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LABOR CONDITIONS IN PORTO RICO.

BY AZEL AMES, M. D.

Of the population of Porto Rico, which according to the census taken in 1899 under the auspices of the War Department was 953,243, the inhabitants of the cities and towns aggregated 203,792, or 21.4 per cent, leaving 749,451, or 78.6 per cent, as the hamlet and rural population.

The area of the island and its adjacent islands, as ascertained by a recent United States survey, approximates 3,606 square miles. There are, therefore, 264 persons to the square mile, a density of population about equal to that of New Jersey, and considerably less than that of Massachusetts and Rhode Island.

The female population is in excess only 8,721, or 0.9 per cent of the total population, and a comparison with the Spanish census statistics of 1861 and 1887 indicates that the proportion of females is slowly, though steadily, increasing.

Of the total population, 31 per cent are under 10 years of age, a higher proportion than is found in any State of the Union, or in any other of the West Indian islands. Deducting this 31 per cent, or 295,505, from the total number of inhabitants, the remaining 657,738 constitute the total from which the wage workers of the island must be drawn, although a considerable number of children under the age of 10 (*a*), chiefly boys, earn the whole or part of a living for themselves, and sometimes even for others, as street peddlers or in the other vocations of outdoor life in which child labor in the Tropics can be employed.

Only 11.8 per cent of the population, or 112,934, of whom 55,608 are males and 57,326 are females, exceed 45 years of age. Deducting liberally from this number for the very few of advanced age and for

a The War Department census of 1899 says "one-fifth."

the sick and decrepit over 45, and making due allowance for others withdrawn by one cause or another, there is still an exceptionally small proportion of those over 45 years of age removed by age and other limitations from the effective class.

If we deduct 50 per cent of the population above 45 as unable to labor, and the attainable statistics do not admit a closer estimate, (a) we have 56,467, which number added to the 295,505 under the age of 10 years gives a total of 351,972, very equally divided between the sexes, who are removed from the total population as incapable of labor. This leaves 601,271 as the number from which the total effective working force of the island must be drawn. Of this number probably more than half are wage workers. (b)

That the sexes are so equal in number throughout the island, as appears by both Spanish and American censuses, indicates presumably a people exempt from any considerable immigration or emigration. The dense population, the small area, the inadequacy of employment for all under present conditions, and the comparative scarcity of food effectively combine to prevent immigration of working people, any popular reports to the contrary notwithstanding. (c) Emigration, until recently practically unknown, will call for consideration later on.

It is difficult, under the most favorable conditions, to accurately determine the number of persons in any community who are wholly or partly wage workers, and still more to assign with accuracy to each handicraft or employment the number of those who thereby obtain a livelihood; many, too, are constantly changing their status from idle to earning, or vice versa, their locations, and their occupations.

In Porto Rico the classes which do not come within the designation of wage workers, while relatively fewer in number than in the United States, have their lines of demarcation much more sharply drawn and their status more clearly defined, the spirit of class being far more dominant with Latin peoples than with the Anglo-Saxon. Outside these classes it is safe to include the great mass, young and

aThe War Department census of 1899 says "between five-tenths and six-tenths."

bThe War Department census of 1899 gives the number of those "having gainful occupations" as 316,365.

cA recent article states that "there is official evidence on file in the Bureau of Immigration to the effect that Porto Rico is even now an asylum for refugees from the various Central and South American countries." In a special report to General Powderly on the conditions of that island, Special Immigrant Inspector Roman Dabler recently stated that "Porto Rico has always been an asylum for fugitives and political refugees from South American countries. Numbers of this class are constantly coming from South American ports and create a spirit of dissatisfaction and social unrest." Such bold and unqualified statements, with others more inclusive, but of like tenor, and entirely at variance with the writer's observation, extending over more than two years, led him to address a note of inquiry, referring to the article named, to the collector of the port of San Juan, who holds also supervising

old, male and female, black, white, and mixed, in the list of those who, except as they craftily or indolently evade their responsibilities, "eat their bread in the sweat of their brows."

Those possessed of means disdain both labor and the laborer; the wealthy class, notably the women, are emphatically the idle class, though the vicious, the willfully indolent, the beggar, and the large number of the physically afflicted each contribute a large quota thereto. Poverty in various degrees and the lower grades of toil, the latter usually procuring bare subsistence only, are the lot of the great mass of the people.

These sharp lines of demarcation, this clear separation and strong contrast between the capitalist, the merchant, the planter, the "factor" and their families, and the wage worker are due to the fact that the intelligent, well-informed, and thrifty producer, the master craftsman, and the skilled mechanic, such as are found in the United States, have here so small and so poor representation.

More potent, however, than any other factor in fixing and holding the great body of the wage workers of the island in the class of lowest-conditioned servants of toil is the want of incentive, of stimulus, and of opportunity. It was long since discerned and expressed by missionaries to the tropical islands that "until the natives could be made to want something there were no available means for reaching them and improving their condition." So long as "a banana diet and a palm shack" in the country and the cheapest of food and a single room in the towns cover alike the needs and ambitions of life; so long as the bare necessities of existence can be obtained by the minimum of labor, while the climate encourages indolence, and no incentive exists to

authority over the custom-houses of the island. He received the following reply, which will be accepted as conclusive by all who know Collector Whitehead:

OFFICE OF THE COLLECTOR OF CUSTOMS,
Port of San Juan, P. R., December 1, 1900.

Maj. AZEL AMES,

San Juan, P. R.

MY DEAR SIR: Responding to your letter of the 26th ultimo, in relation to the alleged "unlimited number of criminals and undesirable people" coming into Porto Rico, I have to state that the total number of persons arrived in Porto Rico from South American ports from May 1, 1900, to this date, is 136.

This statement of transactions carries with it perhaps all the comment it is desirable for me to make, referring to the published article mentioned in your letter. But I may add that if there is "official evidence" to the effect that numbers of fugitives and "refugees" are constantly coming into Porto Rico from South American countries, I am not aware of it. Collectors of customs are charged, within their respective districts, with the execution of the laws relating to immigration at points where there are no immigration officers. The laws in force at ports in the United States in this regard are also applicable to Porto Rico, and if there has been dereliction of duty on the part of customs officers in this district, the proofs are invited.

Yours, respectfully,

G. W. WHITEHEAD, *Collector.*

greater efforts or the overturning of long-rooted tendencies, so long will the condition of the great body of the laboring classes continue very much as it is and the great percentage of the toilers remain, as to-day, in the lower grades of wage workers.

In the United States the wage worker is associated principally with the large communities and the commercial, constructive, mechanical, and manufacturing interests, rarely with agricultural labor. Except as the great granger movement in the United States a few years ago is to be counted as such, there has been no considerable class expression of the agriculturalist in labor relations. Special combinations, usually local, short-lived, and of little importance, have now and then sprung up among certain classes of land wage workers, such as the hop pickers, the wheat harvesters, etc., of the great West, but the agricultural laborer is seldom thought of when "labor problems" in the United States are mentioned.

In Porto Rico, where agriculture is basic; where 78.6 per cent of the entire population is practically rural and essentially agricultural; where a very small fraction of the per cent named will represent those in the rural districts exempt from labor, it is plain that "labor problems" relate almost wholly to the agricultural toiler, his interests, condition, and needs.

While it is true that the seaport cities and the larger towns present conditions and questions more or less analogous to those familiarly known in industry in the United States, the student of labor relations and interests in Porto Rico must first consider the great peon class, which constitutes an overwhelming proportion of the island's population—a population, indeed, of unskilled labor.

Any enumeration of the respective numbers engaged in the several industries of the island must of necessity be approximate rather than exact, and this is especially true as to the subdivision or classification of the peons or laborers, whether rural or urban. All are, from the general insufficiency and instability of employment in almost every occupation, constantly changing place, work, and abode, working wherever they can and at whatever they can find to do.

A fact which impresses the observer of labor conditions in Porto Rico is the great excess of labor of the lowest grade. Unfavorable in most cases as is this excess, it is not without some small measure of advantage, for its attendant low wages and hard conditions coupled with the drastic character of Spanish rule have most happily saved the island from the necessity for and importation of the "cooly" labor upon which Cuba, Jamaica, and the Hawaiian Islands have of late years been compelled in large measure to depend.

The amelioration of the untoward conditions resulting from this excess will be considered later. That it exists in a greater degree in the few cities and larger communities than in the rural districts is no

less true in Porto Rico than in the United States. The tendency of laborers, especially of the lower grades, is to flock to the populous centers. It has, as in the United States, evidently increased since the abolition of slavery.

No more significant proof of this superabundance of labor could exist than the fact that not a few planters, even those somewhat remote from the shipping ports and commercial centers and sometimes situated at no great distance from the belt railroad or from even the sea coast, find it cheaper to transport their coffee, tobacco, and other products on the heads of peons to these ports and markets than by railroad, "bull carts," or even by sea. Unhappily, this excess of labor over the industrial demands of the island does not materially stimulate personal activity in small agricultural or other industries on the part of the unemployed. Their natural indolence and small necessities seem to lead them to accept indigence and vagrancy as no great evils.

The history of labor in Porto Rico has been one of sharply varying and kaleidoscopic conditions. The original slave labor of the indigenes, with possibly the addition of a few Negroes early brought from Santo Domingo by the conquerors, continued for many years, the native an ever decreasing and the Negro a steadily increasing factor. The employment, until the introduction of some of the chief agricultural staples in the next century after the discovery of the island by Columbus in 1493, was chiefly, according to early historians, that of labor in the placer gold mines and explorations for gold, silver, and precious stones, for the Spaniard was first of all a gold hunter. It is possible that the natives were employed to some extent in Cuban iron mines, in the salt mines, and in the iron and galena ores of their own island, and were necessarily engaged somewhat in its primitive agriculture for the support of their masters and themselves.

There is much diversity of opinion among early writers as to the population of the island in the fifteenth and sixteenth centuries, but it is probable that the expression of Las Casas that "it was populated like a beehive" at the time of the discovery should not be taken too literally. The following, furnished by Dr. Cayetano Coll y Toste, probably states the recorded facts, as far as ascertainable, for the early periods. It will be understood that where the population figures of the few towns are given in the earlier periods, they by no means indicate the population of the rural sections:

1493 (year of discovery).—According to Fray Bartolomé de Las Casas, the island was populated like a beehive. Fray Iñigo Abbad accepts Bayacete's total of 600,000 inhabitants. The probabilities are that, owing to the difficulties of obtaining food and to the struggle of the aborigines against the unhealthy condition of the intertropical zone, the number of the indigenes did not exceed 80,000 or 100,000.

1515-1535.—Thirty-five inhabitants in the village of Caparra [the first town of Ponce de Leon] and 35 in San German, the only towns of the

island (Licenciado Velazquez). The indigenes were divided into gangs and made to work in the mines. Those who took part in the uprising (about 1510) were branded on the forehead with an F.

1548.—The capital (San Juan), more than 100 residents; San German, a few more than 30 (Bishop Bastido). Aborigines, but very few.

1556.—The capital (San Juan), 130 inhabitants; San German, 20. (The latter had been burned by French corsairs.)

1646.—The capital, 500 inhabitants; San German, 200; Arecibo, 100, and Coamo, 80.

1759.—5,611 fighting men, according to Gov. Esteban Bravo.

1765.—44,833 souls, according to Governor O'Reilly (first census).

1775.—70,260 souls (Fray Inigo).

1782.—81,120 souls.

1783.—87,984 souls.

1788.—101,398 souls.

1793.—120,022 souls.

1796.—132,982 souls.

1798.—144,525 souls.

1799.—153,232 souls.

1800.—155,426 souls.

1802.—163,192 souls.

1803.—174,902 souls.

1812.—183,014 souls.

1815.—220,892 souls.

1834.—358,836 souls.

1846.—443,139 souls (Santiago Fortun).

1860.—580,329 souls (Paulino Garcia).

1877.—731,648 souls.

1884.—784,709 souls.

1887.—802,439 souls. This census comprises 474,933 whites, 246,647 mixed bloods, and 76,985 Negroes; also 3,224 members of the army, 114 of the navy, and 536 prisoners.

1897.—899,394 souls. This census comprises 573,187 whites, 241,900 of mixed blood, and 75,824 Negroes; also 7,014 members of the army, 368 of the navy, and 1,101 prisoners. Since 1867 a census has been ordered taken every ten years. From 1860 to 1867 no census was taken. A marked decrease will be noticed in the number of Negroes by comparing the total of 75,824 in the census of 1897 with that of 76,985 in the census of 1887. By prohibiting the immigration of Negroes from the neighboring islands, estimating the annual loss to that race through absorption by the white and mixed races at 3 per cent, those 75,824 Negroes that remain in the island would disappear in a period of about 300 years. This is a very interesting anthropological study, because, in the event of this happening, the island of Porto Rico would be the only one of the West Indies where the white race would predominate numerically.

As the native Indian died out the Negro came in to take his place as the chief labor factor of the island. Meanwhile the accession of large numbers, not slaves, from the Barbary coast and from the other Antilles, from France, the island of Corsica, the South American provinces, and from Spain and Portugal, contributed different classes and numerous wage workers, who speedily became amalgamated with the body

of the population. (a) At all times, and increasingly after the first half century, agriculture was the chief employment, commerce, whatever its volume, having no other basis and little development except as related to it, and all other employments being accessory only. (b) Negro slave labor was of course the main reliance, gradually increasing its numbers, as the following tables and statements will show, until 1846, when it began to decline. Meantime the heterogeneous components, from the sources mentioned, and their rapid normal increase, had come to constitute by a large plurality the preponderant body of the population, a laboring and chiefly an agricultural people.

A few Negro slaves probably came with the discoverer from Santo Domingo, and others doubtless accompanied the advent of Ponce de Leon and Diego Colon, but the first legal authorization of their introduction was in 1513, under a tax of 2 ducats per head. By the statements of Fray Iñigo Abbad it appears that through successive imperial authorizations or cédulas—besides some smuggled in—Negro slaves were brought to Porto Rico in the early period as follows:

NEGRO SLAVES BROUGHT TO PORTO RICO, 1530 TO 1553.

Year.	Number of Negro slaves.	Year.	Number of Negro slaves.
1530	200	1550	250
1536	200	1551	150
1540	300	1553	400

a Dr. Coll y Toste states that "the first Spanish immigrants were principally from southern Spain and were a population of mixed races of the Mediterranean. These immigrants, it is said, mixed their blood freely with the native Indians. Following this immigration, Negro slaves from Africa were brought to the island. In this present century [and earlier] an immigration of quite a different type of Spaniard from the pioneer element set in, both from the American continent and from Europe. They were driven, on the one hand, from the Spanish main by the wars of independence of the Central and South American Republics; on the other, many people from the high plains and north of Spain, the Balearic and the Canary Islands, came to better their fortunes in a part of Spanish America as yet untouched by the spirit of revolution and independence. These elements constitute the principal nucleus of the Spanish population in the island to-day, and they have maintained a greater purity of race than those who arrived at an earlier epoch."

b According to Dr. Coll y Toste "sugar cane was taken to Hispaniola in 1506, whence it was brought to Porto Rico in 1515." In 1548 the first sugar plantation was established near the Bayamon River. "Until then nothing but molasses was manufactured from the cane. Coffee was brought from Guadeloupe to Porto Rico in 1763. Tobacco was indigenous and much prized by the native Indians, but the Spanish Government fought its use; two Papal bulls excommunicated those who used it, and a Spanish royal cedula in 1608 prohibited definitely the cultivation of tobacco in Porto Rico. In 1634, however, tobacco was again grown, and also cacao. The cultivation of the former steadily increased until 1836, after which its cultivation diminished for a time, but revived, and it remains the third important staple of the island."

Their importation rapidly increased in the seventeenth and eighteenth centuries, and the number of Negro slaves in the island in 1765, and for a hundred years later, was approximately as follows:

NEGRO SLAVES IN PORTO RICO, 1765 TO 1860.

Year.	Number of Negro slaves.	Year.	Number of Negro slaves.
1765	5,037	1827	31,874
1794	17,500	1830	34,240
1802	13,333	1834	41,818
1812	17,536	1846	51,216
1820	21,730	1860	41,738

The slave population increased rapidly up to 1845, and as rapidly fell off after that year. From 1862 to 1872 the number of slaves steadily decreased, the census of the latter year giving the total number of blacks as 257,709, of whom 31,635 were slaves. The ardent desire on the part of the native Porto Rican planters themselves to be freed from slavery, on humanitarian grounds, is to be credited with its final abolition. For many years the Porto Ricans endeavored to have the Spanish Government abolish slavery in the island; and almost or quite two-thirds of all the slaves were owned by native Porto Ricans. In 1870 they secured the so-called "Moret law," by which all new-born slaves were made free, and on March 22, 1873, the Porto Rican representative in the Spanish Revolutionary National Assembly, aided by the Spanish Liberal party, secured the passage of a law abolishing slavery in the island forever. The condition was most wisely embodied in the law that all freedmen should enter into contract with their actual possessors, with other persons, or with the State, for a period of not less than three years. Three officers of the insular government were appointed to protect the interests of the freedmen in their contracts, and provision was made to indemnify the late owners under appraisals. The number of slaves freed was 39,000, and \$200 the average price paid their owners.

While the abolition of slavery, based as it was upon terms retaining the freedman upon the soil, did not for a decade influence noticeably the proportion of whites, blacks, and mixed in the population of the island, there is, in the opinion of competent observers, no doubt that in a few decades the proportion of the latter was greatly increased, or that the percentage of blacks somewhat decreased. It is impossible, however, to tell how far this may have been offset by the considerable influx, after slavery ceased, of blacks from the Danish and other West Indian islands.

Whatever of the feudal relation of the serf to the land may have existed in the earliest days of the conquerors—and there is evidence

that it then obtained in some degree—Spanish law has not permitted it for the past century or more, though it is undoubtedly true that in the interim the force of circumstances has often effected that which the law did not recognize. The poverty, indolence, and inertia of the plantation laborer, white and black, have often conspired, together with the meager provision of a hut and a little land and employment for wages in the crop season, to keep families of peons for successive generations upon the same plantation. As previously noted, the Porto Rican is not nomadic, and the same peon stock will be found adhering to the same localities through many generations.

It is beyond question that the condition of the laboring classes of Porto Rico in general, and of the peon class in particular, is at the present time, and has long been, very deplorable—largely due, doubtless, to insufficient employment.

One is painfully impressed, whether in the streets of city or town, or in the hill country, by the number of human wrecks, the many beggars, and the sunken-eyed, pallid, anæmic men, women, and children. Extreme poverty, inanition, and decrepitude are found, and though the island is one of great resources and has a good record for thrift, there is reason to believe that from the earliest days of the Spanish occupation this condition of things as to the laboring classes has been only too prevalent—and at times worse, in some respects, than at present. Tradition, sustained by well-corroborated facts, indicates that the natives were well-nigh exterminated in the first century of the Spanish rule by the barbarity of their conquerors and the severe labors enforced upon them. Whatever the later years of settlement and better civilization, of established church and government, and of foreign and alien observation may have done to ameliorate the conditions of the enslaved indigenes, the evidence is conclusive as to the cruelty and oppression of the early Spanish invaders.

Never, for a century at least, did the native bondman receive any more thought or consideration from his taskmasters than was essential to continue his effectiveness as a working machine. When slavery was finally abolished, the former slave was changed only in his legal relation to his master, a change which he could hardly grasp, and which he accepted without enthusiasm; and it required the full three years of the contract relation called for by the act of emancipation to habituate him to the new status and what it involved. Gradual as was the separation of master and slave, and popular as was the abolition of slavery, the changes resultant were in large measure responsible for the low state of peon labor to-day. Under the system and conditions which have very generally prevailed throughout the island since the emancipation, there have been practically no means whereby the freedman or his white fellow-toiler could, though free from leœal

tie to the land or its owner, change either his locus or his lot. Lacking any incentive to labor beyond obtaining the barest necessities of existence, the peon has had little or no ambition to better himself or his surroundings. A few have struggled up to something better than they had and were, but they have been too few and their success has been too exceptional to breed much encouragement. The mass has been content to live and die as their fathers did. The chief bar to such effort has been the comparative ease with which the actual necessities of life can be obtained, and the consequent absence of either means or ambition for better things. No vision of a decent cottage and garden of his own has gladdened the hopes or nerved the purpose of the average peon. It involved too much of imagination, of initiative, of energy, and too slow an acquisition, little by little, to bring it within the bounds of his hope or even his yearning. Besides, he argued, why should he try? If his mind ever awoke to thoughts and plans of better possibilities, reflection reminded him that property was only for the masters; that taxes were adjusted by omnipotent alcaldes to take from one of his class about all he had; that to labor, to acquire, and to save was to do so only for some one more powerful and acquisitive, to whom he must sooner or later surrender. For him there was neither motive nor rational hope. Why should there be greater effort? Wretchedly housed, fed, and clothed, with beggarly pay and more beggarly treatment, there has been neither physical, mental, nor moral stamina to hearten or to build upon. A remark made by Gen. George W. Davis, at one time military governor of Porto Rico, is impressive. He said that to his mind "one of the most discouraging problems of Porto Rico was to know how to materially improve, or to expect to improve, the condition of the laboring classes so long as the chief staple crops of the island, sugar, coffee, and tobacco, would (and hitherto could afford to) pay only 50 centavos [30 cents United States currency] wages per day."

Along with the changed conditions of trade with the United States new sugar enterprises are being started on every hand, old sugar lands long lying in pasture, because it would not pay to work them, are being reclaimed, greater prosperity prevails, and wages have been raised to 50 cents gold per day. Poor cane, bad cultivation, and obsolete methods of sugar making have been far more responsible than the price of sugar, or the tax upon it, in limiting profits to figures that paid only the barest cost of subsistence to those who produced the crop.

The recent exchange of the insular coinage for United States currency has so far done the wage-worker some harm, for, though the law of supply and demand will speedily regulate the market prices of commodities, wages are always much slower in adjusting themselves to changed conditions. The price of nearly every article of common

consumption is now, in gold, what it formerly was in the debased silver of the island, whose utmost value was as 60 cents to the American dollar. But in the change of governments the long-oppressed wage-worker of Porto Rico has received a new and a larger lease of life. Never until now has the laboring man, of every grade, known what it was to be free to think, act, vote, travel, and grow as he liked; to learn, plan, hope, strive, struggle, and thrive as he pleases, though he still is under some of the repressions of Spanish law, and he yet lacks knowledge, courage, and initiative. These last are on the way to him, and he to them, and time, patience, and intelligent endeavor are rapidly bringing them together.

As yet the slow recovery from the effects of former bad government, of bad crops and worse management, of poor cultivation, lavish living, and consequent heavy mortgages; from the later antebellum stagnation and loss; from the recent change of government; from military to civil rule and one currency to another, and from the wildest of hurricanes, retards the sure march of equable laws, broader civilization, and general prosperity. Wages and prices are not yet adjusted; the new values of lands, labor, and commodities are not yet fixed; the work of education is only begun, and government has not yet crystallized into its permanent form. So great a work must take thought, time, patience, and labor, but it progresses steadily and perceptibly, and to none will it surely bring greater results than to the wage-worker.

It is true that in sugar planting the tendency is to centralize and control large acreage. At the same time the small sugar proprietor is rapidly giving up the manufacture of sugar, leaving that part of the work to the great "centrals," yet furnishing them his cane. Under good management and where profits are fairly distributed, he does this, not at a loss, but at considerable gain. Hence improvements of this kind, while they may lessen the chances and numbers of small sugar producers, will certainly improve the peon's pay and conditions. Moreover, conditions have changed, and already under the Government of the United States and its own civil authority the conditions, social, sanitary, educational, and material, of all classes, in Porto Rico, have begun to improve very perceptibly.

Again, while sugar and a few other crops demand large acreage and capital, with expensive centralized machinery, other poorly developed lands, adapted to other crops, are being, as never before, divided into small holdings, and tobacco, citrus fruits, early vegetables, yucca, poultry, etc., will occupy them with profitable industry.

Governmental stimulus, object-lesson training, better facilities for transportation, agricultural schools, and experiment stations; quick transit to great markets for perishable products; the development of new rural industries, such as bee-culture, dairying, the growth of

medicinal and coloring herbs and roots, tapioca, ginger, annotto, indigo, etc., which have been little studied or exploited hitherto, but in which only small capital and little land, but numerous hands, are required, will vastly change and improve the earning capacities and social conditions of all classes of wage-earners.

Of these and other avenues of industry, further consideration will be had in connection with the Classification of Labor, and Opportunities for Labor in Porto Rico.

Remarkable mutations of prosperity and adversity; of the rapid and profitable development of agriculture and its decline; of feverish ambition at times for the ownership of large areas of land, and succeeding reverses, debt, and abandonment; of high prices for staples and their overthrow; of the destruction of property values by hurricanes and war, and their restoration; of plenty and famine; of the insular currency, of commercial conditions, and of governmental policies and control, have characterized and constituted the economic history of the island. A few factors only have been constant and steady, but of these most have been burdensome and untoward. They include the heavy taxation; the illiteracy, poverty, and degradation of the masses; the difficulties of transportation; the retention of the land in large bodies and few hands; the leech-like hold of the merchant upon the planter; (a) the growth of mortgage indebtedness on the part of the native planters, and the contrasting thrift of the merchant class and the foreign planter; and, as brighter features, the wonderful resources and fertility, the marvelous burden-bearing capacity, and the freedom from internecine strife and from insular indebtedness.

If, under the rigors and rapacity of Spanish rule and the waste and demoralization of slavery; with sore burdens of taxation, home and foreign, amounting in recent years to over 12,000,000 pesos (\$7,200,000)

a Maj. F. W. Mansfield, of the Eleventh United States Infantry, a municipal alcalde of our military administration of the island, well states, in a report to the department commander, the relation of the merchant and the planter, and its ruinous ends. He says:

As the peon is bound [not legally, but by circumstances] to his master, so the planter is under obligations to the merchant. Rich as these plantations are, or should be, hardly any of them [belonging to native, i. e., Porto Rican, planters] are free from debt or mortgage. This is [partially] due to the want of a proper banking system. The merchants are, in fact [as often in the Southern States], the bankers. The planter wanting a sufficient amount of money with which to carry on his business, goes to the merchant to borrow it. The merchant lets him have it at an enormous rate of interest [worse still, usually supplies it not in cash, but in goods at high profits], and, to make himself safe, takes a mortgage on the crop. Hence the planter is naturally forced to sell his crop to this particular merchant, at whatever price the latter sees fit to give, and the outcome is that he is lucky if his crop is sufficient to liquidate his obligations. This state of affairs has been going on for years and years, the only result being to make the merchants richer and to give employment to the peons, while the condition of the planters remains unchanged.

As matter of fact, the mortgages often extend to the land as well as the crop, rarely decrease, and ultimately "eat the planter up."

annually; with the added cost of emancipation (some \$13,000,000); with the losses and stagnation of defensive war and periodic hurricanes, and the disadvantages of illiteracy and a state church; if, with these burdens, and only its natural resources and an agriculture represented by the single-stick plow for revenues, the island of Porto Rico could, as it has done, maintain itself free from insular indebtedness and lend millions to the mother country and its Antillean neighbors, what may not rightfully be expected under the stimulus of American control and with intelligent development?

CLASSIFICATION OF LABOR.

The proportion and the number of the wage-workers in the population of Porto Rico, as obtained by both the recent War Department census and by independent calculation, have been noted. The classification adopted by that census of those of the population engaged in gainful occupations, while well adapted to its purpose in the United States and other countries where occupations and conditions are multi-form and numerically strong, loses much of its pertinency and utility in a country almost wholly agricultural. Naturally, deductions resulting from comparisons of its integers lose their usual significance, and the form is valuable chiefly in that it serves to bring such data as it correctly presents concerning Porto Rico into uniform shape with like data relating to other parts and possessions of the United States. As the census of the War Department of 1899 was a special census, and was not taken by the Census Office, or as a part of its current census, it is perhaps a matter of regret that more detailed special study and subdivisions of the wage-winning factors of the Porto Rican population were not made, as the foundation of well-ascertained data for subsequent work. "Agriculture" is so absorbent and inclusive as practically to comprise directly or indirectly the body of the working population of the island, while "fisheries and mining" are so feebly represented as to hardly constitute a division of a class. "Domestic and personal service" occupy so comparatively few as to scarcely warrant separate classification. "Manufacturing and mechanical industries" (with few exceptions) have almost no existence except as unorganized and primitive accessories of agriculture. "Trade" is the only class, beside "agriculture," of proportions warranting the dignity of such designation. "Transportation" barely exists, and is of the poorest and most inchoate description, while "professional service" in numerical strength or importance hardly constitutes a class division. Comparisons instituted between such meager figures and others gathered elsewhere signify little or nothing.

While admirably designed for populations including many diverse occupations with large numbers, under such conditions as obtain in

Porto Rico, its broad classifications fail to group the facts as instructively as a more particular tabulation might have done.

A very well-defined line of demarcation between the wage workers of the urban and rural districts may be easily drawn in respect to numbers, social and sanitary conditions, wages, proportion of the sexes, food, illiteracy, prevalent diseases, longevity, and organization. The study of urban and rural breadwinners in relation to their several specific occupations and with reference to their especial features will be of interest.

It is hardly possible, even with the best devised and most complete facilities and long-continued observation, to determine with any considerable degree of accuracy in many of the occupations the numbers habitually and regularly engaged therein, or the percentage of males, females, or of child labor, or of whites or blacks, so employed. The figures of the recent census, wherever stated as to these factors, must hence be taken as approximations only.

The following list of occupations at present followed in the island, and of certain others as yet quite undeveloped or but recently opened, which are believed to afford opportunity for the wage-worker, will give a pretty accurate idea of the field of employment.

Instead of grouping the breadwinners of Porto Rico under the five general heads of the census they will for the purpose of the present study be discussed under the six heads of Official, Professional, Skilled Artisan, Commercial (mercantile), Agricultural, and Low-grade Labor, the governing aim being to name more specifically the various occupations and to indicate their grades, together with their productive or nonproductive character.

In the classification suggested it is desired to indicate by the term Official, for example, all whose duties are distinctly governmental, whatever the grade or relation, so long as they relate purely to government in any of its branches, and are "official" and above the grade of manual assistants, as clerk, etc., its members being an essentially nonproductive class. Under the term Professional, are to be included all employments calling for technical skill, scientific research or attainment, etc., embracing, for example, actors, artists, architects, chemists, clergymen, dentists, engineers, journalists, and literary and scientific persons generally, some of whom would, and some would not, belong to the productive or constructive class. The possible relevancy of some in each classification to some other class or classes is apparent. In other cases the assignment can only be arbitrary, the propriety of still other relations being admitted; for instance, nurses, who, in the succeeding lists find place with the Professional class, might also be ranked as nonproductive skilled laborers. They would, in the United States census divisions, have come under "personal service," and thus

have been listed with butlers, hostlers, and household servants, the same being true of barbers, who here are named under skilled labor; all, however, being alike nonproductive.

As the design of this article is, primarily, to give some insight into labor conditions in the strict sense, rather than to consider those of the professional, or of the so-called "middle man," the first-named elements of the island's economic forces will have prior consideration. Agriculture, as basic, and engaging by far the larger part of the population, and as distinctively productive, holds the first place. (*a*)

The general titles of the most prominent and profitable of the agricultural pursuits of the island, either actual or possible, as attested by experience here, or under like conditions (no better or more favorable) elsewhere, and including the chief staples, are as follows, being arranged alphabetically, instead of in the order of their importance:

ANNOTTO CULTIVATION.—The growing of the annotto seed (*achiote*), from which is extracted the harmless yellow coloring matter with which butter, cheese, and many fabrics are colored. Its requirement of low-grade labor is considerable.

APICULTURE.—The cultivation of the honeybee for the honey and wax products, a most profitable and promising industry. It requires little, though highly intelligent, labor, but is available to the poorest tenant of land.

COFFEE PLANTING.—The cultivation of the coffee bean or berry, formerly the largest money-value crop of the island, and exceedingly profitable. Of late years badly injured by war, the ravages of the hurricane, and the loss of former markets before new ones have been developed. It has occupied nearly three-eighths of the cultivated area, and is an industry sure to revive and to be of great profit. It requires many hands, including women and children.

FRUIT CULTURE.—The cultivation of citrus and other fruits, an industry as yet almost wholly undeveloped, but presenting the most attractive inducements. The oranges, pineapples, guavas, limes, and small bananas (*guineos*) of the island are unsurpassed, some of them unequalled. Coconuts require only better seed and cultivation to equal any. The grape fruit and shaddock are indigenous, as are scores of other fruits, for which there is large demand. It is a great field hardly yet opened. Its trade dimensions are bound to be great, its employment of labor of all grades of intelligence will be very considerable, and it is available to nearly all.

GINGER CULTIVATION.—The cultivation of the ginger root, which thrives wonderfully in the island, was formerly a large and profitable agricultural industry, but the Continental demand for sugar caused it

a The census of 1899 gives "about five-eighths" as so engaged, being three-fourths of the male breadwinners and one-twenty-fifth of the females.

to be neglected, even by Spanish governmental orders, and it has not revived until recently. It is attractive, seems likely to invite many, and will require a good supply of low-grade labor.

INDIGO CULTIVATION.—The cultivation of indigo was formerly carried on to some extent in the island, but it has now only feeble representation. Its history proves that it is a profitable undertaking. It requires many low-grade laborers.

MAGUEY CULTURE.—The cultivation of the maguey plant, well known in tropical countries, and from which both a strong alcoholic liquor and paper and textile fiber are manufactured. It is produced in large quantities and requires many low-grade hands.

MAIZE CULTIVATION.—The cultivation of maize, or indian corn, has assumed at times considerable proportions, and by reason of the cheapness of labor has probably been profitable, stock food being scarce and in great demand. It may continue profitable with cheap labor, but maize can probably soon come, by the water carriage of the Mississippi and the sea, from the Western corn belt, cheaper and better than it can be raised in the island. It calls for a good deal of low-grade labor. Louisiana rice also is likely to supplant the poorer (upland) native rice, which can not compete with the American.

POULTRY RAISING.—The raising of all kinds of poultry and the sale of eggs has always been a source of large profit to all who have been so employed in the island. The supply is always short of the demand, both in the island and in the United States, and the business can, especially in connection with the manufacture of yucca starch, from the waste of which fine stock and poultry food is obtained, be indefinitely extended with profit. It is open to the poorest and would employ many hands of the low-grade class.

STOCK RAISING.—The raising of horses, asses, mules, cattle, sheep, hogs, and goats has always been largely conducted and very profitable, especially the raising and export of cattle and the raising of swine, both of which have latterly become increasingly profitable. Incidentally the breeding of milch cows and hogs and the development of dairy farming have been greatly stimulated by the supply of stock food to be had from the refuse of starch manufacture. The industry requires many laborers, mostly of the lower grade.

SUGAR PLANTING.—The cultivation of sugar cane and the manufacture of sugar and its by-products—molasses and rum—is at once the most important and at present most profitable business of the island, except starch manufacture, which, however, is on a small scale compared with sugar. Directly and indirectly sugar is undoubtedly the largest employer of labor in Porto Rico and is likely to be increasingly so.

TOBACCO PLANTING.—The cultivation of tobacco, one of the chief

staples, has long been a source of great profit, though for a year or two the industry has been in a depressed condition; but it is now sharply rallying and bids fair to be both a considerably expanded and highly profitable business. It requires a large amount of field labor and a great many hands in its curing, preparation, and manufacture, the latter, however, being chiefly an urban employment.

VANILLA CULTURE.—The cultivation of the vanilla bean has had but little trial in the island in recent years, but all conditions are favorable, especially the cheapness of labor, of which it requires a good deal. The preparation and maintenance of the crop grounds require large outlay and continual and expensive care, but they are warranted.

VEGETABLE GARDENING.—For the raising of early vegetables of all kinds on a grand scale for the markets of the United States the island has advantages exceeded by none and equaled by few. When well organized and conducted the business is very remunerative. It requires a large number of agricultural laborers.

YUCCA PLANTING.—Perhaps no plant ever raised in the island, everything considered, has so much to recommend its cultivation for conversion into marketable products—starch and its by-products, glucose, tapioca, dextrin, and stock food. It has been cultivated only on a small scale but with great profit, and the manufacture of its roots into starch, etc., has been only by hand. It appears to be on the eve of great development, and to promise great prosperity in the sandy-land section, where nothing else of account grows and where many hands of the low-grade labor class will be needed for its cultivation and manufacture. The latter will also demand a considerable number from the other classes.

In addition to the foregoing pursuits, which offer the largest employment to labor, directly and indirectly, the increased cultivation of small fruits and vegetables, for great numbers of which the island is admirably adapted; the growth of medicinal and commercial herbs, like anise, the castor bean, etc., of certain small grains, like buckwheat, and of new fodder grasses and leguminous plants, such as lucern, Japan clover, vetches, etc., and the cultivation of paper pulp and fiber plants will make very considerable draft upon the peon class and upon other more skilled labor. The rubber plant, tea plant, cotton plant (formerly grown here), and other tropical and semi-tropical products are receiving the attention of the Government and others.

While they are the chief domain of labor and sources of production, the distinctive employments of agriculture are noticeably fewer in number than those of either the skilled labor or the commercial (mercantile) class. For the sake of convenience the several foregoing divisions of agriculture have been followed as named, to each of which attach its peculiar handicrafts or employments and certain

labor contingents. Some of these subdivisions of agriculture named have had in the past either little or no considerable attention, such as apiculture or honeybee raising, for which the island is a most favorable and promising field, and fruit culture, which presents wide and exceptional opportunity and promise, but has had as yet no systematic and intelligent development. The maguey, growing luxuriantly and applicable to many uses, has cut small figure, while the vanilla bean, though demanding costly and careful culture, and little cultivated here as yet, will doubtless, from the small experiments made and experience had elsewhere, prove largely remunerative. Indigo, ginger, anise seed and annatto are also products offering good opportunities for small investors, but have had, with the exception of ginger, comparatively little attention thus far.

So closely associated with certain agricultural products which thrive in the island as to be almost as inseparable as the raising of sugar cane and the manufacture of sugar, rum, and molasses are certain derivatives, which, though classed as manufactures, seem almost entitled to group with agricultural results. Coconut "sweets" (*dulces*), milk, oil, husks, fiber, and fans, from the coconut palm; marmalade, conserves, and orange juice from the orange; lime juice from the lime; cassava, manioc, tapioca, starch, glucose, dextrin, etc., heretofore made by the simplest and crudest of manipulation only, from the yucca, and jellies and paste from the guava, are all examples of a long and varied possible list of this character. In all of these lines the small capitalist might speedily develop enlarged demand and opportunity for himself and for large numbers of more or less intelligent wage-workers, many of them women and children.

Connected with the distinctively agricultural pursuits enumerated, and as part of them, may be named, in addition to such as the harness maker, carpenter, mason, and blacksmith, the following occupations:

LABORERS.—The peons or day laborers, who stand in relation to agriculture overwhelmingly preponderant numerically. They constitute, of course, the great bulk, over 68 per cent, of the agricultural breadwinners.

PLOWMEN.—Men usually of the peon class, who from experience and training have come to be expert in furrowing the field, especially for sugar culture, and who grade and are paid higher than the plantation laborers.

TEAMSTERS.—Often, but not always, a distinct employment, with slightly better wages, and really, as in charge of the working cattle and most of the transportation, men of importance, in whom some skill is required.

COFFEE PICKERS.—At the time of picking, most important factors in the success of the coffee planter, as the berry must be picked at the

proper time. In the prosperous days of coffee, the very large area planted and the need of rapid work brought into the field an army, mostly women, young people, and children, which probably outnumbered during picking time any other body of wage workers in the island. Their day of activity is short.

COFFEE SHELLERS.—Mostly women, who after the berry is dried separate the husk or skin from it by beating a mass of coffee with heavy pestles in large wooden mortars. This primitive method will probably soon disappear under the operation of American inventive skill.

COFFEE SORTERS.—Mostly women, a grade higher in the labor scale than the last named, and requiring some expertness.

STOCKMEN.—A large class, engaged in the labors of stock breeding, and the handling and marketing of the horses, asses, mules, cattle, sheep, and swine of the island, calling for more or less intelligence and expert knowledge and skill, and the assistance of many peons.

DAIRYMEN.—A small class as yet, with very primitive methods and ignorant of the great improvements science has brought, but likely to rapidly enlarge its field and work.

CANE CUTTERS, YARDMEN, MILL HANDS, FIREMEN (STOKERS), ENGINEERS (STATIONARY AND LOCOMOTIVE).—These several factors in the productive list are engaged in the cultivation and manipulation of sugar cane either in field or factory, and represent several grades and degrees of intelligence and skill, from lowest to highest. They are an army of themselves.

TOBACCO CURERS.—A considerable body of skilled laborers of the productive class engaged in the drying, sweating, etc.—the curing—of tobacco.

With over three-fourths of the breadwinners of the island engaged in agriculture, and of the total number of breadwinners four-fifths laborers, it will be readily inferred that the other classes can have but small participation in agriculture, while it is evident that where the number of staple crops is so limited, the organization of the different agricultural pursuits can require but few from either the artisan, professional, or commercial forces, to complete their equipment. In many cases, after brief training, on the coffee, sugar, or tobacco plantations, some of the brighter of the peons may be set at the work of overseers, yardmen, or mill hands, or even trusted as firemen in the sugarhouse, or as sorters in the tobacco barn. Thus, though performing a special and higher grade duty, their rank and pay often remain practically the same, and the difficulties of definite classification are not a little increased.

To the above-named agricultural occupations are to be added the rural representatives of certain of the arts, crafts, and trades, the

skilled labor class, which are to be found in most country districts, though few in number. They are:

Bakers.	Masons.
Blacksmiths.	Millers.
Brickmakers.	Miners.
Butchers.	Painters.
Carpenters.	Quarrymen.
Charcoal burners.	Shoemakers.
Cigar makers.	Stonecutters.
Coopers.	Straw workers.
Engineers (stationary engines and cane-field locomotives).	Starch makers.
Gardeners and florists.	Tanners.
Harness makers.	And probably others.

From the professional list only three representatives could be classed as rural—the clergyman, the physician, and the teacher.

Of the commercial (mercantile) class, the rural occupations embrace agents, commercial travelers, hucksters and peddlers, merchants (small grocers, etc.), telegraph operators, and railroad employees (not officials), all being nonproductive.

Of the purely official (governmental) class, the rural representation is very small, being usually comprised in the postmasters and inspectors, with occasional military officers, district judges, *comisarios de barrios*, and temporary representatives of the United States or insular governments, military or civil, all nonproducers.

The occupations of the rural districts, especially relegated to women, are, in addition to household labors, those of—

Coffee pickers, shellers, cleaners, and sorters.	Nurses.
Confectioners.	Poultry raisers.
Dairy women.	Seamstresses.
Dressmakers.	Servants.
Hammock, net, and twine makers.	Straw workers.
Laundresses.	Tailoresses.
Midwives.	Tobacco workers.

In the sugar industry there is practically no place for women, but both coffee and tobacco culture create great demand for them, as do dairy work, the cultivation of fruit and vegetables, poultry raising, and laundering. Even the humblest dwellings usually contain small hand-power sewing machines, which are kept in active use.

Child labor in the rural districts, while having perhaps a less organized character, is, in a way, more general than in the cities and towns. Although the staple crops, like coffee and sugar, and to some extent tobacco, make, in the crop seasons, very considerable drafts upon the boys and girls from 10 to 15 years of age, notably in coffee picking, and, of boys, in the driving of bull carts, handling of *bagazo* (crushed cane husks for fuel), and the many minor labors of the sugar field and

factory, those employed do not, as a rule, work steadily or at such tender years as in the cities and towns. Of course, the numerous duties always and everywhere assigned to children in agricultural districts, both in house and field, are so performed in Porto Rico. The coffee-picking season, which brings into the plantations an army of women, boys, and girls, some even of quite tender years, has its complete analogue in the cranberry picking of Cape Cod and New Jersey, the strawberry picking of several States, and the hop picking of the West. The season is brief, the work light, and the pay fair. The child labor of the cities and towns, on the other hand, involves more of the regular organized unremitting character, as exemplified in peddling, factory work, and shop employment.

Aside from the coffee picking, drying, shelling, and cleaning, some handling of tobacco, the casual labors of field and factory in the cane-grinding season, some little peddling of poultry, fruit, vegetables, and home-made sweets, the care of the horses, cattle, sheep, poultry, and swine, the carrying of mails or changing of post horses, there are a few distinctive employments of children in the country districts.

The tables given a few pages farther on will summarize the foregoing with some other data for reference and comparison of the salient facts as to labor conditions of workmen in the various occupations.

In these tables every occupation is included in one or another of the six grand divisions named and in either "productive" or "nonproductive" industry.

The tax column indicates whether a license or special tax to do business is laid upon the respective occupations. There have been some changes in this regard as between former Spanish and recent American laws, and the recent "Hollander act" for raising revenues has made many changes. Hence the list is liable to error. Usually chiefly professionals, skilled laborers, and master workmen have been required to pay the special tax.

The numbers engaged in a given occupation are approximate at best. It rarely happens that it has been possible to decide what proportion of those enumerated in the recent War Department census were "rural" and what "urban." It has been common to combine "hucksters and peddlers," "boatmen and sailors," "janitors and sextons," etc., even when the actual work of several exponents differed considerably. This United States census enumeration has been amended or subdivided by the tabulations secured by Mr. Thomas L. Whelan, who obtained considerable data at great pains, chiefly as to urban and skilled-labor occupations, and also much as to rural and labor factors; Mr. Timothée, the president of the *Federacion Regional*, and his associates of the several *gremios* furnished information as to wages, hours, cost of living, etc., and the reports of Dr. Henry K. Carroll, commissioner to Porto Rico, and of Gen. George W. Davis have been

of great service. The number engaged in any occupation can at best only be approximated, but the census figures given are the nearest and most recent, and in a general way (as subdivided and amended) will best serve to give the reader the most practicable idea of the proportion, relation, and conditions of those employed under the several classes and in the various occupations.

All amounts of wages have been reduced to United States currency. Wages in San Juan and some other of the larger places rule, for most of the skilled labor occupations and some others, about 10 per cent higher than in the country for the same occupations. Occasionally meals, meat, tips, land for cabins and gardens, etc., in addition to wages, are furnished to work people of one kind or another.

Where wages exceed \$1.20 in American money, they are always paid for a workman of superior ability. While wages have not advanced much since the introduction of United States currency, the prices of nearly all commodities involved in the cost of living have been much increased (temporarily) and some have been doubled.

Where the occupation is distinctly professional and where payment is made by fees or salaries it is obviously impracticable to state earnings with any accuracy and equally so to indicate the grade of the work produced or the proficiency of the professional performer.

The hours are approximate only.

The cost of living, as stated, is approximate at best, varies much, is influenced by the exchange of currency and (temporarily) by the rise of food and other articles, and is liable to considerable fluctuation and change in the future. A more definite and accurate statement could not be given without a more minute inquiry than seems justified under the present abnormal and unsettled state of industry.

The data as to possible savings must, of course, be largely conjectural only, and suggests every practicable study and stimulus. No exact comparison of rates of wages and cost of living per day and possible savings can be made. Workmen do not always have steady employment, and are subject in some instances to habits of living which entail expenses which have been considered as outside the items included in cost of living.

The "quality of work" is designed to indicate the general character of the work produced—i. e., whether "coarse," "fair," "low," or "high" grade work, in which the nature of the raw material used sometimes affects the character of the work in spite of good or fair proficiency on the part of the workman.

The "division of labor" column seeks to record whether the whole occupation in all its parts is conducted by an artisan or by different workmen, each performing a part.

The excess of laborers in respective occupations can not, of course, be definitely known, but is given approximately.

Under the conditions of employment, sanitary and general, the sanitary status of each occupation and those employed therein and the general conditions which attach to each are indicated.

“Labor organizations” include the “federation” (or combination of the several *gremios* or labor guilds), whether socialistic or antisocialistic; and that of the component *gremios* (or specific and local labor clubs), e. g., those of the blacksmith, cooper, printer, etc., and those in the cities or rural regions. The tables following are presented, not as strictly statistical tables of exact data, but rather as the best information obtainable by diligent inquiry and from many sources as to the conditions named. With this understanding and the guarded explanations which have been given, the tables may be accepted as giving a fair general survey of the condition of the various occupations in the island.

WAGES, COST OF LIVING, AND CONDITION IN VARIOUS OCCUPATIONS IN RURAL DISTRICTS.

Marginal number.	Occupations.	Class of labor.	Li-cense tax paid.	Number of persons.				Wages per day.	H'rs per day.
				Men.	Wo-men.	Child-ren.	Total.		
PRODUCTIVE.									
1	Apprentices (mechanical)	Skilled	No..	(a)	.....	.....	(a)	(b)	10-12
2	Bakers	Skilled	Yes..	(a)	(a)	.....	(a)	c \$1.00-\$1.50	12-15
3	Basket makers	Skilled	No..	(d)	Mostly.	Few.	(d)	Piece.	(d)
4	Blacksmiths	Skilled	Yes..	(a)	.....	.....	(a)	1.20-1.80	8-10
5	Brickmakers	Skilled	Yes..	(a)	.....	.....	(a)	e 1.20-2.00	10-12
6	Broom makers	Skilled	No..	(d)	Few.	Few.	(d)	Piece.	(d)
7	Carpenters	Skilled	Yes..	(a)	.....	.....	(a)	1.00-2.50	10-12
8	Charcoal burners	Low	No..	121	.....	.....	121	.30-.50	(d)
9	Cigar makers	Skilled	Yes..	(a)	(a)	.....	(a)	f .75-2.00	(d)
10	Coffee cleaners	Low	No..	Few.	Many.	.....	Many.	g .30-.60	9-10
11	Coffee pickers	Low	No..	Few.	Many.	Many.	Many.	.20-.60	10-12
12	Coffee sorters	Low	No..	Few.	(d)	.....	(d)	g .30-.70	10-12
13	Confectioners	Skilled	No..	(a)	.....	.....	(a)	1.00-2.00	8-10
14	Contractors	Com	No..	(a)	.....	.....	(a)	(d)	(d)
15	Coopers	Skilled	Yes..	(a)	.....	.....	(a)	.60-1.80	10-12
16	Dairymen	Agr.	No..	68	.....	.....	68	1.00-2.00	(d)
17	Dressmakers	Skilled	No..	.....	(a)	.....	(a)	h .50-1.20	8-10
18	Gardeners (i)	Agr.	No..	(a)	.....	.....	(a)	.50-.90	10-12
19	Harness makers	Skilled	Yes..	(a)	.....	.....	(a)	.90-2.00	8-12
20	Laborers (j)	Low	No..	(a)	(a)	.....	(a)	.30-1.20	10-12
21	Machinists	Skilled	Yes..	All.	.....	.....	(d)	1.20-1.80	8-10
22	Masons	Skilled	Yes..	(a)	.....	.....	(a)	.60-2.00	8-12
23	Mill hands (k)	Com	No..	All.	.....	.....	(d)	.50-1.00	10-12
24	Miners	Skilled	No..	48	.....	.....	48	1.20-2.40	(d)
25	Net makers	Skilled	No..	Some.	Many.	.....	(d)	(l)	10-12
26	Planters	Agr.	Yes..	149	156	.....	305	(d)	(d)
27	Quarrymen	Skilled	No..	(m)	.....	.....	(m)	1.00-2.40	10-12
28	Salt makers	Skilled	No..	All.	.....	.....	(d)	.30-1.20	8-12
29	Seamstresses	Low	No..	.....	(n)	.....	(n)	h .50-1.20	(d)
30	Shoemakers	Skilled	No..	(a)	(a)	.....	(a)	.60-1.80	8-12
31	Soap boilers	Skilled	Yes..	All.	.....	.....	(d)	1.00-1.80	10-12
32	Starch makers	Skilled	No..	Mostly.	.....	Few.	(d)	.50-1.80	10-12
33	Stock growers	Agr.	Yes..	253	.....	.....	253	(d)	(d)
34	Stockmen	Agr.	No..	All.	.....	.....	(d)	1.00-2.40	(d)
35	Stonecutters	Skilled	No..	(a)	.....	.....	(a)	1.00-2.40	10-12
36	Straw workers	Skilled	No..	.....	(a)	.....	(a)	(l)	(d)
37	Tanners	Skilled	Yes..	(a)	.....	.....	(a)	.75-1.50	10-12
38	Tobacco curers	Agr.	No..	(d)	(d)	.....	(d)	.60-2.00	10-12
39	Tobacco workers	Agr.	No..	(d)	(d)	.....	(d)	.60-1.00	10-12
40	Wood choppers	Low	No..	All.	.....	.....	(d)	.30-.60	10-12
NONPRODUCTIVE.									
41	Butchers	Skilled	Yes..	(a)	.....	.....	(a)	a 1.50-2.50	(d)
42	Cane cutters	Low	No..	All.	.....	.....	Many.	p .30-.50	10-12
43	Clergymen	Prof	No..	(a)	.....	.....	(a)	(d)	(d)
44	Clerks	Com	No..	(a)	.....	.....	(a)	1.00-2.00	8-10
45	Commercial travelers	Com	No..	(a)	.....	.....	(a)	(d)	(d)
46	Engineers, locomotive	Skilled	Yes..	All.	.....	.....	Few.	q 1.80-3.00	8-12
47	Engineers and firemen, stationary.	Skilled	Yes..	(a)	.....	.....	(a)	1.80-2.40	10-12
48	Foremen	Com	(d)	(a)	.....	.....	(a)	1.80-3.00	8-12
49	Midwives	Skilled	No..	All.	.....	.....	(d)	(d)	(d)
50	Muleteers	Low	No..	All.	.....	.....	(d)	.30-.50	(d)
51	Overseers	Com	No..	(r)	.....	.....	(r)	1.20-2.40	10-12
52	Peddlers	Com	Yes..	(a)	(a)	.....	(a)	(d)	(d)
53	Physicians	Prof	Yes..	(a)	(a)	.....	(a)	(d)	(d)
54	Postmasters	Official	No..	All.	.....	.....	(d)	(d)	8-10
55	Practicians (medical students).	Prof	Yes..	All.	.....	.....	(d)	(d)	(d)
56	Railroad employees	Com	No..	(a)	.....	.....	(a)	.30-2.40	10-12
57	Road workers	Low	No..	All.	.....	.....	(d)	.30-.60	8-12
58	Salesmen and saleswomen	Com	No..	(a)	(a)	.....	(a)	(d)	8-10
59	Servants	Low	No..	(a)	(a)	.....	(a)	s 2.50-7.00	(d)
60	Shopkeepers	Com	Yes..	Many.	(d)	.....	(d)	(d)	(d)
61	Stokers	Low	No..	All.	.....	.....	(d)	.60-1.20	10-12
62	Teachers	Prof	Yes..	(a)	(a)	.....	(a)	\$ 40.00-75.00	5-6
63	Teamsters	Low	No..	All.	.....	.....	(d)	.30-1.00	(d)
64	Telegraph operators	Prof	Yes..	(a)	.....	.....	(a)	\$ 40.00-75.00	8-10
65	Yard masters	Low	No..	All.	.....	.....	(d)	.60-2.00	8-10

a Included in total shown for urban districts. No data are available showing what proportion are urban and what rural.

b Board and clothing.

c Also piecework; rates not reported.

e And bread.

d Not reported.

g And coffee.

f Also piecework; rates, \$0.60 to \$1.50 per 100 cigars.

h And meals.

i The term "gardeners" relates chiefly to vegetable gardeners who raise crops for market.

j The term "laborers" is objectionable as used in the inclusive sense and is only used here (as in several other cases) to enable the reader to obtain the general idea conveyed thereby of the proportion of the population open to such possible classification.

WAGES, COST OF LIVING, AND CONDITION IN VARIOUS OCCUPATIONS IN RURAL DISTRICTS.

Cost of living per day per family.	Possible savings.	Quality of work.	Division of labor.	Source of raw material.	Excess of laborers.	Sanitary condition.	General condition.	Labor organizations.		Marginal number.
								Local.	Federated.	
\$0.20-.35	None	Variable	No.		None	Variable	Variable	No.	No.	1
.35-.50	Small	Variable	Yes.	Foreign	None	Bad	Bad	Yes.	Yes.	2
.10-.25	None	Good	No.	Native	None	Bad	Bad	No.	No.	3
.40-.80	Small	Good	No.	Foreign	None	Fair	Poor	Yes.	Yes.	4
.10-.40	Small	Variable	Yes	Native	None	Bad	Poor	No.	No.	5
.10-.30	None	Good	Yes	Native	None	Fair	Poor	No.	No.	6
.40-1.80	Small	Coarse	No.	N. and F.	Some	Fair	Poor	Yes.	Yes.	7
.30-.50	None	Good	No.	Native	None	Bad	Bad	No.	No.	8
.60-1.50	Small	Fair	Yes	Native	None	Poor	Poor	Yes.	Yes.	9
.20-.30	None	Variable	No.	Native	Large	Poor	Poor	No.	No.	10
.10-.25	None	Variable	No.	Native	Large	Good	Poor	No.	No.	11
.15-.30	None	Good	No.	Native	Small	Good	Poor	No.	No.	12
.30-.60	Small	Variable	Yes	Mostly N.		Poor	Poor	No.	No.	13
(d)	Variable.		No.					No.	No.	14
.50-1.00	Small	Good	Yes	Mostly F.	Small	Fair	Fair	Yes.	Yes.	15
.30-.85	Fair	Poor	No.	Native	None	Fair	Fair	No.	No.	16
.50-1.00	Small	Fair	Yes	Foreign	Large	Variable	Fair	No.	No.	17
.50-.75	None	Poor	No.	Native	None	Good	Good	No.	No.	18
.75-1.25	Small	Poor	Yes	N. and F.	None	Poor	Poor	No.	No.	19
.30-.80	None				Great	Bad	Bad	No.	Some	20
.75-.90	Small	Fair	Yes	Foreign	None	Fair	Fair	No.	No.	21
.60-1.00	Small	Good	Yes	N. and F.	None	Fair	Poor	Yes.	Yes.	22
.40-.75	Small		Yes	Native	Small	Poor	Poor	No.	No.	23
.50-.75	Small		No.	Native	Small	Fair	Poor	No.	No.	24
.45-.60	Small	Good	No.	Mostly N.	Small	Poor	Poor	No.	No.	25
(d)	Variable.	Poor	No.	Native	None	Fair	Fair	No.	No.	26
.50-.90	Small	Fair	Yes	Native	None	Poor	Poor	No.	No.	27
.30-1.00	None	Coarse	Yes	Native	(d)	Poor	Poor	Yes.	Yes.	28
.50-.90	Small	Variable	Yes	Foreign	Small	Poor	Poor	No.	No.	29
.30-.75	Small	Fair	No.	N. and F.	None	Poor	Poor	Yes.	Yes.	30
.60-1.00	Small	Low	Yes	Mostly N.	None	Poor	Poor	No.	No.	31
.30-.75	Good	High	Yes	Native	None	Fair	Fair	No.	No.	32
(d)	Good		Yes	Mostly N.	None	Good	Good	No.	No.	33
.50-1.00	Small		Yes	Mostly N.	None	Fair	Poor	No.	No.	34
.60-1.00	Fair	Coarse	No.	Native	None	Fair	Poor	No.	No.	35
.35-.70	Small	Fine	Yes	Mostly N.	None	Poor	Poor	No.	No.	36
.50-1.00	Small	Coarse	Yes	Native	None	Poor	Poor	No.	No.	37
.60-1.00	Small	High	No.	Native	None	Poor	Poor	No.	No.	38
.45-.75	Small	High	Yes	Native	None	Poor	Poor	No.	No.	39
.30-.50	None		No.	Native	Large	Poor	Poor	No.	No.	40
.25-.50	Small	Variable	No.	Native	None	Bad	Bad	No.	No.	41
.25-.50	None	Coarse	No.	Native	Large	Poor	Poor	No.	No.	42
(d)	Small				None	Fair	Fair	No.	No.	43
.60-1.50	None	Good	No.		None	Poor	Poor	No.	No.	44
(d)	Small		No.		(d)	Variable	(d)	No.	No.	45
.75-1.50	Good	Fair	No.		None	Fair	Fair	No.	No.	46
.75-1.25	Fair	Fair	No.		None	Fair	Fair	No.	No.	47
.75-1.00	Small	Variable	No.		None	(d)	Fair	No.	No.	48
.35-.90	Small		No.		(d)	(d)	Poor	No.	No.	49
.20-.35	None		No.		Large	Poor	Poor	No.	No.	50
.75-1.00	Small		No.		Small	Fair	Fair	No.	No.	51
.25-.60	Small		No.		(d)	Poor	Poor	No.	No.	52
(d)	Fair		Yes		None	Fair	Good	No.	No.	53
(d)	(d)				None	Variable	Variable	No.	No.	54
.60-1.00	Small	Fair			None	Fair	Fair	No.	No.	55
.50-1.00	Small	Variable	Yes		None	Variable	Variable	No.	No.	56
.30-.50	None	Coarse	Yes		None	Poor	Poor	No.	No.	57
(d)	None				Small	Poor	Poor	No.	No.	58
(t)	None		Yes		Small	Usually poor.	Poor	No.	No.	59
(d)	Small				Large	Fair	Fair	No.	No.	60
.60-1.00	None		No.		None	Poor	Poor	No.	No.	61
.75-1.00	Small	Variable	Yes		None	Fair	Fair	No.	No.	62
.30-.75	None		No.		Large	Poor	Poor	No.	No.	63
§ 25.00-40.00	Small		No.		None	Fair	Fair	No.	No.	64
.50-1.00	Small		No.		None	Fair	Poor	No.	No.	65

‡ Mill hands in rural districts include chiefly those who have more or less important assignments and parts to perform in the sugar factories in connection with the machinery and processes. Where the improved sugar-making machinery is in use, their number is increased. They answer in part to the term "sugar makers" of the War Department census.

† Piecework; rates not reported.

ⁿ Included in dressmakers.

o And scrap meat.

m Included in miners.

p And sometimes land.

q Locomotive engineers receive, in some cases, higher pay than the figures shown.

r Included in foremen.

s Per month.

‡ Clothing only; cost not reported.

WAGES, COST OF LIVING, AND CONDITION IN VARIOUS OCCUPATIONS IN URBAN DISTRICTS.

Marginal number.	Occupations.	Class of labor.	License tax paid.	Number of persons.				Wages per day.	Hrs per day.
				Men.	Women.	Children.	Total.		
PRODUCTIVE.									
1	Apprentices.....	Skilled	No.	a 342			a 342	(b)	10-12
2	Architects.....	Prof.	Yes.	c 36			c 36	(d)	(d)
3	Bakers.....	Skilled	Yes.	a 2,337	a 13		a 2,350	e \$1.00-\$1.80	12-15
4	Basket makers.....	Skilled	No.	(d)	Mostly.	(d)	Few.	Piece.	(d)
5	Blacksmiths.....	Skilled	Yes.	a 841			a 841	1.00-2.40	8-12
6	Boat builders.....	Skilled	Yes.	All.			(d)	1.00-2.40	8-12
7	Boiler makers.....	Skilled	No.	All.			(d)	1.80-2.40	10-12
8	Bookbinders.....	Skilled	Yes.	22			22	.60-1.00	10-12
9	Box makers.....	Skilled	No.	Mostly.	Few.	Few.	(d)	.60-1.20	10-12
10	Brickmakers.....	Skilled	No.	a 48			a 48	f 1.20-2.00	10-12
11	Broom makers.....	Skilled	No.	Mostly.	Few.	Few.	(d)	f .60-1.20	(d)
12	Builders.....	Skilled	Yes.	(g)			(g)		10-12
13	Cabinetmakers.....	Skilled	No.	195			195	1.20-3.00	10-12
14	Candle makers.....	Skilled	No.	Few	Mostly.	Few.	(d)	.60-1.20	10-12
15	Carpenters.....	Skilled	No.	a 5,125			a 5,125	h 1.00-1.80	10-12
16	Carriage builders.....	Skilled	Yes.	All.			(d)	1.20-3.00	10-12
17	Chair seaters.....	Skilled	No.	Mostly	Few.	Few.	(d)	f .60-1.20	(d)
18	Chemists.....	Prof.	Yes.	All.			Few.	1.20-4.20	(d)
19	Cigar makers.....	Skilled	No.	a 3,683	a 60		a 3,743	i 1.20-1.80	10-12
20	Cigar manufacturers.....	Skilled	Yes.	160			160	(d)	(d)
21	Compositors.....	Skilled	No.	Mostly.	Few.		(d)	(j)	8-10
22	Confectioners.....	Skilled	Yes.	a 75			a 75	(d)	(d)
23	Contractors.....	Skilled	Yes.	ak 11			ak 11	(d)	(d)
24	Cooks.....	Skilled	No.	(d)	(d)		(d)	l 6.00-9.00	10-12
25	Coopers.....	Skilled	Yes.	a 492			a 492	.65-1.20	10-12
26	Coppersmiths.....	Skilled	No.	All.			(d)	1.80-2.40	10-12
27	Dressmakers.....	Skilled	No.	am 5,785			am 5,785	fn 1.00-1.80	10-12
28	Fishermen.....	Low	No.	455			455	1.20-2.40	(d)
29	Florists.....	Agr.	No.	(o)			(o)	Piece.	10-12
30	Gardeners.....	Agr.	No.	ap 56			ap 56	(d)	10-12
31	Gold and silver smiths.....	Skilled	Yes.	170			170	1.80-2.40	10-12
32	Gunsmiths.....	Skilled	Yes.	21			21	1.20-2.40	10-12
33	Harness makers.....	Skilled	Yes.	a 194			a 194	1.20-2.40	10-12
34	Hatters.....	Skilled	Yes.	11	337		348	.60-2.40	10-12
35	Helpers, mechanics.....	Low	No.	All.			(d)	n .60-1.00	10-12
36	Ice makers.....	Skilled	Yes.	40			40	2.00-3.00	(d)
37	Laborers (q).....	Low	No.	a 211,832	a 3,910		a 215,742	n .20-.60	10-12
38	Lithographers.....	Skilled	Yes.	All.			(r)	s 10.00-50.00	8-10
39	Machinists.....	Skilled	No.	t 179			t 179	1.20-2.00	8-10
40	Masons.....	Skilled	Yes.	a 1,335			a 1,335	.60-1.80	10-12
41	Matchmakers.....	Skilled	Yes.	(d)	Many.	Many.	(d)	.60-1.80	(d)
42	Metal workers (u).....	Skilled	No.	All.			(d)	1.00-1.80	10-12
43	Molders.....	Skilled	No.	All.			(d)	1.80-2.40	10-12
44	Ne makers.....	Skilled	No.	All.			Few.	1.00-1.20	10-12
45	Painters.....	Skilled	Yes.	663			663	.90-1.50	10-12
46	Photographers.....	Skilled	Yes.	30			30	f 1.00-3.00	(d)
47	Plumbers.....	Skilled	Yes.	15			15	2.40-5.00	8-10
48	Potters.....	Skilled	Yes.	85			85	.60-1.80	10-12
49	Printers.....	Skilled	Yes.	352			352	.60-1.80	10-12
50	Sailmakers.....	Skilled	Yes.	All.			Few.	1.00-1.80	(d)
51	Salt makers.....	Skilled	Yes.	All.			(d)	.30-2.40	10-12
52	Seamstresses.....	Skilled	No.		(v)		(v)	n .65-1.50	10-12
53	Shell workers (combs, etc.).....	Skilled	Yes.	All.			(d)	1.00-1.20	10-12
54	Shirt makers.....	Skilled	No.	188			188	f .60-1.00	10-12
55	Shoemakers.....	Skilled	Yes.	a 1,685	a 23		a 1,708	.60-1.20	10-12
56	Soap boilers.....	Skilled	No.	All.			(d)	.60-1.20	10-12
57	Stonecutters.....	Skilled	(d)	a 15			a 15	1.20-2.50	10-12
58	Straw workers.....	Skilled	No.		a 50		a 50	Piece.	(d)
59	Tailors.....	Skilled	Yes.	1,048			1,048	w 5.00-8.00	10-12
60	Tanners.....	Skilled	Yes.	a 24			a 24	1.00-1.80	10-12
61	Tinsmiths.....	Skilled	Yes.	135			135	1.00-2.40	10-12
62	Tobacco workers.....	Agr.	No.	Mostly.	Some.	Few.	(d)	.50-2.40	10-12
63	Turners, wood and metal.....	Skilled	No.	All.			(d)	1.00-2.40	10-12
64	Watchmakers.....	Skilled	Yes.	54			54	(d)	(d)

a Including those in rural districts. No data are available showing what proportion are urban and what rural.

b Board and clothing. c Including draftsmen. d Not reported. e And bread.

f Piecework. g Included in contractors. h And chips.

i In the small cigar shops the wages for cigar makers are from \$0.18 to \$0.60 (American currency) per 100 cigars. In the factories they range from \$0.60 to \$1.50 per 100. Cigarettes are made at \$0.60 per 100 packages, sometimes by day labor.

j Piece; \$9.60 to \$36 per month; \$5 to \$6 per week. k Including builders.

WAGES, COST OF LIVING, AND CONDITION IN VARIOUS OCCUPATIONS IN URBAN DISTRICTS.

Cost of living per day per family.	Possible savings.	Quality of work.	Division of labor.	Source of raw materials.	Excess of laborers.	Sanitary condition.	General condition.	Labor organizations.		Marginal number.
								Local.	Federated.	
\$0.30-\$0.50	None	Variable	No.	.....	None	Poor	Poor	No.	No.	1
(d)	Small	Good	No.	.....	None	Fair	Good	No.	No.	2
.60-1.00	None	Poor	Yes.	Mostly F.	Small	Bad	Bad	Yes.	Yes.	3
.30-.50	None	Good	No.	Native.	None	Poor	Poor	No.	No.	4
.60-1.00	Small	Good	No.	Mostly F.	None	Fair	Poor	Yes.	Yes.	5
.60-1.00	Small	Fair	No.	Mostly F.	None	Good	Poor	No.	No.	6
.60-1.00	Small	Fair	No.	Foreign	None	Poor	Poor	No.	No.	7
.50-.90	Small	Good	Yes.	Mostly F.	None	Poor	Poor	Yes.	Yes.	8
.50-.90	None	Fair	Yes.	Mostly F.	None	Fair	Poor	No.	No.	9
.50-.90	Small	Fair	Yes.	Native.	None	Poor	Poor	No.	No.	10
.35-.75	None	Poor	Yes.	N and F.	None	Poor	Poor	No.	No.	11
(d)	(d)	Fair	Yes.	N and F.	None	Fair	Fair	No.	No.	12
.75-1.00	Small	Fair	Yes.	N and F.	None	Fair	Fair	No.	No.	13
.50-.90	None	Coarse	No.	Mostly N.	Few	Poor	Poor	No.	No.	14
.60-.90	Small	Poor	No.	N and F.	None	Fair	Poor	Yes.	Yes.	15
.75-1.00	Small	Fair	Yes.	N and F.	None	Fair	Fair	No.	No.	16
.50-.75	None	Good	No.	Native.	None	Poor	Poor	No.	No.	17
.90-1.00	Small	Good	No.	Foreign	None	Poor	Good	No.	No.	18
.60-1.00	Small	Fair	Yes.	Mostly N.	None	Bad	Bad	Yes.	Yes.	19
(d)	(d)	Fair	Yes.	Mostly N.	None	Fair	Good	No.	No.	20
.60-.90	Small	Fair	Yes.	.....	None	Poor	Poor	Yes.	Yes.	21
(d)	Fair	Fair	No.	N and F.	None	Fair	Fair	No.	No.	22
(d)	Cons' r'ble	Fair	No.	N and F.	.....	.....	.....	No.	No.	23
(d)	Small	Variable	No.	N and F.	None	Poor	Poor	No.	No.	24
.60-.90	Small	Good	No.	N and F.	None	Fair	Fair	Yes.	Yes.	25
.75-1.20	Small	Good	No.	Foreign	None	Poor	Fair	No.	No.	26
.60-1.00	Small	Fair	No.	N and F.	None	Variable	Poor	No.	No.	27
.60-1.00	Small	.....	No.	.....	None	Fair	Poor	No.	No.	28
(d)	Small	Good	No.	.....	None	Fair	Poor	No.	No.	29
.60-.90	Small	Good	No.	.....	None	Fair	Fair	No.	No.	30
.75-1.20	Small	Good	Yes.	Foreign	None	Poor	Poor	Yes.	Yes.	31
.75-1.20	Small	Fair	Yes.	Foreign	None	Fair	Poor	No.	No.	32
.75-1.00	Small	Poor	Yes.	Mostly F.	None	Poor	Poor	No.	No.	33
.50-1.00	Small	Fair	Yes.	Mostly F.	None	Poor	Poor	No.	No.	34
.50-.75	None	Poor	No.	.....	Small	Poor	Poor	No.	No.	35
(d)	Fair	High	Yes.	Mostly N.	None	Good	Good	No.	No.	36
.20-.50	None	.....	No.	.....	Great	Bad	Bad	No.	No.	37
(d)	Small	Good	Yes.	Foreign	None	Poor	Poor	No.	No.	38
.65-1.00	Small	Good	Yes.	Foreign	None	Poor	Poor	No.	No.	39
.60-1.00	None	Good	Yes.	Mostly N.	None	Poor	Poor	Yes.	Yes.	40
.60-1.00	(d)	Fair	Yes.	N and F.	None	Bad	Fair	No.	No.	41
.75-.90	Small	Good	Yes.	Foreign	None	Poor	Poor	Yes.	Yes.	42
.75-1.00	Fair	Good	No.	Foreign	None	Poor	Fair	No.	No.	43
.50-.75	None	Fair	No.	N and F.	None	Poor	Poor	No.	No.	44
.70-1.00	Small	Fair	No.	Foreign	None	Fair	Poor	Yes.	Yes.	45
.75-1.50	Small	Fair	No.	Foreign	None	Poor	Poor	No.	No.	46
.90-1.00	Fair	Fair	Yes.	Foreign	None	Poor	Fair	No.	No.	47
.50-1.00	Small	Good	No.	Native	None	Poor	Poor	Yes.	Yes.	48
.50-1.00	Small	Good	Yes.	Foreign	None	Poor	Fair	Yes.	Yes.	49
.60-1.00	Small	Good	No.	Foreign	None	Fair	Poor	No.	No.	50
.30-1.00	Small	Coarse	Yes.	Native	Small	Fair	Fair	No.	No.	51
.50-1.00	Small	Good	No.	Foreign	None	Poor	Poor	No.	No.	52
.60-.75	Small	High	No.	Native	None	Poor	Fair	No.	No.	53
.60-.75	None	Fair	No.	Foreign	None	Fair	Fair	No.	No.	54
.50-.90	Small	Poor	Yes.	Mostly F.	Small	Poor	Poor	Yes.	Yes.	55
.50-.90	Small	.....	No.	Native	None	Poor	Poor	No.	No.	56
.75-1.00	Small	Fair	No.	Native	None	Poor	Fair	No.	No.	57
.50-.65	None	Good	No.	Mostly N.	None	Poor	Poor	No.	No.	58
.65-.90	Small	Fair	Yes.	Foreign	None	Poor	Poor	Yes.	Yes.	59
.65-1.20	Small	Poor	Yes.	Native	None	Poor	Poor	No.	No.	60
.75-1.00	Small	Fair	No.	Foreign	None	Fair	Fair	Yes.	Yes.	61
.50-1.00	Small	Poor	No.	Native	None	Poor	Poor	No.	No.	62
.65-1.00	Small	Fair	Yes.	N and F.	None	Fair	Fair	No.	No.	63
1.00-1.20	Small	Good	No.	.....	Good	Good	Good	No.	No.	64

l Per month; also meals and lodging. *m* Including seamstresses. *n* And sometimes meals.

o Included in gardeners.

p Including florists.

q The term "laborers," as used in the War Department census, from which the figures are taken, includes many occupations herein named.

r Very few; nearly all are in a single establishment at the capital.

s Per month.

t Machinists are mostly comprised in a few establishments in the large places and in sugar mills.

u Metal workers comprise numerous workmen in small establishments, such as brass workers, solderers, stencil makers, die cutters, brand makers, cutlers, forge and drop workers, etc.

v Included in dressmakers.

w Per week.

WAGES, COST OF LIVING, AND CONDITION IN VARIOUS OCCUPATIONS IN URBAN DISTRICTS—Continued.

Marginal number.	Occupations.	Class of labor.	License tax paid.	Number of persons.				Wages per day.	Hrs per day.
				Men.	Women.	Children.	Total.		
NONPRODUCTIVE.									
1	Actors and actresses	Prof	Yes.	13	36		49	(a)	(a)
2	Agents, real estate and insurance.	Com	Yes.	4,017			4,017	Commis.	(a)
3	Apothecaries	Prof	Yes.	All.			(a)	\$1.00-\$1.80	(a)
4	Artists	Prof	Yes.	23			23	(a)	(a)
5	Barbers	Skilled	Yes.	734			734	b 18.00-24.00	8-10
6	Bartenders.....	Com	No.	All.			(a)	(a)	(a)
7	Boatmen.....	Low	No.	All.			(a)	c .60-1.80	(a)
8	Bookkeepers (d).....	Com	No.	165			165	1.00-1.80	10-12
9	Butchers.....	Skilled	Yes.	e 137			e 137	1.00-2.40	(a)
10	Clergymen (priests)	Prof	(a)	e 124			e 124	(a)	(a)
11	Clerks	Com	No.	e f 1,100			e f 1,100	1.00-2.40	10-12
12	Commercial travelers.....	Com	Yes.	e 26			e 26	g 1.00-3.00	Var.
13	Commission merchants.	Com	Yes.	All.			(a)	(a)	(a)
14	Copyists	Com	No.	(h)			(a)	.80-2.00	10-12
15	Customs officers	Official	No.	All.			(a)	(a)	8-10
16	Dentists	Prof	Yes.	42			42	Fees.	(a)
17	Draftsmen	Prof	No.	(i)			(i)	1.80-3.00	(a)
18	Draymen	Com	No.	j 1,392			j 1,392	k .80-1.20	10-12
19	Engineers, civil.....	Prof	Yes.	115			115	(a)	(a)
20	Engineers and fireman, stationary.	Skilled	Yes.	e 45			e 45	2.40-3.00	10-12
21	Foremen.....	Com	No.	e l 57			e l 57	m 1.80-5.00	10-12
22	Government employees.	Official	No.	(a)	(a)		(a)	High.	8-10
23	Hackmen	Com	Yes.	(n)			(n)	(a)	(a)
24	Hostlers.....	Low	No.	30			30	.60-1.20	10-14
25	Hucksters.....	Com	No.	(o)	(o)		(o)	(a)	(a)
26	Janitors.....	Low	No.	p 38			p 38	.60-1.20	Var.
27	Journalists.....	Prof	No.	49			49	(a)	Var.
28	Launderers.....	Skilled	No.	232	16,855		17,087	q .60-1.00	10-12
29	Lawyers.....	Prof	Yes.	206			206	(a)	(a)
30	Lightermen.....	Low	No.	(a)			(a)	r .50-1.00	10-12
31	Literary and scientific persons.	Prof	(a)	44			44	(a)	(a)
32	Merchants.....	Com	Yes.	7,557	1,156		8,713	(a)	(a)
33	Messengers.....	Com	No.	r 1,145			r 1,145	.50-1.00	10-12
34	Midwives.....	Prof	Yes.	All.			(a)	Fees.	(a)
35	Milkmen.....	Com	No.	All.			(a)	(a)	(a)
36	Musicians.....	Prof	Yes.	169	15		184	(a)	(a)
37	Navigators.....	Prof	Yes.	All.			Few.	(a)	(a)
38	Notaries.....	Com	Yes.	50			50	Fees.	(a)
39	Nurses.....	Prof	No.	63	64		127	s .60-1.00	(a)
40	Office boys.....	Com	No.	(t)			(t)	.30-.60	10-12
41	Overseers.....	Com	No.	(u)			(u)	1.00-3.00	10-12
42	Packers.....	Skilled	No.	All.			(a)	.60-2.40	10-12
43	Peddlers.....	Com	Yes.	ev 565	ev 141		ev 706	(a)	(a)
44	Physicians.....	Prof	Yes.	e 219			e 219	Fees.	(a)
45	Pilots.....	Com	Yes.	All.			(a)	Fees.	(a)
46	Policemen, insular.....	Official	No.	400			400	bw 24.00-75.00	(a)
47	Policemen, municipal.	Official	No.	555			555	(x)	(a)
48	Porters.....	Low	No.	All.			(a)	c .60-1.00	(a)
49	Postmasters.....	Official	No.	All.			(a)	(a)	(a)
50	Practicantes (medical students).	Prof	No.	150			150	Fees.	(a)
51	Railroad employees, steam.	Com	No.	e 54			e 54	1.00- 3.00	10-12

a Not reported.

b Per month.

c Piecework.

d Bookkeepers, clerks, and others in the employ of the insular or United States Government receive much higher pay than the native employees in these occupations, and their salaries often range from \$1,000 to \$1,500 per year.

e Including those in rural districts. No data are available showing what proportion are urban and what rural.

f Including copyists.

g And expenses.

h Included in clerks.

i Included in architects.

j Including hackmen.

k And coffee.

WAGES, COST OF LIVING, AND CONDITION IN VARIOUS OCCUPATIONS IN URBAN DISTRICTS—Continued.

Cost of living per day per family.	Possible savings.	Quality of work.	Division of labor.	Source of raw materials.	Excess of laborers.	Sanitary condition.	General condition.	Labor organizations.		Marginal number.
								Local.	Federated.	
(a) Variable.	(a) Good	Fair	Yes		None	Poor	Fair	No.	No.	1
Variable.	Good	Fair	No.		None	Fair	Fair	No.	No.	2
(a) Variable.	(a) Good	Fair	No.	Mostly F.	None	Fair	Fair	No.	No.	3
\$0.60-\$0.70	Small	Poor	No.	Foreign	None	Fair	Poor	Yes	Yes	4
(a)	(a)		No.	Mostly F.	(a)	Fair	Poor	No.	No.	5
.50-1.00	Small		No.		None	Fair	Poor	Yes	Yes	6
.60-1.00	None	Good	No.		None	Poor	Fair	No.	No.	7
.75-1.00	None		No.	Native	None	Poor	Poor	No.	No.	8
(a)	(a)		Yes		(a)	Good	Good	No.	No.	9
.60-1.50	Small		No.		(a)	Variable	Variable	No.	No.	10
(a)	Small		No.		None	Good	Good	No.	No.	11
(a)	(a)		No.		(a)	Good	Good	No.	No.	12
.60-1.00	Small	Good	No.		(a)	Poor	Poor	No.	No.	13
(a)	(a)		Yes		None	Good	Good	No.	No.	14
(a)	Fair	Fair	No.		None	Good	Good	No.	No.	15
.95-1.50	Fair	Excel.	No.		None	Good	Good	No.	No.	16
.50-.90	Small		Yes		Few	Good	Poor	No.	No.	17
(a)	(a)	High	Yes		None	Good	Good	No.	No.	18
1.00-1.20	Fair	Fair	No.		None	Fair	Fair	No.	No.	19
										20
1.00-1.50	Fair		No.		None	Fair	Fair	No.	No.	21
(a)	Good				(a)	Fair	Fair	No.	No.	22
.50-.75	None		No.		None	Poor	Poor	No.	No.	23
.40-.75	None		No.		None	Poor	Poor	No.	No.	24
.50-.90	Small		No.		Many	Poor	Poor	No.	No.	25
.50-.90	Small		No.		None	Fair	Poor	No.	No.	26
(a)	Fair	Variable	Yes		None	Fair	Fair	No.	No.	27
.50-.70	Small	Coarse	No.		Large	Poor	Poor	No.	No.	28
(a)	Large	High	No.		None	Good	Good	No.	No.	29
.35-.60	None	Good	No.		None	Poor	Poor	No.	No.	30
(a)	(a)		Yes		None	Good	Good	No.	No.	31
										32
(a)	(a)		No.		(a)	Fair	Fair	No.	No.	33
.50-.75	None		No.		(a)	Poor	Poor	No.	No.	34
(a)	(a)	Poor	No.		(a)	Poor	Poor	No.	No.	35
(a)	(a)		No.	Native	None	Fair	Fair	No.	No.	36
(a)	(a)		Yes		(a)	Fair	Fair	No.	No.	37
(a)	(a)		No.		None	Good	Good	No.	No.	38
(a)	Fair		No.		(a)	Good	Fair	No.	No.	39
.30-.50	None		No.		None	Poor	Fair	No.	No.	40
.75-1.50	Fair		No.		None	Good	Fair	No.	No.	41
.50-1.00	Small		No.		None	Fair	Poor	No.	No.	42
(a)	(a)		Yes	Mostly N.	(a)	Poor	Poor	No.	No.	43
(a)	(a)	Fair	Yes		None	Fair	Fair	No.	No.	44
(a)	(a)		No.		None	Good	Fair	No.	No.	45
(a)	Small				None	Good	Good	No.	No.	46
(a)	Small				Large	Fair	Poor	No.	No.	47
.50-.75	None				None	Poor	Poor	No.	No.	48
(a)	Small				None	Variable	Variable	No.	No.	49
(a)	(a)		No.		None	Good	Fair	No.	No.	50
										51
.75-1.50	None		Yes		None	Variable	Variable	No.	No.	51

l Including overseers.
m High-grade foremen and superintendents command the highest wages named.
n Included in draymen.
o Included in peddlers.
p Including sextons.
q And sometimes soap.
r Including office boys.
s And meals.
t Included in messengers.
u Included in foremen.
v Including hucksters.
w And meals on certain service.
x Variable; about \$24 per month.

WAGES, COST OF LIVING, AND CONDITION IN VARIOUS OCCUPATIONS IN URBAN DISTRICTS—Concluded.

Marginal number.	Occupations.	Class of labor.	License tax paid.	Number of persons.				Wages per day.	H'rs per day.
				Men.	Women.	Children.	Total.		
	NONPRODUCTIVE—concd.								
52	Railroad employees, street.	Com....	No..	14			14	1.00- 2.40	10-12
53	Restaurant proprietors..	Com....	Yes.	77	15		92	(a)	Var.
54	Revenue officers.....	Official.	No..	All.			Few.	(a)	(a)
55	Road hands.....	Low....	No..	All.			(a)	.30- .60	10-12
56	Sailors.....	Com....	No..	1,595			1,595	.60- 1.20	(a)
57	Salesmen and saleswomen.	Com....	No..	b 4,565	b 25		b 4,590	.50- 2.40	10-11
58	Saloon proprietors.....	Com....	Yes.	Mostly.	Few.		(a)	(a)	(a)
59	Servants.....	Low....	No..	b 7,493	b 18,453		b 25,946	c d 2.40- 6.00	(a)
60	Sextons.....	Low....	No..	(e)			(e)	.60- 1.00	Var.
61	Soldiers.....	Official.	No..	All.			(a)	(f)	
62	Stable keepers.....	Com....	Yes.	25			25	Fees.	(a)
63	Steam fitters.....	Skilled.	(a)	All.			(a)	\$1.20- \$3.00	10-12
64	Stenographers.....	Com....	(a)	(a)	(a)		(a)	g 8.00- 20.00	10-12
65	Stevadores.....	Com....	No..	500			500	h. 12 $\frac{1}{2}$ - 20	10-12
66	Stokers.....	Low....	No..	All.			(a)	.60- 1.80	10-12
67	Teachers.....	Prof....	Yes.	b 563	b 246		b 809	i 40.00- 75.00	5- 6
68	Telegraph operators.....	Com....	No..	b j 69			b j 69	c 40.00-100.00	8-10
69	Telephone operators.....	Com....	No..	(k)			(k)	(a)	8-10
70	Typewriters.....	Com....	No..	Mostly.	Few.		(a)	c 40.00- 80.00	9-10
71	Undertakers.....	Prof....	Yes.	All.			(a)	Fees.	(a)
72	Waiters.....	Low....	No..	Mostly.	Few.		(a)	c 10.00- 12.00	8-10
73	Watchmen.....	Low....	No..	All.			(a)	1.00- 2.40	10-12

a Not reported.

b Including those in rural districts. No data are available showing what proportion are urban and what rural.

c Per month.

d And meals and lodgings.

e Included in janitors.

WAGES, COST OF LIVING, AND CONDITION IN VARIOUS OCCUPATIONS IN URBAN DISTRICTS—Concluded.

Cost of living per day per family.	Possible savings.	Quality of work.	Division of labor.	Source of raw materials.	Excess of laborers.	Sanitary condition.	General condition.	Labor organizations.		Marginal number.
								Local.	Federated.	
\$0.50-\$1.00	None .....	.....	Yes.	.....	None	Variable	Variable	No..	No..	52
(a)	(a)	.....	.....	.....	(a)	Poor....	Fair....	No..	No..	53
(a)	(a)	.....	.....	.....	(a)	(a)	(a)	No..	No..	54
.30-.50	None	Coarse..	Yes.	.....	Large.	Poor....	Poor....	No..	No..	55
(a)	Small....	.....	.....	.....	None	Fair....	Fair....	No..	No..	56
Variable.	Small....	.....	Yes.	.....	Small.	Poor....	Poor....	No..	No..	57
(a)	(a)	.....	.....	.....	(a)	Fair....	Fair....	No..	No..	58
(a)	Small....	.....	Yes.	.....	Large.	Poor....	Poor....	No..	No..	59
.50-.90	None .....	.....	.....	.....	None	Fair....	Poor....	No..	No..	60
(a)	Small....	.....	.....	.....	(a)	Fair....	Fair....	No..	No..	61
.60-1.00	(a)	.....	.....	.....	(a)	Poor....	Fair....	No..	No..	62
.75-1.00	Small....	Good ..	No.	Foreign..	None	Poor....	Poor....	No..	No..	63
1.00-1.50	Fair	Variable	No.	.....	None	Fair....	Fair....	No..	No..	64
.50-.60	None .....	.....	No.	.....	Large.	Poor....	Poor....	Yes.	Yes.	65
.50-.80	Small....	.....	.....	.....	Few ..	Poor....	Poor....	No..	No..	66
.60-1.20	Small....	.....	.....	.....	None	Fair....	Fair....	No..	No..	67
(a)	Fair .....	.....	.....	.....	(a)	Fair....	Fair....	No..	No..	68
(a)	Small....	.....	.....	.....	(a)	Fair....	Fair....	No..	No..	69
1.00-1.50	Small....	Variable	No.	.....	None	Fair....	Fair....	No..	No..	70
(a)	Fair .....	.....	.....	.....	(a)	Fair....	Fair....	No..	No..	71
(a)	Small....	.....	.....	.....	None	Poor....	Poor....	No..	No..	72
.60-1.00	Small....	.....	.....	.....	(a)	Fair....	Fair....	No..	No..	73

f Variable; and food, clothing, and medical attendance.

g Per week; Government stenographers receive as high as \$20 per week when experts.

h Per hour, and sometimes meals; 25 cents per hour overtime.

i Per month, and traveling expenses.

j Including telephone operators.

k Included in telegraph operators.

These lists of occupations are only approximate, fairly inclusive, and representative. Small industries, often unique in themselves, are occasionally found in the interior, like the cultivation of patchouli, or anise seed, cane making, or pannier weaving, which are hardly of enough importance to call for separate mention. It is difficult either to include all or to subdivide and properly group some.

Unless general classification and subclassification can be definitely made and individual occupations fully listed, exact enumeration is impossible. It was impossible under existing conditions to make great effort at such subclassification, listing, and enumeration in the recent census, which therefore, though of much value, is shorn of a large measure of usefulness for the present tables.

No thorough determination of the respective numbers of men, women, and children employed in the several vocations can be accurately had, except by long and exhaustive study of the field, save in a few cases where the conditions involved make the fact self-evident. In a very few the extent of the cooperation of the sexes can be very nearly determined.

The grade of work performed in the island in the mechanical lines is not, as a rule, up to the mark. While the iron-workers, silversmiths, stonecutters, and masons are skillful, though the latter do not strengthen their walls by bonding, the workers in wood, leather, and other fabrics are far inferior to men of the same craft in the United States. As a rule, the artisans of Porto Rico can not be considered proficient according to American standards.

There are so few factories of any kind in the island that there is little opportunity for what is known in manufacturing centers as the division of labor, though it is stimulated by the excess of labor seeking employment. It does find occasional expression, as in the bakeries, on the coffee, sugar, and tobacco plantations, in the cigar factories, in the packing of sardines, with the salt workers, etc. In the expansion and better organization of the industries of the island and the absorption of the excess of labor a greater and more helpful division of the forces employed must speedily come.

With the poorer labor elements so predominant here, the greatest benefits of divided labor are experienced, a man of inferior intelligence being able to perform a part successfully, where he could not hope to master the whole, and by such cooperation a degree of speed and of good work are secured and better wages are assured than would be possible to any one of the factories working on the old lines.

So long as the lack of new and active industries with abundant capital behind them or the failure to resuscitate and expand the old ones continue there can, of course, be no material advance in wages which are, in most lines, cruelly low, and compel conditions repugnant to health and happiness.

Not only are the hours of labor too long, but they are not as well regulated, it is believed, as in others of the Antilles. Several reasons for this appear and require further consideration.

It is believed possible to gradually develop the disposition to save and accumulate on the part of the wage worker, as soon as conditions, wages, etc., are made more tolerable for him.

The allowances made to the plantation peons have been less, apparently, than was wise, certainly less than shrewd business considerations are likely to suggest, under the new order of things. Whatever have been or may henceforth be claimed to be the disadvantages to the planter, in providing huts and garden patches for his work people, on or near his plantation, the new and very different status that is to obtain under American men and methods will demonstrate the wisdom of every possible effort on the part of the owner at improving the condition of his laborers. Moreover, it will be found to pay in dollars and cents, aside from the general benefits and satisfaction derived on both sides.

OPPORTUNITIES FOR LABOR.

The effort to indicate, in some degree, to what extent the productive and constructive energy of the laborers of the island is employed in working up native raw material, without the necessity of calling greatly on outside sources, is believed to be worthy of attention.

With the exception of the cereals, metals, soft timber, textile fabrics, and oil, the chief needs of the life of the island seem to reside within it. So far as the cereals are concerned, it is probably easier for the island people to exchange for them some of their own peculiar and much sought crops than to attempt to increase the output of maize, cassava, or other bread-making products. It has long been asserted in agricultural communities that "the planter who does not raise his own bread and meat," but cultivates only a marketable "gold crop," such as cotton, tobacco, etc., "can not thrive." The better use of the island's native phosphates and guanos—happily not rich enough in fertilizer values to find ready market abroad, and hence easier kept at home and more cheaply utilized—will give improved results in crops, which may be exchanged for breadstuffs to advantage, while cattle raising is soon to show marvelous increase both for home consumption and shipment. The development of the prodigal wealth of the island is likely, in a few decades, to surprise even its most sanguine friends. This, however, will not be accomplished until intelligent and diligent thought and effort have been given to the creation of permanent and satisfactory markets for the island staples which are now wanting.

Alert, positive, and well-considered supervision and action are imperatively called for as to the sanitary and general conditions of even the rural laborer, whether in his home, the field, or the factory.

To the average peon and rural toiler health is his only wealth. What more important to him or to the State than that its largest and longest effectiveness shall be protected? Dangers incident to disease, to occupations, to machinery, processes, etc., should be minimized, in the interest of both State and individual.

A potent, depressing, disturbing, unyielding component in the untoward conditions to which the wage worker is subjected is the superabundance of his numbers for the work. Except as all practicable, possible forces are combined to minimize and utilize this, the betterment of present conditions can only be slow, slight, and unsatisfactory. Of course it must be borne in mind that the present conditions of commerce and industry in the island are abnormal. Many causes have contributed to this—the results of the war, the cutting off of the old markets before the establishment of equally large ones in another quarter and the consequent scarcity of money, the enormous damage wrought by the hurricane—all these causes have contributed to prevent the proper and usual working of the farms and to a very serious depression of all of the industries of the island. With the recovery from the effects of these abnormal and temporary causes must follow a degree of prosperity in agricultural lines and the absorption of much, at least, of the present labor surplus.

In the meantime the transfer of a few thousands of the islanders to the Hawaiian Islands, under contract to labor on the sugar plantations, may under wise management prove of value to all concerned. Emigration to Cuba, too, where the land is not so much taken up, may somewhat relieve the present depressed condition of industry.

The organization of labor in Porto Rico has from time to time had the attention, wise and otherwise, of some of the leading students of labor problems there, but apparently never with any lasting results or material benefits to any. The greater illiteracy among all classes, the much less general intelligence, the difficulties of organization under the former government, the lack of competent leaders, the difficulties of transportation, and, above all, the extreme poverty of those most interested, have doubtless each borne a part in preventing any such solidification of thought and action as the great labor organizations in the United States represent.

Always with some real, and, indeed, at times very great wrongs and hardships, it has ever been most difficult to voice them, or gain audience for them from those in whose hands lay, perhaps, some power of redress. But in the twenty-eight years which have elapsed since slavery was abolished free labor has brought itself to the attention of the rulers and the people on several occasions. Petitions, delegations, strikes, and the usual machinery of those aggrieved were from time to time brought to bear on those in authority, with the result that, though unwarranted by law, the Spanish governor-general some years ago

appointed certain officials known as "protectors," to take cognizance of the case in any district where labor agitation was rife, and to these protectors somewhat liberal powers of conciliation and arbitration were given, with (it is claimed by those familiar) very good results.

Following in the wake of the labor movement in the United States and other countries, attempts have been made, with varying success, to organize labor in the island on both general and local bases. In fact, federations with leanings of socialistic and antisocialistic character have existed in the island for several years, though the socialistic body has lacked the virility of the other, and has had of late, if it still exists, only a lingering existence.

Although *gremios*, or guilds, of any class of laborers may at a time of especial excitement or effort be readily organized in the country districts, it is only in the cities and larger towns, usually upon the coast, that such organizations can be maintained, especially as such associations, from the usual poverty both in numbers and resources, promise so little of advantage. A distinguishing characteristic of the Porto Rican, however, is his individuality, and it has so far exerted itself that most of the mechanic crafts have *gremios* at the capital, San Juan, and some few exist in other populous places in the island. There are in several instances two *gremios* of the same craft, one a component of the socialistic federation of labor and the other of its rival federation. While all friendly *gremios* are supposed to be constituent parts of the same federation, there have been a few such scattered and unattached. Most of them at the capital are of apparently good numerical, but not much financial, strength. Strikes, of which quite a number are reported from time to time—three having been in progress at the same time in different parts of the island and by different handicraft organizations in the autumn of 1900—have never, at least in recent years, reached any considerable proportions, probably chiefly through the inability of the strikers to hold out.

The strike of the stevedores employed by the New York and Porto Rico Steamship Company at San Juan originated in a sudden demand on the part of the stevedores for an increase of wages for regular hours of work and for overtime, and for shorter hours. The arrival of two heavily-laden steamships of the company at the same time doubtless was considered favorable to the wishes and demands of the strikers, who withdrew and so intimidated certain others who wished to remain that they also left, while the San Juan stevedores' *gremio*, including stevedores employed by other shipping houses, took up the fight, though not ordering out these other members. It was freely admitted by the officers of the *gremio* that there was not work enough at the docks for more than a third of the number available, so that to give each one work they were divided into three reliefs, each having but two days' work in the week, which gave an average of only about

\$17 per month wages. While readily admitting that this was a small income on which to subsist a family, the steamship company claimed, with truth, that many of its old men wished to remain at this rate, and there were others in plenty ready to offer but for the intimidation and violence of the strikers, whose sentries were arrested and punished for an assault on one of the company's men who was seeking new help.

An offer to arbitrate on the part of the *gremio*, which took charge of the strike, was declined by the local superintendent of the steamship company, who eventually got what aid he needed, after a large cost and delay, and soon had many of his former men, who had been among the strikers, again at work. (a)

At present the functions of the several *gremios* in active existence include the regulation of wages and hours of labor of their members, the procuring of work for them when idle, the regulation of the members in matters of strikes, lockouts, etc., the maintenance of sick benefits, and the collection in case of death of an agreed sum, about \$1 per capita, for funeral expenses, physicians' services, etc. Public physicians being maintained in each municipality, such expenses are not usually met with these payments. No general rules obtain as to apprentices or instruction in trades, but systematic regulation is much desired.

The labor agitator is not unknown here, especially in the socialist order. Several times some of the most ardent exponents have come in conflict with the authorities in the utterance of their views. Appeals to violence in the furtherance of the efforts of the *gremios* to obtain the results sought have been of not infrequent occurrence, and intimidation of scabs or substitutes during a strike has not been confined to words only. A vigilant system of picketing, of oversight of all suspected parties, of preventive telegraphic communication with all parts of the island whence substitutes might come, and of the display of force, and it is said some times of incendiarism, etc., have been maintained wherever a strike was on. But the Porto Ricans are a peaceable and gentle people, except as inflamed, and any equitable system of the

a The writer is much indebted for many facts to Mr. Pedro C. Timothée, president of the *Federacion Regional* of San Juan (practically the only existing federation, embracing most of the several *gremios*, or labor guilds, of the island), who is at present engaged in teaching. Mr. Timothée recognizes very fully the necessities to the labor elements of better education and modes of life, habits of saving, manual training, organization of the workmen themselves for mutual helpfulness, and better labor laws fixing and enforcing the policies of arbitration and conciliation. Mr. Miguel Casanovas, the president of the stevedores' *gremio*; Mr. Valentine Overman, president of the carpenters' *gremio*; Mr. Enrique P. Renton, president of the cigar-makers' *gremio*; Mr. Paulino Carmona, president of the painters' *gremio*, and Mr. Estanislao Casman, president of the masons' *gremio*, are all men who have shown much interest in the amelioration of labor conditions, to whom the writer is under obligations. Much of the data herein contained is due to their cordial cooperation.

regulation of labor, established by law, would have very general and cordial support from all classes.

The methods of arbitration and adjustment of late years adopted by the several crafts and trades themselves and by their employers, and which seem so productive of good results as to be increasingly gaining favor, seem to call for a degree of diffused intelligence and appreciation of principles, as well as initiative and capacity, hardly to be looked for yet in Porto Rico.

COST OF LIVING.

The cost of living is of course one of the prime considerations in any study of the situation and condition of the workingman in Porto Rico, as it must always be everywhere, whether in the country districts or in the city or town. The chief items to be reckoned with under this head are those of food, rent, clothing, fuel, and lighting, and in Porto Rico they are, with by far the greater part of the wage-workers, not only the chief, but practically, the only avenues of outlay. There is in no portion of the United States an equal relative number of people whose real or imaginary needs, outside of bare subsistence, create so small a demand upon their earnings. While this fact is due in a considerable degree to their tropical situation, it is, in the main, due to a combination of the facts that their earnings are at best so meager, and that they have little incentive to labor, and are, especially in the country, without ambition.

There is in certain places and relations a considerable difference between the character and cost of the food supply of the average wage-worker of the rural and urban localities, the advantage as a whole being with the rural toiler. This is not only so as to the food itself, but in the matter of cooking it, as the fuel of the rural worker costs him usually only the labor of himself, wife, or children to gather, while his city brother must buy what he needs. Happily the chief cities and towns of the island have now public water systems, which furnish water for all purposes perhaps at better advantage than in the country; and, although it ought not to be so, it is usually of better quality, the poor water in the rural districts being due to pollution of the streams. Many of the mountain or roadside streams from which numerous peon families are supplied are alike the family cistern and washtub, the watering trough for passing cattle, the wallow of hogs, and the drainage of residents along their banks at higher altitudes. The rural worker has the advantage of a possible yam or sweet-potato patch—probably cultivated by his wife—and if at all prosperous, of a few hens, a pig, or a goat, which pick up their own living; while certain fruits and herbs of the field, cresses from the brook, and, by rare good luck, a few bananas (his main staple), come to him occasionally without cost. His eggs must go to pay for his very limited groceries. Upon all his

articles of foreign production, his rice and dried salt codfish, the two main sources of his strength; beans, salt, flour, and his few groceries, he must, if away from the coast, pay the added cost of freight, above what his city congener pays, and he has to go without the fresh fish which are on the coast so cheap and welcome an addition to the workman's fare. Native cheese the countryman gets cheapest, perhaps produces it from his own goat's milk; the foreign, the city workman buys to better advantage. The balance is not, in bare cost, so very uneven, but the associate conditions put the man in the hills at considerable advantage.

It is owing to the importance of the contributions named to the bill of fare of the country worker, which cost him little or nothing, that it is difficult not only to make a comparison of relative cost, but also to determine what the actual cost of his food per capita and per diem is. It is roughly estimated by different authorities, at from 3 to 20 cents per day, American money, and by some at a much higher figure.

A singular gauge of partial cost is afforded in the fact that 50 bananas or plantains, usually of the large green variety, have frequently been considered the equivalent of a day's wages, which in American money would be 30 cents. As 50 bananas would furnish rather more than a day's food for an average peon's family, they may be estimated, and indeed would market, at something less than that sum.

Locality cuts some figure in the cost of living in the interior, and proximity to railroad, military road, or coast always brings considerable benefits in the matter of food and some other commodities, but on the other hand augments the house rent.

The food list of the rural wage workers in Porto Rico is probably poorer than that of any equal body of people under so enlightened a government and located so near to the great granary and provision supply of the world. It barely includes the essential components to meet the physiological demands of the human system, but it is often interesting to observe how these demands will assert themselves and the individual seek food of a kind which, not especially liked, attractive, or cheap, he buys in response to the craving and claims of his physiological requirements.

The list, except as added to and varied somewhat by the occasional contributions of tropical vegetation, such as the palmetto cabbage, rarely available, water cresses, greens of one kind or another, and a few wild fruits which may be obtained without other cost than the labor of picking, is not a long, varied, or attractive one. The culinary art as practiced here does little to improve the most primitive processes of simple boiling, frying, roasting, and baking, only such combinations being known as convenience or the demand of the system for complementary admixtures have instituted. Cabbage is boiled

with beef, vegetables are cooked with meat, bread is eaten with cheese, not so much because of the palatable agreement of the components, but because back of this is the physical demand for the elements contained in the one and not in the other. Much of the pleasure and hence of benefit to be obtained from food well prepared and made attractive is here lost from want of preparation and better cooking.

The chief food dependencies of the workingman in the country are as follows, and very nearly, perhaps, in the order given as to reliance and esteemed value. The extent to which the nitrogenous elements can be indulged in depends entirely upon the income of the individual breadwinner and householder. The list covers practically the range of food commonly in use, but is somewhat enlarged in cases by the addition of canned goods, imported meats, sausage meat, sardines, etc. As a rule, however, few variations are made from this enumeration.

BREAD.—That made from American flour or that called cassava, made from the green tuber bread fruit (*fruta de pan*), is not generally used.

BANANAS or PLANTAINS.—Of these there are twenty varieties. Eaten raw or cooked. A main reliance.

YAMS.—A kind of large and coarse, sweetish tuber of the potato family. Eaten cooked, boiled, or fried, and much relied upon.

SWEET POTATOES.—Not as sweet or fine grained as the best of those in American markets.

YAUTIAS.—Tubers like potatoes. Eaten boiled or fried.

BEANS.—There are at least three varieties grown, and the small American white bean is imported but not popular. Beans are boiled and used in soup. The baked bean is yet unknown. The red bean (*gandul*) is most esteemed and is eaten much with white rice as a superior dish.

RICE.—White, yellow, and brown. A little upland rice is grown in the island, but is inferior. The broken and the cheaper grades are mostly used in the country. It is used in soups and is boiled alone.

DRIED SALT FISH.—This is the mainstay in the way of nitrogenous food, meat of all kinds and cheese being high.

TORTILLAS.—A sort of vegetable omelet or griddle cake composed chiefly of the starch flour of the yucca.

PEASE.—These are of several varieties and are eaten in soup, boiled, or with omelets.

COFFEE.—This is a great reliance of all classes and is made very strong. It is sometimes too expensive for the poorest peons.

VEGETABLES.—Beets, cabbage, carrots, cucumbers, eggplant, garlic, lentils, lettuce, melons, okra, onions, radishes, Spanish squash or pumpkins, string beans, sugar cane, tomatoes, turnips, green peppers, water cresses, cocoanuts.

FRUITS.—Alligator pears, guavas, small bananas (*guineos*), mangoes, nisperos, oranges, lemons, pineapples, and others, some of which the workingman can usually afford and others hardly at all.

EGGS.—These are little used by the poorer classes, but are the source from which their money for groceries, etc., is largely derived, though they are highly valued as food.

MEATS.—All kinds of meat are too high for any other than exceptional use by the working classes. Bacon stands first in use. Fish and hog's meat (usually only the coarsest pieces, the liver and "lights," heart, feet, etc.) may be had, perhaps once a week, by the poor. A little tripe or a piece of mutton or kid's flesh is indulged in occasionally. Poultry is mostly sold, like eggs, for store supplies.

CHEESE.—That made from goats' milk is most generally used in the country; imported cheese in the cities. It is a highly-valued but rather expensive article of food, though the country made is lower priced.

MILK.—Neither goat nor cow's milk is in as general use as would be expected where both animals are common. Goats' milk is the chief supply, but is mostly used for cheese. Nothing would more helpfully increase the food list of the workingman than to improve the milch cattle and to increase the number of goats, swine, and poultry in the island.

The usual drinks of people in the country are water, coffee, cocoa-nut milk, a sweet fermented drink made from sugar cane, and the rum of the country. The Porto Ricans are as a whole a temperate people.

It seems almost an absurdity to think or speak of the wretched "shacks" which cover the great percentage of rural wage workers as houses. A very small percentage of the population in the country districts have decently constructed dwellings, though their condition and environment is too often hardly better than that almost universally present with the poorest habitations; all others, save the plantation or farm houses, are of much the same exceedingly primitive type. The average home of the peon is a frame of poles covered with palm leaves or bark, with a grass-thatched or palm-leaf roof, the whole bound together with remarkable staying qualities. A hole in the roof suffices for a chimney, and one at back and front for doors. There is possibly a window aperture which can be closed by a shutter at night to keep out air. Sometimes the structure is set up on posts and sometimes not. Sometimes there is a dirt floor and sometimes one of boards. An open frame shed in the rear, with slight covering, affords shelter for cooking in hot and dry weather, and for washing. This home of the peon is like that in which his forbears have lived for generations, and he is satisfied to live and to die here.

If he can beg, borrow, or appropriate the use of a piece of land a few rods square, to set his cabin upon, his rent costs him nothing, and even if he pays the very small sum which, at most, could be demanded, it is paid in most cases by services which very probably consume what would otherwise have been waste time and energy. The wage-worker's

rent in the rural districts, if he keeps out of the villages and towns, is practically nothing.

But the lower in the scale of intelligence human beings are, the world over, the more gregarious is their social life, and the Porto Rican is no exception. He loves the villages, and is willing to pay a rental out of his miserable earnings, even in such beehives as "Poverty Row," just outside the town of Caguas, to be in the throng of his fellows. Of course even the mud or palm-leaf walls, with their grass thatch and board floor, of these densely congregated hamlets, resembling closely an aggregation of huts in an African kraal, do not command a heavy rental—say, at most, 1 to 3 pesos (\$0.60 to \$1.80) per month—while the rent of artisans' houses in the villages is double and even treble that sum. For a few of the best dwellings, occupied usually by the butcher, carpenter, or mason, and where some land and outbuildings are included, the rental may even reach from 50 to 150 pesos (\$30 to \$90) per year. The engineers, foremen, overseers, yard masters, etc., of the sugar estates are often furnished with very comfortable quarters, of varying degrees of excellence and attractiveness, as partial compensation for services, and on some of the sugar plantations, where there are sugar houses or factories, long rows of connected or detached dwellings have been erected for the mill hands, teamsters, and others, whom, in the grinding season, when everything is at high pressure by day and by night, it is important to have at hand.

Rent, under even the most exacting conditions, outside the hamlets is never a tax of importance. In the hamlets and villages of the country side it is still insignificant as a rule, and never exceeds the figures given, unless land of some extent is attached which can be cultivated.

The clothing of the adult rural wage worker, male or female, as a factor in the cost of living, is of but small consideration, and of children is still less, the younger children of the poor class of both sexes, white or black, commonly wearing absolutely nothing. With the official, professional, skilled labor, and commercial classes some attention is paid to appearance, and their representatives are garbed conformably to the habit of their grades in a tropical climate, though never at much expense. It is safe to assert that nine-tenths of even the best representatives of the official and professional classes are usually clothed throughout the year in some of the light (often white) fabrics of cotton, linen, or nankeen, pongee, or alpaca demanded by the heat, and that oftentimes no more expensive single article of apparel is included in their dress than the more or less costly straw hat, which is a most important part of it and is a matter of some pride. The familiar white, blue, or brown drilling, and sometimes cotton duck, is the usual material of the artisan's costume, his hat being usually of cheaper straw or palm leaf than that of the professional or commercial man. For the laboring man of lower grade and the peon

laborer the clothing is the scantiest possible to decency while at work, often consisting of only a cheap cotton undershirt and a pair of the lowest-priced cotton-duck trousers. Hat and shoes are often discarded, the latter usually, and if a hat is worn it is of wool or coarse palm leaf. The women of the peon class largely content themselves with a single garment of cheap cotton, with a light print or cotton duck of better pattern and make for occasions. Bare feet are common as well as bare heads, but if the former are covered it is with the cheapest of shoes and often no stockings, and the latter with a cheap but gay straw hat.

The older boys and young men are clothed much as are their fathers, scantiness, cheapness, and dirt being the prevalent features, except on a Sunday or holiday, when the most immaculate of white duck suits and well-laundered shirts transform the males into cleanly and almost well-dressed and well-appearing people, though even then they may be shoeless. The same transformations affect the other sex, the members of which are, or can be, very excellent laundresses. Proofs of this appear of a Sunday or other gala day in white and well-starched garments of duck, calico, gingham, muslin, or linen. There is always, however, room to doubt whether the cleanliness of the garments is matched by that of the skin, habits of personal cleanliness, which would seem to be imperative in hot climates, not being well observed.

With the exception of the well-to-do or wealthy, with whom it is a matter of individual taste and expense only, the average cost of clothing to the commercial or professional classes would not exceed \$100 a year; that of the average artisan about \$30 a year, while that of the agriculturist and low-grade labor classes would not reach \$15 a year. If it were not for the cost of shoes, now largely imported, and of wool hats, extensive use of which is made by those exposed to the sun's rays, where thickness is requisite, the clothing expense of these two classes would be much less.

Fuel and lights cut but small figure in the expense account of the rural worker. For the utterly primitive means and methods of cooking employed by the great mass of the peon class, the simple, small fire, either out of doors on the ground or, if too wet, on the stone hearth, in the primitive sand box or kettle, or upon the dirt floor of the hut, over which simmers the stew pan or kettle, a few fagots from the roadside or hedge are all-sufficient. Hardly more is requisite when the conveniences of the better dwellings—a masonry bench, with two or more small square iron pans with grated bottoms for wood or charcoal fires set therein—are employed. Charcoal is vended both in the towns and country, charcoal-burning being a considerable and in the past a sadly destructive occupation, enormous quantities of the choicest and most valuable hard woods having been sacrificed for fuel. The prices of wood and charcoal have advanced as the country has been

denuded of its forest growth, and fuel now commands high prices. But the quantity consumed per capita is so small, fire being kept only when cooking or the heating of flatirons is in progress, that its total cost is insignificant, and with the peon practically nothing. There is no coal worth mentioning on the island, and coal by sea would be exceedingly expensive. Wood fuel, including charcoal, is constantly becoming scarcer and dearer. It is primarily necessary, in a tropical climate, that the fire shall be easily made, small in compass, and quickly extinguished without loss as soon as it is no longer needed for cooking or kindred uses, while the fuel must be compact, easily transported, and cheap. The oil stove and coal oil would probably meet nearly all of these requirements. Not only would the food of the whole people be much improved in character, variety, and palatability, but cleanliness of domicile and person, now so terribly neglected, would, by the ease with which hot water could be had, be greatly promoted, two of the prime factors for the lessening of disease being thereby secured, and laundering and other mechanic arts would be greatly inconvenienced. The high price of coal oil, caused by the heavy duty upon it and the monopoly which has until now prohibited its use for anything but lighting, is at an end, and the oil is now available to all classes with a probability of even lower prices than those which now prevail.

The artificial light of the masses in Porto Rico, especially in the country, has hitherto been largely the tallow candle. The total consumption of candles by nearly a million people has been enormous, though of course limited by the fact that there is no great occasion for light in most rural homes or occupations after nightfall. On the other hand, there being neither dawn nor twilight of any duration, earlier lighting is requisite at both ends of the day, both the breakfast and supper of the working classes being often prepared and eaten by candle-light. The cheapest form of tallow product, largely homemade, was, on account of the high duties upon paraffin and stearin (hard) candles, chiefly used until the American occupation. The lower prices now prevalent are bringing the better kinds into general use and are substituting coal oil for candles to a considerable and steadily increasing extent. The advantages in artificial light which Americans, over all the rest of the world, have enjoyed for many years, but which began only with the last half century, have come to the rural people of Porto Rico only in late years, though the wealthier classes, especially of the urban communities, have enjoyed them longer.

In view of the small use, poor quality, and comparatively low price of the means of lighting, the cost per capita to the wage-worker in the country has been too trifling to count much in the cost of living.

It is of interest to note that, upon some of the great central sugar plantations and others, the installation of an electric plant for lighting the sugar house in the grinding season has permitted the lighting of all the residential buildings, etc.

The cost of sickness and burial, in contrast with the trivial expense of certain of the foregoing factors in the aggregate cost of living, is a considerable one to the wage-worker. Where labor organizations exist the draft of these two serious burdens upon the strength and resources of the average breadwinner is somewhat lightened by their meager ministrations, nursing, and allowances; the relief which partially answers to similar provisions in English sick clubs and the secret and benevolent bodies of the United States; the services, if desired, of the physician and apothecary at public expense, and the regulated contributions for burial purposes of fellow-members.

Medical skill in the country districts is generally far from the best; hospital accommodations are few; the services of sisters of the Catholic orders rarely are available outside the towns, except in epidemics; home surroundings and comforts are few and poor at best, and hard as are the conditions and burdens of the toiler in health, sickness and death are woes and horrors beyond anything conceivable in highly civilized communities.

Delicacies and proper nutriment, usually costly, are most difficult or impossible to obtain; nursing is rough, unskilled, and uncleanly, every environment being bad; the medical care is at best often that of an untrained *practicante* (student), a "natural" doctor, an old woman, or possibly even a voodoo apostle, or necromancer. Sickness must be endured under the worst possible conditions for comfort and of unfriendliness to recovery.

With women and children the percentage of mortality is sometimes fearful, male physicians rarely, if ever, taking charge of an obstetric case, a midwife, more or less proficient, or some female friend having charge of the patient. There are no more beneficent effects of the American reorganization of the government of the island than those that are recasting and regulating, on the best lines, the practice of medicine, surgery, dentistry, pharmacy, midwifery, and nursing.

The cost of sickness, aside from the loss of earnings, is too variable to be stated accurately, but even with free medical service, nursing, and medicines it is high in both rural and urban districts.

The pitiful poverty and wretchedness of the confining and burial of the dead, with even the poorest bearing, of course, some marks of affection, sentiment, and reverence, are shocking, harrowing, and repellent to the American mind, accustomed, even in conditions of poverty, to see the last services to the dead conducted at much expense and with every refinement of taste, tender emotion, and dignity that reverence for death and affection for the lost can suggest.

Possibly the expense in our American communities is often much too great and the ceremonial and conditions of burial too costly and elaborate, but the American who has witnessed the conditions in Porto Rico will never, in the interest of all that is best in human nature, wish to suggest any abatement.

Extreme poverty not infrequently permits only the winding sheet for the remains, and the body, suspended from a pole resting on the shoulders of a bearer at each end, is borne from the home to the church and deposited on the floor of the sanctuary for the priestly rites, and thence carried to the interment in the nearest consecrated ground, in whose soil no bodies, except those of the entombed rich, rest long, the exhumed bones soon finding place in the ossuary or bone crypt, which is a revolting feature of every cemetery. In many cases where coffins are used they are hired merely for the occasion.

Notwithstanding these often less than primitive accessories and methods of burial, the expense of services of priest, gravedigger, fees, etc., is a considerable drain on a well-nigh empty pocket, and often only the contributions of friends make anything better than the winding sheet possible.

The food lists of the wage-workers of the cities and towns do not vary greatly from those of the same factors in the country districts. Fresh fish, a more liberal supply of bacon, and dried, prepared, and salted meats of all kinds, butter, imported cheese, canned goods, salad oils, macaroni, and kindred preparations, a better bread supply, and a larger and better range of fresh meat (usually in better condition than in the country), a larger allowance of eggs and poultry, with more delicacies and fruits, though neither as many nor as good vegetables, furnish the principal items of difference between the bill of fare of the rural worker and his city brother.

There is also, as might be expected, much less uniformity in either the component articles of the bill of fare or in the limitations of quantity and combinations, in the city list. Incomes vary much more, the pleasures of the table are reckoned higher and are greater, and better culinary knowledge and facilities contribute both to a much greater variety and form of food. The nearest approach to the conditions of the middle classes in the United States is, of course, possible among the large number of those of the official, professional, skilled-labor, and commercial classes to be met with in populous communities, and their mode and scale of living is, of course, better in proportion to their incomes. The food list of the common laborer varies but very little, and only as already noted, from that of the same class in the country. The following is a fair example of a "middle class" average day's bill of fare:

First breakfast (on rising).—Bread, butter, coffee.

Lunch, or noon breakfast (at noon).—Soup, potatoes, beans, rice, beefsteak or tripe, etc., or dried salt fish.

Dinner (from 6 to 7 o'clock).—Soup, potatoes, sweet potatoes, Spanish peas, meat or fish, rice, cocoanut or other sweets, guava paste, coffee.

The matter of rent in cities and towns is a far more serious matter to the wage-worker than it is in the country. Bad as the conditions

of domicile of the low labor class have been shown to be in the rural districts, they were largely the result of indolence, lack of ambition, and the effect of bad example, long continued. But in the country there was chance for some exercise of choice, and there is always the free air, the uplifting landscape, and the friendship of nature for environment. In the cities and towns the only choice possible to the man or family of smallest income is between bad, worse, and worst. A small tenement of from one to three rooms (very rarely more than two), upon the lower or ground floor of a two or three story building, often without any light or air except such as enters through the central court of the agglomeration of these single tenements, is usually all that can be afforded. For this, which is unfit to live in on every account, a rent of from \$2.50 to \$4, or even \$6 per month if there are three rooms, is paid. With space for but two, or at most three people, it often harbors twice or three times that number. In fact these lower-floor tenements, in San Juan more particularly, are hives of overcrowded, dirty, anæmic men, women, and children, fearfully filthy and demoralizing; yet they are all that are to be had within the limits of the city of San Juan by those receiving low wages. Somewhat better conditions are possible to those who can afford the little detached, semidetached, or block houses outside the immediate city at higher prices, and are available only to those who can pay twice or three times the rents named above. Happily the house conditions at San Juan are exceptional. In Ponce, Mayaguez, Aguadilla, Adjuntas, Arecibo, etc., better conditions and lower rents prevail, and though overcrowding always exists with all classes, and is directly responsible for a large part of the prevalent tuberculosis, more space is available if desired and rents are not as exorbitant. It is difficult to understand how a stevedore, for instance, having a wife and five children, with only a two-room tenement, for which he pays \$4 per month out of the \$17 per month he earns; leaving him but \$13 for food, clothing, fuel, lighting, and incidentals for seven persons, can live at all. It is no wonder that beggary, pauperism, and petty thieving abound.

Clothing, too, makes far larger demands upon the wage-worker in the city and town than in the country. Custom, wherever it reigns, is law, and although the temperature of the cities is usually higher and the need of clothing is less, custom requires the use of more, and high and low, rich and poor, bow more or less to custom's demands. No exact figures or close approximates can be made. Averages only are possible, and sometimes do not mean much, but it is safe to say that for those of all classes except low labor the cost of clothing would be from one-fourth to one-half greater in the cities and towns than in the country (page 418).

There is a possibility that owing to the better opportunities for

supplying themselves in the cities those of the low labor class may even buy a little cheaper than can those in the country. Certainly the cost of clothing to them is no greater than and perhaps not as much as it is to the country people. The garb of any one class is practically the same in both sections, the city man being always more elaborately dressed and spending more on the accessories—gloves, ties, handkerchiefs, etc.—than his country congener, entailing a considerable cost.

Fuel in the cities means either wood, charcoal, or, in rare cases and to a very small extent, soft or anthracite coal. The great bulk consumed is wood, with charcoal a good second. The prices of these commodities have fluctuated so much under the change of currency and military orders affecting the supply that it is hard to quote values or determine the cost to an individual or family. Of course, too, the grade of the wage-worker cuts considerable figure in the use of fuel, the men or women of larger income doing more cooking than those of less. It is safe to estimate the average cost for the small amount of fuel burned in cooking and for laundry needs by an ordinary artisan's family at from \$2 to \$4 per month. For the higher or lower grades it would vary slightly.

Lighting is also considerably more expensive in the municipalities than in the country, and though it is better in quality it is needed more hours, and calls for an outlay in lamps, oil, etc., much beyond that where the candle is in general use. The use of coal oil is general. Gas and electricity are available to a fraction, and an increasing one, of the people, but their cost is still more than most can afford. It is safe to reckon the average cost of lighting to the family of a wage-worker at from \$1 to \$2 per month, and of course in some relations the average would be higher. Coal oil, on which a stringent monopoly was maintained before the American occupation, now retails at about 20 cents per gallon. It is on the duty-free list, and facilities for handling and distributing it like those in use in the States will work a further reduction in price.

Nearly everything that has been stated as to the cost of sickness and burials in the country applies to the same, though in differing degree, in the urban localities. Organization is better for the care of the sick; hospitals, asylums, church benevolent orders, Sisters of Charity nurses, sick-benefit societies, labor *gremios*, and other like helps are of course more numerous, and the burden both of sickness and death is better borne because divided upon more shoulders.

The extremely depressing poverty and conduct of the funeral ceremonials, etc., so common in the country, while frequent enough in the cities, are not seen proportionately often, doubtless due, in large measure, to the above factors. It is safe to say that the cost and conditions of either sickness or burial, save for the items of priestly

service and grave accommodations, are much less than in the country. But the mortuary conditions beggar description, and are revolting to a degree, except in case of the wealthy.

One may assert without fear of contradiction that the relative cost of sickness and burial, man for man, in the same grade of wage winners in the United States and in Porto Rico would be, as to sickness, as 15 to 1, and in regard to burials as 20 to 1, or even more. In the United States no expense is spared in either. In Porto Rico none is incurred that it is possible to avoid. The living must be first considered.

NEEDS OF THE ISLAND.

While the measures and methods called for to vitalize industry in the island have been indicated in a general way in what has been said, some of the most urgent needs for the uplifting of the wage-worker of all classes in Porto Rico and the betterment of industrial conditions may be specifically mentioned.

The first need of the island, after good law and its efficient and honest enforcement, is the advent of capital and the development of internal transportation and other large enterprises. Investments of any magnitude, some claim, are now restrained by the fact that the franchises granted by the Insular Executive Council may be "repealed, modified, or amended" either by the council or by Congress. This, it is said, makes it possible to destroy at one blow all that has been done and to entail overwhelming loss. Another complaint has been that any corporation for the purpose of buying or selling real estate is practically forbidden.

Agricultural corporations are prohibited from holding, by purchase or lease, more than 500 acres of land, and no stockholder in an agricultural corporation can hold stock in any other corporation in any wise interested in agriculture. The seriousness of the restrictions upon agricultural enterprise, especially where the crops are tropical crops requiring large areas and rotation, is self-evident. The investments will not be made, and the revival and expansion of industry so much needed to absorb the present surplus of labor will consequently be prevented.

The need of proper and comprehensive surveys of the island—coast, geographic, and hydrographic—has been felt, and this is already being met by the work of the proper authorities. Increased commerce will no doubt urge the need of better harbor and light-house facilities.

The coinage of the half-cent and the two-cent pieces, especially the former, for exclusive circulation in the island has been urged. The removal of the centavo (one-half cent value) from a people who have no means of preserving, or even of putting away, milk, meat, and other food, and hence buy barely enough for a meal, and who

are often too poor to buy more than one-half cent's worth of anything at a time, is a serious matter.

Some better provision for the control of helpless paupers and the suppression of vagrancy and mendicancy and for the better regulation of vice, crime, and disease has been urged. While some provision exists for the maintenance of boards of health, it is lacking for elementary instruction in the public schools in domestic hygiene.

Laws to regulate and control the homes, places of employment, and conditions of labor, and the employment of women and children, and to facilitate the adjustment of disagreements between the employer and the employed have not yet been sufficiently provided, according to the opinion of many of those best informed and most interested.

In this connection should be mentioned the need of the enactment and enforcement of insular laws requiring wages to be paid in cash and prohibiting the equivalent issue of checks or *vales*, redeemable only in specified places or commodities, in lieu of money.

Banking facilities adequate to new conditions should be established, with a system enabling the loan, under guarded conditions and at a moderate rate of interest, of money to planters and kindred enterprises based upon land or property security and affording an avenue of safe investment at reasonable interest of savings or other funds. In the same line of activity the organization of cooperative home-building associations and cooperative savings banks would accomplish much good and lead to that economy and saving which will most efficiently result in the owning of their homes by wage-workers.

In all of these directions improvement must be gradual; the ignorance of generations can not be overcome in a day, or even quickly. The example of better methods and their results must be relied on as the only convincing arguments in many of the lines of improvement.

In the rural districts some of the more especial and distinctive needs of the breadwinners in the island are, in general, as follows:

The revival of existing (but languishing) industries by the clearing and planting of devastated or neglected plantations. This often will require the loan of money to proprietors or the liquidation of their indebtedness by surrender to mortgagors and the development of the property by new owners. This will necessitate also the reseeded of the land. There has been so much inbreeding and neglect of fertilization and of rotation of crops that it may truthfully be said that practically there is need of renewal in every line. Lands have become impoverished, the cane has diminished in size and in saccharine product, tobacco, cocoanuts, ginger, etc., need new seed, live stock needs new blood, etc. To-day the cocoanuts of the island are unsalable because of inferior quality, the citrus fruits need budding anew, and new life, energy, and methods in cultivation are everywhere requisite;

The development of new agricultural industries and others dependent upon them, such as the establishment of yucca plantations and starch factories; of orange, lime, pineapple, banana, grape fruit, guava, and other fruit and vegetable plantations, and packing and canning factories; of herb and botanical gardens and their preparations; of new cultivations like the *eucalyptus globulus*, or blue gum tree, for fuel and railroad use, and the creation of stock farms and the raising of improved milch cattle, poultry, and swine;

The establishment of better facilities of transportation for crops to market and for food supplies, machinery, etc., to the interior, both by sea and land, including alike railroads, tramways, and public roads;

The reclamation of land by clearing, fertilization, and adaptation to its best uses;

The better housing of plantation hands, with allowances of garden lands upon the estates or adjacent thereto;

The establishment of schools for the children of the island, in which especial attention shall be paid to the rudiments of education, and to manual training and instruction in sewing, cooking, and elementary domestic hygiene;

The establishment of associate cooperation of small sugar and yucca cultivators with the "central" factories, in the interest of all concerned;

The sale, lease, or joint operation of small areas, detached from the great estates, and their development as citrus fruit, small fruit, vegetable, dairy, botanic, poultry, or bee-culture farms, thus giving large employment to the present excess of labor;

The removal of the imbecile, hopelessly disabled, and paupers to the proper care of hospitals, homes, and asylums;

The general introduction of better implements, better cultivation, better seed, and the better curing, packing, and marketing of crops;

Better domestic sanitary conditions, especial attention being given to sources of domestic water supply and the removal of excreta.

OPPORTUNITIES FOR INVESTMENT AND EMPLOYMENT.

Most of the opportunities for investment and employment in Porto Rico may be arranged under the following heads, viz:

1. Pursuits requiring considerable capital, large areas of land, and large numbers of employees.
2. Pursuits requiring small capital, less acreage, and a smaller number of employees; the latter usually of somewhat higher intelligence.
3. Pursuits carried on by means of small, often temporarily borrowed, capital, leased lands of varying areas, and labor hired in greater or less numbers and for varying periods.
4. Pursuits in which only manufacturing or preparing processes are followed, the raw product being supplied to the factory, either by sale at market rates or upon a cooperative basis.

5. Vocations in which no other capital is employed than one's own energy, knowledge, and "tools of trade."

6. Official, professional, commercial, or industrial pursuits, aside from the above named, usually calling for more or less capital, skill, experience, and business capacity.

7. Occupations which require distinctly personal or domestic service.

The first of these is exemplified by the great agricultural undertakings, such as sugar-cane cultivation and the associate manufacture of sugar; large coffee, tobacco, and vanilla plantations; stock raising, railroad construction, etc. The second is illustrated by the permanent fruit, apiculture, starch, dairy, and orange industries; the third by the operations of fruit, vegetable, and yucca "croppers," some apiculturists, guano gatherers, etc.; the fourth by fruit, tobacco, sardine, or ginger-root packers, canners, or preservers, starch manufacturers, etc.; the fifth by the whole list of skilled artisans and mechanics; the sixth by Government officials, physicians, dentists, engineers, bankers, merchants, steamship men, contractors, and journalists, and the seventh by barbers, cooks, nurses, and dressmakers.

The following is a detailed list of pursuits and industries offering opportunities for investment and employment in the island:

AGRICULTURAL PURSUITS.

Apiculture: Bees, honey, beeswax.

Botanical, medicinal, and dyestuff plant culture:

Acacia. Resinous gum.

Anise.

Cana fistula.

Clenga. Flavoring herb.

Culantro.

Mabi.

Malaguetta. Bay oil and bay rum.

Male fern.

Patchouli. A perfume source.

Peppermint.

Wild marjoram.

Wormwood (absinthe), etc.

Aracea.

Carrasco.

Castor bean.

Copaiba.

Laurel.

Manzanilla.

Robano cimarron.

Sassafras.

Tabasco.

Tibey rojo.

Tilcay, etc.

Annotto. Yellow dye.

Mangle bark. For tanning, etc.

Cacao culture: Cocoa bean, chocolate, cocoa butter, etc.

Coffee planting: Coffee berry.

Cotton planting: Cotton, cotton seed, cotton-seed oil.

Dairying: Milk, butter, buttermilk, cheese (hard and soft).

Fruit and small fruit growing, etc.:

Edible fruits now grown in Porto Rico—

Alligator pear.

Almond, wild.

Apricot, Japanese and American. Canned fruit.

Banana or plantain. Twenty or more varieties.

Breadfruit. Two or more varieties.

Cactus pear.

Caimito. A small red fruit. No English name.

Cherry, tropical.

Chocolate bean. Chocolate. Cocoa butter.

Cidra. A species of grape-fruit. No English name.

Coco plum (hicaco).

Cocoanut. Oil, meat, milk, confections, husk, fiber, etc.

Coffee.

Coyoll palm fruit.

Custard apples.

Figs. Paste, preserves, syrup.

Grapes. Raisins, wine.

Grape fruit.

Grosella. A kind of tree gooseberry growing in clusters like grapes. No English name.

Guava. Jellies, paste.

Guineo. A small, very delicious banana or plantain, called in English "lady fingers."

Lemon, sweet.

Lime. Lime juice.

Mamey (mammee sopota).

Mangle. A white pulp inclosed in the shell of the mangrove tree. No English name.

Mango.

Mangosteen (mangotin). A fruit the size of an apple.

Mulberry.

Nispero. A soft, very sweet, russet fruit. No English name

Nutmeg. Spice.

Orange, bitter.

Orange, bitter-sweet. Marmalade.

Orange, sweet. Orange juice, confections.

Pajuil. A small, pulpy, stone fruit. No English name.

Pineapple. Three varieties—sugar-loaf, Mayaguez, and cimarron, or wild. Canned preserves.

Pomegranate.

Remp (quenepa). A South American seedling. A grape-like but stone fruit.

Sea-side grape. The British West India name.

Shaddock. Of the grape-fruit family.

Soursop. A large sweet fruit.

Tamarind. Tamarind pulp.

Edible fruits thought possible to Porto Rico—

Cherries.

Dates.

Fruit and small fruit growing, etc.—Concluded.

Edible fruits thought possible to Porto Rico—Concluded.

Grapes, both raisin and table. Raisins and wine.

Japanese fruits.

Olives. Pickles.

Peaches. Preserves.

Plums. Preserves.

Prunes. Preserves.

Avocado pear.

Chinese plum.

Golden apple.

Granadilla.

Hog plum.

Jamaica plum.

Pois doux.

Sapadilla.

Sorrel.

Star apple.

Sugar apple.

Water lemon.

Edible nuts grown in Porto Rico—

Almond, paper shell. Almond oil, confections.

Cashew. Oil.

English walnut. Oil and confections.

Pecan. Oil and confections.

Edible small fruits grown in Porto Rico—

Fresa. A wild, so-called strawberry, but more like a raspberry in flavor

No English name.

Guinda. A species of currant. No English name.

Rose apple (pomorosa). A berry.

Edible small fruits thought possible to Porto Rico—

Blackberry. Preserves.

Currants, American, red and white.

Currants, Japanese. Preserves.

Currants, Zante. Dried fruit.

Gooseberry. Several varieties. Preserves.

Raspberry, black-cap and red. Preserves.

Strawberry. Several varieties. Preserves.

Fodder grass and leguminous plant culture:

Bermuda grass.

Cowpeas.

Guinea grass.

Japan clover.

Lucerne (alfalfa).

Lupines.

Millet.

Serradella.

Soy or soja bean.

Sulla.

Velvet bean, etc.

Vetches.

Ginger culture: Ginger root. Medicinal and culinary preparations and preserves.

Indigo culture: India root. Dyestuff.

Magney and textile fiber culture:

- Agave. Fiber, alcoholic extract, pulp, paper, rope, twine, etc.
- Emajagua. No English name.
- Guasima. Guano trees.

Maize and kaffir-corn culture:

- Kaffir corn. Sugarless sorghum, corn meal, hominy, stock food.
- Maize. Indian corn.

Poultry raising:

- Ducks.
- Fowls and eggs.
- Geese.
- Guinea fowls.
- Hens.
- Peacocks.
- Pigeons.
- Turkeys.

Rice culture, upland.**Rubber-plant culture: India rubber.****Stock raising:**

- Asses.
- Cattle. Blooded stock, beef cattle, milch cows, working oxen.
- Goats.
- Horses. Blooded stock, general purpose, draft, and saddle stock, and ponies.
- Sheep.
- Swine.

Sugar-cane culture: Molasses, rum, sugar, sirups.**Tobacco culture: Tobacco in leaf, cigars, and cigarettes.****Tree, shrub, plant, and seed culture (nurseries, etc.):**

- Blue gum tree (*eucalyptus globulus*).
- Fig tree.
- Flowering shrubs.
- Grass and garden seeds.
- Willows.

Vanilla culture: Vanilla bean. Flavoring extracts, etc.**Vegetables now grown in Porto Rico:**

- Angola cucumber.
- Arrowroot.
- Artichokes.
- Asparagus.
- Bean, black.
- Bean, carot or carit.
- Bean, small red.
- Bean, string.
- Beet.
- Brussels sprouts.
- Cabbage.
- Carrot.
- Cauliflower.
- Celery.
- Corn, indian (maize).
- Cucumber.
- Culantro. An herb used for soup.
- Eddoe. A tuber used for food. No English name.
- Eggplant.

Vegetables now grown in Porto Rico—Concluded.

- Garlic.
- Gingamboa. Seed like a small lentil. No English name.
- Green pepper.
- Hedionda. Small berry-like cherry, a substitute for coffee. No English name.
- Lentil.
- Lettuce.
- Malanga. A farinaceous root.
- Melon (cantaloupe).
- Melon, musk.
- Melon, water.
- Okra (gumbo).
- Onion.
- Parsley.
- Pea.
- Peanut.
- Potato.
- Radish.
- Rice, upland.
- Sesame seed.
- Spinach.
- Squash or pumpkin.
- Sugar cane.
- Sweet potato.
- Tallote. A corrugated, pear-shaped, green vegetable.
- Tomato.
- Turnip.
- Water cress.
- Yam. A large tuber.
- Yautia. A kind of potato.

Vegetables thought possible to Porto Rico:

- Corn, sweet.
- Malanga.
- Maté.
- Melons, Japanese.
- Squash, summer.

Yucca culture (manioc plant): (a)

- Cassava bread.
- Dextrin.
- Glucose.
- Hydrocyanic acid.
- Starch.
- Stock food.
- Sugar.
- Tapioca.

In the cultivation of nearly half of the edible fruits and small fruits, now grown in the island, to say nothing of those very certain to be soon added to that list, there is present opportunity and inducement likely to be very satisfactorily remunerative. The alligator pear (a great favorite for salads and as a butter substitute with Americans),

a This promises to be the most successful staple agricultural industry of the island, involving comparatively small capital.

bananas, apricots (Japan), almonds, cocoa, chocolate, the cocoanut, coffee, figs, grapes and grape fruit, guavas, guineos, limes, mulberries, nutmegs, oranges, pineapples, and tamarinds are all sources of especial promise and call for no large outlay to plant.

The cultivation of early vegetables on the improved methods and with the improved appliances of the United States for growing, gathering, selecting, packing, and shipping to the markets of the United States must speedily become a great business in the island, for which it possesses many very superior and certain controlling advantages.

FISHERIES, FISH CULTURE, ETC.

Coast fisheries:

Crabs.

Edible crawfish.

Fish of many varieties.

Prawns.

Sardines.

Sea turtles.

Sharks.

Shrimps.

Canned prawns, sardines, shrimps, and turtle meat.

Shark skin.

Sea fisheries: Edible sea fish of many kinds.

Oyster culture: Oysters (French method).

MINING PURSUITS.

Coal mining: Lignite coal. Poor and in small quantities.

Copper mining: Copper. Small quantities.

Galena-ore mining: Lead and silver. Small quantities.

Gold mining, placer: Pan gold. Very small quantities.

Guano: Cave-bat guano.

Iron mining: Some magnetic ore. Good supply.

Manganese. Small quantities.

Phosphates. Principally on islands.

Salt mining: Rock deposit and evaporation. Good and abundant.

Silver mining: Silver. Small quantities.

MANUFACTURING AND MECHANICAL PURSUITS.

Alcohol: Absinthe and vermouth.

Animal charcoal: Boneblack.

Annotto extract: Butter and cheese color, etc.

Balsam copaiba.

Basket work: Baskets, creels, panniers, etc.

Bay oil and bay rum.

Boats and lighters.

Boilers: Steam.

Boots and shoes: Riding boots, canvas shoes, straw shoes, etc.

Bread and crackers: Cassava.

Bricks and tiles.

Building material: Doors, sashes, blinds, wood finish, etc.

Building stone: Natural and artificial.

Butter, cheese, etc.
Cabinet woods.
Candles.
Canes and curtain rods.
Canned goods:
 Alligator pears.
 Apricots, Japanese.
 Butter.
 Cocoanut, shredded.
 Fresas.
 Ginger, preserved.
 Guava jelly and paste.
 Honey.
 Mulberries.
 Peppers.
 Pineapples.
 Prawns.
 Sardines.
 Shrimp.
 Soups, etc.
 Tamarinds.
 Turtle meat.
Cement: Rock and artificial, stone and flagging (concrete).
Charcoal: Fuel and gunpowder.
Cigars and cigarettes.
Cocoa: Chocolate, cocoa butter, shells, etc.
Cocoanut products:
 Fiber.
 Husk.
 Mats.
 Meat.
 Oil.
 Rope.
 Utensils, etc.
Combs: Tortoise shell and horn.
Confections: Sweets, pastes, preserves, etc.
Cotton fabrics: Cloth, cord, twine, rope.
Cotton-seed oil.
Dextrin: Yucca root.
Dyestuffs.
Earthenware.
Emajagua, guasima, maguey, textile fiber, etc.
Fig paste, fruit preserves, etc.
Fish glue.
Furniture, wood and wicker.
Ginger root and preserved ginger.
Glucose: Sugar cane, yucca.
Glue, from horns, hides, etc.
Grass fabrics: Hammocks, mats, shades, etc.
Guava jellies, pastes, etc.
Hammocks: Fiber and grass.
Hard woods, for cabinetwork, etc.
Hats and caps.
Hides, horns, etc. Tanning.

Ice, artificial.
 Iron: Small wares, utensils, etc. Small metal working.
 Jams, jellies, juices, extracts, etc. Sweets, flavors, etc.
 Lampblack and ivory black.
 Leather: Sole, coarse, and shark skin.
 Lime: Burnt limestone and shells.
 Lime juice and pickled limes.
 Lumber: Native soft and hard wood.
 Matches.
 Mattresses and cushions: Guano tree and other mosses.
 Maguey (agave) fiber and extract (alcoholic).
 Manioc: Yucca root.
 Marmalade: Orange, guava, etc.
 Molasses and sirups: Cane sugar.
 Musical instruments: Hand.
 Nets, seines, etc.
 Oils, animal and vegetable: Horse, oleo, palm, essential, etc.
 Orange preserves, marmalade, juice, peel, etc.
 Palm fiber, fans, leaf, and oil.
 Paper: Fiber and wood pulp.
 Pastes: Soup, macaroni, etc., and preserves.
 Pavement blocks: Concrete, clay (hard burned), and slag.
 Peanut oil and butter.
 Perfumery, flower extracts, etc.: Patchouli, jessamine, tuberose, etc.
 Phosphates: Prepared and put up.
 Pottery: Drainpipe, building blocks, etc.
 Resins and gums: Acacia, etc.
 Rope, husks, twine, etc.: Cotton, maguey, emajagua, etc.
 Rum: Sugar cane.
 Soap.
 Starch: Yucca root. Forty-two varieties.
 Stone filters.
 Straw work: Hats, hammocks, baskets, etc.
 Sugar, sirup, glucose, etc.: Cane sugar, yucca, etc.
 Tallow: Candles, soap, axle grease, etc.
 Tanning extracts, from mangle bark, acacia, etc.
 Tapioca: Yucca root.
 Tortoise-shell ware: Combs, ornaments, jewelry, etc.
 Turtle (green, sea) products: Meat, soups, etc.
 Vanilla and other flavoring extracts.

MECHANIC ARTS.

Baking.
 Basket-making: Baskets, panniers, chairs, cradles, etc.
 Blacksmithing and metal working: All blacksmithing and small metal work.
 Butchering.
 Carpentering, bridge building, etc.: All joiner and wood-building work.
 Coopering: Barrels, butts, casks, hogsheads, pipes, etc.
 Engraving on wood and metal.
 Gold and silversmithing: Gold and silverware.
 Gunsmithing: Firearms construction and repair.
 Harness making: Harness repair.
 Machinist work: Metal and machinery construction and repair; cutlery, etc.
 Masons and bricklayers' work: Brick and stone construction and repair.

Painting and kalsomining: House and ship painting and repairing.
Paper hanging: Wall papering.
Plumbing.
Printing: Printing work.
Quarrying: Building stone, rough.
Shoemaking.
Steam fitting.
Stonecutting: Prepared stone for building.
Tailoring.
Tinsmithing: Utensils.
Watch and clock making.

In this list of occupations there is believed to be good and in some of them unusual and exceptional opportunity for the skilled artisan in Porto Rico, and they have been selected from the total for this reason. Better bakeries are much needed. The better wickerwork, familiar in light (tropical) furniture, is needed, as is its repair. Fine horseshoeing and architectural blacksmithing rarely exist. The demand for cooperage will increase steadily, as will also that for carpentering, bridge building, etc. There are few or no steel, copper, or zinc engravers in the island, and the work will increase. There are few modern artists in working gold and silver, the work being done chiefly on old lines. Armorers are few, poor, and not familiar with latest devices. Harness making can not profitably compete with the great cheap producers in the United States, but good workmen are sadly needed for repairs. Small machinist work is with difficulty obtained. There are a few decent establishments, but better tools and plant, better methods, and later trained men are needed and must ere long be had. The work of masons and bricklayers varies; that in stone is much of it excellent, but the wall work at times makes trouble. The standard American brick is needed, and workmen to lay it who are used to it. Painting and interior finish need American methods, materials, and workmen. Paper hanging is an art very little understood, but entirely possible with success, if proper wall papers, glue, pastes, sizings, and skill are used. They can not be had in the island. Plumbing and steam fitting have not now half a dozen competent exponents in the island. The demand must steadily and rapidly increase, and must be met from the States. Good printers, compositors, pressmen, lithographers, and electroplaters are increasingly wanted. Good quarrymen and stone cutters and artificial stone (cement) workers are and will be in demand. Good tailors are scarce, and the well-organized ready-making shops for light goods, with best machinery, would thrive. Tinsmithing is poorly represented and offers inducements. Watch making calls for good men.

TRADE.

Occupations.

Banking and brokerage. (Savings banks.)	Hotel, restaurant, and saloon keeping.
Bookkeeping and clerical work.	Journalism.
Building and contracting.	Laundering, cleansing, and dyeing.
Commission business.	Printing, binding, and lithography.
Draying and teaming.	Stenography and typewriting.
Foremen and overseers' work.	Telegraphy and telephony.

The occupations listed afford fair opportunities in connection with trade for competent Americans, according to their capacities, in Porto Rico, but in the ordinary and old-established lines of mercantile pursuits there are practically few or no chances to thrive. The following list shows the present exports from the island:

PRESENT EXPORTS.

Annotto.	Horses.
Bananas.	Molasses.
Bay oil and bay rum.	Mules.
Cattle.	Oranges.
Chocolate.	Peanuts.
Cigars and cigarettes.	Pineapples
Cocoa and products.	Rice.
Cocoanuts and products.	Rum.
Coffee.	Salt.
Cotton.	Sheep.
Donkeys.	Starch.
Fruits and small fruits.	Sugar.
Ginger.	Tallow.
Goats.	Tamarind pulp.
Heidionda (chicory substitute).	Tobacco, leaf.
Hides, horns, etc.	Tobacco seed.
Hogs.	Vegetables.

There are many commodities of American manufacture which will undoubtedly give good returns, and well-established businesses in the several lines named below are likely, if energetically pushed, to be very remunerative:

PRODUCTS FOR WHICH A MARKET SEEMS POSSIBLE.

Breadstuffs:	Dried salt fish:
Biscuit, hard bread, and crackers.	Cod.
Buckwheat flour.	Haddock, well-cured and packed.
Corn and corn meal.	Hake.
Flour and its preparations.	Mackerel (Nos. 2 or 3), salted.
Oats, oatmeal, and other cereal preparations.	Smoked fish (halibut and salmon).
Rye meal, etc.	Smoked herring.
	Tongues and sounds.

Meats, dried, salted, and prepared:
 Bacon, cured, smoked.
 Beef, salt and jerked.
 Hams and shoulders, smoked.
 Pigs' feet, pickled, etc.
 Pork, salted.
 Sausage meat.
 Tallow and stearin.
 Tongues, dried and pickled.
 Tripe, pickled.

Miscellaneous food:
 Beans.
 Beer and malts.
 Butter.
 California wines.
 Canned goods.
 Cheese.
 Cotton-seed oil.
 Dried fruits.
 Fruits and vegetables (apples, pumpkins, etc.).
 Lard.
 Pickles and vinegar.
 Rice.
 Sauces.
 Whiskies and liquors.

Clothing:
 Boots and shoes.
 Cotton fabrics of all kinds: Cloth, duck, drillings, prints, sheetings.
 Dress goods.
 Fancy articles of all kinds.
 Finished goods.
 Furnishing goods.
 Hosiery.
 Leather goods.
 Light woolen goods.
 Mixed suitings, etc.
 Rubber and oiled clothing.
 Rubber boots and shoes.
 Toilet articles.
 Underwear.
 White goods, towelings, etc.
 Wool hats and caps.

House building and furnishing supplies:
 Beds and bedding supplies.
 Bricks: Fancy bricks, terra cotta, tiling, mantels, and "made stone."

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House building and furnishing supplies—
 Concluded.

China.
 Cooking apparatus: Ranges, gas ranges, and oil stove utensils.
 Corrugated-iron roofing.
 Glassware and glazed pottery.
 House trimmings and hardware.
 Laundry conveniences.
 Lumber: Dressed and undressed, dimension stock, siding, shingles, clapboards, etc.
 Mirrors.
 Rugs.
 Sanitary apparatus: Bath tubs, water-closets, traps, tanks, boilers, piping, etc.
 Sashes, doors, blinds, wood mantels, and "finish."
 Straw mattings.
 Wood and cane (rattan) furniture.

Accessories, implements, and machinery:
 Agricultural implements and machinery.
 Arms and ammunition.
 Artisans' and garden tools.
 Boats, sailboats, and launches.
 Carriages and children's carriages.
 Coal oil.
 Dairy machinery and conveniences.
 Engines, boilers, and machine tools.
 Fishing and sporting tackle of all kinds.
 Granite, enameled, tinned, and copper ware.
 Hand and power lathes.
 Hard candles.
 Hardware.
 Harness.
 Lamps.
 Live stock.
 Paper and stationery.
 Soap.
 Trees, plants, shrubs, and seeds.
 Utensils of all sorts (American make).
 Woodworking machinery.

TRANSPORTATION.

Boating.	Porterage.
Cartage and hauling.	Steam-railway construction, maintenance, and operation.
Express service.	Street-railway (electric) construction, maintenance, and operation.
Ferriage.	Street-railway (horse) construction, main- tenance, and operation.
Hacking and public conveyance.	Steamship service.
Highway and street construction and maintenance.	Towing and salvage.
Lightering.	Vessel freightage.
Pack-train transportation.	
Pilot service.	

Among the above occupations considerable opportunity and of varying grades exists for both American employment and investment, with probable improvement to all lines thereby.

PROFESSIONAL SERVICE.

Apothecaries.	Lawyers.
Architects.	Librarians.
Artists.	Musicians.
Chemists.	Photographers.
Clergymen.	Physicians and surgeons.
Dentists.	Surveyors.
Engineers, civil.	Teachers.

In either of the above-named professions there is fair opportunity for employment in Porto Rico. The apothecaries and druggists are in sufficient number, and rather more in the large towns and cities, because the business, as everywhere in tropical countries, has been exceedingly prosperous and profitable, though far less so now than formerly. Good openings, however, still exist, especially in improving localities, and will increase. Artists and photographers have, of course, a considerable element of "luck" in their lines, but hard work is effective with them also, as with others. Good dentists and physicians (and surgeons increasingly) are needed, and will be more so. Engineers and surveyors are likely to be busy ere long, and the teacher, if competent, is everywhere demanded.

DOMESTIC AND PERSONAL SERVICE.

Barbers.	Nurses.
Coachmen.	Seamstresses.
Cooks.	Servants.
Dressmakers.	Waiters.
Hostlers.	Watchmen.

As it is in this division of labor that the great surplusage of material, whether good, bad, or indifferent, exists, it will not be expected that even among the best of these occupations there are many opportunities or inducements to citizens of the United States. Only those

have been named that may afford an opening for any person, male or female, competent in one or another of these vocations, who, seeking the island for health, or in the hope of investing in a small way or of bettering his or her condition otherwise, wishes meanwhile to be earning a living. American barbers, with their equipment and methods, are more popular than the natives, or even the French or Spanish, and a good one can find a place or make a business for himself. Good American cooks are in great demand, and the supply is far short of the need. Coachmen are rarely wanted, but a good competent American can find a place.

Dressmakers and seamstresses, some of fine abilities, are superabundant throughout the island, but a few familiar with American styles and methods would not lack for employment as soon as known. The native women and girls often do most beautiful needlework, etc., but usually rather of the ornamental than useful order. Good nurses are difficult to get and a really competent one need have no lack of employment. Hostlers of the American type are wanting, and while there are few needed, good ones are generally not long idle if industrious and sober. Servants of all classes abound, but for competent and trained ones there is always place. Of really good restaurant and hotel waiters who speak both English and Spanish (or French) the supply is never equal to the demand. Watchmen there are, as of municipal police, in plenty, but one on whom to rely is not readily found when needed. The demand is, moreover, an increasing one.

SOCIAL ECONOMICS AT THE PARIS EXPOSITION.

BY N. P. GILMAN.

Among the national sections in the Social Economy Palace at the recent Universal International Exposition in Paris, that of the United States stood in the foremost rank. It was interesting to the student of social economics because of the amount of matter of solid worth which it contained, and was attractive to the general visitor because of the variety of the exhibits and the manner in which they were displayed. The comparatively limited space available (27 by 27 feet) was utilized, for instance, by the ingenious wing frames for showing a large number of photographs in one case, the actual amount of wall space taken being represented by the size of one frame only. Not only was the section arranged with taste, giving the impression of an abundance and variety of material to draw from, but the record of social economics in America was presented in a manner unique among the national exhibits. The Department of Education and Social Economy for the United States Commission to the Exposition arranged for two series of monographs, one for each of its two important subjects. The series of monographs on American social economics was edited by Prof. Herbert B. Adams, of Johns Hopkins University. There were 20 of these monographs, the work of 13 different writers, and they were printed in excellent form. Though the cost of publishing them was defrayed from different sources and the printing was done by several American presses, care was taken to secure uniformity of type and page and paper, so that the series could be bound together. (*a*) As

a Mention should be made of the generosity of the State of Massachusetts, which assumed the expense of publishing ten or more of the monographs; of the League for Social Service, of New York, which contributed four, and of the State of New York. The monographs vary in size from 8 to 102 pages. The following list gives the subjects and authors:

I. The Social Economy Exhibit at the Paris Exposition of 1900, by Richard Waterman, jr., of the Department of Education and Social Economy.

II. The Country and the People, by Edward D. Jones, instructor [now professor] in economics and statistics in the University of Wisconsin.

III. Resources and Industries, by Edward D. Jones.

IV. Commercial Institutions, by Wilfred H. Schoff, chief of the foreign department in the Philadelphia Commercial Museum.

V. Bureaus of Labor Statistics, by William Franklin Willoughby, expert in the Department of Labor, Washington, D. C.

these pamphlets were written some months before the opening of the Exposition, it was out of the question for most of the writers to refer to particular exhibits in the section as illustrating their remarks. In future expositions it would be desirable to have such concert between the writers of monographs and the exhibitors that the writers could refer to the exhibits and the exhibits be marked with references to the monographs.

INDUSTRIAL AND SOCIAL BETTERMENT.

A close accord between writer and exhibit was attained in the interesting display of photographs made by the recently formed League for Social Service of New York City. Several cases of photographs were arranged by the league, which acted as special agent for the Department of Social Economy, to illustrate "industrial betterment," and the secretary of the league, W. H. Tolman, contributed the monograph with the same title. While reference was not made from one source of information to the other, an employer of labor or a student of sociology interested in the subject and willing to devote some hours to a study of it would have found the pamphlet, which was illustrated with eight pages of photographs, and the wing-frame views of the industrial establishments admirable supplements to each other. This portion of the United States section might be called the most strictly "missionary" in its intention of provoking imitation of the good works of numerous American employers, and this fact justifies a particular enumeration of the league's exhibit in this direction. The photographs

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- VI. Employment Bureaus, by William Franklin Willoughby.
 - VII. Inspection of Factories and Workshops, by William Franklin Willoughby.
 - VIII. Inspection of Mines, by William Franklin Willoughby.
 - IX. Regulation of the Sweating System, by William Franklin Willoughby.
 - X. Industrial Arbitration and Conciliation, by William Franklin Willoughby.
 - XI. Building and Loan Associations, by William Franklin Willoughby.
 - XII. Cooperation and Profit Sharing, by N. P. Gilman, Meadville, Pa.
 - XIII. The Housing Problem, by Lawrence Veiller, secretary of the Tenement-House Committee, Charity Organization Society, New York City.
 - XIV. Religious Movements for Social Betterment, by Josiah Strong, president of the League for Social Service, New York City.
 - XV. Municipal Movements and Social Progress, by Frederick W. Spiers, instructor in history and economics in the Northeast Manual Training High School, Philadelphia, Pa.
 - XVI. Industrial Betterment, by William Howe Tolman, secretary of the League for Social Service, New York City.
 - XVII. Young Men's Christian Associations, by H. S. Ninde, secretary of the International Committee of the Young Men's Christian Associations, New York City.
 - XVIII. Trend of Social Economic Legislation, by Robert H. Whitten, sociology librarian in the New York State Library, Albany, N. Y.
 - XIX. The Past and Present Condition of Public Hygiene and State Medicine in the United States, by Samuel W. Abbott, secretary of the Massachusetts State Board of Health, Boston.
 - XX. The Social Relief Work of the Salvation Army in the United States, by Booth Tucker, commander, New York City.

represented the works and the various institutions for the benefit of employees, of which the following is a list:

INSTITUTIONS FOR BENEFIT OF EMPLOYEES AT VARIOUS ESTABLISHMENTS IN THE UNITED STATES.

Establishment.	Location.	Institutions for benefit of employees.
American Waltham Watch Co.	Waltham, Mass.	Robbins Park, employees' houses, and the Adams boarding house.
F. A. Brownell Photographic Works.	Rochester, N. Y.	The suggestions from employees system and the rest room.
Cleveland Electric Railway...	Cleveland, Ohio	Club rooms, with billiard tables, bowling alleys, and reading matter at the various stations.
Cleveland Hardware Co.	Cleveland, Ohio	Library, orchestra, rest room, and dining room.
Draper Manufacturing Co.	Hopedale, Mass.	Employees' houses.
National Cash Register Co.	Dayton, Ohio	An elaborate system of clubs, schools, and societies.
Eastman Kodak Co.	Rochester, N. Y.	Kodak Park around the factory and reading rooms.
Ferris Bros.	Newark, N. J.	Recreation, dining, and dressing rooms.
Gorham Manufacturing Co.	Providence, R. I.	The Casino.
H. J. Heinz Co.	Pittsburg, Pa.	Dressing rooms, baths, and hospital, girls' and men's dining rooms, and the new auditorium.
Ludlow Co.	Ludlow, Mass.	Employees' houses (those with bath rooms being very popular), schools, and library.
N. O. Nelson Manufacturing Co.	Leclaire, Ill.	Village of employees' houses.
Proctor & Gamble Co.	Ivorydale, Ohio.	Fine buildings.
Siegel-Cooper Co.	New York and Chicago.	Rooms for reading, lounging, dining, and washing; hospital, schoolroom, gymnasium, clothing closets, bicycle accommodations; physician.
John Wanamaker.	New York.	School, lunch, and recreation rooms; Looking Forward Club room.
Walker & Pratt Co.	Watertown, Mass.	Baths, lavatories, and lockers.
Sherwin-Williams Co.	Cleveland, Ohio	Lunch rooms, bulletin board, and factory magazine.

Besides these more or less developed systems of betterment of industrial conditions, the league also pictured a few other establishments where the general conditions of the workman's lot are excellent—cases in which a company, without establishing, as yet, special institutions for the benefit of the employees, has given them the advantages of healthful, spacious, or picturesque surroundings in the country. Such are the Apollo Iron and Steel Company at Vandergrift, Pa.; the Briarcliff farm, at Briarcliff Manor, N. Y., with its school, church, and men's boarding house; the General Electric Company, with its decoration of its grounds at Schenectady, N. Y., and its projected village for its upper employees; and the Westinghouse Company at Wilmerding, Pa., with its library in the office building, and its housing system. The J. H. Williams Company, of Brooklyn, N. Y., especially protects its men from dangerous machinery, besides furnishing to its workmen a system of baths; while the Worcester (Mass.) Corset Company, the George Frost Manufacturing Company, of Boston, Mass., and C. F. Hathaway & Co. were pictured as manufacturing under conditions fully approved by the National Consumers' League.

The monograph by Dr. Tolman contains 80 pages describing the institutions for industrial betterment operated by most of the firms just mentioned and by some fifteen or sixteen others. The descriptions are arranged, for the most part, under subject headings such as hygiene,

fire protection, prizes, schools, recreation, vacations, factory publications, restaurants, baths and lavatories, parks, club houses, thrift, libraries, improved homes, and the like. There are full accounts of the work of several companies, such as those at Ludlow, Mass., Wilmerding, Pa., and Providence, R. I. Of all the American monographs on social economics Dr. Tolman's had the most directly practical purpose. The pamphlet has been electrotyped and is being used by the League for Social Service in its efforts in behalf of the working people.

A special section of the French exhibit illustrated "patronal institutions," all those "welfare institutions," as the Germans call them, which employers support, mainly or entirely at their own expense, for the benefit of their work people. France has a great variety of such institutions, and the section made no distinction between those which are maintained without profit sharing and those which accompany a profit-sharing agreement. Often the latter institution has followed upon a considerable development of the patronal institutions proper, and in no essential manner does it modify them; so that if it should be given up they would still continue. The great French railway systems—those of the East, the West, the North, and the South, the Lyons, the Orleans, and the State itself—are favorably distinguished for the interest they take in the housing, health, education, and recreations of their many thousands of workers. Similar measures are taken by Solvay et Cie., the great soda manufacturers; the Grand Magasin du Louvre, the great Parisian department store; the Dock and Storage Company of Marseilles; the Compagnie Général des Voitures of Paris; Garnier-Thiébaud Frères of Kichompré, Vosges; the Société J. and A. Pavin de Lafarge, lime and cement makers of Viviers, Ardèche; J. Thiriez, père et fils, cotton manufacturers of Lille and Loos, and Waddington Sons and Company in the same industry at Saint Remy-sur-Avre.

The patronal institutions of Belgium are noted for their number and variety. At the head, in point of size, stand those of the great zinc works, La Vieille Montagne. This company in the exhibit of its products in the Champ de Mars building called attention to its institutions for its workers at Moresnel, Couité, Bray, Angleur, Penchot, and other places, and this kind of reference was common with all the firms and companies possessing such institutions who made exhibits. A large atlas of statistics, reports, and photographs showed the work done by the Society for Popular Instruction of Morlanwelz, in the Province of Hainaut. The activities of this society, founded in 1877, for Morlanwelz and the neighboring communes, embrace all kinds of schools from the *crèche* to the *gardienne*. Some 500 boys and girls attend the primary schools, and there are 70 pupils in the industrial and housekeeping departments; the Belgian Government subsidizes

the latter kind of instruction. Under the 15 sections of the society's institutions, besides more common entries, were Les Francs Mineurs, the union of coal miners for promoting their moral and material interests; the Conference St. Vincent de Paul, intended to relieve needy families and to prevent free and illicit union of the sexes; the Cercle d'Agéments, which provides games and sports on Sundays; the Cercle Dramatique; a cheap fuel organization, and a library of 1,500 volumes.

The paternal interest of the Russian Government in the welfare of workmen has not had the effect of extinguishing individual initiative in Russia. On the contrary, there were in the Russian section the reports and exhibits of a considerable number of companies and firms which have done much to render the condition of their employees more comfortable. The Woolen Manufacturing Company of Dago-Kertell (C. & E. Ungern-Sternberg), for instance, showed models of the convenient cottages it has erected, to the number of 173, for its 600 workmen, of which 138 are fully paid for. These houses have abundant garden space and outbuildings, including a bath house. The workman is helped to build only on condition that he shall not sell his house except to another workman. Artesian wells furnish pure water, and no epidemic disease is known at Dago-Kertell. The sea gives opportunity for sport and for fishing. Two cooperative stores, three schools, a hospital, and other institutions are evidence of the continued efforts which have resulted in greatly raising the level of the workman's life, and have kept industrial peace for fifty-six years.

Of the other Russian establishments which practice the principles of industrial betterment on a large scale, the cotton mills of the Société de la Grande Manufacture at Yaroslav are perhaps the most conspicuous. Yaroslav has been a seat of this industry for many years, and the company now employs nearly 9,000 persons, of whom 4,000 are women. It manufactures chiefly cheap goods for the popular market. A third of the volume describing the works is devoted to the institutions—religious, educational, sanitary, and recreative—which the company supports, in whole or in part, for the common life of the 17,000 people who depend for subsistence upon the main factory. The cotton mills at Tver are almost, if not quite, as large as those at Yaroslav. The company here maintains a school with commercial and superior sections, numbering, in 1899–1900, 1,140 pupils; a hospital with 102 beds; a maternity hospital; an asylum for aged work people; an orphanage and a *crèche*; a library, with an annual expenditure of 2,500 rubles (\$1,287.50), and a theater seating 1,200 persons. All these institutions are free to the work people. Other companies of a similar tendency represented at Paris were the Russian-American Rubber Company, of St. Petersburg; the B. P. and A. Yassuninsky Company (textiles), of Kokhma, Vladimir department; the Cloth Company Popof, Moscow department; La Société Émile Zundel, Moscow; the glassworks of

Pestrowka (Prince A. Obolensky); the P. Malutine Fils Company at Ramenskol; the cotton mills "La Manufacture des Trois Montagnes," Prochorof, at Moscow, and the Coal Company of Southern Russia.

PROFIT SHARING.

France is known as the classic land of profit sharing, and the exhibit made by profit-sharing firms was large and varied, under the stimulus of the Society for the Practical Study of Participation in Profits, of which the late Charles Robert was long the animating spirit. The society, now numbering 140 members, stipulates in its constitution that only employers or workers in profit-sharing establishments can become members. Among the houses exhibiting at Paris in this line of social effort may be mentioned the less familiar names of L. François, A. Grellon et Cie., rubber manufacturers at Paris; Delaunay-Belleville et Cie., engineers at St. Denis; A. Badin et Fils, Barentin; La Grande Culture Thenenille (Allier), a cattle-raising farm, where one-half of the products goes to the associated cultivators, and there has been a great improvement in the condition of the agricultural laborers; (a) the Compagnie des Wagon-Bars (dining cars), which gives its highest grade of employees a bonus of 3 per cent on the business done; the Secteur de la Place Clichy, Paris, an electric-light company with 142 participants; and the Chambre Consultatif des Associations Ouvrières de Production, which has divided from 25 to 60 per cent of the profits with the workmen employed and has built 60 houses in Paris and 40 in the department for working people.

The long-established and successful profit-sharing establishments of Leclaire, Godin, Boucicaut, and Laroche-Joubert were represented in several sections, because of the variety of their institutions for their employees, and especially by large wall diagrams in the great open upper hall of the Palais. A few details from the placards of the noted Bon Marché, founded by M. Aristide Boucicaut, may be mentioned. The capital of the Bon Marché is in 400 shares of 32 coupons each. The whole 12,800 coupons are held by employees, active or retired, so that this vast enterprise is now a truly cooperative establishment. There were 2,741 employees reported as sharing in the benefits of the provident fund, for which a first levy is made upon the profits. The latest contribution to this fund was 245,000 francs (\$47,285), its capital was 3,125,948 francs (\$603,308), and the sums distributed 1,450,627 francs (\$279,971). A total of 1,073 employees have profited by this fund on leaving the house. A fund to replace the present Caisse de Retraite or retiring fund of 6,751,685 francs (\$1,303,075) has a capital of 2,508,626 francs

^a The student of the *métayer* system can now be referred to a valuable work by M. Roger Merlin, *Le Métayage et la Participation aux Bénéfices*, published in 1898, and chiefly concerned with the share system, and to a supplementary pamphlet by the same writer, *Enquête sur le Métayage*, 1900.

(\$484,165). A third levy is made in behalf of the aid and retiring fund for the work people (*les ouvriers*), which now amounts to 438,485 francs (\$84,628). The Bon Marché pays 5 per cent interest on deposits up to 3,000 francs (\$579) from any employee. It provides lodging for young women in its employ whose homes are not in Paris and for young persons who can not live at home in the city. Coffee and chocolate are free to the women employed, and each employee has a right to a luncheon and a dinner, which is the same for all grades, in one of the four dining saloons, where one-third of the force can eat together, wine or beer and a salad being furnished. Medicines and medical attendance are furnished free in case of need, and 16 free beds are reserved for the employees in the Hospital Boucicaut. All employees must belong to some mutual aid society. Besides maintaining classes in vocal and instrumental music, fencing, and the study of English, the Bon Marché sends the most capable students to London for a stay of several months to perfect their mastery of English.

Professor Reiger's pamphlet on provident institutions in Holland, exhibited in the Dutch section, was mainly concerned with savings, pensions, and the increasing prevalence of life insurance. His second pamphlet on wages and profit-sharing handles a variety of topics such as the later and the older Bourses du Travail and their somewhat disappointing record in finding employment for men out of work. Profit sharing finds a friend in Professor Reiger, but the pamphlet deals chiefly with the experience of Mr. J. C. Van Marken in regard to this method of remuneration of labor in Holland. Mr. Van Marken has published a brochure of some 70 pages, abundantly illustrated, which represents, in successful operation, a carefully reasoned out scheme of social organization of industry, covering the whole life of the workingman. This scheme bears no such marks of fancifulness as abound in Fourier's system, and is free from many, if not all, of the faults which M. Godin and Mr. Van Marken committed. Mr. and Mrs. Van Marken's labors have been noticed in most of the recent literature on industrial betterment, but apparently none of the authors had before him this new and authoritative work, which details the history and the present working of a remarkable system of institutions for the welfare of the employee.

HOUSING OF THE WORKING CLASSES.

The center of the floor of the United States section was occupied by three large models of tenement houses, contributed by the tenement house committee of the Charity Organization Society of New York. Effort is being made to procure needed legislation to promote the formation of companies to build improved dwellings at moderate rents and to shape public opinion concerning a problem which takes an acute

form in New York beyond all other cities of the modern world. No great capital of Europe can show such a condition of things as that represented by one of these models—that of the old block bounded by Christie, Forsythe, Canal, and Bayard streets. Here are 39 tenement houses, with 605 different apartments, accommodating 2,781 persons, 2,315 over 5 years of age and 466 under. Twenty-one apartments have five rooms each; 105, four rooms; 179, three rooms, and 263 two rooms only. The block has but 264 water-closets and not a single bathroom. Forty apartments have hot water, and there are 441 dark rooms, with no ventilation to the outer air, all the light and air coming from other rooms; 635 rooms get their light and air from dark and narrow air shafts. The spectacle presented by this block, with its interior area almost filled by houses, crowded into the formerly free space, and its narrow passages for air and light was a revelation to many visitors. But the old block, bad as it is, is far better than the new block of typical tenement houses erected under existing laws, which was also shown. With 4 families on each floor in 14 rooms; 22 families in each building, and 704 families in the whole block, 4,000 persons all told, all the houses of the same height and as near together as possible, this imposing block is one of the worst types ever built.

It was unfortunate that the cheerful side of the situation was represented by only one model of the prize plans by Mr. R. Thomas Short for the best form of construction of tenements on an entire block around a central rectangular area affording a playground.

The photographs of the numerous tenements built by Mr. A. T. White, of Brooklyn, and by the Improved Dwellings Association and the City and Suburban Homes Company, both of New York, were in a case on one side of the room, where they were inspected by few.

In Mr. White's buildings every room has air and light direct from outside. The rents in the older blocks are from \$1.90 per week for two rooms to \$3 for three rooms. The apartments are occupied by day laborers and all classes of workingmen, who thus pay no more, possibly less, than they would be charged for the worst tenements in New York, while Mr. White has received 5 per cent net profit on his investment for 20 years or more. In his more recent Riverside buildings \$7.60 per month is charged for three rooms, each apartment is self-contained, having a separate water-closet, dust chute, and washtubs. The interior area is made into a small park, 100 by 250 feet, with a fountain, a playground, and a concert stand, where music is furnished free on Saturdays in summer.

The model tenements erected on Seventy-first street and First avenue, New York, by the Improved Dwellings Association, in 1879, are another demonstration of the compatibility of "philanthropy and 5 per cent," the rents ranging from \$6 a month for two rooms to \$13.50 for three. Likewise, the City and Suburban Homes Company,

at Sixty-fourth street and First avenue, supply independent apartments of two or three rooms, with shower and tub baths, dumb-waiters, steam heat, and gas ranges, at an average rent of \$1 a week per room. Other photographs represented the neat and comfortable houses for workmen erected in Wilmington, Del., renting for from \$10 to \$22 a month, and in Cincinnati, Albany, Cleveland, Chicago, Dayton, Pittsburg, and St. Paul. But the extreme contrast to the perpetual-fever nests of Baxter street and Bottle Alley, in New York, was shown in the model houses erected by American employers at Willimantic, Conn., where six rooms rent for \$1.93 a week, in a park-like environment; at the Howland Mills, New Bedford; at Cumberland Mills, Me., and especially at Hopedale, Mass., where the Draper Company build double houses for men who earn \$2.50 a day, creditable to any country neighborhood, which they let for \$3 a week, each house containing a parlor, dining room, kitchen, pantry, hall, bathroom, and three sleeping rooms.

Europe, as has been said, has no such tenement-house problem as New York presents. In East London, for example, the worst streets are bordered by houses of two or three stories only, while in Paris the all-too-common style of house, the same for rich and poor, provides a central area for each dwelling. The housing problem in Europe is mainly at present the problem of providing better houses in the country or the suburban districts for factory hands or agricultural laborers. How earnest and widespread the efforts are which municipalities, employers of labor, and philanthropic societies are making toward this end was evident in the social economic exhibits of all the more enlightened nations at Paris. It was especially evident in the exhibit of workmen's dwellings built of actual stone, brick, and mortar at the exposition annex in the Bois de Vincennes. Here, in an ample space, were full-sized houses representing the comfortable and attractive tenements built by the Société Bordelaise des Habitations à Bon Marché, the Menier Chocolate Works at Noisiel, near Paris, the Caisse d'Épargne of Troyes, the Prussian ministry of war, the Farbwerke of Lucius and Brüning, at Höchst on the Main, the General Savings and Retiring Fund guaranteed by the Belgian State, the Suchard Chocolate Works of Neuchâtel, Switzerland, and the Lever Company, at Port Sunlight, England.

The Bordeaux Society showed on the side of its dwelling, at Vincennes, a statement of its work. It builds houses in groups of from 7 to 28 in number. These houses have a kitchen and living room on the ground floor, one step down from the yard, two large rooms on the first floor, and two of good size in the attic under the roof, sloping back. They are built in a very solid manner, each having a bathroom, and there is a garden in the rear. The property, in the case of the Cheysson group valued at 7,800 francs (\$1,505) for ground and building,

can be acquired in regular payments for twenty years at what amounts to a moderate rent.

At Noisiel the houses stand widely apart in a park through which a river runs. They are double, costing 8,293 francs (\$1,601), each house having a kitchen, a hallway (*salle*) in front, a good cellar, and two chambers; the yearly rent is 150 francs (\$28.95). The neat houses built by the Savings Bank of Troyes for 5,100 francs (\$984) have large gardens and small greenhouses. The Prussian war ministry's double houses are quite different in style from the others, but very substantial and homelike in appearance, an outhouse and a large garden being provided for each pair of houses.

The Belgian exhibit at Vincennes was the largest, showing the great interest taken by this crowded little country in the housing of its many thousand workers. At Ixelles, for instance, the workingman belonging to the Cooperative Society pays 17.50 francs (\$3.38) monthly rent, this sum including the premium on a life-insurance policy for 3,000 francs (\$579) procured as a guarantee for 20 years, and then he becomes owner of a house costing 2,638 francs (\$509). This rent is easy for a man to pay who is earning 3.50 francs (68 cents) a day. At Chenée, likewise, if he earns 4 francs (77 cents) a day he can become owner, after twenty-five years, of a house costing 4,125 francs (\$796) by paying 21.50 francs (\$4.15) rent, a life-insurance policy for 3,850 francs (\$743) being procured. Another example in Belgium is furnished by a 4,300-franc (\$830) house, 800 francs (\$154) for the lot and 3,500 francs (\$676) for the building, to be gained in fifteen years by a workman paying 26 francs (\$5.02) rent on a wage of 6 francs (\$1.16), his life-insurance policy being for 3,200 francs (\$618). The tendency of large makers of chocolate to care for their employees, shown not only at Noisiel, but by the Cadburys in their model establishment at Bournville, near Birmingham, England, appears in the large two-story and high-studded houses built by Ph. Suchard, the Swiss manufacturer. It would be difficult to choose, on the score of comfort, between these roomy dwellings and the brick cottages of Port Sunlight, England, perhaps the most attractive, architecturally, in the Vincennes exhibit. In the Champ de Mars building the Lever Brothers exhibited a large relief model of their village. (a)

An important exhibit at Vincennes, near the workingmen's dwellings, was the reproduction of the attractive *Maison de Convalescence* maintained at the metal works and foundry of Bernsdorf, Lower Austria, by Arthur Krupp. Herr Krupp's hospital, with its 24 beds and all the adjuncts of a cheerful common home for as many

a It is hardly necessary to refer to the report on the Housing of the Working People, prepared, under the direction of the United States Department of Labor in 1895, by Dr. E. R. L. Gould. In this report are described in detail, with many plans and illustrations, most of the types of houses which were exhibited at Vincennes. Port Sunlight is of more recent date.

convalescents, is but one of the many institutions supported by him for the benefit of the force. The list embraces an industrial school, a college, a public school, a church, a music hall, a theater, a dining hall, a health station, two recreation houses, and a cooperative store. The workingmen's houses are neat and of various styles.

English cooperators are becoming deeply interested in the erection of houses for workingmen. In answer to inquiries from the central board 109 societies stated last spring that they have no housebuilding department, but 224 others replied as follows:

Houses built and owned by the societies	4,247
Houses built and sold by the societies.....	3,709
Houses built by members on advances made by the societies	16,082
Total	24,038

The better housing of the workingman is evidently a problem that deeply stirs the French conscience. A large number of exhibits of photographs and models were shown in class 106, devoted to this subject, in addition to the houses at the Vincennes annex. A Marseilles society, which has replaced many picturesque but unwholesome dwellings in that city with healthful homes at a moderate cost, endeavors to influence capital to "do social service by helping the workingman" in this direction, and seeks to diffuse among the working people themselves the desire for a comfortable home. From numerous quarters the housing movement in France receives aid and encouragement. Proprietors of mines like those of Lens and Douvrin or Roche-la-Motière et Firminy; Chocolate works like the Menier, at Noisiel; Catholic industrialists like the Harmel Brothers, at Val des Bois; glassworks like the Cristalleries de Baccarat; pottery makers like H. Boulenger et Cie., at Choisy-le-Roi; ironworkers like the Société Anonyme de Vezin Aulnoye, and F. Hubin, at Harfleur; makers of chemicals like the Solvay Company, at Varangéville-Dombasle, all second the efforts of people's banks (such as La Prudence, at Montceau-les-Mines, Saône-et-Loire), of savings banks, and of building societies among the workers themselves. Among the latter may be mentioned the Association Fraternelle des Employés et Ouvriers des Chemins de Fer Français, which has erected nine types of houses; Le Coin du Feu, at Saint Denis; Ma Campagne, of the Magazin du Louvre employees, which has erected very pleasing homes in the country, and the Société des Habitations Ouvrières de Passy-Auteuil, in the suburbs of Paris. The Société de Crédit des Habitations à Bon Marché, founded in 1898 under the presidency of M. Jules Siegfried, with a capital of 500,000 francs (\$96,500), makes loans to local building associations at 3 per cent interest net. In 1899 it loaned 890,000 francs (\$171,770) in this way. In France, as in England, Holland, and Belgium, much that is picturesque and antique in the town or country homes of the poor will inevitably disappear before this large movement for better housing. Mention is made of

the Menier, the Solvay, the Magasin de Louvre, the Passy-Auteuil, and the A. Engels houses at Héricourt (Haute Saône) as among the most attractive. (a) The pressure of modern populations into cities renders it probable that the housing problem will long continue to occupy all the philanthropy and all the business sagacity that can be concentrated upon it. The Statistical Society of Paris, for instance, in a diagram shown at the Exposition, declared that the most numerous families in Paris and the suburbs are the worst lodged; and that for the proper housing, in comfort and decency, of the existing working population there should be 20,202 more lodgings of two rooms each, 19,675 of three rooms, 8,055 of four rooms, and 2,389 of five rooms, a total of 50,321 additional lodgings of 143,594 rooms.

The great attention paid in Belgium to questions involving the welfare of the workingman was evidenced at Paris by the large amount of literature shown in the social economy building. Much of it referred to the housing of employees. The Compagnie Belge d'Assurances Générales sur la Vie, for instance, advanced from 1893 to 1899 for cheap houses nearly 6,500,000 francs (\$1,254,500) to be repaid in annuities or with the combination of mixed insurance. Loans amounting to more than 4,000,000 francs (\$772,000) were secured in the latter way. In addition to the examples already given from the housing exhibit at the Vincennes annex, an instance may be quoted of the financing by the workingman of one out of many attractive houses in a large city shown in photographs. The land in this case cost 1,940 francs (\$374) and the building 8,200 francs (\$1,583), a total of 10,140 francs (\$1,957). On this a loan was made at an interest charge of 240 francs (\$46.32) and the premium of mixed insurance on a twenty-year policy was 303.45 francs (\$58.57), making it necessary for the workingman to pay 543.45 francs (\$104.89) a year for twenty years in lieu of rent. At the end of the time he becomes full proprietor. The Belgian housing societies often bear peculiarly appropriate names, such as that of the Society *Eigen Heerd* (your own hearth) at Antwerp.

In Holland the *Jordaan* Society takes its name from one of the worst quarters of Amsterdam, where the poor are very badly housed. The society's pamphlet, entitled "An Essay at the Solution of the Question of Lodging the People," gives photographs of old and new conditions in the small section of the *Jordaan* chosen for its work. These views are very similar to those presented in volumes on the tenement-house evil in New York. The society has been anxious, in

^aThe report of the Department of Labor on the Housing of the Working People contains plans and details of many of the styles of houses alluded to above. M. Émile Cacheux, a French specialist in this line, is the author of several works exhibited in class 106, viz, *Workmen's Dwellings in all Countries*, second edition, 650 pp., with an atlas of 78 plates; *L'Economiste pratique*, 815 pp., 72 plates, and *Les Habitations Ouvrières à la Fin du XIXe Siècle*, 300 pp., 18 plates, a compte rendu of the documents of the Exposition of 1889.

its revival of activity in the last five years, to gain as much light as possible from cautious experimenting. It found itself obliged to adopt the system of constructing large blocks of tenements rather than small houses, but in all directions it was ready to learn by experience. The result of its labors in facing the housing problem on a large scale in a great city like Amsterdam was a complete agreement with a governmental declaration made in submitting a bill on the subject. "Experience has proved that, without the intervention of the central authority, a complete cure can not be obtained. It is almost impossible to transform, without expropriation, filthy and unwholesome quarters and overcrowded centers into healthy and spacious districts with suitable buildings. We must, therefore, to this end, enlarge the law of expropriation. But we can expect a lasting betterment only if the efforts of private initiative find financial support in subsidies from the State and the municipality." The pamphlet is a contribution of weight to the literature of the housing question.

In the Swedish section of social economy there were exhibited attractive models of the houses for workingmen erected by the Société Carnegie of Stockholm and also an interesting analogue to the work of Miss Octavia Hill and Mrs. Lewis in London and Mrs. Roland Lincoln in Boston. The society at Stockholm for building workmen's dwellings, known as Stockholms Arbetarshem, has erected five model houses which accommodate at present 660 persons, more than half being children or minors. The dividend allowed is 4 per cent. Any surplus is spent for the benefit of the tenants, who have always been very appreciative of these lodgings, taking good care of them and paying their rents regularly. The tenants have established a mutual aid society, and there is a cooperative store on the premises. The society supports Sunday schools and manual-training classes for the young people among its tenants. These classes follow the lines marked out by the private association (aided by the municipality) known as the Arbetsstugor för Barn, or Society for Establishing Workshops for Poor Children. There are 37 of these institutions in Sweden, according to the brief account given by Madame Anna Hierta-Retzius, and experience has shown their great value in preventing the demoralization of the children of the poor. The Frederika Bremer Society for Promoting the Interests of Women is deeply interested in this and similar movements for the improvement of family life.

DISTRIBUTIVE COOPERATION.

GREAT BRITAIN.

Whatever may have been accomplished elsewhere in the way of distributive or productive cooperation, Great Britain has now a lead over all other countries. The large chart exhibited at Paris by the English Cooperative Union was prepared too early to show the figures

of English cooperation for 1899. Figures for 1899 were obtained, however, from the report made at the cooperative congress at Cardiff in June, 1900, and are given below. The central board complains that many societies fail to comply with urgent and repeated requests for information, while other societies send in the desired information too late for compilation. Despite this incompleteness, however, English cooperation makes an impressive exhibit. The following tables give the total results of cooperative activity for 1898 and 1899: (a)

TOTAL MEMBERSHIP, SHARE CAPITAL, SALES, PROFITS, AND INVESTMENTS OF COOPERATIVE SOCIETIES OF GREAT BRITAIN AND IRELAND, 1898 AND 1899.

Year.	Total societies.	Societies reported.	Members.	Share capital.	Sales.	Profits.	Investments.
1898.....	1,640	1,603	1,646,078	\$96,157,363	\$318,565,329	\$34,872,137	\$56,847,027
1899.....	1,651	1,613	1,729,976	104,053,201	339,852,028	38,071,953	65,548,538

MEMBERSHIP, SHARE CAPITAL, SALES, AND PROFITS OF COOPERATIVE SOCIETIES OF GREAT BRITAIN AND IRELAND, BY KIND OF SOCIETY, 1898 AND 1899.

Kind of society and year.	Total societies.	Members.	Share capital.	Sales.	Profits.
Wholesale societies:					
1898.....	2	1,351	\$4,863,906	\$88,896,735	\$2,168,405
1899.....	2	1,369	5,174,223	93,566,074	2,682,604
Retail societies:					
1898.....	1,468	1,535,119	\$4,801,230	202,340,792	31,588,782
1899.....	1,473	1,613,460	92,142,418	219,223,396	34,190,803
Productive societies:					
1898.....	147	31,890	3,837,021	14,121,026	809,143
1899.....	153	32,957	4,013,446	13,265,763	870,476
Supply associations:					
1898.....	18	77,151	2,646,734	13,198,401	305,023
1899.....	15	80,986	2,641,668	13,665,166	309,548
Special societies:					
1898.....	5	567	8,472	8,375	784
1899.....	8	1,204	81,446	131,629	18,522

CAPITAL, SALES, INTEREST, AND PROFITS OF COOPERATIVE WHOLESALE SOCIETIES OF ENGLAND AND SCOTLAND, 1898 AND 1899.

Society and year.	Members.	Capital.		Sales.	Interest on capital.	Profits.
		Share.	Loan.			
English wholesale:						
1898.....	a 1,063	\$3,774,141	\$6,286,116	\$66,061,511	\$184,299	\$1,806,387
1899.....	a 1,079	3,996,486	6,639,585	69,164,523	195,186	1,584,693
Scottish wholesale:						
1898.....	b 567	1,089,765	4,676,692	22,835,224	53,444	862,018
1899.....	c 601	1,177,737	5,039,144	24,401,551	55,940	1,097,911

a Societies. b 288 societies and 279 employees. c 290 societies and 311 employees.

The figures in the last table show a steady progress in the activities of the two great wholesale societies. The list of the distributive retail

a The Cooperative Union, it should be observed, does not include all the cooperative societies in Great Britain. In 1899 there were 1,095 societies, with a membership of 1,523,030, which were members of the union, and 556 societies, with a membership of 206,946, which were outside the union. Twenty-two societies joined the union in 1899.

societies which were reported to the congress shows a gain of only 5, but this is largely because the tendency is now strong for the large societies to establish branches in outlying districts, where formerly independent but weak societies would have been set up; 212 branches were thus established in 1899 by 141 societies, in most cases to the entire satisfaction of the central board.

FRANCE AND OTHER COUNTRIES.

More than half of the space on the floor and walls of the social economy building at Paris was assigned by the authorities of the Exposition to French exhibitors. The cooperative distributive stores of France numbered 1,489 in December, 1899, according to the *Almanach de la Coopération Française* for 1900, a gain of 40 over the figures for 1898; but many societies fail even to report their existence. Among the numerous societies which were represented by exhibits in the section devoted to cooperative distribution those sustained by the employees of the leading railway systems of France were conspicuous for their size and effectiveness. Others deserving special attention were the Civil Cooperative Society of the eighteenth arrondissement of Paris, the society *La Revendication* of Puteaux, and the *Société des Usines du Pied Selle*, Fumay, Ardennes. A small pamphlet for free distribution, by M. E. Navarre, one of the French jurors in this section (No. 107), entitled "Cooperative Distribution Explained to Visitors to the Exposition," was a very useful supplement to the exhibits made here.

In Belgium the social reform movement has its antisocialistic and its socialistic side. The trade unions of Ghent which are affiliated with the Workmen's Anti-Socialistic League made an exhibit at Paris. Each union is strictly independent as to its own affairs and is represented on the committee of the league for all affairs of general interest. The league is busied with trade schools, help for the unemployed, and other practical measures. Near the chart devoted to democratic Catholic institutions in Belgium was the exhibit of the well-known cooperative society of Ghent, the "Vooruit." It was founded in 1880, in a city of 180,000 people, with a capital of 2,000 francs (\$386), borrowed from the weavers by the 150 members. On May 1, 1900, it numbered 7,000 families, and was the proprietor of a bakery selling 105,000 kilograms (231,483 pounds) of bread a week, of clothing and shoe stores, a coal yard, 7 groceries, and 5 pharmacies. Its business had reached 1,500,000 francs (\$289,500) a year, and it maintains maternity, sick, and pension funds, and rooms and a library "for the education and organization of the workmen."

The mention of the Vooruit's pharmacies recalls the exhibit made by the Cooperative Society of People's Pharmacies of Brussels, founded in September, 1881, and now supporting 9 shops. Ninety-eight societies are affiliated, and the more than 13,000 members represent at

least 40,000 working people. The dividend was 70 per cent in 1899, and medicines of the first quality are furnished, which cost almost nothing in comparison with the usual inflated prices of the apothecary. The society returned as net profit, in eighteen years, 1,354,234 francs (\$261,367), and its property is valued at more than 3,000,000 francs (\$579,000). It is entirely a workingmen's organization, founded and administered by them.

In his report to the International Cooperative Alliance on the state of cooperation in Austria, Herr Carl Wrabetz gives the number of distributive societies existing at the end of 1898 as 712; in 1873 the number was only 73. A number of societies having been established in 1898, the figures of sales, etc., refer to 644 societies, which had together 212,268 members, with a total capital of 7,936,000 florins (\$3,222,016). In 1898 these societies' sales were 350,000,000 florins (\$142,100,000); in 1873 they were but 50,000,000 florins (\$20,300,000). The gross profit was 6,750,000 florins (\$2,740,500), but from this had to be deducted for taxes, etc., 450,000 florins (\$182,700); for interest to members, 140,000 florins (\$56,840), and for expenses of administration, etc., 3,660,000 florins (\$1,485,960). The remainder, 2,500,000 florins (\$1,015,000), represented the net profit. (*a*)

In Germany the number of cooperative stores was given by Dr. H. Albrecht, in his pamphlet on Welfare Institutions in Germany, as 1,373 in 1899. Dr. H. Crüger, president of the General Union of Cooperative Societies, has the following to say concerning the development of cooperation in Germany:

The enormous development in Germany of cooperation in general has also its reverse side—the anticoperative movement. * * * In every country the opposition of small traders to the distributive societies has increased in proportion as these developed. This opposition has been most energetic, and it has obtained, in Germany at least, considerable success, for the small traders have succeeded in getting laws passed which limit the operation of distributive societies. The small traders demand that a distributive store shall be started only where the authorities recognize a necessity for it. * * * One law which deserves especial consideration is the tax law. It is generally recognized that a cooperative distributive society which deals only with its members does not perform a commercial act, because the excess of receipts which it realizes represents nothing but the economies of the members. Nevertheless the corporations which felt themselves menaced by the competition of the cooperative stores exerted themselves to the utmost to subject them to taxes as commercial societies. And to-day the cooperators in all the German States pay not only the tax on industry, but also a whole series of other contributions, which probably will not be slow in increasing. * * * We here see the state taking a hostile attitude with regard to the consumers' societies.

M. Paul Apostol, the author of the volume, translated into French by M. E. Castelot (Guillaumin et Cie., Paris), on *The Artels and*

*a*In 1873 other kinds of cooperative associations than those named were set down as numbering but 51; in 1898, as numbering 1,158.

Cooperation in Russia, made a short report to the International Congress of Cooperative Societies last summer, in which he states that these establishments, which are nowhere more needed than in Russia, number only 307 at present actually in operation. Only 103 of these societies reported their standing on January 1, 1897. They had 55,294 members; 97 societies practiced the bad plan of selling on credit; the same number of societies made purchases to the extent of some 15,000,000 rubles (\$7,725,000) in 1896; 99 societies sold to the extent of some 16,000,000 rubles (\$8,240,000). The net profits were from 1 to 5 per cent in 58 societies, from 5 to 10 per cent in 30 societies, and more than 10 per cent in 2 societies. The greater part of the societies distribute to shareholders 5 to 10 per cent on their stock. Only 24 societies out of 100 making a reply on this point support productive branches (bakeries, tailor or glove shops, butcher shops, etc.). Most of these have been established in the last ten years, but some have been in operation for ten or even twenty-five years.

Among the smallest countries in Europe, Denmark is probably the most interesting to the student of cooperation. Its first cooperative store was established in 1866; in 1898 there were 837 distributive societies, with 130,731 members. Only 8 of these societies are in cities, perhaps only 1 in Copenhagen. Two reasons are given for this extreme and unusual preponderance of rural cooperation over that in the towns and cities. The Danish law provides that no person shall carry on any commercial business within a radius of 7 miles from the market place of the nearest town; for some of the rarer kinds of business undertakings this limit is reduced to $4\frac{1}{2}$ miles. The end sought is the foundation of "a neutral zone" around each town, the population of which shall patronize the town stores. But the cooperative stores which simply distribute to their members, as consumers' unions, do not come under this law, so they have multiplied in these neutral zones, 470 being found in them. On the other hand, 133 stores which deal also with the outside world come under the law, and must avoid the neutral zone of noncompetition. Another reason given for the greater spread of cooperation in the rural districts of Denmark is the superior intelligence of the people dwelling in the country. Denmark also shows to-day 1,052 cooperative creameries, with some 162,000 members, furnishing four-fifths of all the milk product of the country, and £7,000,000 (\$34,065,500) worth of butter annually. Twenty-five cooperative lard factories, almost all in the towns or cities, count 54,000 members in this very important Danish industry; three-fifths of the whole number of swine are handled by them, and their annual production of lard is about £1,000,000 (\$4,866,500) in value. The Danish cooperative society for the exportation of eggs, founded in 1895, has 400 branches and 22,000 members, exporting one-sixth of the whole number of eggs carried out of the country, valued at £100,000 (\$486,650). The cooperative principle is also largely applied

in Denmark to the buying of food stuffs, seeds, and fertilizers. "It is not a rare thing to see a Danish peasant a member of ten cooperative societies," whose administration is for the most part gratuitous on the part of the members.

COOPERATIVE PRODUCTION.

The latest report of the central board of the Cooperative Union of Great Britain gives the following summary of the returns relating to cooperative production:

TOTAL MEMBERSHIP, CAPITAL, TRADE, PROFIT, AND LOSS OF COOPERATIVE PRODUCTION SOCIETIES OF GREAT BRITAIN, BY COUNTRIES, 1898 AND 1899.

Country and year.	Total societies.	Members.	Capital.	Trade.	Profit.	Loss.
England and Wales:						
1898	127	5,948	\$4,641,449	\$11,572,566	\$557,326	\$30,630
1899	135	6,427	4,954,365	10,783,580	604,137	5,835
Scotland:						
1898	20	1,462	1,412,117	2,548,460	251,817	.....
1899	18	1,500	1,561,421	2,482,173	266,339	.....
English, wholesale:						
1898	1	7,029	3,468,603	7,804,829	239,855	5,110
1899	a1	8,653	3,741,876	9,276,824	336,134	16,264
Scottish, wholesale:						
1898	1	4,050	2,131,434	5,527,702	262,144	924
1899	b1	4,579	2,098,445	5,339,300	290,934	1,465
Total:						
1898	149	18,489	11,653,603	27,453,557	1,311,142	36,664
1899	155	21,159	12,356,107	27,881,877	1,497,544	23,564

a Number of productive departments, 14.

b Number of productive departments, 9.

Much of the so-called cooperative production in the preceding table is production carried on by the Wholesale Society of England under ordinary labor conditions, a body of distributive cooperators being the employers and their employees having no true cooperation with them.

As the development of cooperative production is now the most interesting phenomenon in the cooperative world, the success of cooperative distribution being pronounced and assured, it may be of interest to supplement the figures just given with the detailed statistics of the Federated Productive Societies. Not all the productive societies are in the federation. "No society can join the federation which does not by its rules practice profit sharing with its workers, under which, in the first place, a substantial and known share of the profit of a business belongs to the workers in it, not by right of any shares they may hold, or any other title, but simply by right of the labor they have contributed to make the profit; and, in the second place, every worker is at liberty to invest his profit or any other savings in shares of the society or company, and so become a member entitled to vote on the affairs of the body which employs him." Consequently the figures of the following table relate to the cooperative production which is carried on with the most consistency in Great Britain.

YEAR OF ESTABLISHMENT, CAPITAL, TRADE, PROFIT AND LOSS, AND DIVIDENDS ON WAGES OF FEDERATED PRODUCTIVE SOCIETIES OF GREAT BRITAIN, 1899.

[The column showing year of establishment was taken from the Cooperators' Year Book for 1900, the other data, except where otherwise noted, from the report to the Thirty-second Annual Co-operative Congress, 1900.]

Year established.	Name of society.	Share capital, loans, and reserve fund.	Trade during year.	Profit.	Loss.	Dividend on wages.	
						Amount.	Per cent of wages.
TEXTILES, ETC.							
1870	Hebden Bridge Fustian	\$175,505	\$215,605	\$22,138	.....	\$3,830	5.00
1872	Airedale Worsted Manufacturing	37,740	91,023	5,387	.....	224	2.92
1874	Leek Silk Twist Manufacturing	24,454	86,059	2,175	.....	1,207	7.50
1876	Leicester Hosiery	221,484	332,100	18,488	.....	1,071	1.67
1886	Burnley Self-Help Manufacturing	182,421	231,879	6,249	.....	.....	.....
1886	Wm. Thomson & Sons, Limited	129,444	131,921	9,937	.....	2,424	7.50
1892	Cooperative Institute Tailoring Dept.	a3,119	a8,842	a438	.....	.....	.....
1893	Kettering Clothing	61,858	178,956	16,984	.....	4,180	8.96
1898	Kettering Corset Manufacturing	27,452	36,854	2,326	.....	740	6.25
BOOTS AND SHOES, LEATHER, ETC.							
1881	Northamptonshire Productive (Wollaston)	12,984	73,494	4,132	.....	1,285	6.25
1884	Bozeat Boot and Shoe	3,786	11,475	39	.....	.....	.....
1885	Norwich Boot and Shoe	2,876	12,643	384	.....	39	2.50
1887	Leicester Equity Boot and Shoe	133,040	228,823	13,456	.....	2,950	3.75
1888	Kettering Boot and Shoe	64,170	187,234	12,118	.....	4,463	8.13
1889	Bristol Pioneers' Boot and Shoe	b6,545	b10,896	.....	b1,022	.....	.....
1890	Nantwich Boot and Shoe	8,108	22,527	1,275	.....	180	3.33
1891	Barwell Boot and Shoe	a14,507	a35,165	a1,041	.....	a195	1.98
1892	Leicester (Anchor) Boot and Shoe	19,218	79,251	5,124	.....	1,192	5.00
1892	Glenfield Boot and Shoe	11,003	39,477	1,747	.....	399	3.54
1892	Higham Ferrers Boot and Shoe	4,798	30,455	1,981	.....	457	5.10
1892	London Leather Manufacturing	b15,816	b26,255	.....	b2,015	.....	.....
1893	Desborough Boot and Shoe	14,687	62,257	4,122	.....	973	5.00
1893	Rothwell Boot and Shoe	b11,611	b50,972	.....	.....	.....	.....
1895	Canterbury Tanners	b22,473	b13,281	b642	.....	.....	.....
1896	Kettering Union Boot and Shoe	10,205	43,302	2,336	.....	676	6.67
1896	Leicester Self-Help Boot and Shoe	4,375	21,748	.....	.....	.....	.....
1896	Midland (Wellingborough) Boot and Shoe	7,601	10,950	.....	.....	.....	.....
1897	Long Buckby Boot and Shoe	1,007	2,127	.....	.....	.....	.....
METAL TRADES.							
1873	Walsall Padlock	33,847	85,874	7,898	.....	4,137	10.00
1873	Sheffield Cutlery	7,519	7,786	414	.....	34	2.42
1876	Coventry Watch	13,281	17,841	1,329	.....	428	5.00
1888	Alcester Needle Makers	16,765	15,724	516	.....	.....	.....
1888	Dudley Bucket and Fender	33,920	117,205	9,514	.....	2,638	10.08
1893	Cooperative Engineers, Leicester	5,781	10,010	506	.....	.....	.....
1894	London General Engineers	2,774	3,056	.....	.....	.....	.....
BUILDING, WOODWORKING, ETC.							
1873	Newcastle-on-Tyne Household Furnishing	103,793	110,265	1,732	.....	.....	.....
1891	Bradford Cabinetmaking	28,308	27,189	1,114	.....	.....	.....
1891	General Builders (London)	30,163	51,342	.....	.....	.....	.....
1892	Newcastle-on-Tyne Cabinetmaking	2,511	26,571	.....	.....	.....	.....
1892	Medway Shipbuilding	6,789	7,665	350	.....	112	.....
1894	Kettering Builders	22,955	43,979	3,840	.....	954	7.50
1896	Cambridge Builders	1,251	3,591	.....	.....	.....	.....
1896	Wigan Cabinetmakers	c2,458	c6,283	.....	c185	.....	.....
1896	Leicester Builders	19,948	46,490	594	.....	229	1.88
PRINTING, ETC.							
1885	Bookbinders (London)	1,927	3,664	496	.....	.....	.....
1892	Leicester Printing	22,873	25,238	1,767	.....	321	3.33
1895	Nottingham Printing	4,341	6,774	754	.....	127	4.58
1896	Blackpool Union Printers	8,594	10,336	925	.....	.....	.....
VARIOUS.							
1885	Cooperative Sundries (Droylsden)	67,304	151,791	10,536	.....	1,080	7.50
1887	London Productive	16,108	11,436	.....	365	.....	.....
1892	Bristol Piano	8,774	5,300	672	.....	.....	.....
1892	Photographic Society (Maidstone)	784	978	.....	.....	.....	.....
1895	Thames, etc., Barge Owning	a7,368	a2,652	a19	.....	.....	.....
1896	London Typewriters	657	954	.....	.....	.....	.....

a Figures are for 1898 and are taken from the Cooperators' Year Book for 1900.

b Figures are for 1898.

c Figures are for 1897.

Class 103 brought together the cooperative productive societies, cooperative credit agencies, and *syndicats professionnels* (trade unions and employers' associations) of France. Cooperative production, as is well known to all students of cooperation, has had a very interesting and, on the whole, successful record in France, especially in Paris, in recent years. The latest *Almanach de la Cooperation Française* gives a list of 110 productive societies, of which 66 are in Paris and 44 in the Provinces. It was altogether appropriate that the *Palais de l'Économie Sociale et des Congrès* should be entirely constructed by cooperative societies of Paris. An ornamental leaflet, itself the work of a productive society, *L'Imprimerie Économique*, gave the list of these societies and another list of the classes comprised in group XVI. Eighteen workingmen's associations erected and equipped the well-built palace—masons, carpenters, locksmiths, furniture makers, painters, floor makers, plumbers and roofers, electricians, statuaries, and upholsterers.^(a) Of these societies the best known, probably, is the society of painters, *Le Travail*, founded in 1882. An interesting document in the literature of cooperative evolution is the report of the administrative council of this society advising its transformation into a new association of the same name in 1898 (on account of its great success), with a large capital, which was still kept subordinate to the labor element. This proposal was unanimously adopted by the society, which has now been operating successfully for two years on a much enlarged scale. The cooperative bank of the productive societies at Paris has been of great assistance to them; its most effective work has been done since 1894, when it received from M. Faustin Moigneu an unconditional gift of 500,000 francs (\$96,500).

More, perhaps, than in most other departments of human activity do figures in the realm of productive cooperation fail to tell the whole story. Anyone who would realize the spirit and aims of the most consistent cooperators in England should visit the productive works at Leicester or Kettering, for instance, see the workers at work, and talk with the managers. Kettering, in particular, has been described as perhaps the most thoroughly cooperative town of considerable size in Great Britain. The *Cooperators' Year Book of 1900* gives these

^a Other lines of production in which cooperation has been successful are baking, boot and shoe making, paper-bag manufacture, paving, cement and lime making, lithography, and decorating.

striking figures to show the progress of working-class copartnership in the two places named:

CAPITAL, TRADE, AND PROFIT OF COOPERATIVE SOCIETIES AT KETTERING, 1889 AND 1898, AND AT LEICESTER, 1888 AND 1898.

Location and year.	Number of societies.	Capital.	Trade.	Profit after paying 5 per cent on capital.
Kettering:				
1889	1	\$5,022	\$17,461	\$1,596
1898	5	136,311	414,071	26,333
Leicester:				
1888	2	33,092	54,894	1,265
1898	7	395,646	632,645	27,710

In these two towns are found workingmen who have made their way up from the ranks and have not left the "army of labor;" that is to say, they are the "cooperative men" who make of cooperation a faith in the fullest sense of the word—not only a true belief which some one has defined as "personal indorsement of reality," but also a devotion to the principle which deserves to be called religious. When men, able to manage successfully large factories of boots and shoes or clothing, accept contentedly little more than the wages of the ordinary workman, because they believe in the cooperative principle and are anxious to help their class, they give the strongest proof of their sincerity. The manager of a cooperative productive establishment in England, which has dealings with cooperative societies only as its customers, is also free, it should be remembered, from many of the anxieties which beset the manager under the ordinary conditions of external competition. These considerations must be held in view if we would prophesy the future of cooperative production in England, where the cooperative man is not lacking, and in America, where he may yet be developed under new conditions, which will lead workingmen, as some one has remarked, to "cotalk" less and "cowork" more.

COOPERATION IN GENERAL.

It is interesting to note the directions in which English cooperators have, thus far at least, had much less conspicuous success than in distribution or manufacturing. In agriculture, according to the central board, the same societies appear in the list year after year, and few names are added, and the board suggests that societies should pay more attention to cooperative farming, if only in the way of assistance to those of their number who are workers on the soil. The following tables give statistics of farming operations conducted by the wholesale and distributive societies and by the farming societies of Great Britain in 1899.

ACREAGE AND CAPITAL EMPLOYED, RENT, AND PROFIT AND LOSS OF WHOLESALE AND DISTRIBUTIVE SOCIETIES OF GREAT BRITAIN ENGAGED IN FARMING, BY SECTIONS, 1899.

Section.	Number of societies.	Acreage.	Capital employed.	Rent.	Profit.	Loss.
Midland	18	1,603	\$65,547	\$9,928	\$1,908	\$1,212
Northern	23	2,265½	152,107	13,105	7,811	1,124
Northwestern	21	762	88,673	6,652	501	2,545
Scottish	4	853	51,439	8,643	3,450	1,723
Southern	8	652½	134,048	3,553	1,942	540
Southwestern	1	67	3,898	1,022	58	.....
Western						
Total	75	6,203	495,707	42,903	15,670	7,144

ACREAGE, CAPITAL, RENT, AND PROFIT AND LOSS OF FARMING SOCIETIES OF GREAT BRITAIN, BY SECTIONS, 1899.

Section.	Number of societies.	Acreage.	Capital.	Rent.	Profit.	Loss.
Northern	1	28	\$1,776	\$331	\$83	.....
Southern	1	223	17,860	535	170	.....
Western	1	242	5,256	740	107	.....
Total	3	493	24,892	1,606	360	.....

The British Agricultural Organization Society has been formed on the lines of the Irish Society, which has had such great success. The movement is too new in England to make much of a showing in figures. The following is a statement of the condition of this society in 1898 and 1899:

MEMBERSHIP, CAPITAL, SALES, AND PROFIT AND LOSS OF THE BRITISH AGRICULTURAL ORGANIZATION SOCIETY, 1898 AND 1899.

Year.	Number of societies.	Number of members.	Capital.	Sales.	Profit.	Loss.
1898	13	4,416	\$272,709	\$504,500	\$8,448	\$2,881
1899	12	4,758	293,489	634,918	6,691	15,110

The growth of cooperation in Ireland has been very considerable in recent years. There are now in existence 164 creameries with 42 auxiliaries, 102 agricultural societies, and 41 poultry and miscellaneous societies. "The estimated membership is about 40,000" and "cooperative selling, apart from the products of the dairies, has not proved a great success." (a)

a See Cooperative Year Book for 1900, page 81.

Cooperative credit banks are still few in Great Britain and Ireland compared with the thousands of them in Germany. The figures for 1899, as given by the Cooperative Union, are as follows:

MEMBERSHIP, CAPITAL, AND PROFIT AND LOSS OF COOPERATIVE CREDIT BANKS OF GREAT BRITAIN AND IRELAND, 1899.

Country.	Societies.	Members.	Capital.	Profit.	Loss.
England:					
Town banks.....	5		\$4,238.72		
Country banks.....	5	123	2,253.19		
Ireland.....	48	2,085	18,594.90	\$204.39	\$4.87
Scotland.....	1	373	10,706.30	1,391.82	
Total.....	59	2,586	35,793.11	1,596.21	4.87

The Cooperative Insurance Society of England, after twenty-five years accumulation, now expects to pay an annual dividend on premiums, in its fire and fidelity departments, having paid 2 shillings on the pound in 1899. Hereafter, besides ordinary life insurance, it will transact an industrial life and personal accident insurance business, life-insurance premiums being payable either weekly, monthly, quarterly, half yearly, or yearly. The last two years' business has been as follows:

RISKS INSURED, AMOUNT OF INSURANCE, PREMIUMS RECEIVED, AND CLAIMS PAID BY THE COOPERATIVE INSURANCE SOCIETY, 1898 AND 1899.

Kind of insurance.	Risks insured.		Amount of insurance.		Premiums received.		Claims paid.	
	1898.	1899.	1898.	1899.	1898.	1899.	1898.	1899.
Life.....	804	939	\$375,742	\$486,165	\$17,179	\$20,342	\$3,942	\$6,730
Fidelity.....	2,075	2,285	1,051,315	1,188,089	7,728	8,254	1,898	2,195
Fire.....	53,352	59,352	58,432,070	66,126,046	79,368	87,758	22,430	36,450

The Cooperative News of Manchester, the organ of the movement as a whole in Great Britain, has a circulation of a little over 50,000 copies. The paper is conducted on the same routine plan, year after year, and it suffers from the lack of able contributors drawn from the ranks of men of letters and economists and sociologists, not technically members of the cooperative world, though in full sympathy with the principles of cooperation. The Wholesale Society of England supplies 322 societies with 170,000 copies of its little monthly paper, the Wheatsheaf, and the Scottish Cooperator is sent out fortnightly to the extent of 21,750 copies by the Wholesale Society of Glasgow. Labor Copartnership, the organ of the Labor Association, sends 5,800 copies a month to 235 societies, and the Irish Homestead has a circulation of 8,000 copies monthly.

In the British exhibit at Paris was a chart giving the figures of the activity of registered provident societies up to December 31, 1898. The English custom of lumping together, as such societies, savings

banks, cooperative societies, trade unions, building societies, and loan societies, and giving the total of membership and funds on such a basis, does not appear to be scientifically helpful. The statistics given at Paris do not agree with those found in the Sixth Annual Abstract of Labor Statistics of the United Kingdom, 1898-99, recently issued by the Labor Department, and are, therefore, not quoted. The Abstract states the membership of the 1,307 trade unions as 1,644,591; and it reports 43 federations and 735 local associations of employers for the year ending December 31, 1899.

Baron Collot d'Escury's review of the numerous cooperative efforts in agriculture in Holland to diminish the cost of production and raise the selling price of the fruits of the soil will afford encouragement to any country that has not yet learned to adapt itself to the new conditions which America has imposed upon farming in Europe. Figures were given for 1898, but the last two years have seen a great increase in all directions of cooperation in agriculture. There were in 1898 540 societies for the purchase of fertilizers, seeds, grains, and other farmers' supplies, to the extent of 4,122,598 florins (\$1,657,284). Selling societies are few as yet, but they are making good progress. On the other hand, there were 485 cooperative creameries in 1898, with 25,376 members, using 386,378,937 liters (408,286,623 quarts) of milk. The list of cooperative institutions in Holland includes also a few factories for making potato starch, preserves, hoops and basket work, beet sugar, chicory, and madder; 174 societies for improving the breed of horses and cattle; 592 societies of mutual insurance against mortality of live stock; similar societies for insurance against hail; 129 mutual fire insurance companies, and, in 1899, 70 cooperative credit societies for farmers, a direction in which progress is rapid. All these kinds of agricultural societies are most numerous in the east and the north of Holland.

The social economic exhibit of Germany was characterized by thoroughness and solidity. Germany made no exhibit at Paris in the department of education. The exposition of German efforts to answer the social questions of our age was limited to two very important matters—the system of workmen's insurance and the welfare institutions of employers for their work people. The latter were shown by photographs, models, plans, and literature. A guide to this special exhibit was provided in a pamphlet of nearly 200 pages, which was furnished in German or French. The French title was *Les Œuvres de Salut Social en Allemagne* (Social Welfare Institutions in Germany), and it was prepared at the instance of the German committee on the social economy section of the Exposition by Prof. H. Albrecht, of Gross-Lichterfelde. The president of the committee was Dr. Julius Post. Drs. Post and Albrecht are the authors of the standard work on employers' welfare institutions in Germany, *Musterstätten persönlicher Fürsorge von Arbeitgebern für ihre Geschäftsangehörigen* (Bd. I,

1889; Bd. II, 1893). Dr. Albrecht has arranged his matter after the plan of this large work, first treating institutions for the protection of childhood and adolescence, and, secondly, those for the protection of adults. The institutions for children and youth embrace *crèches*, kindergartens, orphan asylums, schools for the manual and intellectual training of boys and girls, a variety of societies for the protection of girls and young women, and apprentice schools for boys. The protection of adults covers all institutions for regulating labor, wages, contracts, profit sharing, workmen's councils, and the like; mutual aid, cooperative, and saving societies; the housing of the workman; a great variety of institutions for supplementing the workman's school training, such as libraries, lecture courses, people's palaces, recreation houses, and musical organizations, and all measures in relief of special needs, such as sickness, lack of work, release from prison, and the repression of intemperance. Under each of these heads reference was made, by numbers, to the exhibits, if any, made at the Exposition or to the books in the small library on social betterment to be found in the same room in the German building.

Frequent bibliographies of select works on each topic treated are another feature of this brochure. The photographs and relief models of workmen's houses in the German building were supplemented by the actual houses at Vincennes, mentioned elsewhere in this paper. The statistics given by the general union were reported under the heading of cooperative societies. Out of 16,912 cooperative societies, 10,858 were cooperative credit societies. Next in number were the rural economy societies, numbering 2,017, followed by the cooperative stores, numbering 1,373; the agricultural supplies societies, 1,193; the cooperative societies of agricultural laborers, 432; the building societies, 244; the productive societies, 193, and other minor groups. Cooperative production has not had any striking success in Germany, according to Dr. Albrecht. A great many societies have dissolved after a short existence, and of the 193 reported as now alive, very few are properly organizations of workmen. An interesting group of which is formed by the societies in the foundation and management of which persons not members of the corporation take part, from philanthropy. Two such societies are the Gutenberg Press of Anhalt at Dessau, modeled in part upon the Van Marken Press at Delft, Holland, and the weavers' society, St. Paul, at Lubeck, established in 1880 by a Roman Catholic priest, Father Bloeink.

WORKINGMEN'S INSURANCE.

The exhibit of workingmen's insurance made by Germany was of great impressiveness, as almost the entire space of the considerable section was devoted to this one institution. A large gilded obelisk in the center represented the enormous sums paid as compensation to

workingmen in the German Empire from 1885 to 1899, inclusive. The amount was given as 2,400,000,000 marks (\$571,200,000). This amount would equal 961,000 kilograms (2,118,640 pounds avoirdupois) of coined gold in the shape of the Parisian obelisk, the base being 7.4 square meters (79.7 square feet), and the height 14.9 meters (48.9 feet). At the top of the obelisk a section on which the imperial coat of arms was placed denoted the State subsidy of 8.9 per cent. Below was represented the much larger contribution of the employers, 49.1 per cent, and next the workmen's 42 per cent. These percentages are for 1899. A large chart on one wall of the section represented in more detail the statistics of the scheme for the years 1885 to 1897 in the shape of a tree. The roots were four—interest on the surplus being a fourth feeder of the tree above, beside the workingman, the employer, and the State. The main branches were the three kinds of insurance granted by the German legislation which has followed upon the notable declaration of Emperor William the Great, in his message to the Reichstag of November 17, 1881. Scrolls and shields of proportionate sizes and of three colors exemplified the amounts paid out for the various purposes of the three kinds of insurance.

Besides this chart there was a great amount of literature, official and private, treating the question of insurance and the prevention of accidents.

The system of workingmen's insurance thus represented at Paris has been made the subject of a special report prepared under the direction of the United States Department of Labor, by Mr. John Graham Brooks, and it has since been treated more briefly in the volume on Workingmen's Insurance by Mr. W. F. Willoughby. It is not desirable, therefore, to enter here into the details of the methods of its operation. A few late figures are taken from the two pamphlets in English which were supplied by the German section of social economy. One of these was the Guide to the Workmen's Insurance of the German Empire, compiled by Dr. Zacher, the permanent member of the Imperial insurance department, and revised to date for the Exposition. The second brochure was compiled by Dr. G. A. Klein, of the same department. In 1897 the workingmen's contribution to the sick-insurance fund was 102,900,000 marks (\$24,490,200), over two-thirds of the whole amount, according to the law. For the same year the employers contributed 45,500,000 marks (\$10,829,000). The employers in 1898 contributed to the accident insurance fund 75,100,000 marks (\$17,873,800), the whole burden. To the invalidity insurance fund the workingmen contributed, in 1898, 59,000,000 marks (\$14,042,000), and the employers an equal amount. Dr. Klein says that "frequently the workman's share is also paid by the employer, without deduction from his salary [wages]," while the Imperial subsidy (for this fund only) was 24,400,000 marks (\$5,807,200). Interest and other receipts were,

in 1897, 7,400,000 marks (\$1,761,200) for sick insurance; in 1898, for accident insurance, 12,300,000 marks (\$2,927,400), and for invalidity insurance 21,200,000 marks (\$5,045,600). The total reserve fund of the three insurances had grown to be 889,500,000 marks (\$211,701,000) in 1897. The expenses of administration of the funds were 10.1 per cent for the period 1885 to 1897. For 1897 the expense of administration for sick insurance was 5.7 per cent, and for 1898, on accident insurance, it was 14.3 per cent, and for invalidity insurance 10.3 per cent. Five per cent of the expense in the accident insurance was to meet expenditures of the employers' trade associations for better supervision of factories and the elaboration of regulations for preventing accidents. "The expenses incurred by the employers for accident prevention, which are in their total much higher, are not contained in these figures." In 1898 the estimated total compensation given in workmen's insurance was 279,700,000 marks (\$66,568,600), and in 1899, 304,500,000 marks (\$72,471,000). From 1886 to 1899 the increase in percentage each year over the previous year varied from 5.6 per cent in 1894 to 24.6 per cent in 1891, the average annual increase for the fourteen years being 13.2 per cent. In the 2,413,800,000 marks (\$574,484,400) paid to workmen from 1885 to 1899, the workmen received 1,249,400,000 marks (\$297,357,200) more than they paid in, for the total charges for compensation, management, and reserve. "This condition changes from year to year still more in favor of the workmen according to the increase of compensations in accident insurance—a charge carried by the employers alone." Invalidity insurance has been in effect since 1891 only, and the amounts of the pensions, which are still rather low, will increase from year to year. "In spite of the burden cast upon the employer through workmen's insurance, wages have advanced and production has increased in the German Empire. In the two years 1897 and 1898 the wages of the workmen insured by accident insurance have advanced, respectively, 330,600,000 marks [\$78,682,800] and 389,800,000 marks [\$92,772,400] over the year previous." What qualifications should be made as to the relative positions of the German workman, with his wages and his insurance, and the English or American workman, with his high wages alone, is not a question to enter into here. The legal condition of the German workingman has been raised, his hygienic conditions improved, and his tendency to save greatly increased. The insurance funds have employed their capital in a large variety of ways, such as loans for improved dwellings, for agricultural improvement, for hospitals, public baths, cooperative stores, and the like, which tend to raise the level of the workingman's lot greatly. From 1891 to 1899 the invalidity insurance fund advanced, in round numbers, 134,000,000 marks (\$31,892,000) for such purposes. Whatever may be thought of the paternal policy which underlies this system, and of its adaptability to

English or American conditions, it has produced excellent results in Germany.

In the same section of the Exposition a large case had been equipped with some 960 photographs of apparatus or arrangements for the prevention of accidents in manufacturing industries and farming. It was intended that an ingenious electrical device should present all these photographs in turn. The apparatus proved defective, however, and was in operation but a small part of the time. There were, still, always visible two dozen photographs at a time in the case, and there was a special catalogue of more than 100 pages, briefly describing each piece of preventive apparatus and also giving the name of the maker where it is manufactured and for sale. Later on a complete set of these photographs was on exhibition in large albums.

The social economic exhibits of Austria-Hungary were made in separate sections. The Austrian section presented an exposition of governmental interest in labor in many reports of factory inspection, strikes and lockouts, and obligatory insurance against accidents, sickness, and death. There is a special service of the Austrian ministry of commerce for the encouragement of small industries. Institutes hold temporary or permanent exhibitions of the products in wood, metal, and textiles of these small shops or home factories, and loans of money or machinery are made to small productive associations. The Austrian section showed reports of savings banks, private and postal, but the chief interest of the section, at least in the direction of provision for the future, attached to the figures of compulsory insurance against accidents, sickness, and other incapacity for labor. The number of accidents reported in 1890 was 16,041; in 1897, 69,283. The number of injured persons indemnified in 1890 was 6,741; in 1897, 19,661. The number of pensioners in 1890 was 1,928; in 1897, 28,812. The receipts in 1890, chiefly contributions from members, were 7,627,484 crowns (\$1,548,379), and the expenses for deaths and accidents 411,196 crowns (\$83,473). In 1897 the receipts were 19,066,262 crowns (\$3,870,451), and the expenses 7,697,882 crowns (\$1,562,670). The Austrian system of accident insurance, obligatory since November 1, 1889, requires the employer to contribute 90 per cent of the annual levy and the workman the other 10 per cent. The highest weekly or monthly sum paid for incapacitation is 60 per cent of the wages earned by the injured workman, and it may reach 50 per cent for his representatives in case of his death. In 1897 there were insured 236,413 establishments, including farms and forests; workingmen of all classes, 2,077,473; workingmen, usually so styled, 1,331,957; and the wages represented amounted to 1,006,376,740 crowns (\$204,294,478). The number of sick-insurance funds in 1890 was given as 2,740, and as 2,927 in 1897. These figures included district, factory, corporation, mine, and engineering funds, and fraternal associations. The expenditures from

August 1, 1889, to December 31, 1897, are given as 124,000,000 crowns (\$25,172,000) in money aid; 38,000,000 crowns (\$7,714,000) in medical expenses and aid; 28,000,000 crowns (\$5,684,000) in medicines; 12,800,000 crowns (\$2,598,400) in hospital service; and 6,800,000 crowns (\$1,380,400) in funerals, a total of 209,600,000 crowns (\$42,548,800) in eight years and five months. The number of persons insured in 1897 was 2,285,232; the number of cases of sickness was 1,158,388, including childbirths; the number of deaths, 21,192. The contributions in 1897 amounted to 37,865,758 crowns (\$7,686,749), the expenditures to 33,490,994 crowns (\$6,798,672), and the reserve to 30,244,308 crowns (\$6,139,595).

In France much interest is felt in the protection of workmen from accidents. This interest has expressed itself, however, not in State regulation, as in Germany, but in the formation of insurance associations of employers in the various industries. The association in the textile industry includes 343 manufacturers, employing 879,251 persons. This body levies an annual sum of 461,468 francs (\$89,063), which it derives from seven classes of risks in which the premium varies from one-fourth of 1 per cent on wages to 1.80 per cent. A rebate is granted at the end of each year in proportion to the more or less fortunate record of the twelve months. The association in the iron and steel manufacture has 94 members and insures 79,677 persons; that in the sugar-refining business, with 158 members, insures 28,405 persons. The Paris Union des Entrepreneurs et Industriels is a local organization of similar aims, with 2,309 members, and like associations are found in the north of France. These bodies publish, for the benefit of working people, placards and leaflets containing instructions for guarding against accidents, and the French railways made an exhibit of apparatus for their prevention. France has no institution similar to the Dutch museum of accident preventers at Amsterdam.^(a) It seems probable, however, that the initiative of French employers organizing in each line of industry will render superfluous such State action as that of the German Empire.

SAVINGS AND CREDIT INSTITUTIONS.

Students of sociology are aware of the promising development of people's banks in Italy. The Italian section at Paris made a large showing of this important instrumentality for advancing the welfare of the working classes. Nearly all the reports and charts in this

^a There is at Amsterdam (Groeneburgwal, 44) a unique museum of appliances to prevent accidents and disease in manufactories and workshops. Photographs of this exhibit, shown at Paris, represented apparatus for humidifying dry air and filtering a dusty atmosphere, covers for millstones, and similar means of sanitation. M. Struve's pamphlet offers several views of this important museum and describes its working in practice.

exhibit were in the Italian language. Mr. Henry W. Wolff's volume on People's Banks, in its latest edition, has given, however, a full survey in English of their history and present condition. A valuable document to be had at the Exposition was the brochure issued by a leading institution of this kind, La Banca Popolare, of Milan, founded in 1865. This memoir gives eight lithographic views of the building occupied by the bank in Milan and a complete exhibit of its methods of operation and its financial standing. The brochure is a valuable supplement to any general discussion of people's banks, showing how the general principle has been applied in this great city of northern Italy.

In the Italian section were many reports of savings banks, *monté di pietá*, life-insurance societies, and societies to promote popular recreation, like the "Trastevere" at Rome. The best general survey of all forms of mutual aid and thrift in Italy is probably the volume published in 1898, by A. Colin et Cie., of Paris, entitled *La Prévoyance Sociale en Italie*, the joint work of Mm. L. Mabileau, C. Rayneri, and the Comte de Rocquigny.

The people's banks of Belgium numbered, on June 30, 1899, 14,379 members; they made advances during the previous year of 80,864,406 francs (\$15,606,830); the whole amount of the business during the year was 422,079,911 francs (\$81,461,423); the dividends of the various banks ranged from nothing up to 15 per cent, the usual rate being between 4 and 5 per cent. The Government is an active factor in the encouragement of thrift. One of the most significant sights in the very interesting old-time city of Bruges is the working men and women handing in their savings of a Sunday morning to the post-office clerk in charge of the Belgian State funds for savings and old age.

Cooperation in Austria has taken chiefly the form of credit associations. Of these there were 142 in 1873 and 4,032 in 1898; their capital was less than 50,000,000 florins (\$20,300,000) in 1873, and but little less than 600,000,000 florins (\$243,600,000) in 1898; their loans in the former year were, in round numbers, 100,000,000 florins (\$40,600,000), and in 1898 nearly 1,000,000,000 florins (\$406,000,000).

A pamphlet on *Crédit Populaire* in Russia declares the question of people's banks one of vital interest to 114 millions of peasants. The Government has for thirty years recognized the need of such an institution, but so far it has developed but slightly, and there are only 3,000 loan banks of all kinds in that immense territory, and, for the most part, their operations are on a very modest scale.

A pamphlet in French, offered to visitors to the Exposition, gave a full statement of the theory and the operation of the Hungarian State postal savings banks. In 1899 there were 116,681 books of deposits

issued, and 89,842 were reimbursed. Similar figures since 1886 show that "with the population of the country the penchant for savings indeed exists, but that perseverance is still lacking. Nevertheless * * * the postal savings banks, in respect to the number of depositors, hold the first place among Hungarian savings banks." The Hungarian Postal Bank is the only one, besides the Austrian, which has a check and clearing department. The account of the workings of this department shows that it "still has a vast field to explore." Thus far, as the figures show, it has attracted mainly persons in the upper economic spheres. The poorer classes yet remain to be associated in its credit facilities.

In the social-economic exhibit made by Holland, the figures showing the great increase in savings had a special interest. The relative increase from 1857 to 1897 in the number of savings bank depositors and in the average size of their deposits is far beyond that of the population, which was 3,329,000 in 1857 and 5,004,000 in 1897. The gain was graphically shown by representations of coins, enlarging bank books, safes, buildings, purses, and the like. There were 127 savings banks in 1857 and 277 in 1897, besides the 1,017 postal savings banks started in 1882, and increasing to 1,289 in 1897. In 1857 the private banks had 46,661 accounts with depositors; in 1897, 361,509 accounts. In 1882 the postal banks had 46,242 accounts; in 1897 they had 627,409. In 1857 there were on deposit in the private banks 4,817,000 florins (\$1,936,434); in 1897, 78,277,000 florins (\$31,467,354). In 1882 the postal banks held 2,019,000 florins (\$811,638) for depositors; in 1897, 61,646,000 florins (\$24,781,692). The number of savings books to 1,000 inhabitants on the 31st of December was, for the private banks, 14 in 1857 and 72 in 1897; for the postal banks 11 in 1882 and 125 in 1897. The average amount on deposit at the same time of the year was, for the private banks, 102 florins (\$41) in 1857 and 216 florins (\$86.83) in 1897; for the postal banks 44 florins (\$17.69) in 1882 and 98 florins (\$39.40) in 1897.

THE FREE PUBLIC LIBRARY.

An exhibit in the United States section which had no parallel in any other part of the Exposition was that of the American Library Association. It was crowded into a corner, however, and was not given the prominence it deserved. Concerning the importance as a civilizing agency of the free public library practically all authorities on education are now agreed. No country has developed a public-library system equal to that of the United States, especially in the eastern part of the country. In the whole exhibit of education this special exhibit of our free libraries was notable as an extreme development of free education. The enterprise of the American Library Association, seconded by the generosity of Mr. Andrew Carnegie, made it possible for a visitor to

learn from an expert in charge the methods of installation and administration of an American public library. These were illustrated by specimens, as far as space would admit, of card catalogues, forms, bulletins, loan systems, and the other details of library economy. Three monographs were prepared for distribution, viz, Handbook of American Libraries, by a committee of the association; Public Libraries and Popular Education, by Prof. H. B. Adams, and The Modern American Library, by Melvil Dewey. The picture collection comprised 10 framed wall pictures, showing the finest types of American libraries, and some 700 photographs and plans shown in wing frames and portfolios. Library schools, library commissions (with their varied work, including traveling libraries and pictures), children's departments, historical, governmental, and university libraries, and museums connected with libraries were illustrated, as well as many exteriors and interiors of free libraries proper from all parts of the United States. Mr. Carnegie's munificence in the cause of public libraries was made the subject of a special exhibit. A large number of charts, showing the development and extent of the American system, picture bulletins, catalogues, bound volumes (400), works on bibliography, classification, and cataloguing, and library periodicals, forms, and blanks covered the whole range of the librarian's work. One of the most interesting parts of the exhibit was the four traveling libraries from New York, Wisconsin, and Pennsylvania, three of the twenty States which now send books to those who can not come to a public library—the consummation, it would seem, of the free-library idea.

THE NEGRO EXHIBIT.

An unusual exhibit in the United States section was the varied collection showing the progress of the Negro race in the United States. This exhibit embraced many specimens of work done in manual-training and trade schools, besides the usual educational exhibits; a collection of books by Negro authors and of newspapers and periodicals published by Negroes; photographs of the Hampton Institute, the Tuskegee School, and other colleges and training schools for the Negro; a collection of charts illustrating the condition of the American Negro, prepared by students of Atlanta University; a number of volumes, too formidable in size for consultation, compiled by Prof. W. E. Burghardt Du Bois, entitled *The Georgia Negro, a Social Study*; *Types of American Negroes*; *The Black Code of Georgia*; *Negro Landholders of Georgia*, and *Negro Life in Georgia*. One set of photographs showed the possibilities of the race, and was concerned with the Coleman Manufacturing Company's cotton mill, a plant owned, managed, and operated entirely by Negroes. Some of the more important statistics presented in the exhibit are here shown.

The Negro population of the United States was, in 1790, 757,208; a hundred years later it was 7,470,040. The time at which to begin to make comparisons of population, however, is more properly the year 1800. At that time the number of Negroes was 1,002,037, a proportion of 1 in 5 of the total population. This proportion gradually fell from 1 in 6 in 1830 and 1 in 7 in 1860 to 1 in 8 in 1890. The statistics show an increase of amalgamation of the white and the Negro races, probably noted with the most reliability in the study of the Georgia Negro, to be summarized later. In 1860 11 per cent of the Negroes were free laborers and the remainder slaves. In 1890 17.5 per cent were proprietors and 82.5 per cent tenants. Of the whole number of Negro children of school age, 37.59 per cent were enrolled in the public schools in 1876, 56.66 per cent in 1886, and 57.29 per cent in 1896, the total enrollment in 1895-96 being 1,429,713. The charts on exhibition represented the proportion of illiteracy among the American Negroes as less than that prevailing in Russia, Servia, and Roumania, and only a little greater than that in Hungary. As to their occupations, agriculture, of course, stands first, employing 1,106,728 persons in 1890 classified as agricultural laborers. Then come farmers, servants, general laborers, workers in laundries and on railways, draymen, workers in sawmills and brickworks, carpenters, barbers, teachers, tobacco workers, seamstresses, and blacksmiths. The Negro press is credited with 3 magazines, 3 daily papers, 11 school papers, and 136 weeklies. The amount of crime is indicated by the ratio of 3,250 prisoners to the million of the Negro population. Paupers are rated as 86 out of every 100,000 persons. The number of church organizations was 23,462, Baptists and Methodists predominating and Roman Catholics having but a small percentage. The number of church buildings was 23,770, valued at \$26,626,448, and there were 2,673,977 communicants. The estimated capital of Negro business men, engaged chiefly as storekeepers, undertakers, druggists, bankers, publishers, and in building and loan associations, was \$8,784,637.

The study of the Georgia Negro concerns 858,815 persons, composing 46.74 per cent of the total population of the State. A comparison of the conjugal condition of the Negroes with that of Germany (the reasons for this particular choice are not given) shows a larger proportion of Negroes than of Germans to the entire population married between the ages of 15 years and 40, the German percentage being 37.31 and the Negro 54; but between 40 years and 60 the Georgia figures are 73.50 per cent, while the German are 84.8. Of persons 60 years old and over Germany has 62.2 per cent married, and the Negro population of Georgia 54.5 per cent. In the difficult matter of statistics of amalgamation Professor Du Bois rates 44 per cent of the Georgia Negroes as "full-blooded" and 40 per cent as "brown" (persons having some white blood or "descendants of light-colored Africans"); the

remaining 16 per cent are "yellow," having more white blood than Negro. The illiteracy figures are given as 99 per cent in 1860, 92.1 in 1870, 81.6 in 1880, 67.27 in 1890, and they are estimated at 50 per cent in 1900. In 1897 Georgia had 180,565 Negro children enrolled in the public schools, and there were 3,316 teachers, against 2,512 in 1886; there were 2,795 schools in 1898 against 1,436 in 1878. The valuation of all taxable property belonging to Georgia Negroes in 1899 was \$13,447,423; 1,062,223 acres of land held by them being valued at \$4,220,120, and their household and kitchen furniture at \$1,434,975.

INTERNATIONAL LABOR CONGRESSES.

In the list of international congresses, which were a notable feature of the Exposition of 1900, there were several of special interest to the workingman. Among these were the congresses on the housing question, on accidents and accident insurance, on legal protection of workmen, on Sunday rest, on young women workers, on cooperative production, on cooperative consumption, and on profit sharing, and the congress of the International Cooperative Alliance. The International Cooperative Alliance was profitable and interesting from the international point of view, while the congress on young women workers was not without a special feature of interest in the papers presented by women and priests. Of the four cooperative congresses the profit-sharing congress was naturally the smallest in point of numbers, having an average attendance of some 20 persons, the majority of whom were business men who had practiced the system or professors who had advocated it for years. The larger part of the questions discussed (13 out of 20) were resolutions voted by the congress of 1899, and they were reaffirmed, substantially, by the congress of 1900. The new questions related to forfeiture clauses in profit-sharing agreements, strikes, the fitness of the adoption of profit sharing in all cooperative undertakings, the métayer system, and factory councils composed of workmen and employers. In these questions the attitude of the congress was that of opposition to forfeiture clauses in most cases, depreciation of strikes, and hearty advocacy of factory councils, the métayer system in agriculture, and the extension of profit sharing to all cooperative undertakings.

The meeting of the International Cooperative Alliance produced a considerable literature of value to the student of cooperation in the shape of printed reports on the actual state of cooperation: In France, by Professor Gide; in Holland, by M. Goedhart, of The Hague; in Austria, by Herr Carl Wrabetz, of the Reichsrath; in Hungary, by M. Gyorgy; in India, by Ambika Charan Wkila; in Denmark, by M. H. Faber; in England, by Mr. J. C. Gray; in Switzerland, by Dr. Hans Müller; in Finland, by Dr. H. Gebhard, of the University of Helsingfors; in Germany, by Dr. H. Crüger. The reports that introduced

the discussions of the alliance were also important, the list including papers on the means of developing the action of the alliance, by Mr. H. W. Wolff; on cooperation and profit sharing, by M. A. Trombert; on the different forms of cooperative production, by M. Ladousse; on national and international commercial relations between productive and consumers' and credit societies of cooperators, by Sig. L. Ponti, of Rome; on cooperative education, by Sig. Luzzati; on the practical utility of wholesale societies, by Mr. Brodrick, of the English Wholesale; and on cooperation as a means of uniting social classes and arriving gradually at social peace and international fraternity, by M. de Boyve.

M. de Boyve also presented the first paper read at the Congress of Consumers' Societies, on the necessity of a common programme for all such organizations. M. Fitsch treated of the utility of reserve funds and their employment; M. Buffet, of the means to be employed to meet attacks from the commercial world; M. Briotet answered in the affirmative the question, "Should consumers' societies enter upon production?" M. Chevallier examined the evil consequences which may result from sales to the general public in consumers' stores, and M. Chiousse discussed the usefulness of district federations of stores, their organization and operation. At the opening session of this congress on Sunday, July 15, delegates from Germany, England, Belgium, Spain, the United States, Holland, Hungary, Italy, Portugal, and Russia made brief addresses.

The literary result of the Congress of Cooperative Production is to be found in three pamphlets. The first, devoted to cooperation in the past and from the philosophic point of view, was principally the work of M. Raphael Barré, secretary of the cooperative bank of the productive societies. Cooperation from the industrial and economic point of view was the subject of the second pamphlet, to which M. Ladousse was the chief contributor, while the third division of the general subject, cooperation in its external relations, was discussed by M. Petit. In all probability the most substantial outcome of these cooperative congresses is the printed matter prepared for them. The resolutions presented were either declarations of aims and purposes or recommendations for action, the result of which depends upon the several national organizations. The personal intercourse laid the foundations of a more fruitful cooperation in the future. Like other bodies which simply talk and resolve, these congresses are open to much criticism; but they are, after all, one of the indispensable means of educating and forming public opinion.

LITERATURE OF THE SOCIAL ECONOMIC SECTION.

Holland was one of the few countries represented at the Exposition which took pains to present in print a full statement of its social economic status, especially as regards the workingman. Six pam-

phlets were prepared and published for distribution at the Exposition, which, taken together, furnish an excellent view of the situation in Holland. These pamphlets, varying in size from 35 to 150 pages, were easily obtainable by persons interested in social economy. The subjects and authors were as follows: The Aim and Work of the "Jordaan" Society for the Construction of Workmen's Houses, contributed by the society; Cooperative Societies in Agriculture, by the Baron K. J. A. G. Collot d'Escury, president of several such societies; the Regulation of Labor, Accident Insurance, Factory Inspection, etc., by H. W. C. Struve, inspector of labor; Wages and Profit Sharing, and Provident Institutions, by W. A. Reiger, professor of political economy at Groningen University; Public and Private Charities in Holland, by Chevalier H. Smissaert. The comparatively small exhibit of material from Holland was largely made up of photographs and models from the establishment at Delft directed by Mr. J. C. Van Marken. This was described in an illustrated pamphlet by Mr. Van Marken on Social Organization in Industry, a unique document, setting forth the theory and the practice of the elaborate social organization which he has built up at Delft. In addition to the literature already named may be mentioned the pamphlet containing the statutes of the engineering house of Stork Bros. & Co. at Hengelo. The literary contribution of Holland is of permanent value to social economy, and more than compensates for any deficiency in charts and diagrams.

M. Struve's pamphlet, in the Dutch section, covers the wide field of factory regulation and inspection. Under each head is given the law as it stands and a review of its practical working. The latter half of the brochure is a detailed report of the inspection of the province of Utrecht and a part of the province of South Holland. Of especial interest is the account of the *chambres de travail*, in which workmen and employers are both represented. The interests of master and men are always held before these labor chambers. They now number about 60 in 26 communes, but they have as yet published no reports. Being of very recent creation, the first chambers dating from 1898, their work has not been notable, but they deserve the attention of all observers of industrial phenomena.

One of the best features in this section was the monographs contributed by cities and manufacturers describing the social-economic condition of the city, or the department, or the establishment. A large book of 700 pages, for instance, bore the title Social Economy and Provident Institutions of the Department of the Marne and of Rennes. The city of Rennes appointed a special commission to prepare reports on the matters to be exhibited in the Social Economy Palace from the department of the Marne. On the basis of these reports a monograph was compiled showing the entire social-economic status of the department, especially of Rennes and Chalons. The

book was not only a *catalogue raisonné* of the exhibits actually made, but it also embraced institutions and establishments not making any exhibit, thus giving a review of the civilization and culture of the department, especially of its two chief cities. Other industrial monographs of a more limited nature were those describing the communes of Nassandre, a sugar refinery and its surroundings, and of Fellines (Nord), a woodworking establishment. These representations in diagrams, photographs, and letterpress gave great prominence to the workingman and his family life. Numerous monographs were to be found in class 104, describing the state of agriculture and the condition of the farmer and the laborer in such places as Ceffonds (Haute Marne), Cendeau, and Fréтин (Nord), the latter especially contrasting the agriculture of 1850 with that of 1900. A standard volume on the subject of agricultural syndicates here exhibited was that by M. H. de Gailliard-Bancel, now in its sixth edition, entitled *Manuel Pratique des Syndicats Professionnels*.

An exception to the general use of the Italian language in the Italian section was the pamphlet on the development of cooperation in the province of Treviso, contributed by the chamber of commerce of the city of the same name. This essay gives a brief description of the aims of all species of cooperation practiced in the province, and special data concerning the standing of particular societies, including people's banks, rural loan banks, agricultural syndicates, agricultural committees (*comices*), mutual aid societies, mutual insurance of cattle, and cooperative stores, creameries, bakeries, and the like. Cooperation in the province of Treviso was thus fully exhibited for the benefit of the juries of classes 103 and 104 in the social economy section in a model manner. Another pamphlet was that contributed by the Society of Cooperative Typographers of Como, which gives a complete history of the society for its ten years' existence, and closes by declaring that the one aim of the makers of the pamphlet was to show that "cooperation is rooted in even the small cities of Italy, and that so far as is possible it preserves the prestige of the fundamental ideas which inspire and sustain our humanitarian institutions."

The Italian Government favors the cooperative movement and includes in the royal department of agriculture, industry, and commerce the charge of institutions of credit and provident aid.

The Belgian exhibit included a variety of maps and charts from the Anti-Accident Society of Employers at Brussels, from the savings banks and other thrift organizations, and from many kinds of mutual aid societies. An institution firmly rooted on the continent, but not so well planted in English-speaking countries, was exhibited in the Belgian atlas locating the *conseils des prud'hommes* and the industrial and labor counsels, showing their distribution in the whole country and in each manufacture or business. A number of charts and pamphlets showed

the results of the linen industry upon the health of the workers, 12,275 persons having been examined, and two interesting volumes were on exhibition—*La Belgique Charitable*, by M. Ludovic Saint Vincent (Brussels, 1893), and *Manuel Social; la Législation et les Œuvres en Belgique*, by A. Vermeerch, S. J.

MISCELLANEOUS EXHIBITS.

The peace exhibit in the Swiss section was large and varied. It contained a select library of the best literature on international peace, including, from America, Dr. B. F. Trueblood's new volume, *The Federation of the World*, and there were a number of diagrams concerning warfare and the range of ancient and modern artillery, intended to show the increasing horrors of modern battles. The Red Cross Society's work in mitigation of these horrors was exhibited in contrast to M. Rodin's powerful figure of war. The International Peace Federation presented diagrams and statistics showing what is meant by "the armed peace of Europe," the wars of the nineteenth century, and the losses to civilization caused by them.

A series of columns surmounted by flags of the nations gave the savings exhibits of their populations. The authorities for the figures were not stated. The table of average sums deposited per inhabitant placed Denmark at the head of the list, followed by Switzerland, Germany, Norway, Belgium, and the United States. Denmark was also first on the list showing the number of savings-bank depositors to every 100 persons of the population—46.12 in this case. Then came, in order, Switzerland, Belgium, Sweden, Norway, Germany, France, Great Britain, Australia, Holland, Italy, Austria, Hungary, and the United States—7.68 in the last instance; these figures not including the very large savings in building and loan associations. In respect to the whole amount of savings on deposit, the United States stands first, followed by Germany, Austria-Hungary, and Great Britain.

A notable feature of the Swedish social-economic exposition was the exhibit made by the city of Gothenburg, showing how that municipality supplies its citizens with water, its drainage system, its methods of taxation, its mortality figures, and all its educational and philanthropic activities. A similar exhibit was made by Stockholm, in which the mineral springs, the hospitals, and the analysis of drugs were prominent. The greatest municipal exhibit made at Paris was, naturally, that of the French metropolis itself in the large building especially devoted to it. This was a most impressive showing of the life and activity of perhaps the most highly civilized municipality in the world.

The League for Procuring the Rights of Women made an exhibit in class 110 of the Exposition devoted to "public or private initiative for the improvement of social conditions." This league gives the average wage of the French workingman at 4.30 francs (\$0.83) and

that of the workingwoman at 2.45 francs (\$0.47). This society, taking the motto "Equal pay for equal work," wishes to see added to the Civil Code "all French persons, without distinction of sex, are equal before the law." It states the whole number of women employed in France in industry, commerce, and domestic service to be 2,565,625, and of men 3,428,908; in industrial pursuits alone the women number 1,173,061, the men 2,146,156. France is a land of women workers, and in a large part of its commercial life, the minor distributive concerns, there is little doubt that the woman is at least as potent as the man.

In this same section, No. 110, the city of Paris exhibited its free employment bureaus. Subsidized by the municipal council, each of these is located in a *mairie*, or ward house, but it is managed independently. In twenty arrondissements these bureaus, varying from three to eleven years of existence, have placed 85,879 men and 203,664 women; the annual average has been 11,475 men and 29,185 women.

It would be impracticable to enumerate all the charts and diagrams exhibited in the United States section, but a few details of interest may be selected. One chart for Massachusetts showed an encouraging decrease in the percentage of childworkers, from a percentage of the whole number of workers, in all industries of 5.05 in 1870 to 1.94 in 1890. A bound volume showed the blanks and the methods used by officials—the district police, the board of arbitration, and other boards—in carrying out the industrial legislation of the State. Charts made on the basis of figures given in the Eleventh Census illustrated the number of establishments and the average capital in 1880 and 1890 in selected industries in the United States, showing the steady tendency in the country to the concentration of capital in large undertakings. The following table shows the industries selected, the number of establishments, and their average capital in 1880 and 1890:

NUMBER AND AVERAGE CAPITAL OF ESTABLISHMENTS IN SELECTED INDUSTRIES IN THE UNITED STATES, 1880 AND 1890.

Industries.	1880.		1890.	
	Number of establishments.	Average capital.	Number of establishments.	Average capital.
Woolen mills.....	1,990	\$48,289	1,311	\$99,916
Paper mills.....	692	66,823	567	145,281
Slaughtering and meat packing.....	872	56,673	1,367	86,332
Cotton mills.....	1,005	218,413	905	391,183
Agricultural implements.....	1,943	31,966	910	159,686
Boots and shoes.....	1,959	21,947	2,082	45,765
Flour and grain mills.....	24,338	7,287	18,470	11,287
Leather, tanning, and currying.....	5,424	12,371	1,596	50,916
Breweries.....	2,191	41,629	1,248	186,275

A series of maps showed which States provide for the inspection of mines, factories, and workshops, and for various other forms of indus-

trial legislation. Another map located the large number of industrial plants claiming to be "the largest in the United States," or "the largest in the world," in a great variety of businesses.

The Statistical Society of Paris exhibited a chart showing the comparative cost of living in 1803 and 1897. According to this society, if the cost of food and drink for a Parisian family be taken at 100 in 1803, in 1897 it would be 107; for fuel (wood only, to 1845) the figures for 1803 being 100, those for 1897 would be 95. Lighting expenses showed a similar decrease, but greater, from 100 in 1803 to 81 in 1897. Taking these three categories of expense together, the society calculates that the cost of living in 1897 was 102 per cent of that in 1803. This, of course, implies a considerably higher standard of comfort at the close of the century than at its beginning, and wages are much higher now than then.

In class 108, whose subject of exposition was institutions for the intellectual and moral development of workingmen, French gymnastic and physical culture societies made a large showing. A noticeable effect of the militarism of France is the importance attached to instruction in the use of firearms in these societies, while fencing, swimming, and bicycling are not neglected. In Paris, however, the bicycle is little used compared with London and smaller cities like Oxford or Haarlem. The standard of living of the Parisian artisan evidently does not yet include a bicycle for riding to and from his work, as it does with many American workmen. Musical organizations are very common, on the other hand, among French working people, if one may judge by the number represented in this class, including choral societies, and the brass bands of such concerns as the Lombart and Menier chocolate works, the Baille-Lemaire opera glass works, the great railways, and the Belle Jardinière, the large Parisian clothing house.

Class No. 101 in the Social Economic Exposition illustrated apprentice systems and the protection of young workers. Here the methods of the great glassworks at Baccarat are especially deserving of attention. The apprentice is given into charge of a group of workmen who pay him wages, and have thus a direct interest in making him an industrious and skillful worker. Boarding houses receive the apprentices for a small fee, the company spending some 18,000 francs (\$3,474) annually on their board and lodging. In the last ten years 805 apprentices have been entered. The school of design, supported by the works, has 80 young men for pupils and 50 young women; the hours of attendance are paid for as hours of work, and savings-bank books, with a deposit credited, are given as prizes for excellence. The apprentice systems of the Maison Leclaire (painting and decoration), the Maison Chaix (printers), and Ch. Milde, fils et Cie. (electricians), which has graduated 103 young men since 1888, should be mentioned; also the Professional School of the Syndicate of Paper Makers, with its full

course in the history and geography of paper manufacture, its school of design, and its instruction in all the methods of the industry.

Under the general title of *Inventaire Sociale du Siècle* (social inventory of the century) the French Government made an exhibition of charts relating to associations, wages, population, and other social topics. The number of societies for general professional interests was stated as 7,246; for education, study, and social activity, 2,203; musical societies, 6,453; friendly societies, 3,575; mutual-aid societies, 10,897; other societies for mutual aid or provident purposes, 2,505; for assistance, 990; for physical exercise, 5,721; for games, 5,436; for unknown purposes, 174—a total of 45,200 societies, of which 5,573 are credited to Paris and the department of the Seine. The Bourses du Travail existing on January 1, 1900, were said to have the following memberships: Paris, 67,462 members; Marseilles, 10,198; Lyons, 10,130; Bordeaux, 5,579; Nice, 4,478; Havre, 3,021; Limoges, 3,664. The tables of variation of wages in France, according to regions, showed wages to be highest in Paris, the next places in order being Lyons and Marseilles. In the Finistère, Morbihan, Landes, Pyrenees, and Dordogne departments, where trade unions are the fewest wages are the lowest. Ten persons out of every 1,000 employed in France are in the service of the State or the commune. Tables which have bearings upon many social tendencies gave the figures of the population of France in 1801 and 1896, showing an increase of 21.6 per cent; but the contrast of 1846 and 1896 was less favorable, if increase of population be taken as a sign of prosperity. The total population of France in 1846 was given as 35,400,486; in 1896, 38,517,975. The rural population fell, in this period of fifty years, from 26,753,743 to 23,492,163 persons. The urban population increased from 8,646,743 to 15,025,812. There are some 400,000 more women than men in France, and there are 40,000 more widows than widowers. Of 10,845,247 families in 1896 there were 1,808,839 with no child, and 2,638,752 had but 1 child each; 2,379,259 families had 2 children each; 1,593,387 had 3 children each; 984,162 had 4; 584,582 had 5; 331,640 had 6; 289,771 had 7 or more, while in 234,855 families the number of children was unknown. The bearing of these statistics on the future of France as an industrial nation is variously interpreted. It has yet to be proved that the population of a country must steadily increase by a considerable percentage for it to live and prosper, absolutely, if not relatively.

In the Hungarian section of social economy decorative panels represented the life of the workingmen in different regions; their means of subsistence were shown in models of the articles of food; views of the Nobel dynamite factory at Presburg and of the State railway center at Dios-Györ showed how well the best employers house their workers in Hungary. Comparative tables graphically presented the prices of

bread made of wheat, rye, and indian corn in seven regions of the country. There were four exhibits under glass of models of articles of food for as many quarters of the country. One exhibit showed bread (4 parts wheat, 2 parts maize, 1 part potatoes), cheese, milk, wine, fish, meat, potatoes, beets, peppers, tomatoes, cabbage, and tobacco, as making up the workman's dietary. The fare in Budapest is, of course, the best, adding to the articles just mentioned sugar, coffee, beer, onions, and pease. Above the various exhibits were given the names and dates of the Hungarian statutes for the benefit of the workmen, viz, the sick insurance law of 1891; the Sunday law of the same year; the agricultural labor law of 1898, and the factory laws of 1884. The usual contracts of service were shown below. Tables presented the methods of payment of wages in Hungarian agriculture. Payment in kind, it seems, is still the rule in half of Hungary, while money payment and a combination of both methods prevail in the other half. The *Crédit Foncier* of Hungary makes loans to farmers under a law of 1889, to aid in defense against inundations and in improving the soil. In Budapest are employment bureaus for workmen, the work of which was shown, and the Royal Commercial Museum holds a permanent exposition. The collection of medicines, apparatus, and sundry materials for first aid to the injured, which the Hungarian law obliges factory owners to keep on hand, was represented in one quarter of the room, and a specimen public library, furnished to country towns by the education department, in another. A map of the mutual-aid societies of Hungary distinguished between those aided by the State and those entirely supported by private enterprise.

A document of much value in the educational field described the apprentice shops of the Hungarian State railways. The exhibit, in this section, of work done by the apprentices prepared the visitor for the impressive railway exhibit from Hungary in the annex at Vincennes. Finally should be mentioned an elaborate volume, originally prepared in 1897 for the Millennial Exhibition of Hungary, under the editorship of the head of the statistical office, Dr. Joseph de Jekelfalussy, entitled, *The Millennium of Hungary and its People*, which could be procured in English at the Hungarian section. This work embraces contributions by some twenty writers on the geography, history, politics, industries, language, art, education, finance, and general cultural life of the country, and it may be commended to librarians and others desirous of obtaining a good account in our language of this very interesting and active people by Hungarians themselves.

TEMPERANCE REFORM.

In the Russian exhibit in the Social Economy Palace large space was occupied by the official temperance committees. Russia undertook in 1895 to diminish the evils arising from the abuse of intoxicating drinks.

The State has a monopoly of the sale of alcoholic liquors, but it has endeavored to decrease the sale of them without regard to the financial results of such a decrease. It has cut down the number of selling places and has established temperance committees in each province and in the large towns. The duties of these bodies are to watch the sale of liquors in order to see that it conforms to all the legal regulations made in the interests of health and good morals; to make widely known the dangers of the abuse of ardent spirits; to establish hospitals for drunkards; and to erect "people's houses," tea saloons, and lecture halls, where light drinks are served and various entertainments given on fête days and at other times. The constructive work of the committee is substantially that of the promoters of coffeehouses in England and Holland and other countries of the Continent. Each committee receives from the State an annual subvention amounting to 50,000 rubles (\$25,750) at least. It is composed of State officials, who invite to their aid private persons of both sexes, who are called cooperative members; at present, there are some 23,600 of these. The State monopoly is being introduced gradually into province after province, and it now prevails in 45 departments, each of which has a committee, and there are also 6 other special committees in the large cities. Returns have been made from the 25 provincial and the 6 city committees which have been instituted for some time. Connected with the departmental committees, there are 237 district committees; 12 cities and 6 large villages have committees possessing equal powers with those of the districts; those of the 6 large cities are on a level with the provincial committees. Each village and each quarter in the cities has "protectors," named by the committees; in 1898 there were 5,479 of these helpers. On the 1st of July, 1898, the temperance committees were in possession of 1,713 tea saloons and people's restaurants; 747 reading rooms and libraries; 501 concert and lecture halls; 91 people's theaters, and 138 people's orchestras. In 1898 the committees organized 4,658 lectures; 602 theatrical representations; 445 popular outdoor festivals on a large scale, and 438 concerts and dancing soirées. The State subventions have risen from 203,400 rubles (\$104,751) in 1895 for 4 provinces, to 1,797,200 rubles (\$925,558) in 1899 for 41 committees; the budget for 1900 provided for a subsidy of 2,711,000 rubles (\$1,396,165). The public-spirited persons who second the work of the official committees also spend considerable sums for which they expect no returns. The Russian Government matched its exhibit on the Champ de Mars, which showed the method of operation of its monopoly of alcohol, with this social economic exhibit of the means taken to decrease the evils of the abuse of alcohol. All the apparatus of a tea saloon, or people's restaurant, was shown in full, as located in one house empty of visitors and in another in full activity. The buildings are neat and attractive, and the reforming tendency is not made evident

to those who frequent them. A model library for such a house was shown, with lists of books recommended for purchase. A special exhibit represented the floating refectory maintained in St. Petersburg, near the island of Petrovskoi. The whole of this temperance exposition deserved the close inspection of all social reformers who realize the importance to the workingman of correcting his budget for drink, and who also realize that he has as good a claim to enjoyment in social clubs as persons in more comfortable circumstances.

The social-economic section of Switzerland proper was devoted chiefly to matters of world-wide interest, such as international arbitration and the Red Cross, but the Blue Cross (temperance) societies were prominent. It appears from the tables and diagrams on exhibition that the national temperance society, L'Espoir, for the young, counts 153 sections and 5,780 members, and 3,259 total abstainers, while the Blue Cross has 365 sections with 15,457 members, and can enumerate 5,656 reformed drunkards. Other tables presented the work of other temperance societies. Switzerland possessed in 1899, 432 cafés de temperance, or coffee houses, and 12 asylums for the cure of inebriates of both sexes. Photographs and lantern slides, similar to those in the Russian section, represented the effects of alcoholic liquors upon the health of individuals, and the peace and welfare of families.

Madame Hierta-Retzius contributed a brochure to the Congress of Women at the Exposition on the Swedish and Norwegian liquor systems. Following as authority the comptroller of finance at Gothenburg, Mr. Axel Ramm, and Mr. G. H. von Koch, of Stockholm, whose writings are dated in 1899, Madame Hierta-Retzius gave a popular account of these systems, well known in the United States through the report under the direction of the Department of Labor, by Dr. E. R. L. Gould, and a report to the State of Massachusetts, by Mr. John Koren, for the special commission appointed to make the investigation. Mr. Ramm reports the number of saloons in Gothenburg for the sale of spirits as 15 against 27 in 1868, the population having increased in this time from 53,000 to 126,000. "The fact is incontestable that the sale of alcoholic liquors has fallen off 50 per cent in the last quarter of a century." The stricter Norwegian system, as practiced at Bergen, has greatly decreased the sale of alcoholic liquors since 1877. In 1898 the population of Bergen had almost doubled, but the sale of brandy was 32,000 liters (83,814 quarts) less than in 1877; the individual consumption was 2.45 liters (2.59 quarts) in 1877; in 1895 it was 1.35 liters (1.43 quarts), and recently it has not equaled 1 liter (1.06 quarts). The qualification of these figures necessitated by the great use of *laddevin* (a mixture of brandy and a cheap Portuguese wine) renders comparison of the drinking habits of the years 1877 and 1900 unreliable, however, and Madame Hierta-Retzius, of course, pointed out the defect in the Scandinavian legislation which allows

the free sale of malt liquors. This is not a fault inherent in the systems in question, but a shortcoming of the lawmaking authorities.

INTERNATIONAL UNIONS.

An interesting exhibit at Paris was that devoted to international bureaux. Berne, Geneva, and Lucerne are the headquarters, or the birthplaces, of many of those international alliances. The Union Postale Universelle, for instance, established in 1875, covered in its first year territory extending over 37,000,000 square kilometers (14,285,700 square miles), with 350,000,000 of people; in 1900 it included 102,000,000 square kilometers (39,382,200 square miles), and 1,075,000,000 persons—the greater part of the world, excepting China and Central Africa. The tables of international postal business showed 318,591 postal orders made out in 1875, and 12,536,021 in 1897; the amounts represented being 67,991,274 francs (\$13,122,316) in 1875, and 731,718,366 francs (\$141,221,645) in 1897. Postal packages carried increased from 4,739,721 in 1875 to 26,750,623 in 1897; letters, postal cards, printed matter, business papers, and samples numbered 143,958,799 in 1875 and 901,232,388 in 1897. An International Bureau of Telegraph Lines, established at Berne, embraces now a million kilometers (621,370 miles) of wires, against 218,000 kilometers (135,459 miles) at its inception in 1868. The length of submarine cables was 16,47 kilometers (10,195 miles) in 1868, and 335,000 kilometers (208,159 miles) in 1900; the number of national interior telegrams sent was 19,961,925 in 1868, and 271,000,000 in 1900; the number of international telegrams was 9,279,806 in 1868, and 68,200,000 in 1900. The International Bureau of Weights and Measures exhibited at Paris numerous photographs of the apparatus used in its delicate business, while the International Bureau of Tariffs had on exhibition its International Customs Journal and some 150 documents relating to the present tariff systems of the various trading countries. The International Bureau for the Suppression of the Slave Trade was also represented. An interesting table related to the 29 international unions now in existence, showing the number of States belonging to each, and the standing of each country as respects membership in each and all of these unions.

The International Union for the Protection of International Property exhibited two tables whose figures have very different sociological importance. One gave the number of patents allowed yearly, taking the average of the last five years. At the head of the list comes the United States with 22,156 patents allowed; then follow Great Britain with 13,030, France with 11,418, Belgium with 6,680, Austria with 6,367, Germany with 5,910, Hungary with 3,136, Italy with 2,970, Switzerland with 1,980, Sweden with 949, Norway with 847, Denmark

with 493, the Argentine Republic with 300, Portugal with 282, and Japan with 240. The number of these patents to every million of inhabitants is given as follows: Belgium, 923; Switzerland, 645; Norway, 321; Great Britain, 320; the United States, 296; France, 295; Austria, 224; Denmark, 202; Sweden, 179; Hungary, 160, and Germany, 112.

The International Union for the Protection of Literary and Artistic Works, for which an exhibit was made, includes among its members Germany, Great Britain, France, Belgium, Spain, Italy, and Japan. The United States is not a member of this organization. The figures of literary production in 1898 show Germany first with 23,279 works; then come France with 14,781; Russia, 11,548 (in 1895); Italy, 9,670; Great Britain, 7,516; Japan, 6,497 (1895); Austria, 5,000 (1896); the United States, 4,886; Holland, 2,984; Belgium, 2,272; Sweden, 1,555; Hungary, 1,407 (1895); Denmark, 1,092, and Norway, 534. The table of proportions of literary productions shows for Germany 351 works to each million inhabitants; France, 344; Sweden, 338; Belgium, 331; Italy, 309; Sweden, 300; Norway, 262; Great Britain, 175; Russia, 85; the United States, 81; Spain, 66. The figures of the periodical press, showing the number of periodicals to the million of inhabitants, place the United States at the head, while three small countries of Europe follow. The United States has, according to this table, 510 periodicals to every million of people; Sweden, 320; Belgium, 253; Holland, 184; Germany, 161; France, 156; Great Britain, 113; Austria, 98; Chile, 88; Italy, 78; Russia, 77; Japan, 17; Egypt, 11.

PHILANTHROPIC ACTIVITIES.

Beside its economic exhibit, the New York League for Social Service also exhibited several cases of photographs, showing movements for social betterment which would usually be classified as purely philanthropic. Religious bodies are laying increasing emphasis upon practical measures for social improvement. The League for Social Service naturally set this feature to the front, its organization having a religious, though not at all sectarian, complexion. Its photographs pictured the large variety of work done by the so-called "institutional churches," of which Grace Church, St. George's, St. Bartholomew's, the Church of the Ascension, and the Fifth Avenue Baptist Church, of New York; the Westminster Presbyterian Church and the Lincoln Park Baptist Church, of Chicago; and other churches in Topeka, Kans., and Jersey City, N. J., were particularly notable. The Salvation Army in America has imitated the good work done by the parent organization in England. Its "shelters," hospitals, fresh-air camps, and other relief agencies were shown as they are in operation at Boston, New

York, Chicago, Jersey City, Cripplecreek, Colo., San Francisco, and elsewhere, together with its colonies at Fort Amity, Colo., and Fort Romie, Cal. The social work of the Young Men's and Young Women's Christian Associations was also fully exemplified by the league, as well as the work which these religious bodies now devote to gymnasiums, general education, and industrial training. Their employment bureaus, their schools of domestic science, their classes in a great variety of trades and occupations—as in Boston, New York, Philadelphia, Hartford, Detroit, Dayton, Buffalo, Cincinnati, and Portland, Oreg., for example—do excellent work in training workers and finding work for them. The railway department of the Young Men's Christian Association, as represented at New York and Philadelphia, for instance, specializes for a class of men needing peculiar attention; and the "air-brake class" is but one example of the good sense with which the demand has been met. In the general field of social work done by churches or denominations another line of photographs represented numerous colleges or "universities," supported by religious bodies, in the South and West, such as Biddle, at Charlotte, N. C.; Fisk, at Nashville, Tenn.; Shaw, at Raleigh, N. C.; the St. Paul School, at Lawrenceville, Va.; and the Indian schools at Yankton and Pineridge, S. Dak. This activity might have been classed more logically, perhaps, with the educational department on the Champ de Mars, but the impression was made upon the visitor to this section that religion in America is taking on a distinctly humane and social character. Finally, the League for Social Service exhibited in another case its own work in the shape of programmes; pamphlets summarizing the social laws of seven States; its anti-Mormon series; its monthly periodical, first entitled Social Engineering, and now, in an enlarged form, Social Service; and various minor publications.

The French Musée Social, located on the Rue de Las Cases, near the Boulevard St. Germain, is one of the permanent exhibitions of Paris which the student of social questions should not fail to visit. It occupies the former mansion of its benefactor, the late Comte de Chambrun, which has been adapted to the uses of such a foundation by providing rooms for a library of some thousands of volumes, a small lecture hall, a reading room, and various rooms for documents, manuscripts, and other material. The conception of such a museum is excellent, though, if it were carried out in New York, for example, it should be adapted to American conditions.

One of the interesting exhibits in the Social Economy building was that of photographs and tables showing the work of reform and industrial schools in Great Britain. They are all under the control of the secretary for home affairs, and are inspected at least twice a year. The greater number are directed by voluntary committees of public-spirited persons, while some are due to county councils and school

boards. The reform schools take a young person less than 16 years of age who has committed some crime punishable by imprisonment. The industrial schools are preventive institutions for those under 14 years of age. Truant schools and day industrial schools are auxiliary. At the end of 1898, there were in Great Britain 47 reform schools, of which 35 were for boys and 12 for girls; and 142 industrial schools, of which 79 were for boys, 58 for girls, and 5 mixed. Of the 5,460 pupils in the reform schools, 800 could work and live outside. The total number to the date of the report was 19,310. From 1876 to 1898 the number sent to the reform schools has positively diminished each year, while the number sent to the industrial schools rapidly increased to 1893, and has been almost stationary since. There may be an indefinite detention in the reform school up to 19 years of age, and in the industrial school up to 16, with external supervision, later, up to 18. Each pupil in the reform schools costs on the average £21 (\$102.20) a year. Two-thirds of this sum comes from the State, while £5 (\$24.33) is levied on the municipal rates, and £2 (\$9.73) is provided by parents or gifts. Each industrial-school pupil costs about £20 (\$97.33) a year, the sum being divided thus: £9 10s. (\$46.23) from the State, £9 (\$43.80) from the rates, and £1 10s. (\$7.30) from parents or gifts. From 1876 to 1898, the State contribution remained the same; the municipal contribution has increased and has practically replaced gifts; the total has varied little. The parents must pay something for the sake of the principle; many contribute, actually, only a shilling (24 cents) a week; in 1898, the parents' contribution amounted to £24,488 (\$119,170.85).

The same system of education prevails in both kinds of schools. The effort is made to awaken an *esprit de corps*. The schools are not too large for the principal to know each pupil personally. A school is considered of good size which contains 150 boys or 50 girls, the reform schools being usually smaller than the industrial. In the religious education of the inmates the principal is aided by the neighboring clergy. The elementary education is almost the same as in ordinary schools, less attention being paid to literature and more to scientific matters. Industrial training is naturally more varied for boys than for girls. The marine schools prepare them to be sailors; the agricultural to be farmers; the urban to be tradesmen; the suburban schools add horticulture to the list of studies. The school bands are important for the recruiting of regimental bands. Industrial training has been extended greatly of late years on the basis of drawing; the reasons for doing things are always given to the pupil. Domestic life is the chief end in view in the training of girls. Nowhere else in Great Britain, it is claimed, is physical education more regarded than in these schools; a good physical preparation for active life is held to be vastly important; the boys found here are

usually active to begin with. An ingenious system of rewards—giving stripes on the sleeve, privileges concerning letter writing and receiving visits, taking books from the library, and payment of pennies for good points made—brings the docile pupil into the highest class. On leaving he receives two suits of clothing, if his behavior has been good, and at least one-fourth of his capital due to good points made, with all that he has gained otherwise; the remainder is paid (within the three years he is supervised) every six months, if the reports are favorable. In most cases pupils are prevented from returning to their parents, who are likely to be depraved. Of 14,701 boys who left these schools from 1895 to 1898 about 10 per cent were committed to prison later, about 1,000 disappeared or died, the remainder entered the army or navy, or became farmers, mechanics, factory hands, or other regular workers. Most of the girls went into service as domestics or nurses. Especial pains are taken by voluntary committees to procure situations for discharged pupils, an aid which the State could not render.

INDUSTRIAL EDUCATION.

The preceding account of the Social Economy Exposition has probably shown that in the field of social reform the United States has much to teach the Old World, as well as somewhat to learn of it. By the side of the other sections of the *Exposition Universelle* America has comparatively less to learn here and more to teach. The work of our Federal Department of Labor, for instance, has been recognized by foreign countries on previous occasions, and the exhibit of it in the United States section, consisting of a full set of its reports, together with the reports made by all the State departments from their beginning, was impressive, externally and internally. The exhibit, again, of the American Library Association in the same section was considered as altogether without a parallel and deserving the several *grands prix* bestowed on the exhibit and its makers.

What we have to learn from the continental nations is not so much in the direction of technical education as in that of artistic training proper. The American institutes of technology are at least equal to the similar schools of France or Germany or Russia. The substance of the work done by us in industrial and technical education is not excelled by that done abroad. But in matters of form and of art we have evidently much to learn. The ordinary observer would have noted this in the way in which some of our best exhibits in Paris were arranged. So much less of taste and artistic faculty was shown by the side of the French or the German or the Japanese exhibits. The artist would go farther and observe how similar things on exhibition both in the continental sections and in our own would attract by their industrial finish and beauty in the former case and repel by their lack

of artistic excellence in the latter. Most of all, Americans need to go to school to the French people in art matters proper. Our painters, indeed, who study in Paris are so obedient to their French masters that they are even reproached for lack of originality by French critics, who seem to think that excellence in form and color must be one thing in Paris and another in New York. If our industrialists will heed this example, and if our industrial and technical schools will bring their art departments up to the level of the technical departments, we shall have learned the chief lesson which the Paris Exposition of 1900 has to offer us. The first great exposition held in England admonished the English manufacturers, who had eyes to see, that they were far behind France in industrial art, and the Philadelphia Exposition of 1876 showed the United States how much Russian technical colleges had to teach us. Since 1889, again, in England technical and industrial education has so advanced that the English Royal Commission to Paris could say last year that "there are now few centers of industry and commerce in which technical education is not brought to bear on the various pursuits of the population." (*a*) This statement is true as may be seen in such representative English towns as Leicester and Huddersfield, in smaller places like Hebden Bridge, and in the London polytechnics. (*b*) What we have to do in America is to extend the admirable work of our best American models of manual training and technical and trade schools all over the country, so that the English commission's words may apply to the United States as well as to England. A recent report of a committee of the American Society for the Promotion of Engineering Education, signed by several experts, has well declared that manual training and art education should be made a part of all public-school education, from the kindergarten to the high school, and it points to the public school established by Mr. J. H. Stout at Menomonie, Wis., as an ideal institution. Details of the methods needful for widely extending and improving our existing systems of art education are left to specialists; on the main point the great admonition of the Paris Exposition to American industry is that we should make our products more beautiful.

a See the handbook describing the British education section, p. 28.

b See Mr. Sidney Webb's account of the London polytechnic institutes.

THE WORKMEN'S COMPENSATION ACT OF HOLLAND.

The following is a summary of the main provisions of a recent law of Holland which provides for the insurance of working people against accidents. The summary has been prepared from an official copy of the enactment obtained through the Department of State:

This law is defined as the "Act of January 2, 1901, providing for the legal insurance of working people against pecuniary loss from accidents in certain industries." It applies only to accidents received by working people during the exercise of their trade in the service of an employer, either while working for wages or while being trained for some trade and working without pay.

The act specifies the industries which come within the scope of the law. It covers practically all gainful occupations except the following, which are excluded: Farming, cattle raising, gardening, and forestry; passenger and freight transportation on vessels other than those engaged in trade from one domestic port to another, those remaining in the same port, and those on rivers and inland waters exclusively; fishing, other than that on rivers and inland waters; commerce on all vessels of not more than 60 cubic meters (2,118.87 cubic feet) capacity and not propelled by power machinery.

The act provides for the establishment of a State Insurance Bank for the purpose of carrying on the insurance business under this act. It is managed by a board of three directors, one of whom is appointed chairman by the Crown. The chairman represents the bank in outside business affairs. Three substitutes are appointed to take the places of directors when necessary. A technical adviser is also attached to the bank. The directors, substitutes, technical advisers, and inferior officials are appointed by the Crown and receive a compensation, which is fixed by the latter. Substitutes receive pay only while rendering service. The board of directors is directly responsible to the Government. Each year they must prepare a compilation of accident statistics, and every five years they must draw up a scientific balance.

A supervisory board, consisting of six or nine members appointed by the Crown, has supervision over the condition and management of the State Insurance Bank. Of the members one-third must be selected from among the employers and one-third from among the working people who come under the provisions of the act. One-third of the members are changed every two years, this arrangement to begin

three years after the act takes effect. The Crown appoints a chairman from among the members, and also a secretary, the latter receiving a salary and serving for five years. The chairman and members of the board receive a per diem for attendance, but no salary.

The board of directors of the State Insurance Bank decides all claims for compensation arising under the act, and all sums awarded are paid by it through the post-offices.

Appeals arising from the enforcement of the provisions of the act are decided by councils of appeals, and in the highest resort by a State board. In the councils of appeals employers and working people who come within the provisions of the act have representation as members. All matters pertaining to the organization and procedure of these councils and of the State board are to be regulated later on by a special act.

The act further provides for the appointment of inspectors, who serve under the orders of the directors of the State Insurance Bank, and whose duty it is to visit the employers and working people and to see to it that the provisions of the law are properly enforced. These inspectors are prohibited from engaging either directly or indirectly in any industry.

Local commissions are also appointed by the Crown, who look after the interests of the insured. They are empowered to conduct the appeals against the decisions of the State Insurance Bank, and are required to investigate cases where there may be grounds for reviewing such decisions and revising the amount of compensation allowed.

The act provides for the following compensation in cases of accident arising out of and in the course of the employment of a working man or woman in any of the industries specified in the act:

Medical attendance and medicine, or compensation in lieu thereof, according to general regulations to be made by the board of directors of the State Insurance Bank.

If, as a result of the accident, the workman is unable to return to work on the third day after the accident he receives in addition to medicine and medical attendance a temporary compensation, beginning on the day after the accident and continuing during incapacity, but only until the forty-third day. This compensation is equal to 70 per cent of the daily wages of the insured, Sundays and holidays being excepted.

If, as a result of the accident, the insured remains either partially or totally disabled six weeks after the date of the accident he receives a regular compensation or pension during the period of such disability. This pension amounts to 70 per cent of the daily wages of the insured (Sundays and holidays excepted) in case of total disability, and in case of partial disability to an amount in proportion to the partial incapacity of the insured.

In calculating these and all other pensions granted under this act any amounts of daily wages in excess of 4 gulden (\$1.61) are not considered.

In case the accident results in the death of the insured the State Insurance Bank pays the following compensations:

For funeral expenses an amount equal to 30 times the daily wages of the deceased is allowed the surviving relatives.

Pensions are allowed the dependent relatives of the deceased, the same to be reckoned from the date of death, as follows:

To the wife who was living with the deceased at the time of the accident, 30 per cent of the daily wages of the deceased until her death or remarriage.

To the husband who was living with the deceased at the time of the accident, if the wife was the breadwinner, as much as the deceased had contributed toward his support, but not more than 30 per cent of her daily wages, to be paid until the death or remarriage of the husband.

To each child 15 per cent, and if parentless 20 per cent of the daily wages of the deceased until the completion of the sixteenth year of age.

To the parents, or in default of parents to the grand parents, of the deceased, if the latter was the breadwinner, as much as he contributed toward their support, but not more than 30 per cent of his daily wages, to be paid until the death of the longest surviving.

To each grandchild of the deceased, if he was their breadwinner, as much as he contributed to their support, but not exceeding 20 per cent of his daily wages, to be paid until the completion of the sixteenth year of age.

To the parents-in-law of the deceased, if the latter was their breadwinner, as much as he contributed toward their support, but not more than 30 per cent of his daily wages, to be paid until the death of the longest surviving.

In case the widow or widower remarries the pension ceases, and an amount equal to from one to two times the annual pension is paid as a final settlement.

The pensions to be paid to the persons above designated can not exceed in the aggregate 60 per cent of the daily wages of the deceased. The claims of the wife or husband and of the children must be fully satisfied before any pensions can be granted to the parents or grand parents, grandchildren, or parents-in-law, and the claims of these are considered in the order named.

If the claims of the widow or widower and of the children aggregate more than 60 per cent of the daily wages of the deceased, a proportionate reduction is made in the pension granted to each.

If it can be shown that the accident was intentional, neither the insured nor his survivors have any claim for compensation or pensions. If the accident was due to intoxication, the insured is entitled to but one-half the temporary or permanent compensation, and if death results from such accident the surviving dependents have no claim to pensions.

The funds necessary to cover the expenses of accident insurance under this act are derived entirely from the employers, and the latter are forbidden to make any deductions from the wages of employees on this account. The employers are required to keep regular pay rolls, to be used in calculating the premiums and compensations to be paid. The employer may fulfill his obligation in one of three ways: (1) The payments may take the form of a premium payable to the State Insurance Bank at regular periods and based upon the amount of his pay roll and upon the degree of accident risk assigned to his trade in the scale of risks to be prepared in accordance with the provisions of this act. In calculating from the pay rolls amounts of daily earnings in excess of 4 gulden (\$1.61) are not considered. (2) The employer may, upon depositing adequate security with the State Insurance Bank, obtain permission to undertake the payment of the prescribed compensation. (3) He may be permitted to transfer his liability under this act to an insurance company, provided that this company deposits adequate security with the State Insurance Bank.

Pensions granted under this act up to the amount of 260 gulden (\$104.52) per year are inalienable and free from seizure or attachment.

RECENT REPORTS OF STATE BUREAUS OF LABOR STATISTICS.

NEW YORK.

Seventeenth Annual Report of the Bureau of Labor Statistics of the State of New York for the year 1899. Transmitted to the legislature February 5, 1900. John McMackin, Commissioner. xxiii, 1260 pp.

This report consists of five parts, as follows: Part I, The economic condition of organized labor, 553 pages; Part II, Industrial accidents and employers' responsibility for their compensation, 609 pages; Part III, Employment and wages from 1896 to 1899, 55 pages; Part IV, Report on the State free employment bureau, 25 pages; Part V, Labor laws of New York State enacted in 1898, 5 pages.

THE ECONOMIC CONDITION OF ORGANIZED LABOR.—Since the beginning of 1897 this bureau has collected from the labor organizations of the State quarterly reports concerning the number and sex of members, their earnings and days of employment, the number of members unemployed, etc. In the present report this information is given for the four quarters ending September 30, 1899, in the form of detailed statistical tables showing the data for each occupation, industry, and locality, and summary tables and an analysis of the statistics presented. The facts were obtained from the secretaries of labor organizations, who, in turn, obtained them from the individual members on blanks supplied by the bureau. The following table gives a general summary of the data for each quarter since the beginning of 1897:

STATISTICS OF LABOR ORGANIZATIONS FOR EACH OF THE QUARTERS FROM JANUARY, 1897, TO SEPTEMBER, 1899.

Quarter ending—	Organizations reporting.	Membership on last day of quarter.			Members unemployed on last day of quarter.		Members unemployed during entire quarter.	Average days of employment during quarter.	
		Men.	Women.	Total.	Number.	Per cent of total membership.		Men.	Women.
Mar. 31, 1897	927	138, 249	4, 321	142, 570	43, 654	30. 6	35, 381	58	63
June 30, 1897	976	147, 105	4, 101	151, 206	27, 378	18. 1	17, 877	69	57
Sept. 30, 1897	1, 009	162, 690	5, 764	168, 454	23, 250	13. 8	10, 893	67	66
Dec. 31, 1897	1, 029	167, 250	6, 712	173, 962	39, 353	22. 6	10, 132	65	56
Mar. 31, 1898	1, 048	173, 349	6, 606	179, 955	37, 857	21. 0	18, 102	62	61
June 30, 1898	1, 079	164, 802	7, 538	172, 340	35, 643	20. 7	10, 272	61	58
Sept. 30, 1898	1, 087	163, 515	7, 505	171, 020	22, 485	13. 1	9, 734	65	64
Dec. 31, 1898	1, 143	167, 271	7, 480	174, 751	46, 603	26. 7	15, 477	63	65
Mar. 31, 1899	1, 156	166, 005	7, 511	173, 516	31, 731	18. 3	22, 658	64	68
June 30, 1899	1, 210	180, 756	7, 639	188, 395	20, 141	10. 7	6, 730	70	72
Sept. 30, 1899	1, 320	200, 932	8, 088	209, 020	9, 590	4. 7	4, 790	71	71

α This is not a correct total for the preceding items. The figures given are, however, according to the original.

The number of labor organizations reporting to the bureau increased steadily during the period. There was likewise a decided increase in the membership, although some fluctuations occurred during the period.

The number of unemployed members fluctuated from quarter to quarter and from year to year, being greater during the spring and winter than during the fall and summer months of each year. A comparison of the corresponding quarters of 1897, 1898, and 1899, respectively, shows with two exceptions, a general decrease in the number of the unemployed during the quarter. The percentage of members of labor organizations unemployed was smaller on June 30 and September 30, 1899, than at the end of any other quarter of the period.

A comparison of the average number of days of employment during 1897, 1898, and 1899 shows a slight falling off in 1898, but a general increase in 1899. The average earnings of members of labor organizations likewise show a decided improvement in 1899. This is especially noticeable in the case of female members whose earnings had decreased during the preceding year.

The following tables show, by industries, the number and membership of labor organizations and the per cent of members unemployed at the end of each of the last four quarters:

ORGANIZATIONS REPORTING AND MEMBERSHIP AT THE END OF EACH QUARTER FROM DECEMBER 31, 1898, TO SEPTEMBER 30, 1899.

Industries.	Organizations on—				Membership on—			
	Dec. 31, 1898.	Mar. 31, 1899.	June 30, 1899.	Sept. 30, 1899.	Dec. 31, 1898.	Mar. 31, 1899.	June 30, 1899.	Sept. 30, 1899.
Building trades	289	287	301	316	53,776	52,665	58,404	62,163
Clothing and textiles	104	101	100	104	24,158	25,003	27,357	29,702
Transportation	162	165	169	181	20,335	19,176	21,240	24,372
Printing and allied trades	71	75	76	79	14,970	15,487	15,471	16,023
Metals, machinery, and shipbuilding	191	194	207	226	17,632	18,128	20,777	23,914
Tobacco	55	54	55	55	9,644	9,235	9,197	8,886
Food and liquors	80	82	85	88	7,891	7,645	8,038	8,391
Theaters and music	28	28	27	29	9,400	9,461	8,414	9,518
Stoneworking, paving, etc.	44	50	52	61	5,686	5,463	6,226	7,134
Woodworking and furniture	36	36	40	46	4,982	4,846	5,836	6,991
Restaurants and retail trade	29	27	31	34	2,083	2,228	2,773	3,207
Public employment	7	7	11	40	1,796	1,793	1,998	3,727
Glass	15	18	20	21	853	800	914	1,108
Miscellaneous	32	32	36	40	1,545	1,586	1,810	3,884
Total	1,143	1,156	1,210	1,320	174,751	173,516	188,455	209,020

PER CENT OF MEMBERS OF LABOR ORGANIZATIONS UNEMPLOYED AT THE END OF EACH QUARTER FROM DECEMBER 31, 1898, TO SEPTEMBER 30, 1899.

Industries.	Per cent of members of labor organizations unemployed on—							
	Dec. 31, 1898.		Mar. 31, 1899.		June 30, 1899.		Sept. 30, 1899.	
	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.
Building trades.....	39.3		33.2		7.8		4.1	
Clothing and textiles.....	59.8	42.1	8.6	5.4	21.5	10.8	.6	1.5
Transportation.....	8.8		10.8		3.7		2.9	
Printing and allied trades.....	9.2	5.0	8.2	5.3	6.9	4.3	8.8	4.5
Metals, machinery, and shipbuilding.....	7.7		7.2		3.4		3.3	
Tobacco.....	18.4	14.2	11.2	19.3	5.5	4.0	2.9	1.6
Food and liquor.....	6.6		9.4		10.0		8.7	
Theaters and music.....	8.2	3.4	15.3	3.1	49.0	91.1	7.1	1.9
Stoneworking, paving, etc.....	58.2		53.4		30.2		22.7	
Woodworking and furniture.....	11.5		14.1		19.3		6.0	
Restaurants and retail trade.....	14.5		18.3		12.1		10.1	
Public employment.....	.3		11.0		5.1		.1	
Glass.....	4.1		.6		25.8		23.0	
Miscellaneous.....	6.3		3.6		1.2		.9	
Total.....	26.6	28.6	18.7	9.3	11.0	9.6	4.9	1.8

ACCIDENTS AND EMPLOYERS' LIABILITY.—This elaborate report covers not only the results of an original investigation of accidents and accident insurance in New York State, but deals also with the subject of industrial accidents and the liability of employers in various States of the Union and in 17 foreign countries, showing the legislation enacted and the workings of the same, and in some instances, statistics of accidents, etc. It concludes with a general review of the problem of industrial insurance and its application to the United States.

The original statistics of accidents for New York State were obtained from labor organizations and manufacturers by means of schedules of inquiry, and show for the months of April, May, and June, 1899, the nature and causes of accidents, age and sex of persons injured, the extent of the disabilities and loss of working turns resulting, together with the number of dependents and sources of support of those injured. Of 4,931 establishments from which returns were received, 691 reported 1,847 persons injured by accident, 29 of whom were killed, during these three months. The reports of trade-union secretaries for the same period show a total of 155 persons injured, 9 fatally, out of a total membership of 188,455 on June 30, 1899. These reports are said to be defective and incomplete and probably show too low a proportion of accidents. Of the 4,931 establishments making returns, 1,078 reported that they carried accident or liability insurance, chiefly the latter.

EMPLOYMENT AND WAGES FROM 1896 TO 1899.—This is the second inquiry regarding employment and wages in manufacturing establishments undertaken by this bureau, the preceding one covering the five years ending June 1, 1895. The present inquiry covers the four years ending June 30, 1899, and shows for 3,553 establishments in the State, the number of employees on June 30, and the total wages paid during

each year. Statistics for nine years are given for 66 establishments, principally in the iron and steel industries.

The following two tables show the number of employees and total wages paid in each of 12 groups of industries during the four years ending June 30, 1899:

EMPLOYEES IN 3,553 ESTABLISHMENTS FROM JUNE 30, 1896, TO JUNE 30, 1899.

Industries.	Estab- lishments report- ing.	Employees on June 30—				Per cent of in- crease, 1896-1899.
		1896.	1897.	1898.	1899.	
Stone and clay products	197	13,641	14,361	14,392	15,203	11.5
Metals, machinery, and apparatus	989	81,064	79,037	37,526	102,154	26.0
Wood	389	20,531	20,469	21,697	23,457	14.3
Leather, rubber, pearl, etc.	222	16,947	17,592	19,051	20,284	19.7
Chemicals, oils, and explosives	123	9,609	9,858	10,156	10,869	13.1
Pulp, paper, and cardboard	70	4,189	4,067	4,072	4,413	5.3
Printing and allied trades	417	26,374	26,334	27,531	28,831	9.3
Textiles	238	42,672	44,864	47,070	48,201	13.0
Clothing, millinery, laundering, etc.	319	37,847	39,668	43,221	47,295	25.0
Food, tobacco, and liquors	347	23,531	30,659	32,181	34,698	17.5
Public utility	52	12,099	11,693	13,680	14,993	23.9
Building industry	190	5,453	5,744	5,513	5,880	7.8
Total	3,553	299,957	304,376	326,090	356,278	18.8

WAGES PAID IN 3,553 ESTABLISHMENTS FROM THE YEAR ENDING JUNE 30, 1896, TO THE YEAR ENDING JUNE 30, 1899.

Industries.	Estab- lishments report- ing.	Total wages paid during year ending June 30—				Per cent of in- crease, 1896-1899.
		1896.	1897.	1898.	1899.	
Stone and clay products	197	\$5,585,901	\$5,587,129	\$5,783,522	\$6,042,037	8.2
Metals, machinery, and apparatus	989	42,365,091	39,814,442	44,594,000	51,127,291	20.7
Wood	389	9,392,691	9,385,447	9,850,458	10,366,216	10.4
Leather, rubber, pearl, etc.	222	6,884,653	6,856,895	7,533,847	7,976,594	16.7
Chemicals, oils, and explosives	123	5,001,784	4,914,240	4,929,851	5,262,297	5.2
Pulp, paper, and cardboard	70	1,731,371	1,731,125	1,815,490	1,893,512	9.4
Printing and allied trades	417	15,272,801	15,267,607	16,091,644	16,506,305	8.1
Textiles	238	15,312,844	14,238,029	16,616,482	16,567,911	8.1
Clothing, millinery, laundering, etc.	319	14,414,998	14,670,771	16,524,478	18,037,239	25.1
Food, tobacco, and liquors	347	14,212,354	14,502,243	15,377,219	15,795,642	11.1
Public utility	52	7,760,250	8,279,158	8,625,157	9,709,860	25.1
Building industry	190	3,900,107	3,331,792	3,536,862	3,370,745	2.1
Total	3,553	141,184,845	138,577,878	151,279,010	162,645,649	15.2

From June 30, 1896, to June 30, 1899, the number of employees in 3,553 establishments increased 18.8 per cent. From the first to the second year the number increased 1.5 per cent, the next year 7.1 per cent, and the last year 9.3 per cent. The increase during the four years was smallest, 5.3 per cent, in the group of pulp, paper, and cardboard industries, and greatest, 26.0 per cent, in the group of metals, machinery, and apparatus. Each of the twelve groups of industries shows an increase during the past two years.

The amounts paid for wages in 3,553 establishments increased 15.2 per cent from the year ending June 30, 1896, to the year ending June 30, 1899. During the year ending June 30, 1897, there was a

decrease of 1.8 per cent in the amount of wages paid; this was followed by an increase of 9.2 per cent in 1898, and of 7.5 per cent in 1899. The increase during the four years was smallest, 2.1 per cent, in the group of building trades, and greatest, 25.1 per cent, in the groups of clothing, millinery, laundering, etc., and of public utility.

A study of employment and wages for a longer period is afforded by the returns from 66 establishments manufacturing metal, stone, and clay products, which cover the nine years ending June 30, 1899, as shown in the following table:

EMPLOYEES AND WAGES IN 66 ESTABLISHMENTS FROM THE YEAR ENDING MAY 31, 1891, TO THE YEAR ENDING JUNE 30, 1899.

Year.	Employees at end of period.	Total wages paid during period.
June 1, 1890 to May 31, 1891.....	18,171	\$9,946,760
June 1, 1891 to May 31, 1892.....	19,395	10,532,457
June 1, 1892 to May 31, 1893.....	20,263	11,029,107
June 1, 1893 to May 31, 1894.....	15,112	8,246,148
June 1, 1894 to May 31, 1895.....	17,233	8,848,010
July 1, 1895 to June 30, 1896.....	18,999	9,869,717
July 1, 1896 to June 30, 1897.....	17,615	9,024,503
July 1, 1897 to June 30, 1898.....	20,797	10,588,775
July 1, 1898 to June 30, 1899.....	25,085	12,834,151

These returns show a steady increase in business activity from June 1, 1890, to May 31, 1893; a great decline in 1894, a gradual recovery in 1895 and 1896; another decline in 1897, and a decided increase in 1898 and 1899, the figures for the latter year being far in excess of those of any other year of the period.

STATE FREE EMPLOYMENT BUREAU.—During the year 1899, 5,289 persons registered for employment, of whom 2,135 were men and 3,154 were women. There were 99 applications from employers for men and 2,944 for women. Ninety-eight males and 2,303 females, or a total of 2,401 persons, obtained employment through the agency of this bureau.

OHIO.

Twenty-third Annual Report of the Bureau of Labor Statistics of the State of Ohio, for the year 1899. John P. Jones, Commissioner. 333 pp.

The contents of the present report are as follows: Introduction, 13 pages; labor laws and court decisions, 78 pages; convict labor, 5 pages; manufacturing, 184 pages; statistics of cities, 19 pages; free employment offices, 18 pages; chronology of labor bureaus, 4 pages.

CONVICT LABOR.—Statistics are given of the number of convicts employed in each of the various industries at the penal institutions of the State, and the number of persons employed at free labor in the same industries; also a copy of the State law regulating the employment of convicts.

MANUFACTURING.—As in preceding years, this subject occupies the greater part of the annual report. Detailed statistical tables are given showing, by occupations and for cities and villages, the number of males and females employed in various industries, their average daily and yearly earnings, and hours of daily labor in 1898, and the average number of days employed in 1897 and 1898. Other series of tables show, by industries, for cities, villages, and the State, the number of establishments reported, number of males and females employed each month, and monthly average of males and females for 1897 and 1898; total wages paid in 1897 and 1898, and the number and salaries of office employees, capital invested, value of product, and value of material used in 1898.

Following is a brief summary of some of the figures presented: In 2,226 establishments \$53,520,558.18 was paid in wages during 1898, which amount was an increase of \$6,208,775.03 over the wages paid in the same establishments during 1897. During 1898 the total value of goods made in 2,216 establishments was \$238,729,697.96, and the value of the material used was \$121,839,652.76. In 2,231 establishments an average of 102,393 males and 21,723 females were employed during 1898.

STATISTICS OF CITIES.—In this chapter are reproduced so much of the statistics of cities, published in the Bulletin of the United States Department of Labor, for September, 1899, as relates to cities in Ohio.

EMPLOYMENT OFFICES.—During the year ending December 29, 1899, the free employment offices at Cincinnati, Cleveland, Columbus, Toledo, and Dayton received applications from employers for 6,216 males and 17,681 females. Applications for situations were made by 15,259 males and 10,886 females. Positions were secured for 5,058 males and 9,931 females.

RECENT FOREIGN STATISTICAL PUBLICATIONS.

AUSTRIA.

Die Arbeitseinstellungen und Aussperrungen in Österreich während des Jahres 1899. Herausgegeben vom Arbeitsstatistischen Amte im k. k. Handelsministerium. 390 pp.

This is the sixth annual report on strikes and lockouts published by the Austrian Government. Its scope is the same as that for the preceding year. The data are presented in a series of 6 tables, containing (1) strikes according to geographical distribution, (2) strikes according to industries, (3) general summary of strikes, (4) comparative figures for the years 1894 to 1899, (5) details of each individual strike in 1899, (6) details of each individual lockout in 1899. An appendix contains a brief review of industrial conditions in 1899, an extract from a report of the Austrian trade-union commission showing trade-union membership and contributions in aid of strikes, and copies of papers and documents relating to strikes and lockouts in 1899.

STRIKES IN 1899.—The year 1899 shows a much greater number of strikes, strikers, and establishments affected than the preceding year. There were, in 1899, 311 strikes, affecting 1,330 establishments, and involving 54,763 strikers and 5,374 other employees who were thrown out of employment on account of the strikes. The strikers represented 60.23 per cent of all employees in the establishments affected. Of the striking employees 51,080 were reemployed, 1,115 new employees took the places of strikers; 35,809, or 65.39 per cent, of the strikers were males and 18,954, or 34.61 per cent, were females. Of the 311 strikes, 121, involving 33,881 strikers, occurred through the intervention of labor organizations. Of these strikes, 13.22 per cent succeeded, 57.03 per cent succeeded partly, and 29.75 per cent failed. Of the entire number of strikes in 1899, 15.43 per cent succeeded, 45.02 per cent succeeded partly, and 39.55 per cent failed.

Of the 311 strikes reported, 259 involved but 1 establishment each, 25 involved from 2 to 5 establishments, 7 from 6 to 10 establishments, 8 from 11 to 20 establishments, 8 from 21 to 50 establishments, and 4 involved more than 50 establishments.

The strikes were mostly of short duration, 170, or over one-half the total number, having lasted from one to five days. Forty-six strikes

lasted over thirty days. The following table shows the results of strikes in 1899 according to their duration:

RESULTS OF STRIKES, BY DURATION.

Days of duration.	Strikes.				Strikers.			
	Suc- ceeded.	Suc- ceeded partly.	Failed.	Total.	Suc- ceeded.	Suc- ceeded partly.	Failed.	Total.
1 to 5	33	63	74	170	4,886	8,149	5,108	18,143
6 to 10	8	23	14	45	300	5,370	1,377	7,047
11 to 15		11	11	22		1,942	819	2,761
16 to 20	1	4	3	8	12	1,699	563	2,274
21 to 25		7	5	12		544	436	980
26 to 30	1	2	5	13	31	3,294	522	3,647
31 to 35		4	2	6		217	143	360
36 to 40	1	4		5	43	473		516
41 to 50	1	8	3	12	18	3,801	727	4,546
51 to 100	3	12	5	20	394	13,723	180	14,207
101 or over		2	1	3		209	73	282
Total	48	140	123	311	5,594	39,421	9,748	54,763

The following table shows the number of strikes, strikers, establishments affected, etc., during 1899, by industries:

STRIKES, BY INDUSTRIES, 1899.

Industries.	Strikes.	Estab- lish- ments.	Total employ- ees.	Strikers.		Others thrown out of employ- ment.	Strikers reem- ployed.	New employ- ees after strikes.
				Num- ber.	Per cent of total employ- ees.			
Mining	26	32	5,035	3,477	69.06	385	3,359	70
Stone, glass, china, and earthen ware	21	42	3,416	2,112	61.83	304	1,915	34
Metals and metallic goods ..	32	112	6,959	2,459	35.34	197	1,936	71
Machinery and instruments	24	40	4,255	1,356	31.87	483	1,221	86
Wooden and caoutchouc goods	35	229	4,504	3,198	71.00	162	2,716	235
Leather, hides, brushes, and feathers	7	7	419	331	79.00	4	274	54
Textiles	84	185	45,046	30,249	67.15	2,918	29,291	162
Paper hanging and uphol- stering	1	1	4	4	100.00			
Wearing apparel and mil- linery	17	203	1,034	696	67.31	22	674	14
Paper	6	71	1,720	562	32.67	14	516	27
Food products	8	318	3,313	1,512	45.64	75	1,227	277
Chemical products	4	4	747	559	74.83		549	6
Building trades	33	69	13,425	7,842	58.4	805	7,026	60
Printing and publishing	7	11	369	199	53.93	5	191	5
Commerce	3	3	526	90	17.11		76	14
Transportation	3	3	147	117	79.59		109	
Total	311	1,330	90,919	54,763	60.23	5,374	51,080	1,115

The strikes in the textile trades were more numerous and extensive than those in any other group of industries, 84 strikes, involving 30,249, or over half of all the strikers, belonging to this group. This large number of strikers was due largely to a general strike of textile workers in Moravia for a 10-hour day, which involved 10,141 strikers and lasted 66 days. The groups of building trades and mining were next in importance with regard to the number of strikers involved.

In the presentation of strikes by causes, the cause and not the strike is made the unit, and the figures, therefore, show the number of times that each cause figured as an incentive to a strike, regardless of the actual number of strikes. Thus, in 1899 there were 311 strikes, while 370 causes were enumerated. The following table shows the causes of strikes by industries:

CAUSES OF STRIKES, BY INDUSTRIES, 1899.

Industries.	Against reduction of wages.	For increase of wages.	For change in method of payment.	For reduction of hours.	For discharge of foremen, workmen, etc.	Against obnoxious treatment.	Against discharge of employees.	Against obnoxious rules.	Other causes.	Total.
Mining	2	13	.....	.....	.....	.....	5	1	5	26
Stone, glass, china, and earthen ware...	1	11	2	3	1	.....	1	2	1	22
Metals and metallic goods.....	8	6	.....	5	3	2	6	2	4	36
Machinery and instruments.....	2	9	1	6	.....	.....	7	1	2	28
Wooden and caoutchouc goods.....	3	14	.....	13	2	1	6	1	2	42
Leather, hides, brushes, and feathers.....	1	5	.....	1	.....	.....	.....	1	.....	8
Textiles.....	7	37	1	23	7	1	8	5	16	105
Paper hanging and upholstering.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1
Wearing apparel and millinery.....	1	12	.....	5	2	1	2	1	1	25
Paper.....	.....	5	.....	3	.....	.....	1	1	.....	10
Food products.....	.....	3	.....	1	.....	.....	1	.....	3	8
Chemical products.....	1	1	.....	.....	.....	.....	.....	.....	.....	4
Building trades.....	2	18	1	11	.....	.....	.....	2	5	39
Printing and publishing.....	.....	4	.....	1	2	.....	.....	.....	1	8
Commerce.....	1	2	.....	.....	.....	.....	.....	1	.....	4
Transportation.....	.....	3	.....	1	.....	.....	.....	.....	.....	4
Total.....	29	143	5	73	17	5	40	18	40	370

The most frequent cause of strikes in 1899 was the demand for increased wages. Next in importance was the demand for reduced hours of labor. Of the demands relating to wages, 16.13 per cent were successful, 44.24 per cent were partly successful, and 39.63 per cent were unsuccessful. Of the demands relating to hours of labor, 31.97 per cent were successful, 23.77 per cent were partly successful, and 44.26 per cent were unsuccessful.

The following table shows the results of strikes in 1899, classified according to industries:

RESULTS OF STRIKES, BY INDUSTRIES, 1899.

Industries.	Strikes.				Strikers.			
	Suc- ceeded.	Suc- ceeded partly.	Failed.	Total.	Suc- ceeded.	Suc- ceeded partly.	Failed.	Total.
Mining	2	12	11	26	446	1,352	1,679	3,477
Stone, glass, china, and earthen ware	3	7	11	21	95	1,630	387	2,112
Metals and metallic goods	2	15	15	32	194	1,150	1,115	2,459
Machinery and instruments	5	12	7	24	281	845	230	1,356
Wooden and caoutchouc goods	5	11	19	35	345	2,454	399	3,198
Leather, hides, brushes, and feathers	1	3	3	7	12	182	137	331
Textiles	10	50	24	84	1,659	25,059	3,531	30,249
Paper hanging and uphol- stering			1	1			4	4
Wearing apparel and milli- nery	6	6	5	17	138	444	114	696
Paper		2	4	6		431	131	562
Food products		4	4	8		1,457	55	1,512
Chemical products		2	9	4		292	207	559
Building trades	8	12	13	33	2,217	3,971	1,654	7,842
Printing and publishing	3	2	2	7	89	92	18	199
Commerce	1	1	1	3	64	8	18	90
Transportation	1	1	1	3	54	54	9	117
Total	48	140	123	311	5,594	39,421	9,748	54,763

STRIKES DURING SIX YEARS.—During the period from 1894 to 1899, inclusive, there was an average of 250 strikes, and 49,139 strikers per year. The following table gives the strike statistics for each year from 1894 to 1899, inclusive:

STRIKES, BY YEARS, 1894 TO 1899.

Year.	Strikes.	Estab- lishments affected.	Strikers.	Per cent of strikers of total employ- ees.	Days lost.
1894	172	2,542	67,061	69.47	795,416
1895	209	874	28,652	59.68	300,348
1896	305	1,499	66,234	65.72	899,939
1897	246	851	38,467	59.03	368,098
1898	255	885	39,658	59.86	323,619
1899	311	1,330	54,763	60.23	1,029,937

The following two tables show the number of strikes and strikers during each year from 1894 to 1899, inclusive, by industries:

STRIKES, BY INDUSTRIES, 1894 TO 1899.

Year.	Mining.	Stone, glass, china, and earthen- ware.	Metals and metallic goods.	Mach- inery and instru- ments.	Wooden and caout- chouc goods.	Textiles.	Building trades.	Other.	Total.
1894	13	22	23	7	23	34	11	39	172
1895	4	29	37	6	38	29	24	42	209
1896	11	29	33	14	55	43	42	78	305
1897	25	27	26	20	27	28	34	59	246
1898	29	27	26	13	28	28	49	55	255
1899	26	21	32	24	35	84	33	56	311
Total.	108	155	177	84	206	246	196	329	1,498

STRIKERS, BY INDUSTRIES, 1894 TO 1899.

Year.	Mining.	Stone, glass, china, and earthen-ware.	Metals and metallic goods.	Machinery and instruments.	Wooden and caoutchouc goods.	Textiles.	Building trades.	Other.	Total.
1894.....	22,986	6,415	2,752	194	9,793	6,917	14,975	3,629	67,061
1895.....	626	9,943	3,694	253	2,336	4,085	5,361	2,354	28,652
1896.....	30,120	3,217	2,973	2,058	5,972	9,791	5,434	6,669	66,234
1897.....	3,632	3,053	1,568	4,689	1,372	11,275	4,995	7,883	38,467
1898.....	7,046	4,491	991	2,471	3,818	3,171	13,961	6,209	39,658
1899.....	3,477	2,112	2,459	1,356	3,198	30,249	7,842	4,070	54,763
Total.	67,887	29,231	14,437	11,021	23,989	64,888	52,568	30,814	294,835

By far the greater number of strikers during this period were engaged in three groups of industries, namely, 67,887 in mining, 64,888 in the textiles, and 52,568 in the building trades.

Of the 1,498 strikes during the six years, 665 were due either wholly or in part to demands for increased wages, 158 to demands against a reduction of wages, 291 for a reduction in the hours of labor, 213 against the discharge of employees, and 138 for the discharge of foremen, workmen, etc.

The following table shows the causes of strikes during each year of the period, the cause and not the strike being made the unit:

CAUSES OF STRIKES, 1894 TO 1899.

Year.	Against reduction of wages.	For increase of wages.	For change in method of payment.	For reduction of hours.	For discharge of foremen, workmen, etc.	Against obnoxious treatment.	Against discharge of employees.	Against obnoxious rules.	Other causes.	Total.
1894.....	23	53	5	19	12	5	34	16	32	199
1895.....	19	89	6	31	22	2	31	8	37	245
1896.....	28	140	8	67	32	5	40	12	34	366
1897.....	26	116	7	47	26	13	32	18	45	330
1898.....	33	124	8	54	29	9	36	20	39	352
1899.....	29	143	5	73	17	5	40	18	40	370
Total.	158	665	39	291	138	39	213	92	227	1,862

The results of strikes from 1894 to 1899 are shown in the following table:

RESULTS OF STRIKES, 1894 TO 1899.

Year.	Strikes.				Strikers.			
	Number.	Per cent succeeded.	Per cent succeeded partly.	Per cent failed.	Number.	Per cent succeeded.	Per cent succeeded partly.	Per cent failed.
1894.....	172	25.00	27.91	47.09	67,061	9.15	37.31	53.54
1895.....	209	26.79	24.88	48.33	28,652	12.81	60.69	26.50
1896.....	305	20.98	36.40	42.62	66,234	4.60	62.80	32.60
1897.....	246	17.48	36.99	45.53	38,467	15.69	47.81	36.50
1898.....	255	18.32	41.18	40.00	39,658	8.36	66.46	25.18
1899.....	311	15.43	45.02	39.55	54,763	10.21	71.99	17.80
Total.....	1,498	20.16	36.52	43.32	294,835	9.43	57.04	33.53

Of the total number of strikes reported in six years 20.16 per cent succeeded, 36.52 per cent succeeded partly, and 43.32 per cent failed.

Of the strikers 9.43 per cent succeeded, 57.04 per cent succeeded partly, and 33.53 per cent failed.

Strikes during this period were most frequent in the spring; that is, during the months of March, April, and May. They were least frequent in the winter, or the months of January, February, and December.

Over one-half of the strikes in each year during the 6-year period lasted from 1 to 5 days. The average duration of strikes was 12.34 days in 1894, 13 days in 1895, 15 days in 1896, 12.47 days in 1897, 11.18 days in 1898, and 14 days in 1899.

LOCKOUTS.—There were 5 lockouts in 1899, involving 38 establishments and affecting 3,457 persons locked out. Of the latter 3,448 were reemployed, 4 were discharged, and 5 refused to return. Of the lockouts 2 were on account of Labor Day (May 1), 1 was against a threatened strike for a 10-hour day, and 2 were to force strikers in other establishments to relinquish their demands. The following table gives the statistics of lockouts for each year from 1894 to 1899:

LOCKOUTS, BY YEARS, 1894 TO 1899.

Year.	Lockouts.	Establishments involved.	Persons locked out.	Per cent of persons locked out of total employees.	Persons locked out and reemployed.
1894.....	.....	.....	.....	.....	.....
1895.....	8	17	2,317	51.25	2,183
1896.....	10	211	5,445	79.52	4,589
1897.....	11	12	1,712	54.40	1,647
1898.....	.....	.....	.....	.....	.....
1899.....	5	38	3,457	60.96	3,448

FRANCE.

Statistique des Grèves et des Recours à la Conciliation et à l'Arbitrage Survenus Pendant l'Année 1899. Office du Travail, Ministère du Commerce, de l'Industrie, des Postes et des Télégraphes. xviii, 632 pp.

The present volume is the ninth of a series of annual reports on strikes, and conciliation and arbitration, issued by the French labor bureau. The information is presented in form similar to the preceding annual reports, except that in the present volume a recapitulation is given of all the strikes reported in France from 1890 to 1899, inclusive.

STRIKES IN 1899.—There were 740 strikes in 1899, involving 176,826 strikers and 4,290 establishments. The strikes resulted in an aggregate loss of 3,550,734 working days, including 1,038,340 days lost by 35,576 employees who were not strikers. The average time lost per striker was 20 days. Of the strikers 143,367 were men, 23,417 were women, and 10,042 were children. The year 1899 had the largest

number of strikes, strikers, and days lost on account of strikes of any year since the publication of strike data. In addition to the strikes there were, in 1899, 10 lockouts, affecting 28 establishments and 1,243 employees.

Of the 740 strikes reported in 1899, 441 were participated in by members of labor organizations, and in 218 strikes the employers were organized. Twenty-nine labor organizations and 3 employers' associations were created while strikes were in progress. Regular aid was given by labor organizations for the relief of strikers in 44 strikes, and in the case of 63 strikes the intervention of labor organizations was accepted by employers.

Of the 740 strikes reported 575 involved but 1 establishment each, 65 involved from 2 to 5 establishments, 32 from 6 to 10 establishments, 44 from 11 to 25 establishments, 10 from 26 to 50 establishments, 9 from 51 to 100 establishments, and the remaining 5 involved from 150 to 450 establishments each.

As regards the results of the disputes in 1899, 180 strikes, involving 21,131 strikers, were successful; 282 strikes, involving 124,767 strikers, were partly successful, and 277 strikes, involving 30,874 strikers, failed. In the case of 1 strike, involving 2 establishments and 54 employees, the strike was terminated by the destruction of the establishments by lightning. For this reason this strike is not considered in the strike tables presented in the report.

The two following tables show the number of strikes, strikers, and establishments involved, according to the results of strikes, also the number of working days lost, and the proportion that the number of strikers is to the total number of working people, according to 17 groups of industries:

STRIKES, BY INDUSTRIES, 1899.

Industries.	Succeeded.		Succeeded partly.		Failed.		Total.	
	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.
Agriculture, forestry, and fisheries	3	12	4	28	3	6	10	46
Mining	7	7	17	33	8	8	32	48
Quarrying	5	10	9	30	8	13	22	53
Food products	3	37	9	161	7	128	19	326
Chemical industries	2	2	8	12	3	3	13	17
Paper and printing	3	55	5	154	8	8	16	217
Hides and leather goods	12	15	11	11	9	16	32	42
Textiles proper	48	65	82	275	74	150	204	490
Clothing, cleaning, and upholstery	3	5	5	16	8	8	16	29
Woodworking	17	102	10	93	16	29	43	224
Building trades (woodwork)	7	47	11	113	1	430	19	590
Metal refining	2	2	5	5	6	7	13	14
Metallic goods	25	96	42	665	58	119	125	880
Precious-metal work	1	1	1	9			2	10
Stone, earthenware, and glass	5	10	13	23	17	20	35	53
Building trades (stone, tile, excavating, etc., work)	25	209	35	750	32	189	92	1,148
Transportation and handling	12	13	15	44	19	44	46	101
Total	180	688	282	2,422	277	1,178	a 739	a 4,288

a One strike involving 2 establishments and 54 employees not included.

STRIKERS AND DAYS OF WORK LOST BY ALL PERSONS AFFECTED BY STRIKES IN 1899,
BY INDUSTRIES.

Industries.	Strikers in—			Total strikers.	Strikers per 1,000 working people (a).	Days of work lost by all persons affected.
	Successful strikes.	Partly successful strikes.	Strikes which failed.			
Agriculture, forestry, and fisheries	510	1,267	159	1,936	1.21	31,735
Mining	1,772	28,636	691	31,099	b 174.12	393,234
Quarrying	1,630	1,990	1,363	4,983	(c)	29,543
Food products	190	891	623	1,704	13.27	8,332
Chemical industries	867	3,228	1,253	5,348	99.34	26,654
Paper and printing	247	1,470	75	1,792	18.53	14,271
Hides and leather goods	760	2,857	459	4,076	32.73	22,983
Textiles proper	5,888	30,065	3,975	39,928	55.28	1,966,033
Clothing, cleaning, and upholstery	227	301	146	674	.96	2,589
Woodworking	1,188	1,173	588	2,949	12.52	14,078
Building trades (woodwork)	322	521	1,200	2,043	(d)	55,108
Metal refining	270	20,190	1,281	21,741	227.95	329,250
Metallic goods	3,426	12,740	10,843	27,009	89.07	228,073
Precious-metal work	35	121	.....	156	2.21	4,340
Stone, earthenware, and glass	459	4,699	2,313	7,471	71.82	131,338
Building trades (stone, tile, excavating, etc., work)	2,792	10,012	2,690	15,494	e 40.73	232,023
Transportation and handling	548	4,606	3,215	8,369	35.41	61,150
Total	21,131	124,767	30,874	f 176,772	g 34.61	3,550,734

a Census of 1891.

b Includes quarrying.

c Included in mining.

d Included in building trades (stone, tile, excavating, etc., work).

e Includes building trades (woodwork).

f One strike, involving 2 establishments and 54 employees, not included.

g Relates to all industrial working people in France.

Of the different industries, the textiles furnished 204 strikes and 39,928 strikers; metals and metallic goods, 140 strikes and 48,906 strikers; the building trades, 111 strikes and 17,537 strikers; mining, 32 strikes and 31,099 strikers, making 487 strikes and 137,470 strikers for these four groups of industries, or nearly two-thirds of the total number of strikes and more than three-fourths of the total number of strikers. Considering the number of persons actually engaged in the various industries according to the census of 1891, it is shown that the relative prevalence of strikes was greatest in the metal-refining industry, 227.95 out of every 1,000 employees having taken part in disputes during the year. The two groups of mining and quarrying and chemical industries came next, with 174.12 and 99.34 strikes per 1,000 employees, respectively.

In the two following tables the strike data are shown by causes:

STRIKES, BY CAUSES, 1899.

[A considerable number of strikes were due to two or more causes, and the facts in such cases have been tabulated under each cause. Hence the totals for this table necessarily would not agree with those for the preceding tables.]

Cause or object.	Succeeded.		Succeeded partly.		Failed.		Total.	
	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.
For increase of wages	99	438	168	1,971	155	1,048	422	3,457
Against reduction of wages ..	11	11	10	24	24	24	45	59
For reduction of hours of labor with present or increased wages	48	432	16	640	37	234	101	1,306
Relating to time and method of payment of wages, etc ..	38	200	13	198	22	210	73	608
For or against modification of conditions of work	10	32	18	168	21	24	49	224
Against piecework	8	76	1	5	10	33	19	114
For or against modification of shop rules	12	83	8	27	16	126	36	236
For abolition or reduction of fines	6	6	3	3	10	11	19	20
Against discharge of workmen, foremen, or directors or for their reinstatement	13	13	10	12	35	42	58	67
For discharge of workmen, foremen, or directors	13	13	17	17	55	56	85	86
Against employment of women	1	1			4	4	5	5
For limitation of number of apprentices					1	1	1	1
Relating to deduction from wages for the support of insurance and aid funds ..	56	535	14	79	14	502	84	1,116
Other	4	6	6	23	7	516	17	545

STRIKERS AND DAYS OF WORK LOST BY ALL PERSONS AFFECTED BY STRIKES IN 1899, BY CAUSES.

[A considerable number of strikes were due to two or more causes, and the facts in such cases have been tabulated under each cause. Hence the totals for this table necessarily would not agree with those for the preceding tables.]

Cause or object.	Strikers in—			Total strikers.	Days of work lost by all persons affected.
	Suc-cessful strikes.	Partly successful strikes.	Strikes which failed.		
For increase of wages	20,239	84,261	32,072	136,572	3,174,564
Against reduction of wages	1,366	683	940	2,989	52,827
For reduction of hours of labor with present or increased wages	10,520	18,274	3,496	32,290	321,115
Relating to time and method of payment of wages, etc	16,839	23,266	2,630	42,735	2,028,713
For or against modification of conditions of work ..	1,982	7,084	2,858	11,924	212,231
Against piecework	899	51	1,666	2,616	17,918
For or against modification of shop rules	736	2,393	2,469	5,598	32,647
For abolition or reduction of fines	1,305	494	6,334	8,133	130,092
Against discharge of workmen, foremen, or directors or for their reinstatement	4,968	2,956	5,708	13,632	110,192
For discharge of workmen, foremen, or directors ..	11,168	6,227	10,247	27,642	336,659
Against employment of women	20		339	359	7,326
For limitation of number of apprentices			4	4	214
Relating to deduction from wages for the support of insurance and aid funds	7,797	2,447	6,931	17,175	265,084
Other	157	24,590	7,848	32,595	535,779

Strikes due to wage disputes continued in 1899, as in preceding years, to be the most numerous, 467 strikes, involving 139,561 strikers, being due to this cause alone. Over three-fourths of the persons

engaged in strikes on account of wages were either successful or partly successful. Of the other causes of strikes, those relating to the time and method of wage payments and to hours of labor were most prevalent, and but a very small proportion of persons engaged in such strikes failed. Those involved in strikes against piecework and for the abolition or reduction of fines were mostly unsuccessful.

The next two tables show, respectively, the results of strikes according to their duration and according to the number of strikers involved:

STRIKES AND STRIKERS, BY DURATION OF STRIKES, 1899.

Days of duration.	Strikes.				Strikers.			
	Suc- ceeded.	Suc- ceeded partly.	Failed.	Total.	Suc- ceeded.	Suc- ceeded partly.	Failed.	Total.
7 or under	142	158	192	492	16,257	39,509	12,051	67,817
8 to 15	21	54	48	123	2,196	21,208	7,583	30,982
16 to 30	8	42	12	62	1,412	36,411	476	38,299
31 to 100	9	26	22	57	1,266	26,932	9,113	37,311
101 or over.....		2	3	5		712	1,651	2,363
Total	180	282	277	a 739	21,131	124,767	30,874	a 176,772

a One strike, involving 2 establishments and 54 employees, not included.

DURATION AND RESULTS OF STRIKES, BY NUMBER OF STRIKERS INVOLVED, 1899.

Strikers involved.	Strikes.				Days of duration.				
	Suc- ceeded.	Suc- ceeded partly.	Failed.	Total.	1 to 7.	8 to 15.	16 to 30.	31 to 100.	101 or over.
25 or under	50	36	125	211	163	26	13	9	.....
26 to 50	47	52	62	161	122	22	8	9	.....
51 to 100	32	59	36	127	78	27	12	10	.....
101 to 200	21	53	28	102	58	23	9	12	.....
201 to 500	21	52	13	86	45	16	11	10	4
501 to 1,000	8	15	7	30	18	6	2	3	1
1,001 or over.....	1	15	6	22	8	3	7	4	.....
Total	180	282	277	a 739	492	123	62	57	5

a One strike, involving 2 establishments and 54 employees, not included.

As in the preceding year, the strikes were mostly of short duration, 492 of the 739 strikes lasting 7 days or less, 123 lasting from 8 to 15 days, 62 from 16 to 30 days, 57 from 31 to 100 days, and 5 lasting more than 100 days.

Over one-half of the strikes involved 50 strikers or less each. The smaller strikes, involving 25 strikers or less each, were mostly failures, while most of the larger strikes were either wholly or partly successful.

STRIKES DURING 10 YEARS.—During the period from 1890 to 1899, inclusive, there was an aggregate of 4,210 strikes, 924,486 strikers, and 15,021,841 working days lost, making a yearly average of 421 strikes, 92,449 strikers, and 1,502,184 days lost. Most of these disputes occurred in three industries, namely, 1,368 strikes with 255,887 strikers in the textile industry, 619 strikes with 101,472 strikers in the metal industry, and 596 strikes with 132,803 strikers in the building trades. It may be stated that the textile industry, which has furnished

more than one-fourth of all the strikes and strikers during the 10 years, is the industry in which labor organizations have been most feebly developed. The following table shows the total number of strikes and strikers reported during the 10 years, from 1890 to 1899, by industries:

STRIKES AND STRIKERS, BY INDUSTRIES, 1890 TO 1899.

Industries.	Strikes in 10 years.	Strikers in 10 years.	Industries.	Strikes in 10 years.	Strikers in 10 years.
Agriculture, forestry, and fisheries.....	96	46,004	Building trades (woodwork).....	100	12,741
Mining.....	178	196,058	Metal refining.....	59	34,801
Quarrying.....	100	20,371	Metallic goods.....	546	65,340
Food products.....	86	9,592	Precious-metal work.....	14	1,331
Chemical industries.....	75	21,815	Stone, earthenware, and glass.....	195	34,410
Paper and printing.....	114	5,008	Building trades (stone, tile, etc., work).....	496	120,062
Hides and leather goods.....	260	24,696	Transportation and handling.....	179	46,193
Textiles, proper.....	1,368	255,887	Other.....	19	2,562
Clothing, cleaning, and upholstery.....	105	10,061			
Woodworking.....	219	17,554	Total.....	4,210	924,486

Of the 4,210 strikes reported in the 10 years, 2,125 were due, either wholly or in part, to demands for increased wages, and 544 to demands against a reduction of wages; 766 were due to demands for or against the discharge of workmen, foremen, or directors, or for their reinstatement, and 472 for a reduction in the hours of labor. The demands regarding wages and hours of labor were mostly successful or partly successful, while those for or against the discharge of workmen, foremen, or directors or for their reinstatement usually failed.

Strikes during this 10-year period were most frequent during the months of April, May, June, and July. The greatest number occurred in May and the smallest number in December.

The following table shows the number of strikes, strikers, and aggregate working days lost, and the per cent of strikes and strikers that succeeded, succeeded partly, and failed, during each of the 10 years from 1890 to 1899:

STATISTICS OF STRIKES, 1890 TO 1899.

Year.	Strikes.				Strikers.				Aggregate working days lost by all persons affected.
	Number.	Per cent succeeded.	Per cent succeeded partly.	Per cent failed.	Number.	Per cent succeeded.	Per cent succeeded partly.	Per cent failed.	
1890.....	313	26.71	20.85	52.44	a 118,941	11.38	23.85	64.77	1,340,000
1891.....	267	34.47	25.38	40.15	b 108,944	20.64	49.85	29.51	1,717,200
1892.....	261	22.05	31.49	46.46	c 48,538	20.46	49.86	29.68	917,690
1893.....	634	24.92	32.49	42.59	170,123	21.27	26.36	52.37	3,174,850
1894.....	391	21.48	32.99	45.53	54,576	23.63	45.41	30.96	1,062,480
1895.....	405	24.69	28.89	46.42	45,801	18.70	45.13	36.17	617,469
1896.....	476	24.58	25.63	49.79	49,851	23.23	34.21	42.56	644,168
1897.....	356	19.10	34.27	46.63	68,875	28.80	41.76	29.44	780,944
1898.....	368	20.38	33.42	46.20	82,065	12.91	39.66	47.43	1,216,306
1899.....	d 739	24.36	38.16	37.48	d 176,772	11.95	70.58	17.47	3,550,734
Total..	4,210	24.10	31.29	44.61	924,486	18.04	43.33	38.63	15,021,841

a Number reported for 305 strikes.

b Number reported for 265 strikes.

c Number reported for 253 strikes.

d One strike involving 2 establishments and 54 employees, not included.

The above statistics do not appear to disclose any marked tendency either toward an increase or decrease in the number of strikes or strikers, the number in each case fluctuating irregularly from one year to another. The same is true with regard to the percentage of success or failure from year to year, although there is some indication of an increasing tendency in the percentage of strikes that were compromised.

Of the total number of strikes reported during the 10 years, 24.10 per cent succeeded, 31.29 per cent succeeded partly, and 44.61 per cent failed. Of the strikers, 18.04 per cent succeeded, 43.33 per cent succeeded partly, and 38.63 per cent failed.

The strikes were mostly of short duration, 2,623 or 62.3 per cent of the strikes, with 347,298 or 37.6 per cent of the strikers, having lasted but one week or less. On the other hand, 404 strikes, with 213,991 strikers, lasted more than 30 days. In the case of 26 strikes, involving 2,057 strikers, the duration was not known.

CONCILIATION AND ARBITRATION.—The law of December 27, 1892, regarding conciliation and arbitration (*a*) in trade disputes was applied 197 times in 190 different disputes. As the number of strikes during the year was 740, the proportion of the number of applications of the law to the total number of disputes was 26.62 per cent. The proportion for the six preceding years, taken collectively, in which the law was applied, was 22.09 per cent. The initiative in demanding the application of the law was taken by the employees 112 times, by the employers once, by both employers and employees 4 times, and in 80 cases the initiative was taken through the intervention of justices of the peace.

As regards the results of the application of the law, it was found that in 12 of the 197 cases, relating to 9 disputes, work was resumed before committees of conciliation were constituted. In 79 of the remaining 185 cases, relating to 76 disputes, the demands for conciliation were refused in 65 cases by the employers, in 1 by the employees, and in 13 cases by both employers and employees. In 2 of these cases the employees renounced their demands, and in 2 others a compromise was effected. In the other 75 cases, relating to 72 disputes, strikes were declared or continued after the refusal of conciliation. Of these 72 strikes, 8 were successful, 36 were partly successful, and 28 failed.

For the settlement of the remaining 105 disputes 106 committees of conciliation were constituted. Of these disputes 36 were settled directly by the committees of conciliation, 6 by arbitration, and 4 were adjusted by the parties themselves after having had recourse to committees of conciliation. In one of these cases a strike resulted after the failure of conciliation, but later another committee of conciliation settled the dispute. This leaves 59 cases in which the attempted conciliation and

a For a copy of this law see Bulletin No. 25, pp. 854-856.

arbitration failed and strikes resulted or continued. These strikes succeeded in 7 cases, succeeded partly in 41, and failed in 11 cases.

The following statement gives a summary of the cases in which recourse was had to the law of 1892 regarding conciliation and arbitration, and the results of such recourse during the year 1899 and for the preceding six years collectively:

SUMMARY OF CASES IN WHICH RECOURSE WAS HAD TO CONCILIATION AND ARBITRATION, 1893 TO 1898, AND 1899.

Items.	1893 to 1898.	1899.
Total number of strikes.....	2, 630	740
Cases in which the law of 1892 was applied.....	<i>a</i> 581	<i>b</i> 197
Disputes settled:		
Before the creation of committees of conciliation.....	45	9
After refusal of demands for conciliation.....	30	4
Directly by committees of conciliation.....	<i>c</i> 147	36
By arbitration.....	18	6
Directly by parties after having had recourse to conciliation.....	11	4
Total cases settled through the application of the law.....	248	59
Strikes resulting or continuing:		
After refusal of demand for conciliation.....	179	72
After failure of recourse to conciliation and arbitration.....	<i>d</i> 152	59
Total cases of failure after application of the law.....	332	131

a The 581 cases of recourse to the law relate to 580 disputes.

b The 197 cases of recourse to the law relate to 190 disputes.

c There were but 144 disputes settled by committees of conciliation, 3 of them being counted twice because 2 committees were formed in each of these 3 cases.

d Figures here apparently should be 153; those given are, however, according to the original.

The above summary shows that of 190 disputes considered in 1899 59 were settled directly or indirectly through the application of the law of 1892, and in the case of 131 the recourse to the law proved fruitless. Of the 59 disputes thus settled 21 were favorable to the demands of the employees, 34 resulted in a compromise, and 4 were unfavorable to the employees. In the 131 disputes which continued after the failure of attempts at conciliation and arbitration the employees succeeded in 15, succeeded partly in 77, and failed in 39.

GERMANY.

Streiks und Aussperrungen im Jahre 1899. Bearbeitet im Kaiserlichen Statistischen Amt. xxviii, 171 pp.

This is the first annual publication on strikes and lockouts issued by the German imperial statistical bureau. The information contained in this report for 1899 had previously been published quarterly in summary form in the Vierteljahrshefte zur Statistik des Deutschen Reichs. A strike for the purposes of this report is defined as "any combined cessation of labor on the part of two or more industrial employees undertaken for the purpose of enforcing certain demands upon an employer." While this definition does not cover all sympathetic strikes, the latter are nevertheless included in the report. A lockout is defined as "any combined shutting out of two or more employees by an employer for the purpose of enforcing certain demands made

upon the employees." The report is intended to cover all strikes and lockouts occurring during the year 1899 in the handicraft trades, factories, mines, hotels, restaurants, etc., and in transportation and commercial occupations in the German Empire.

The information is obtained by the local police authorities, who are required to make a report after each strike or lockout, on blank schedules furnished by the imperial statistical bureau. In this bureau the files of newspapers and trade journals are also consulted in order to catch any disputes that might escape the notice of the local police authorities.

The report contains an analysis and summaries of the strikes and lockouts, copies of the schedules of inquiry, and tables showing in detail, by locality and industry for each dispute, the duration, establishments affected, total number of employees, strikers, and others thrown out of employment, causes, results, manner of settlement, etc.

STRIKES.—There were 1,336 strikes reported in 1899, of which 48 continued after the close of the year and are not, therefore, considered in the tabulations. The remaining 1,288 strikes which ended in 1899 affected 7,121 establishments. The strikes in the case of 5,478 of these affected the entire establishment, while in the case of 1,643 only certain branches or occupations were affected. Operations were completely suspended in 1,316 of the former and in 574 of the latter.

There were 99,338 strikers and 10,122 others thrown out of employment on account of strikes, making a total of 109,460 employees affected. The following table shows, by industries, the number of strikes ending in 1899, the establishments and employees affected, and the results of the strikes:

STATISTICS OF STRIKES, BY INDUSTRIES, 1899.

Industries.	Strikes ending in 1899.	Estab-lish-ments.	Strik-ers. (a)	Others thrown out of em-ploy-ment. (a)	Strikes which—		
					Suc-ceed-ed.	Suc-ceed-ed part-ly.	Fail-ed.
Gardening, florist, and nursery trades	1	1	4	.....	.....	.....	1
Mining, smelting, salt, and peat extraction.....	30	52	10,027	442	3	13	14
Stonework and earthenware.....	105	237	5,919	224	23	37	45
Metal work.....	140	699	9,609	246	29	44	67
Machinery, tools, and instruments.....	45	116	3,736	563	7	18	20
Chemicals	4	4	307	.....	.....	2	2
Forestry products, lighting materials, and var-nishes	4	5	103	30	2	.....	2
Textiles	104	169	11,088	2,156	22	49	33
Paper.....	9	17	224	1	1	.....	7
Leather.....	39	91	1,489	55	11	13	15
Woodenware and carved goods	154	1,228	8,541	210	50	50	54
Food products	53	501	3,040	176	8	16	29
Clothing and cleaning	64	671	4,946	212	26	21	17
Building trades	471	3,129	36,554	5,660	128	157	186
Printing and publishing	13	18	434	.....	3	.....	10
Painting, sculpture, decoration, and artistic work	2	9	78	.....	.....	.....	2
Commercial employment	16	86	1,353	.....	2	5	9
Transportation	31	85	1,861	147	16	2	13
Hotels, restaurants, etc.....	3	3	25	.....	.....	1	2
Total	1,288	7,121	99,338	10,122	331	429	528

a Maximum number at any time during the strike.

Of the 19 industries above enumerated, that of building trades had the largest number of strikes, strikers, and establishments affected, being over one-third of the entire number in each case. Next in importance with regard to the persons affected were the textiles and the group of mining, smelting, etc. Over one-half of the strikers and others affected on account of strikes were engaged in these three groups of industries.

In presenting strikes by causes the cause and not the strike is made the unit, and the figures, therefore, show the number of times that each cause figured as an incentive to a strike, regardless of the actual number of strikes. Thus in 1899 there were 1,288 strikes, while 2,101 causes are enumerated. The following table shows the causes of strikes, by industries:

CAUSES OF STRIKES, BY INDUSTRIES, 1899.

Industries.	Wage disputes.			Disputes relating to working time.			Other disputes.				Total
	Against reduction of wages.	For increase of wages.	Other.	For reduction of hours.	Against working over-time.	Other.	For change in method of wage payments.	For discharge of foremen, superintendents, etc.	For reinstatement of employees.	Miscellaneous.	
Gardening, florist, and nursery trades.....		1							1		2
Mining, smelting, salt, and peat extraction.	1	25	3	2	1	1	1		5	7	46
Stonework and earthenware.....	5	54	21	12			13	1	7	32	145
Metal work.....	13	61	25	38	2	9	8	10	18	63	247
Machinery, tools, and instruments.....		24	10	15	2	2		4	10	19	86
Chemicals.....	1	3									4
Forestry products, lighting materials, and varnishes.....		3		1							4
Textiles.....	7	64	29	22	3	12	1	5	17	25	185
Paper.....		4	3	2		1			2	5	17
Leather.....	3	26	4	8		2			7	5	56
Woodenware and carved goods.....	11	92	25	46	5	10	7	3	15	43	257
Food products.....	4	40	10	6		4	1	2	9	9	85
Clothing and cleaning.	10	30	12	6	1	3		2	9	16	89
Building trades.....	11	351	83	107	7	34	33	4	44	109	783
Printing and publishing.....		3	2	2				2	5	4	18
Painting, sculpture, decoration, and artistic work.....				1	1					1	4
Commercial employment.....	1	12	5	3	1					1	23
Transportation.....		26	6	4		3			2	5	46
Hotels, restaurants, etc.		1	1						1	1	4
Total.....	67	820	239	275	23	81	64	34	153	345	2,101

The most frequent causes of strikes in 1899 were those due to wage disputes; next in importance were demands relating to working time, for the reinstatement of employees, for changes in the methods of wage payments, and for the discharge of foremen, superintendents, etc. Of the demands relating to wages, 23 per cent were successful,

44.2 per cent were partly successful, and 32.8 per cent were unsuccessful. Demands relating to working time and changes in methods of wage payments were likewise mostly successful or partly successful, while demands for the reinstatement of employees were usually unsuccessful. The following table shows the results of strikes by causes:

RESULTS OF STRIKES, BY CAUSES, 1899.

Causes.	Succeeded.	Succeeded partly.	Failed.	Total.
Against a reduction of wages.....	24	18	25	67
For increase of wages.....	193	346	281	820
Other wage disputes.....	42	134	63	239
For reduction of hours.....	61	133	81	275
Against working overtime.....	3	13	7	23
Other disputes concerning working time.....	12	42	27	81
For change in method of wage payments.....	3	38	23	64
For discharge of foremen, superintendents, etc.....	7	10	17	34
For reinstatement of employees.....	29	26	98	153
Other causes.....	66	129	150	345
Total.....	440	889	772	2,101

The strikers in 1899 were mostly engaged in a few large strikes, over one-half of their number having participated in 96 strikes involving over 200 persons each. Strikes involving 10 persons or less usually failed, while the larger strikes were, mostly, either successful or partly successful, particularly those involving over 500 persons each, only one-fourth of which were failures. In the following table the strike data are grouped according to the number of strikers involved:

STATISTICS OF STRIKES, BY NUMBER OF STRIKERS INVOLVED, 1899.

Strikers involved.	Strikes ending in 1899.	Estab-lish-ments.	Strikers. (a)	Others thrown out of employ-ment. (a)	Strikes which—		
					Suc-ceeded.	Suc-ceeded partly.	Failed.
2 to 5.....	78	88	309	40	18	13	47
6 to 10.....	177	206	1,447	280	48	21	108
11 to 20.....	262	380	4,084	415	78	55	129
21 to 30.....	214	431	5,444	564	62	73	79
31 to 50.....	189	588	7,700	731	49	86	54
51 to 100.....	170	762	12,329	1,286	42	79	49
101 to 200.....	102	804	14,157	1,972	20	48	34
201 to 500.....	60	1,369	18,707	883	9	32	19
501 or over.....	36	2,493	35,161	3,951	5	22	9
Total.....	1,288	7,121	99,338	10,122	331	429	528

a Maximum number at any time during the strike.

The strikes were mostly of short duration, 763 out of a total of 1,288 lasting 10 days or less each, 288 lasting from 11 to 30 days, and 237

lasting over 30 days. In the following table the strike data are grouped according to the duration of the strikes:

STATISTICS OF STRIKES, BY DURATION, 1899.

Days of duration.	Strikes ending in 1899.	Establishments.	Strikers. (a)	Others thrown out of employment. (a)	Strikes which—		
					Succeeded.	Succeeded partly.	Failed.
Less than 1 day	133	151	3,434	562	34	20	79
1 to 5	439	957	23,573	2,491	141	111	187
6 to 10	191	603	11,387	728	59	69	63
11 to 20	182	1,268	14,427	3,232	44	72	66
21 to 30	106	1,912	15,484	631	22	49	35
31 to 50	105	1,027	11,031	469	20	44	41
51 to 100	94	922	13,488	771	8	46	40
101 or over.....	38	281	6,514	1,238	3	18	17
Total	1,288	7,121	99,388	10,122	331	429	528

a Maximum number at any time during the strike.

Of the 1,288 strikes, 1,019 are classed as offensive strikes and 269 as defensive strikes; 931 were individual and 357 were collective strikes; 744 strikes were either ordered or aided by trade organizations.

LOCKOUTS.—There were 23 lockouts affecting 427 establishments and 5,298 employees. The demands of employers related to wages in 22 cases, to working time in 10 cases, and to others matters in 12 cases, some lockouts being due to two or more demands. The lockouts were successful in 6 cases, partly successful in 9 cases, and unsuccessful in 8 cases.

GREAT BRITAIN.

Report by the Chief Labor Correspondent on the Strikes and Lockouts of 1899, with Statistical Tables. 1900. xciv, 124 pp. (Published by the Labor Department of the British Board of Trade).

The present report on strikes and lockouts in the United Kingdom is the twelfth issued since the commencement of the series in 1888. The report contains a detailed statement showing for each dispute beginning in 1899 the locality, the number of establishments, the number and occupations of working people affected, the cause or object of the dispute, the date of beginning and ending, and the result. It also contains summary tables, comparative data for recent years, an analysis of the statistics of strikes and lockouts, statistics of conciliation and arbitration, the text of certain agreements terminating trade disputes, and specimen schedules of inquiry. The general method of inquiry pursued and the plan of presentation have been the same as during the past few years.

STRIKES AND LOCKOUTS IN 1899.—The most noticeable feature of the data for 1899 is the great decrease in the importance of the disputes. While the number of separate strikes and lockouts was greater than in

1898, the figures for 1899 are in all other respects^s the lowest of any of the six years for which statistics for comparison are available. There were, in 1899, 719 strikes and lockouts, affecting 138,058 persons directly and 42,159 persons indirectly, and causing an aggregate loss of 2,516,416 working days.

The disputes in 1899, as in previous years, were mostly due to wages, 460 out of a total of 719 strikes and lockouts resulting chiefly from this cause. Of the total of 138,058 persons directly engaged in disputes from all causes, 94,651, or 68.6 per cent, were involved in wage disputes; 17,895, or 13.0 per cent, in disputes relating to working arrangements, rules, and discipline; 8,187, or 5.9 per cent, in disputes due to the employment of particular classes of persons; 5,130, or 3.7 per cent, in disputes due to questions of trade unionism; 3,857, or 2.8 per cent, in disputes due to hours of labor; and 8,338, or 6.0 per cent, in disputes due to other causes.

The following table shows the number of strikes and lockouts and the number of persons directly involved in 1899, classified according to the principal causes and the results obtained:

STRIKES AND LOCKOUTS, BY CAUSES AND RESULTS, AND WORKING DAYS LOST, 1899.

Principal cause or object.	Strikes and lockouts the results of which were—				Total strikes and lockouts.	Aggregate working days lost by all persons affected. (a)
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.		
Wages.....	153	127	173	5	460	1, 678, 011
Hours of labor.....	4	7	6	.....	17	32, 014
Employment of particular classes of persons.....	29	56	16	1	102	164, 128
Working arrangements, rules, and discipline.....	25	22	21	.....	68	433, 670
Trade unionism.....	12	26	6	2	46	101, 061
Sympathetic disputes.....	6	6	12	.....	24	106, 597
Miscellaneous.....	1	1	.....	.....	2	935
Total.....	230	245	236	8	719	2, 516, 416

a For strikes and lockouts ending in 1899, including those that may have begun in 1898. Persons affected means all persons thrown out of work.

STRIKERS AND PERSONS LOCKED OUT, BY CAUSES AND RESULTS, 1899.

Principal cause or object.	Strikers and persons locked out in disputes the results of which were—				Total strikers and persons locked out.
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.	
Wages.....	22, 668	45, 643	25, 716	624	94, 651
Hours of labor.....	410	1, 860	1, 587	.....	3, 857
Employment of particular classes of persons.....	1, 913	4, 629	1, 595	50	8, 187
Working arrangements, rules, and discipline.....	8, 330	1, 732	7, 833	.....	17, 895
Trade unionism.....	1, 166	2, 765	1, 135	64	5, 130
Sympathetic disputes.....	2, 246	3, 616	2, 371	.....	8, 233
Miscellaneous.....	75	30	.....	.....	105
Total.....	36, 808	60, 275	40, 237	738	138, 058

Of the 719 disputes, 230 were in favor of the employees, 245 were in favor of employers, 236 were compromised, and 8 were indefinite or remained unsettled. Of the persons directly involved, 36,808, or 26.7 per cent, were engaged in disputes settled in favor of employees, 60,275, or 43.7 per cent, in disputes settled in favor of employers, and 40,237, or 29.1 per cent, in disputes that were compromised. The remaining employees were engaged in disputes which were indefinite or unsettled at the close of the year. Persons involved in disputes due to the employment of particular classes of persons and to questions of trade unionism were mostly unsuccessful, while a majority of those engaged in disputes for other causes were either wholly or partly successful.

In 1899, as in previous years, the great majority of disputes affected comparatively few working people. This is shown in the following table:

STRIKES AND LOCKOUTS, BY GROUPS OF PERSONS AFFECTED, 1899.

[Persons affected means all persons thrown out of work.]

Groups of persons affected.	Strikes and lock-outs.	Persons affected.		Groups of persons affected.	Strikes and lock-outs.	Persons affected.	
		Number.	Per cent.			Number.	Per cent.
5,000 and upward	2	41,500	23.0	100 and under 250.....	159	24,724	13.7
2,500 and under 5,000.....	5	16,013	8.9	50 and under 100.....	134	9,031	5.0
1,000 and under 2,500.....	23	30,403	16.9	25 and under 50.....	127	4,451	2.5
500 and under 1,000.....	41	26,567	14.7	Under 25 (a).....	155	2,464	1.4
250 and under 500.....	73	25,064	13.9	Total.....	719	180,217	100.0

a Disputes involving less than 10 persons, and those which lasted less than 1 day, have been omitted, except when the aggregate duration exceeded 100 working days.

Thus 416 disputes, or 58 per cent of the total number, involved only 15,946, or 9 per cent of the working people. On the other hand, 2 disputes alone involved 41,500, or 23 per cent, of the total employees affected.

The disputes were mostly of short duration, more than half of them having been settled in less than two weeks. This is shown in the following table, in which the disputes are grouped according to the total number of weeks of duration:

STRIKES AND LOCKOUTS AND PERSONS AFFECTED, BY DURATION OF DISPUTES, 1899.

[Persons affected means all persons thrown out of work.]

Weeks of duration.	Strikes and lock-outs.	Persons affected.	Weeks of duration.	Strikes and lock-outs.	Persons affected.
Less than 1.....	284	69,993	10 and under 15.....	39	9,302
1 and under 2.....	136	29,893	15 and under 20.....	9	724
2 and under 4.....	108	46,180	20 and under 25.....	7	2,870
4 and under 6.....	64	8,451	25 and over.....	23	5,028
6 and under 8.....	29	5,428	Total.....	719	180,217
8 and under 10.....	20	2,348			

The following tables show the extent to which each of the various groups of industries were involved in the strikes and lockouts in 1899, and the results of the disputes in each case:

STRIKES AND LOCKOUTS, BY INDUSTRIES AND RESULTS, AND WORKING DAYS LOST, 1899.

Industries.	Strikes and lockouts the results of which were—				Total strikes and lockouts.	Aggregate working days lost by all persons affected. (a)
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.		
Building trades	64	37	76	3	180	554,207
Mining and quarrying	35	36	36	2	109	504,428
Metal, engineering, and shipbuilding	38	58	42	2	140	420,660
Textile	40	48	36	.....	124	552,485
Clothing	16	12	9	.....	37	42,154
Transportation	10	21	16	.....	47	62,450
Miscellaneous	25	27	18	1	71	78,245
Employees of local authorities	2	6	3	.....	11	6,787
Total	230	245	236	8	719	2,516,416

a For strikes and lockouts ending in 1899, including those that may have begun in 1898.

STRIKERS AND PERSONS LOCKED OUT, BY INDUSTRIES AND RESULTS, 1899.

Industries.	Strikers and persons locked out in disputes the results of which were—				Total strikers and persons locked out.
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.	
Building trades	11,015	1,806	13,875	84	26,780
Mining and quarrying	11,539	7,513	7,872	96	27,020
Metal, engineering, and shipbuilding	4,662	4,444	4,791	530	14,427
Textile	6,505	39,230	6,087	.....	51,822
Clothing	516	423	515	.....	1,454
Transportation	1,478	4,248	5,809	.....	11,735
Miscellaneous	860	1,632	1,149	28	3,669
Employees of local authorities	33	979	139	.....	1,151
Total	36,808	60,275	40,237	738	138,058

The group of building trades in the above tables shows the largest number of disputes and of aggregate working-days lost, although the largest number of persons directly engaged in strikes and lockouts is found in the group of textiles, namely, 51,822, or 37.5 per cent of the entire number. This is due to a strike of 35,000 employees in the jute industry. The largest measure of success on the part of employees was attained in the mining and quarrying industry and in the building trades, 42.71 per cent of the employees in the former, and 41.13 per cent of the employees in the latter, having been entirely successful. In the case of employees of public authorities, 85.06 per cent failed completely.

STRIKES AND LOCKOUTS DURING SIX YEARS.—During the period from 1894 to 1899 there was a yearly average of 816 strikes and lockouts in which an average of 186,464 employees were directly involved. The figures for 1899 are much below these yearly averages.

The following table gives the strike statistics for each year from 1894 to 1899, inclusive:

STATISTICS OF STRIKES AND LOCKOUTS, 1894 TO 1899.

[Persons affected means all persons thrown out of work.]

Year.	Strikes and lockouts.	Persons affected.			Aggregate working days lost by all persons affected. (a)
		Strikers and persons locked out.	Others thrown out of employment.	Total.	
1894.....	929	257,314	67,934	325,248	9,529,010
1895.....	745	207,239	55,834	263,123	5,724,670
1896.....	926	147,950	50,240	198,190	3,746,368
1897.....	864	167,453	62,814	230,267	10,345,523
1898.....	711	200,769	53,138	253,907	15,289,478
1899.....	719	138,058	42,159	180,217	2,516,416

a For strikes and lockouts ending in each year shown, including those that may have begun in the year preceding.

The industry group of mining and quarrying supplied the largest proportion of persons affected each year, except 1897 and 1899. In 1897 the great engineering dispute and in 1899 the dispute in the jute industry caused their respective groups to overshadow that of mining and quarrying. Next in importance with regard to the number of persons involved in disputes during the six-year period were the textile and the metal, engineering, and shipbuilding industries.

The two following tables show the number of strikes and lockouts and persons affected during each year from 1894 to 1899, by industries:

STRIKES AND LOCKOUTS, BY INDUSTRIES, 1894 TO 1899.

Industries.	1894.	1895.	1896.	1897.	1898.	1899.
Building.....	162	146	171	193	183	180
Mining and quarrying.....	232	187	171	127	129	109
Metal, engineering, and shipbuilding.....	161	160	266	229	152	140
Textile.....	178	124	153	103	99	124
Clothing.....	65	39	48	56	58	37
Transportation.....	48	27	25	48	22	47
Miscellaneous.....	78	61	87	95	67	71
Employees of local authorities.....	5	1	5	8	6	11
Total.....	929	745	926	864	711	719

PERSONS AFFECTED BY STRIKES AND LOCKOUTS, BY INDUSTRIES, 1894 TO 1899.

[Persons affected means all persons thrown out of work.]

Industries.	1894.	1895.	1896.	1897.	1898.	1899.
Building.....	13,632	9,438	33,312	15,047	16,684	30,524
Mining and quarrying.....	218,087	83,957	67,197	49,392	177,029	46,831
Metal, engineering, and shipbuilding.....	28,040	46,328	48,137	97,189	21,432	21,119
Textile.....	40,004	64,129	33,656	37,001	24,978	61,499
Clothing.....	5,609	50,040	3,969	7,016	3,561	2,258
Transportation.....	11,507	4,256	3,312	12,523	3,473	12,611
Miscellaneous.....	7,808	4,961	8,070	11,734	6,261	4,212
Employees of local authorities.....	561	14	537	365	484	1,163
Total.....	325,248	263,123	198,190	230,267	253,907	180,217

The following two tables show the principal causes of strikes and lockouts, and the number of disputes and persons directly involved in each cause from 1896 to 1899:

STRIKES AND LOCKOUTS, BY PRINCIPAL CAUSES, 1896 TO 1899.

Year	Wages.	Hours of labor.	Employment of particular classes of persons.	Working arrangements, rules, and discipline.	Trade unionism.	Sympathetic disputes.	Other causes.	Total.
1896.....	579	22	144	96	64	16	5	926
1897.....	532	20	121	119	49	20	3	864
1898.....	449	19	87	94	51	8	3	711
1899.....	460	17	102	68	46	24	2	719

STRIKERS AND PERSONS LOCKED OUT, BY PRINCIPAL CAUSES, 1896 TO 1899.

Year.	Wages.	Hours of labor.	Employment of particular classes of persons.	Working arrangements, rules, and discipline.	Trade unionism.	Sympathetic disputes.	Other causes.	Total.
1896.....	95,975	2,355	22,745	17,533	5,279	3,864	199	147,950
1897.....	73,906	39,227	14,840	29,068	6,327	3,796	289	167,453
1898.....	176,392	777	9,203	11,742	2,215	345	95	200,769
1899.....	94,651	3,857	8,187	17,895	5,130	8,233	105	135,058

By far the greater number of disputes during this period were due to wages. Next in importance were disputes relating, respectively, to working arrangements, rules, and discipline, the employment of particular classes of persons, and hours of labor.

The following tables show the number of disputes and persons directly involved each year from 1896 to 1899, classified according to results:

STRIKES AND LOCKOUTS, BY RESULTS, 1896 TO 1899.

Year.	Strikes and lockouts, the results of which were—				Total strikes and lockouts.
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.	
1896.....	378	302	243	3	926
1897.....	351	307	215	11	864
1898.....	238	227	243	3	711
1899.....	230	245	236	8	719

STRIKERS AND PERSONS LOCKED OUT, BY RESULTS, 1896 TO 1899.

Year.	Strikers and persons locked out in disputes, the results of which were—				Total strikers and persons locked out.
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.	
1896.....	64,355	41,431	41,905	259	147,950
1897.....	40,464	68,159	56,897	1,933	167,453
1898.....	45,490	120,667	34,501	111	200,769
1899.....	36,808	60,275	40,237	738	138,058

Nearly one-half of the persons directly involved in strikes and lock-outs during this period failed completely, and only a little over one-fourth were entirely successful. The rest were involved in disputes which were compromised, or which remained unsettled or indefinite.

In the following table the disputes beginning in 1896, 1897, 1898, and 1899 are classified according to the various methods of settlement:

STRIKES AND LOCKOUTS BEGINNING IN 1896, 1897, 1898, AND 1899, BY METHOD OF SETTLEMENT.

[Persons affected means all persons thrown out of work.]

Method of settlement.	1896.		1897.		1898.		1899.	
	Strikes and lock-outs.	Persons affected.	Strikes and lock-outs.	Persons affected.	Strikes and lock-outs.	Persons affected.	Strikes and lock-outs.	Persons affected.
Arbitration.....	19	10,276	14	9,756	13	3,350	16	3,319
Conciliation and mediation.....	30	10,472	27	9,544	30	16,167	22	8,386
Direct negotiation or arrangement between the parties.....	633	136,307	624	187,048	495	206,926	562	156,743
Submission of working people.....	114	30,587	76	15,207	71	17,590	22	7,054
Replacement of working people.....	107	7,250	105	4,307	96	9,616	88	3,980
Closing of works.....	19	3,159	7	1,673	.....	.....	3	95
Indefinite or unsettled.....	4	139	11	2,732	6	258	6	640
Total.....	926	198,190	864	230,267	711	253,907	719	180,217

The method most generally adopted for settling disputes in 1899, as in the three previous years, was by direct negotiation of the parties concerned, or their agents, and there appears to have been an increasing tendency in the proportion of persons affected by strikes and lock-outs settled in this manner. During 1899, 562 disputes, affecting 156,743 persons, were arranged by direct negotiation; 38 disputes, affecting 11,705 persons, were settled by mediation, conciliation, and arbitration; 22 disputes, affecting 7,054 persons, were settled by the submission of the employees; and in 88 disputes, affecting 3,980 persons, the employees directly involved were replaced by others.

DECISIONS OF COURTS AFFECTING LABOR.

[This subject, begun in Bulletin No. 2, has been continued in successive issues. All material parts of the decisions are reproduced in the words of the courts, indicated when short by quotation marks and when long by being printed solid. In order to save space, immaterial matter, needed simply by way of explanation, is given in the words of the editorial reviser.]

DECISIONS UNDER STATUTORY LAW.

CONSTITUTIONALITY OF STATUTE—AIDING SEAMEN TO DESERT—*Handel v. Chaplin*, 36 *Southeastern Reporter*, page 979.—In an inferior court of the State of Georgia, one Edward Handel was convicted of a violation of section 655 of the penal code of said State. He was sentenced to confinement in the county chain gang and made application to the superior court of Chatham County for a writ of habeas corpus. His application was refused, and he then carried his case, upon a writ of error, before the supreme court of Georgia, which rendered its decision August 7, 1900, and affirmed the action of the superior court.

Section 655, above referred to, reads as follows:

If any person shall aid an articed seaman or apprentice to desert from or leave his vessel while in the waters of this State, or shall inveigle, entice, convey away, abduct, or carry, with or without violence, or secretly carry off an articed seaman or apprentice from any such vessel, or shall board such vessel with intent to do so, he shall be punished as for a misdemeanor.

The record of the case shows that Handel was convicted of a violation of the above statute in that he aided one John Bendecksen to desert from his ship, a Norwegian bark, while it was in the waters of the State of Georgia. It also shows that in his application for a writ of habeas corpus Handel claimed that section 655 was void and unconstitutional for the following reasons:

(a) The power to legislate upon the subject-matter of said section was and is the exclusive right of Congress, and taken completely from State legislatures. (b) That by reason of the nature of the subject-matter legislated upon in said section 655, and the questions and interests involved in said law, the power to legislate thereon resides with, and should be exercised exclusively by, Congress. (c) Congress had full power to legislate upon the subject-matter involved in said section 655, and to pass laws to prevent the evil consequences of the acts in said section aimed at by the legislature of this State, and in pursuance of such rightful power Congress has passed a full and complete body of laws, and said laws are now still in force; and therefore said section

655 is void and unconstitutional, and especially so in that said section 655 is in many and material respects at variance with and in repugnance to the aforementioned laws of the United States. (d) Said section 655 is void by reason of its repugnance to the laws of the United States. (e) Said section 655 is void by reason of section 2, Article VI, of the Constitution of the United States, and paragraphs 1, 2 and 3 of section 1, article 12, of the constitution of the State of Georgia.

Section 2 of Article VI of the Constitution of the United States, above referred to, reads as follows:

This Constitution, and the laws of the United States which shall be made in pursuance thereof, and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every State shall be bound thereby, anything in the constitution or laws of any State to the contrary notwithstanding.

Paragraphs 1, 2, and 3 of section 1 of article 12 of the constitution of Georgia, also referred to above, are as follows:

Paragraph 1. The laws of general operation in this State are—First, as the supreme law: The Constitution of the United States, the laws of the United States in pursuance thereof, and all treaties made under the authority of the United States.

Par. 2. Second, as next in authority thereto: This constitution.

Par. 3. Third, in subordination to the foregoing: All laws now of force in this State, not inconsistent with this constitution, and the ordinances of this convention, * * *

The record also shows that, in refusing to issue the writ of habeas corpus applied for, Judge Falligant, the justice of the superior court, used the following language:

The petitioner was convicted and sentenced by the city court of Savannah, under section 655 of the penal code of 1895, for aiding one John Bendecksen, a seaman, to desert from the bark *D. H. Morris*. It is admitted that the bark was a foreign, Norwegian, bark, and that there is no law of the United States covering the precise case, and that the section of the criminal code does not conflict with any statute of the United States, nor interfere directly or indirectly with foreign or interstate commerce. It is claimed, however, that the United States having exclusive jurisdiction, and having legislated with reference to American seamen and ships, the silence of Congress upon the subject of foreign ships and seamen amounts to the exclusion of State action; and the section is therefore claimed to be unconstitutional, for the reasons stated in the petition, and the conviction and sentence void and of no effect.

Regarding this State statute as a purely local law, under the police power, affecting persons within this jurisdiction, and not in conflict with any law or jurisdiction of the United States, interfering in no respect with foreign or interstate commerce, or with any jurisdiction of the laws of the United States, but, rather, promotive of both, it is held that section 655 is a valid, constitutional law; and, petitioner having been lawfully convicted under said law, his application for release is refused, and he is hereby remanded back into custody, that the sentence of the city court of Savannah may be carried out.

The record of this case does not give the opinion of the supreme court, delivered when it affirmed the action of the superior court, but the syllabus of the same, prepared by the supreme court, is shown, and is in the following language:

Congress not having legislated upon the subject of the offense of aiding articed seamen or apprentices to desert or leave a foreign vessel while in the waters of this State, the legislature of the State had the right and power to enact section 655 of the penal code, making it a misdemeanor for any person to aid or induce an articed seaman or apprentice to desert from or leave his vessel while in the waters of this State. The act in no way attempts to regulate or interfere with commerce, but is an aid thereto. Where the subject is local, and not national, in its nature, and does not require a uniform system of regulation, then, in the absence of legislation on it by Congress, it may be regulated by the State.

CONSTITUTIONALITY OF STATUTE—PAYMENT OF WAGES—*Commonwealth v. Hillside Coal Co.*, 58 *Southwestern Reporter*, page 441.—An indictment against the above-named company for failing to pay an employee in lawful money was dismissed in the circuit court of Muhlenberg County, Ky., and the Commonwealth appealed the case to the court of appeals of the State.

Said court rendered its decision September 27, 1900, and reversed the decision of the lower court, and its opinion, delivered by Chief Justice Hazelrigg, fully sets forth the facts in the case. It reads as follows:

The appellee is engaged in the mining industry, employing more than 10 men, and although able financially to do so, failed to pay in lawful money an employee on the 16th of April, 1899, the wages due him for the preceding month. A demurrer to the indictment, which was found on April 26, 1899, and which charged substantially the foregoing facts, was sustained by the trial court; hence this appeal by the Commonwealth. Section 244 of the constitution provides that "all wage-earners in this State employed in factories, mines, workshops or by corporations shall be paid for their labor in lawful money." Section 1350 of the Kentucky statutes provides that one who violates the provisions of section 244 of the constitution shall be deemed guilty of a misdemeanor, and be punished by a fine of not exceeding \$500 for each violation. A still later statute (section 2739a, Ky. St.), it being the law under which the present indictment was found, provides as follows: "Sec. 2739a. (1) That all persons, associations, companies and corporations employing the service of ten or more persons in any mining work or mining industry in this Commonwealth, shall on or before the sixteenth day of each month, pay for the month previous, such servant or employees on his or their order in lawful money of the United States the full amount of wages due such servant or employees rendering such services. But if such person, corporation or company, after using due diligence, is unable to make said payment as above required, he or it shall within fifteen days thereafter make

out a pay-roll and statement of amount due each employee and also a duebill for said sum bearing interest from said sixteenth day of the month, and deliver same to each of said employees." A succeeding section makes it unlawful for one employing such servants or employees to coerce or require them to deal with, or purchase merchandise from, any person or company, or at any place or store, or to exclude laborers from work, for failing to deal with any person, or at any place or store, or to blacklist them for such failure, etc. A third section makes a violation of the preceding sections a misdemeanor, and fixed the punishment of the offender at a fine of not less than \$50, nor more than \$100.

A preliminary objection to the indictment by the appellant is that, as the operator has fifteen days after failing to pay within which to execute his duebill, no indictment can be found until after the expiration of this time. It will be seen, however, that one who is able to pay is given no such time. The averment of the pleading is that the appellee is amply able to pay the wages in question, and hence the indictment charges an offense under the terms of the law, and was not prematurely found.

In the second place, it is claimed that the statute is a special one, in that its operation is limited to those mine owners who work ten or more miners, and is therefore obnoxious to the constitutional provision prohibiting special legislation "regulating labor, trade, mining, or manufacturing." (Subsection 24, sec. 59, Const.) The constitution does so prohibit, but we do not regard this as special legislation, within the meaning of the law. In so far as the statute may discriminate in favor of wage-earners engaged in mining work or industry—a discrimination vigorously denounced in some jurisdictions and as vigorously upheld in others—the statute simply follows the lead of the organic law [the constitution] and can not, therefore, be said to be contrary to it. And, when we look to the purpose in view in the adoption of such legislation, we think the classification or apparent discrimination made in the statute is permissible, because it is natural and reasonable, and, moreover, entirely consistent with the end sought to be accomplished by the organic law. The abuse sought to be corrected was the imposition practiced on the miners by the operation of mines by forcing them, directly or indirectly, into dealing with the "company stores," where goods at exorbitant prices were paid for wages instead of money. This evil can hardly be practiced at small concerns, or where less than ten miners are employed. In effect, the lawmakers said there is in small concerns using less than ten men practically no such evil as the constitution seeks to suppress; therefore we ignore the small concerns, and apply the benefit of the constitutional provision to that portion of the class only which needs the benefit. The organic law makes the general classification in the first instance, and this fact cuts short all discussion of its constitutionality which might otherwise grow out of the special application to miners. The statute then erects a class within a class, and this is allowable if based on reasonable, natural, and consistent grounds. We think the indictment charges an offense under the law, and the demurrer ought to have been overruled. Judgment reversed for further proceedings.

EMPLOYERS' LIABILITY—CONSTRUCTION OF STATUTE—NEGLIGENCE OF THE EMPLOYER—*Stewart v. Ferguson*, 58 *Northeastern Reporter*, page 662.—An action was brought in an inferior court of the State of New York by Thomas C. Stewart, administrator, against John W. Ferguson to recover damages for alleged negligence causing the death of Andrew C. Stewart, the plaintiff's intestate. Said intestate was in the employ of the defendant, Ferguson, and while engaged in laying brick in the wall of a building which the defendant was erecting, the scaffold upon which he was standing, which the defendant had caused to be erected, fell and caused his death. He recovered a judgment as a result of the trial, which was affirmed by the supreme court of the State, appellate division, first department, upon appeal. From this decision the defendant appealed the case to the court of appeals of the State, which rendered its decision November 20, 1900, and affirmed the judgments of the lower courts.

The opinion of the court of appeals, delivered by Judge Landon, contains the following language:

There was evidence tending to show how the scaffold was constructed, but not tending to show any particular structural weakness. There was no evidence tending to prove the cause of the fall of the scaffold other than the fall itself. The trial court instructed the jury that the falling of the scaffold raised a presumption of the negligence of the defendant in its construction, and he refused to charge that the happening of the accident created no presumption of negligence on the part of the defendant. The charge was not excepted to, but the refusal was; but both charge and refusal may be considered, because the charge made the refusal more pointed and impressive. Before the passage of the labor law (chapter 415, Laws 1897) it had been held that the falling of a scaffold without any apparent cause was prima facie evidence of negligence on the part of the person bound to provide it.

At this point the opinion cites a number of cases, and then continues as follows:

These cases proceeded upon the theory that, if the scaffold had been properly constructed, in the absence of other ascertained cause of its fall, negligence in its construction or maintenance might be presumed. In *Butler v. Townsend*, 126 N. Y., 105; 26 N. E., 1017, the negligent act which caused the fall of the scaffold was ascertained, and the question in controversy was whether it was the negligence of the master or of his servants. The court held that the scaffold was not a place in which to perform labor, but an appliance for use in its performance, and therefore the master's duty was that which he owed his servants in respect of appliances, and not of places; and that his duty to his servants was performed in respect of the scaffold by furnishing proper materials for its construction, and competent workmen to construct it; and that he could commit the details of its construction to such servants; and that their negligence in the execution of these details resulting in an injury to a fellow servant was not the master's negligence. In *Kimmer v. Weber*, 151 N. Y., 417; 45 N. E., 860, a scaffold fell,

and the same rule was applied. Assuming the law to be as stated in the two classes of cases, the case before us falls within the class in which no other cause of the fall of the scaffold was ascertained except as inferred from the fall itself, and not within the class in which it was otherwise ascertained. But, if within the latter class, then we think sections 18 and 19 of the labor law enlarge the duty of the master or employer, and extend it to responsibility for the safety of the scaffold itself, and thus for the want of care in the details of its construction. These sections provide:

"Sec. 18. Scaffolding for use of employees. A person employing or directing another to perform labor of any kind in the erection, repairing, altering, or painting of a house, building or structure shall not furnish or erect, or cause to be furnished or erected for the performance of such labor, scaffolding, hoists, stays, ladders or other mechanical contrivances which are unsafe, unsuitable or improper, and which are not so constructed, placed and operated as to give proper protection to the life and limb of a person so employed or engaged.

"Sec. 19. All swinging and stationary scaffolding shall be so constructed as to bear four times the maximum weight required to be dependent therefrom or placed thereon, when in use," etc.

This section differs from section 1, c. 314, Laws 1885, in this respect: That section provides for the punishment of knowingly or negligently doing the acts mentioned in this section. This section omits the words "knowingly or negligently," and declares that the acts shall not be done. The plaintiff would have to prove either knowledge or actual negligence under the earlier act, and the defendant, no doubt, could invoke for his protection upon the charge of negligence the distinction between his negligence and that of his servants, as laid down in the case of *Butler v. Townsend*, supra. This probably explains why the earlier act was not noticed in *Butler v. Townsend*, *Kimmer v. Weber*, supra, and in the cases in the appellate division cited by the appellant. Section 18 is a positive prohibition laid upon the master without exception upon account of his ignorance or the carelessness of his servants. The evidence tended to show that this scaffold was not overloaded, but was bearing the weight usually required in the performance of the labor for which it was an appliance. Prima facie it was so constructed as to bear less than one-fourth the weight required by section 19. Its fall, in the absence of evidence of other producing cause, points to the omission of the duty enjoined by the statute upon the defendant to the plaintiff in its construction, and points to it with that reasonable certainty which usually tends to produce conviction in the mind in tracing events back to their causes. It is circumstantial evidence, and, if it does convince the jury, it justifies their verdict.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—FELLOW-SERVANTS—CONSTRUCTION OF STATUTE—*Missouri, Texas and Kansas Railway Co. v. Baker*, 58 *Southwestern Reporter*, page 964.—In the district court of Hill County, Tex., a hearing was had upon the suit of S. M. Baker against the above-named railway company for damages for injuries sustained by him while in its employ. He alleged that the injury

was caused by the negligence of a foreman of a switching crew, of which he himself was a member, while the crew was engaged in making up a train to be sent out on the road. The company put in a special plea, alleging, among other things, that if Baker's injuries were caused by the negligence of any of its employees that said employees, admittedly members of the same switching crew with the plaintiff, were his fellow-servants, for whose negligence the company was not liable. The plaintiff filed a demurrer to this plea, alleging that such a case as the plaintiff's was excepted from the operation of the fellow-servant rule of the common law by article 4760f of Sayles's Civil Statutes. The court sustained this demurrer and rendered a judgment in favor of the plaintiff, and the defendant company appealed the case to the court of civil appeals of the State, which rendered its decision October 13, 1900, and sustained the judgment of the district court.

The opinion of the court of appeals was delivered by Judge Templeton, and the following is quoted therefrom:

It is provided by article 4760f, Sayles's Civ. St., that railway companies shall be liable for all damages sustained by any servant thereof, while engaged in the work of operating the cars, locomotives, or trains of the corporation by reason of the negligence of any other servant. The appellant insists that this statute applies only to train crews. We think that the language of the statute is broad enough to include all of the employees of the company engaged in operating its locomotives and cars in the yards, as well as on the road, and to embrace those handling the locomotives and cars in making up trains to be sent out on the road. The cars and locomotives, while being propelled about the yards to be made into a train, are being operated as much as when they are being propelled along the road after they have been made into a train, and a switchman engaged in directing the movements of the cars and locomotives in the yards and in making couplings is as much engaged in operating the same as a brakeman or porter while doing similar work on a made-up train.

DECISIONS UNDER COMMON LAW.

BLACKLISTING—ACTION FOR DAMAGES—SUFFICIENCY OF DECLARATION—*McDonald v. Illinois Central Railroad Co.*, 58 *Northeastern Reporter*, page 463.—Action was brought against the above-named railroad company and others by William F. McDonald to recover damages for blacklisting. He alleged that he had been for five years in the employ of said company as a switchman and conductor; that on or about June 26, 1894, he voluntarily left the service of the company as one of a number of striking employees; that said company and the other defendant railroad companies entered into a conspiracy, agreement, and understanding with other railroad companies, having lines of railway running into the city of Chicago, to the effect that they would furnish, each to the other, information as to all their employees who had left their service during the strike which commenced on or

about June 26, 1894, and ended on or about August 6, 1894, commonly known as the "A. R. U." or "American Railway Union" strike, and as to all their employees who were members of the A. R. U., and that such employees of any and all said companies would not be employed by any of said companies without a release and consent from the railway company by which any such employee was last employed, such release and consent being commonly called by railroad men a "clearance," and that on account of said conspiracy, etc., he was prevented from obtaining employment. In the trial court, an inferior court in the State of Illinois, the defendants entered a demurrer to the plaintiff's declaration, which was sustained by the court and a judgment in favor of the defendants was rendered. The plaintiff appealed to the appellate court for the first district of the State and said court affirmed the judgment of the lower court. He then carried the case upon a writ of error to the supreme court of the State, which rendered its decision October 19, 1900, and affirmed the judgment of the appellate court.

The opinion of the supreme court was delivered by Chief Justice Boggs, who used the following language therein:

Counsel for plaintiff in error [McDonald], in support of his insistence that the circuit court erred in holding the declaration did not state a cause of action, says: "The question presented by the declaration and demurrer (when shorn of legal phraseology) is simply this: Is it lawful for all the employers in any line of industry to combine and agree that they will not hire any of each other's employees who have left the service of any one of them, unless the employer whose service he has left gives his consent that such employee may be employed? Or, to put it in another form: Is it lawful for all the employers in any line of industry to combine and conspire together to punish a man who leaves their service during a strike by refusing him employment, and thus preventing him from securing employment at his trade, unless his former master emancipates him by giving his consent to his employment?"

We do not think the question in either of its forms was presented to the trial judge by the pleadings. The allegation of the declaration is: "Said defendant railroad companies [defendants in error and other railroad corporations named therein] entered into a conspiracy, agreement, and understanding that they, the said railroad companies, would furnish each to the other information as to all their employees who had committed offenses, or who were charged with having committed offenses, and also as to all their employees who had left their service during the strike which commenced on or about June 26, 1894, and ended on or about August 6, 1894, commonly known as the 'A. R. U.' or 'American Railway Union' strike, and as to all their employees who were members of the A. R. U., or American Railway Union, and that such employees of any and all said companies would not be employed by any of said companies without a release and consent from the railway company by which any such employee was last employed, such release and consent being commonly called by railroad men a 'clearance.'" The meaning of the averment is equivocal. Counsel for plaintiff in

error, ignoring a portion of the language, construes the declaration to charge that said defendant corporations agreed that former employees of either company should be required to have an instrument expressing the consent of the former employer to the subsequent employment by another company. That portion of the averment, alone considered, would as well bear the other construction: that the agreement was that such employee should show he had been released from his former employment or had quit with the consent of his employer. But the averment in its entirety is to be resorted to to ascertain the true meaning of the instrument denominated a "release and consent," and, if two or more meanings present themselves, that which is most unfavorable to the pleader is to be adopted. (4 Enc. Pl. & Prac., 759.) The pleader, in obedience, as we must assume, to his duty to state issuable facts, distinctly and definitely declares the "release and consent" referred to to be that which is commonly known as, and called among railroad employees, a "clearance." The trial court then properly held the averment of the declaration to mean that the "release and consent" instrument referred to in the declaration was the ordinary clearance or clearance card in common use among railroad corporations and their employees.

Under every rule of construction of pleadings, there is no issuable averment that the companies defendant agreed the consent of either should be essential to the employment by the other of such companies of a discharged employee, but only that an employee who had voluntarily quit the employ of either of the companies during the strike should not be employed by the other unless he could produce the "clearance" or "clearance card" in common use among railroad circles, and commonly called by railroad men a "clearance." The declaration, by its own language, explains that the instrument of "release or consent" referred to by the pleader is simply that known and commonly called a "clearance" among railroad men. It is not averred the defendant companies (defendants in error here), or any of the corporations named in the declaration, agreed or had an understanding that employees who had joined in the strike mentioned in the declaration should not be granted "clearance cards." On the contrary, the inference deducible from all that is said on the point in the declaration is that the railroad companies continued to grant clearances after the strike as before, and that plaintiff in error applied to defendant in error, the Illinois Central Railroad Company, for a "clearance card." The declaration does not charge said defendant company refused to grant him a "clearance card" or a "clearance" setting forth truthfully all facts proper to be stated in a "clearance card," but the language of the declaration is that said company refused to give him such an instrument as would "enable him to obtain employment in the railroad business."

In what respect the release and consent or clearance which it is plainly inferred the company was willing to give the plaintiff was insufficient to enable him to obtain employment from other railroad corporations is not disclosed. The declaration does not charge that the Illinois Central Railroad Company refused to state fully and fairly all facts proper to be inserted in such an instrument, or that it inserted or desired to insert in the clearance any statement that was false or injurious to him, or that had no proper place in his clearance paper. The company was not required to give him a clearance that would enable him to get

employment from other companies operating railroads. As we said in the Jenkins case [174 Ill., 398]: "Such a card is in no sense a letter of recommendation, and in many cases might, and probably would, be of a form and character which the holder would hesitate and decline to present to any person to whom he was making application for employment." Whether the charge included in the question formulated by the counsel for the plaintiff in error would constitute a cause of action was not presented to the trial court by the declaration, and we agree with the view entertained by the trial court, that the declaration failed to state a cause of action.

EMPLOYERS' LIABILITY—CONTRACT OF INDEMNITY—RIGHTS OF EMPLOYEE AGAINST INDEMNITOR—*Beacon Lamp Co. et al. v. Travelers' Insurance Co. et al.*, 47 *Atlantic Reporter*, page 579.—This was a bill brought in the court of chancery of the State of New Jersey by the Beacon Lamp Company and Aaron Moses, its trustee in bankruptcy, against the Travelers' Insurance Company and Mary Bardzik to recover an amount for which it had insured the lamp company against loss from liability for damages on account of personal injuries to employees caused by the negligence of the assured. The defendant insurance company demurred to the bill and to the answer by way of crossbill of its codefendant, Mary Bardzik. The court of chancery rendered its decision November 7, 1900, and overruled the demurrers.

Vice-Chancellor Pitney delivered the opinion of the court, in which he stated the facts of the case and several interesting points of the decision in the following words:

The complainant [the lamp company] and its trustee in bankruptcy claim to occupy the position of a surety for the defendant insurance company, which they claim occupies the position of principal debtor to the defendant, Mary Bardzik. The object of the original bill is to enforce the payment by the insurance company to the other defendant, Bardzik, of the debt so due in exoneration of the bankrupt's assets. The crossbill of Miss Bardzik is aimed at the insurance company, and is based, not upon any privity of contract between her and the insurance company, but upon the fact that she has a demand by judgment against the complainant, against which demand complainant is indemnified by the insurance company; and she claims that out of these facts arises an equity on her part to demand payment directly from the insurance company.

The lamp company, complainant, being engaged in carrying on a factory, purchased from the insurance company, defendant, a policy of insurance, by which it agreed to indemnify the lamp company, for the term mentioned, against loss from common-law or statutory liability for damages on account of bodily injury accidentally suffered by any employee caused by the negligence of the assured, to the extent of not more than \$5,000 incurred and suffered by one individual, and subject to certain enumerated conditions and exceptions not necessary here to be stated, except the fifteenth, which provides that "no action shall lie against the company, as respects any loss under this policy, unless it shall be brought by the assured himself to reimburse him for loss actually sustained, and paid by him in satisfaction of a judgment

after trial of the issue." During the life of this policy Miss Bardzik was employed by the lamp company in its factory, and suffered personal injury under such circumstances as to render the lamp company liable to her for damages, and upon a recovery by her against the lamp company to render the insurance company liable to indemnify the lamp company to the extent of not more than \$5,000. This is admitted by counsel of the insurance company. Miss Bardzik brought suit against the lamp company, the defense of which was conducted by the insurance company, and resulted in a verdict for \$6,000. The facts show, and it is admitted by the counsel of the insurance company, that, if the lamp company had paid Miss Bardzik this judgment, a cause of action at common law would have arisen at once in its favor against the insurance company. What actually occurred was this: On the day that judgment was entered, and before execution was levied, the lamp company was thrown into bankruptcy on the petition of one of its creditors, and enjoined from paying Miss Bardzik, and she was enjoined from enforcing her judgment against it. The complainant Moses was duly appointed trustee in bankruptcy. This state of facts seems to me to clearly place the three parties to this suit in the relation toward each other which the complainant and Miss Bardzik claim that they occupy. As between Miss Bardzik and the lamp company, and without regard to the policy of insurance, the lamp company is the debtor and Miss Bardzik is the creditor; and they bear the same relation to each other that the owner of land who has given a bond and mortgage does to the holder of the mortgage. But when we introduce the element of the policy of insurance given by the insurance company, the situation of the parties is, in equity, changed, precisely as it is in the case where the giver of a bond and mortgage conveys the land, and the grantee assumes the payment of the bond and mortgage as a part of the consideration money. At once, in such a case, in the view of a court of equity, as between the grantor and grantee of the land, the grantee becomes the principal debtor to the holder of the bond and mortgage, and the bondsman and mortgagor becomes surety for the grantees; and that change of relationship inures to the benefit of the mortgagee. He may still treat his bondsman as his debtor, and sue him at law; or he may treat him as a surety, and claim through that relation the benefit of the covenant of the grantee to pay the debt; and this he may do notwithstanding the insolvency of the mortgagor.

The principal point, however, made by the insurance company against the complainant's bill is based upon the severe language found in the condition above recited: "No action shall lie against the company as respects any loss under this policy, unless it shall be brought by the assured himself to reimburse him for loss actually sustained, and paid by him in satisfaction of a judgment after trial of the issue." This language, when strictly construed, does certainly go a long way toward sustaining the defendant's position. But the effects ascribed to it by counsel are so contrary to the manifest right and justice of the case that the court will not adopt such construction, unless clearly compelled thereto. Counsel for complainant and for Miss Bardzik contend, first, that the complainant's bill in equity is not such an action as is forbidden by the clause; that an action at law is there contemplated, resulting in a peremptory judgment for a fixed sum; and that

the clause was intended to protect against actions at law being brought before the liability of the insured to the injured party was established by a judgment; and to avoid such actions as *Sparkman v. Gove*, 44 N. J. Law, 252; and *Hoppaugh v. McGrath*, 53 N. J. Law, 81; 21 Atl., 106; and, further, that this suit is not based, strictly speaking, on the contract, but rather on the complainant's equity arising out of the facts of the case. Now, although it is well settled that at law the ordinary contract of insurance is treated as a direct one between the parties, leading to the relation of debtor and creditor, yet this particular form of contract leads to the relation of principal and surety. The real creditor is Miss Bardzik, and the real debtor is the insurance company, and the insured named in the contract, the lamp company, occupies the position of a mere surety. Hence, it is argued, the right of the complainant is based upon that relation, and not on contract. In fact, the action is one for the specific performance of the contract by the insurance company to indemnify the complainant, and such actions are so classed by the commentators. Hence, it is argued, the case appears from an equitable standpoint precisely as if there were no contractual relations between the insurance company and the lamp company, and the attitude of principal and surety between those parties arose, as well it might, and often does, arise, out of the bare facts. I am inclined to think this view is sound. Giving the clause in question its strictest construction, it yet seems to me that a chancellor will not permit it to stay his hand in enforcing a plain equity.

As to the crossbill, I think the objections raised have less force, if possible, than as against the complainant. Miss Bardzik has a claim against the lamp company based upon her judgment. Under the peculiar circumstances of the case that is really the debt of the insurance company, and on the principles previously stated she is entitled to have the benefit of the insurance company's covenant, notwithstanding the insolvency, and her inability to realize her judgment against the lamp company.

EMPLOYERS' LIABILITY—DUTIES OF THE EMPLOYER—ASSUMPTION OF RISK BY THE EMPLOYEE—*Felton v. Girardy*, 104 *Federal Reporter*, page 127.—This was an action brought by the administratrix of Charles Beckert to recover damages for the negligent death of the intestate while in the employ of the defendant, one Felton. The evidence showed that Beckert was employed in an engine repair shop; that he was ordered by the foreman of the shop to get into the fire box of a locomotive engine and remedy a leak; that though the fire had been drawn the steam gauge still showed a pressure of 16 pounds; that leaky boiler flues are often plugged to prevent the escape of steam and water into the fire box; that sometimes the end of such a flue is threaded and a brass screw plug is tightly screwed in, and that at other times a tapering iron plug is driven in with a hammer; that both methods were in use in this engine; that when a flue plug leaks it is first necessary to determine whether it is a screw or driven plug, and if it is a screw plug the leak can often be stopped by tightening it with a wrench, and if it is a driven plug it is ordinarily tightened

by driving it in further with a hammer; that while the two kinds of plugs can ordinarily be distinguished by an experienced man, an inexperienced man would have difficulty in so doing; that to drive in a screw plug with a hammer is dangerous, as the threads are liable to be crushed, and if there is steam in the boiler, it is liable to be blown out; that Beckert, an inexperienced man, went into the fire box as ordered by the foreman and for some reason used a hammer instead of wrench and undertook to tighten a screw plug by driving it in, and that the hammering broke or crushed the threads which held the plug in place, so that the pressure of the steam still in the boiler blew it out and Beckert was scalded to death by the escaping steam and hot water. In the United States circuit court for the eastern district of Tennessee, where the case was heard, a judgment was rendered in favor of the plaintiff, and the defendant, Felton, took the case upon a writ of error before the United States circuit court of appeals, which rendered its decision October 2, 1900, and affirmed the judgment of the lower court.

The opinion of the court of appeals was delivered by Circuit Judge Lurton, and in the course of the same he stated the principles of the common law, bearing upon the facts of the case, in the following language:

The theory upon which the plaintiff's suit was predicated, as set out in the third count of the declaration, was that the deceased was inexperienced in the repairing he was set to do; that he was only a boiler maker's helper, and that the work he was ordered to do was the proper work of an experienced boiler maker, and required a degree of skill and knowledge which deceased did not have; and that his inexperience in such work, and the great danger encountered in performing it, were known to Feeney, the foreman who directed him to do the work, and that he was not cautioned or instructed as he should have been.

A servant impliedly assumes the risks and hazards incident to the service he contracts to render, and, in the absence of knowledge to the contrary, an employer may assume, as between the master and the servant, that one applying for a particular employment possesses the skill and judgment requisite to the safe and proper performance of his duty. But if the employment be one of a dangerous character, requiring skill and caution for its proper discharge with safety to the servant, and the master be aware of the dangers, and have reason to know that the servant is unaware of them, and that from his youthfulness, feebleness, incapacity, or inexperience does not appreciate them, the servant can not, even with his own consent, be exposed to such dangers, unless he be cautioned and instructed sufficiently to enable him to comprehend them, and, with proper care on his own part, do his work safely.

The rule is not materially different in principle when a servant is directed to do a temporary work outside of the work which he has engaged to do. If there is nothing peculiarly dangerous in the new work, and the master has no reasonable ground for believing that the servant is unaware of the dangers he will encounter, or has not the requisite skill and experience to do the work with safety to himself,

the servant may well be regarded, if he obey, with having assumed the usual and ordinary risks incident to the employment.

But when a servant is ordered by one having authority over him to do a temporary work beyond the work which he had engaged to do, and the superior knows, or ought to know, from all the circumstances of the case, that the work which the subordinate is directed to do is of a peculiarly dangerous character, and is aware, or under all the circumstances should be aware, that the risks and hazards of the work, or the proper mode of doing the work to avoid the incident risks, are not obvious or known and appreciated by the subordinate, by reason of his youth, incapacity, or inexperience, it is the duty of the superior to caution and instruct such disqualified servant sufficiently to enable him to understand the dangers he will encounter, and how to do the work with safety if he exercise due care himself.

The duty of qualifying the servant in such a situation depends upon the circumstances, as is also the case in an original employment, where the direction is to do a work within the legitimate scope of the original contract of service. The principle is that if an employer knows that the servant will be exposed to risks and dangers in any labor to which he assigns him, and is aware that the servant is from any cause disqualified to know, appreciate, and avoid such dangers, the dangers not being obvious, the master is guilty of a breach of duty, unless he gives such reasonable cautions and instructions as should reasonably enable the servant, exercising due care, to do the work with safety to himself.

Undoubtedly, an employer, in the absence of other evidence, would be justified in assuming that one who represents himself as competent for a particular line of work did not need cautioning and instructing in that line. But if an employer know that a servant, to whom he assigns a particular work involving peculiar dangers, and requiring experience and skill to avoid the danger which he knows the servant will encounter, has not had the experience necessary to enable him to comprehend and avoid such dangers, he can not absolve himself from the duty of cautioning and instructing such servant, although the servant represent himself as altogether qualified. It is the knowledge of the master of the inexperience and disqualification of the servant of dangers known to the master which fastens upon the latter the duty of taking reasonable care that the servant shall not sustain an injury through such known inexperience.

EMPLOYERS' LIABILITY—NEGLIGENCE OF FELLOW-SERVANTS—EFFECT OF MASTERS' PROMISE TO REMEDY DANGEROUS CONDITIONS OF WORK—*Vogt v. Houstain, 83 Northwestern Reporter, page 533.*—This suit was brought by Henry Vogt against George T. Houstain, doing business as Houstain Brothers, to recover damages for injuries sustained while in his employ. Defendant, Houstain, was engaged in building an elevator; it had been carried about 60 feet from the ground, and the plaintiff, Vogt, was engaged at the bottom placing lumber in piles below a hoist and making it fast to the apparatus to be sent up to the top of the elevator as required by the carpenters there at work. Several times previous to the accident pieces of lumber had fallen from

the top of the elevator, and once a piece fell in dangerous proximity to the plaintiff. He became frightened and complained to the superintendent, who ordered the foreman in charge of the work at the top of the elevator to keep the lumber from falling. The foreman replied that he would see that nothing should fall again; and the superintendent then told the plaintiff to go ahead and that he would see that he was protected. Two days after, when kneeling on the ground at his work, a piece of plank fell upon and seriously injured his foot. It was not claimed by the plaintiff that any liability arose against the defendant for the injury other than was supported by the assurance given him by the superintendent, and he considered that, until this had been given, his injury having been caused by the negligent act of a fellow-servant on the top of the elevator, the risk of such injury had been assumed by him, but he claimed that the assurance of the superintendent took the case out of the rule and was strong enough to sustain a recovery of damages. This claim was sustained by the district court of Ramsey County, Minn., where the trial was had, and a verdict for the plaintiff was rendered therein. The defendant moved for a new trial, which the court denied, and the defendant appealed the case to the supreme court of the State, which rendered its decision August 7, 1900, and reversed the action of the lower court.

The law on this point as the court laid it down in its opinion, delivered by Judge Lovely, is clearly stated in the syllabus of the same, prepared by the court, which reads as follows:

1. Where the master conducting an enterprise of hazard promises an employee to remedy a defect in the instrumentalities he furnishes, or to discharge an incompetent servant, the person receiving such promise may wait in reliance thereon a reasonable length of time for the fulfillment of the same, when the danger is not imminent; and the promise does not thereby assume the risk of injury resulting therefrom.

2. The rule stated above does not extend to a promise made by the master that the fellow-servants of the employee to whom the promise is made will not be guilty of sporadic or occasional acts of negligence on their part, so as to bind the master in such cases.

3. In all such cases the liability of the master depends upon his failure or neglect to perform some personal obligation or duty that he owes as such master to the servant, which is imposed by the general duties of the relation between them.

EMPLOYERS' LIABILITY—NEGLIGENCE—VICE-PRINCIPAL—FELLOW-SERVANTS—*City Council of Augusta v. Owens*, 36 *Southeastern Reporter*, page 830.—Action was brought in the city court of Richmond County, Ga., by Benjamin Owens against the city of Augusta to recover damages for injuries incurred by him while in its employ. The city owned and operated a certain quarry, from which it obtained rock to use on

its streets, etc. One John Joy was employed by it as superintendent of the work at the quarry, and the plaintiff, Owens, was employed as a laborer. On the day of the accident Joy ordered the plaintiff to go to the foot of the quarry and assist in making a drill, and at about the same time he ordered two other laborers to go to a point on the face of the quarry wall, directly over the point where the plaintiff was ordered to work, and there to quarry out some rock which had been loosened by a blast. One of said laborers with a crowbar loosened a piece of rock, which moved from its place and rolled down the face of the quarry wall and struck the plaintiff on the head and injured him, and it was alleged by the plaintiff that this act of Joy's in ordering the work to be done directly over the place where the plaintiff had been ordered to work was negligence which was to be considered as negligence of the city, the plaintiff's employer, on the ground that Joy was a vice-principal. The city denied that Joy was its vice-principal and claimed that he was to be considered a fellow-servant of the plaintiff's, for whose negligence, under the law, it could not be held liable, and also that, even if he was a vice-principal, yet the immediate cause of the accident was the negligent act of the laborer who loosened the rock and caused it to roll down and who was a fellow-servant of the plaintiff, and that therefore the city could not be held legally liable. A judgment was rendered for the plaintiff, and the city carried the case upon a writ of error to the supreme court of the State, which rendered its decision July 14, 1900, and sustained the claim of the plaintiff upon the points above mentioned, although it reversed the judgment upon other grounds.

The opinion of the court was delivered by Judge Lewis, and the syllabus of the same, prepared by the court, contains the following:

3. Where a municipal corporation is engaged in operating a rock quarry which it owns, a person placed there by its authority as general superintendent of the work, with power to direct the movement of its laborers, not joining with them in their labor, and being as to this business the city's sole and only representative, is the vice-principal, and not the fellow-servant of the workmen under his charge; and this is so whether it was within the scope of his authority to engage the workmen or not.

4. Though the immediate cause of a physical injury to an employee may be the negligent act of a fellow-servant, the master is liable, if the fellow-servant did this act under and in obedience to an order given by a vice principal of an employer, if the giving of the order was itself an act of negligence as to the defendant.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—BREACH OF CONTRACT OF EMPLOYMENT BY EMPLOYER—*Sax v. Detroit, Grand Haven and Milwaukee Railway Co.*, 84 *Northwestern Reporter*, page 314.—William J. Sax brought suit against the above-named railway company to recover damages for breach of contract of employment. In

the circuit court of Shiawassee County, Mich., a judgment was rendered in his favor and the defendant company carried the case up to the supreme court of the State upon a writ of error. Said court rendered its decision November 13, 1900, and reversed the judgment of the lower court. Upon one important point, however, it sustained the claim of the plaintiff, Sax.

This point, together with the facts in the case, are set out in the opinion of the supreme court, delivered by Judge Hooker, in the following words:

The plaintiff's hand was injured while acting in the capacity of brakeman upon a freight train upon the defendant's railroad, and he was idle for about four months. He then resumed work as a passenger brakeman upon another branch of defendant's road, and worked about four months, when he was dismissed, according to plaintiff's claim, and laid off because the service of a brakeman was dispensed with upon his trains, according to the defendant's contention. He brought this action to recover damages for the breach of a contract which he says was made between the defendant and himself after his injury, whereby, in consideration of a release of a claim for damages upon account of his injury, the defendant promised to give him a permanent position in its employ, which was to last during his lifetime, as long as his services and conduct were satisfactory to the company.

Under the contract alleged and proved, the defendant had the right to terminate the employment whenever the plaintiff did not perform his duties to the entire satisfaction of the defendant. It was admitted that the defendant company discontinued the service of the plaintiff when the service of a brakeman on the trains upon which he was at work was dispensed with, for that reason, through Mr. Cooper, the trainmaster. It affirmatively appears, therefore, that he was not laid off by reason of dissatisfaction with his service, and a failure to employ him thereafter constituted a breach of the contract.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—COMPETENCY OF OFFICIAL SCHEDULE OF WAGES AS EVIDENCE—FELLOW-SERVANTS—*Missouri, Kansas and Texas Railway Co. v. Elliott*, 102 *Federal Reporter*, page 96.—This was an action brought to recover damages for the death of one Elliott, a fireman in the employ of the above-named company, caused, as alleged, by the negligence of the company's train dispatcher in issuing an order which caused the collision of two trains and the death of the fireman of one of them, the said Elliott. There was a trial to a jury which resulted in a verdict and judgment for the plaintiffs, the widow and children of the deceased, whereupon the defendant appealed the case to the United States court of appeals in the Indian Territory, which court affirmed the judgment of the trial court and the defendant then removed the case by writ of error into the United States circuit court of appeals for the eighth circuit, which rendered its decision April 9, 1900, and affirmed the judgments of the lower courts.

In the opinion of the circuit court of appeals, delivered by Judge Caldwell, the following points of interest are noted:

It is assigned as an error that the court refused to instruct the jury that the train dispatcher was a fellow-servant of the fireman. But this was not error. That the train dispatcher is not a fellow-servant of the train man in discharging the duties of the train dispatcher for the railroad company is now as firmly settled as any rule of law can be by judicial decisions. A railroad track is of no use to its owner or the public unless cars are run upon it. The railroad is built for that purpose. It is the movement of the trains upon the track that constitutes it a railroad. That is the consummation of the whole business. Trains will not move of their own volition. They have to be set in motion and kept moving by orders from some source. The conductors and engineers on the different trains have no authority over each other. They are required to obey orders for the movement of their trains, but can give none. The company itself can alone tell when and how its trains shall be run. That is its business, and, in the last analysis, its only business. In the orderly and safe conduct of this business, it must make a printed time-table, which is but another name for orders governing and regulating the movement of its trains under normal conditions. The making of this time-table is a legal duty of the railroad company, and, no matter upon whom the company may devolve this duty, the time-table, when made, and whether well or ill made, is the work of the railroad company, and the company is responsible for its results. It is not the work of the man who put it up, no matter what relation he sustains to the company. In contemplation of law, it must necessarily emanate from the supreme head or authority of the company, without regard to the hand used to promulgate or publish it. But printed time-tables alone are not adequate to meet all the requirements for the speedy, orderly, and safe movement of its trains; and for this reason the company is compelled to have recourse to the telegraph, through whose agency it makes special time-tables to meet the exigencies and requirements of the business, which are not, and can not be, provided for in the printed time-table. Of these facts, as well as of the general duties of the train dispatcher, the courts take judicial notice. But, whether the time-table is general or special, in print or sent by telegraph, it emanates from the railroad company (from the master), and is a duty the performance of which can not be delegated to any servant of the company, of whatever rank, without making that servant the alter ego of the company, and the company liable for his negligence in the performance of that duty. The alter ego of the company in directing the movement of its trains by telegraph is the train dispatcher, and his orders are the orders of the company, and must be obeyed by all to whom they are addressed. The authority of the company in the premises is necessarily supreme, and its order, through its train dispatcher, must be obeyed; otherwise, inextricable confusion and destruction to life and property would be the result. It is a duty which admits of no divided authority. The train dispatcher is supreme in his sphere. No one, not even the directory itself, would presume to order the movement of a train, except through the train dispatcher, who alone, through his train-dispatch book and train sheet, can issue an order for the safe movement of a train over the track.

The plaintiffs offered in evidence the "schedule showing the rate of wages to all classes" of the company's employees. This schedule was in the possession of Mr. E. M. Morton, the freight and ticket agent of the company at Muscogee, one of the terminal points of the Choctaw division of the company's road, who testified that it was issued by the general manager of the company, and that it was furnished all terminal agents who had charge of yards, or anything of that kind; that a terminal was a point where train crews run from and to; and that Muscogee and Denison were the terminal points of the Choctaw division. The witness was a terminal agent, and, as such, had been officially furnished with, and had possession of, this official schedule of wages paid employees. But the defendant objected to its introduction, and the court sustained the objection. This schedule of wages was clearly competent for the purpose of showing the wages the company paid the firemen in its employ.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—DUTIES OF THE EMPLOYER—ASSUMPTION OF RISK BY THE EMPLOYEE—*Louisville and Nashville Railroad Co. v. Miller*, 104 *Federal Reporter*, page 124.—One J. E. Miller was injured while in the employ of the above-named railroad company as a switchman. He had no experience as a switchman prior to his employment except five days of what is called "cubbing," by which is meant that he had been assigned, on his own application, and without pay, to a switching crew, as a volunteer who wished to learn and qualify himself for employment as a switchman. At the end of his five days' "cubbing" two foremen recommended him by letters to the yardmaster as competent for service as a switchman. When he presented these letters to the yardmaster he refused him employment, saying that he would not be qualified with less than one month's service as a "cub," yet on the next day, with full knowledge of his limited experience, said yardmaster employed him as a switchman without any further advice, warning, or instruction. Miller's injury was incurred while making a coupling of a kind which was new to him and which could only be done safely in a particular way about which he knew nothing. He brought suit against the company to recover damages for his injuries, and in the United States circuit court for the middle district of Tennessee he recovered a judgment in his favor. The company then carried the case upon a writ of error to the United States circuit court of appeals for the sixth circuit, which rendered its decision October 2, 1900, and sustained the action of the lower court.

The opinion of the court of appeals was delivered by Circuit Judge Lurton who, in the course of the same, used the following language:

The case was submitted to the jury upon the theory that the plaintiff was inexperienced in the work of a switchman, and that this was known to the railroad company; that, having been employed as a switchman, and assigned to work in the general yard of the company,

where he was likely to be required to handle foreign cars, with and without bumpers or deadheads, and having coupling apparatus of many styles, the company was bound to qualify him for such service by giving him instruction adequate to the hazards and risks incident to the occupation, and by which he might perform his duties in the way safest for himself. The instructions to the jury in respect to this issue were full and clear, and no exception was taken thereto. The learned counsel for plaintiff in error [the railroad company] say, however, that no such issue should have been submitted, and that it was error to deny the request for a peremptory instruction for the defendant. This contention is primarily based upon the proposition that the plaintiff applied for employment as a switchman, and that he must be, therefore, taken to have assumed all the risks incident to the usual duties of a switchman, and that, even if the company knew of his inexperience, he can not escape the consequences of his own ignorance or inexperience, having voluntarily solicited the particular employment in which he was injured. This view of the law is seemingly supported by the cases of *Dysinger v. Railway Co.*, 93 Mich., 646; 53 N. W., 825, and *McDermott v. Railroad Co.*, 56 Kans., 319; 43 Pac., 248.

We do not assent to the reasoning of these cases, nor are they in accordance with the great weight of authority. It is illogical to say that a servant impliedly assumes the hazards and risks of an occupation which are known to the master, but which the master knows are unknown to the servant, unless the dangers are so obvious that even an inexperienced man could not fail to escape them by the exercise of ordinary care. The law is now well settled that the duty of cautioning and qualifying an inexperienced servant in a dangerous occupation applies as well to one whose disqualification arises from a want of that degree of experience requisite to the cautious and skillful discharge of the duties incident to a dangerous occupation with safety to the operator, as when the disqualification is due to youthfulness, feebleness, or general incapacity. If the master has notice of the dangers likely to be encountered, and notice that the servant is inexperienced, or for any other reason disqualified, he comes under an obligation to use reasonable care in cautioning and instructing such servant in respect to the dangers he will encounter, and how best to discharge his duty.

Undoubtedly, when one of apparent maturity and of average capacity solicits a particular line of work, the master has the right, in the absence of information, to assume that the applicant is qualified for the particular work applied for. It is only where such facts are brought to his notice of the disqualification of the servant to safely encounter dangers known to him, and presumptively unknown to the servant, that the duty of cautioning and instructing the servant arises. In the case at bar the plaintiff below gave notice that he had had no experience as a switchman. The yardmaster then undertook his instruction, and assigned him, as a learner, to a switching crew. In less than five days the foremen of these crews certified that he was qualified. The yardmaster, with full notice of this brief tutelage, assigned him to duty without further instruction. There was evidence from which the jury might infer that such an experience was wholly inadequate to fit him to encounter the dangers he was likely to meet. The particular coupling he undertook was one which he was likely to have to make, and was a risk which an experienced servant would assume as an ordinary hazard of the service. Yet the plaintiff

testified that he had had no instruction, and no caution in respect to such cars and such diverse coupling arrangements. The duty of qualifying a green or inexperienced servant for the safe performance of a new and dangerous duty is a personal duty of the master, and, if it be delegated, the delegate must be qualified, and should not discontinue the instruction until it is completed. The negligence of the servants who undertook to qualify Miller was the negligence of the master. The judgment is accordingly affirmed.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—DUTIES OF THE EMPLOYER—FELLOW-SERVANTS—*Eaton v. New York Central and Hudson River R. R. Co.*, 57 *Northeastern Reporter*, page 609.—Action was brought by Edwin A. Eaton against the above-named railroad company and from a judgment of the appellate division, fourth department, of the supreme court of the State of New York, reversing a judgment in his favor obtained in a lower court. He appealed the case to the court of appeals of the State, which rendered its decision June 12, 1900, and reversed the judgment complained of.

The opinion of the court of appeals, delivered by Judge Cullen, contains a statement of the facts in the case as well as the reasons for the decision. In the course of the same the following language was used:

This action was brought, servant against master, to recover damages for personal injuries. The plaintiff was an experienced brakeman in the defendant's employ, and at the time of the accident was in service on a freight train. While applying the brake, the attachment of the brake chain to the foot of the brake staff gave way, and the plaintiff was precipitated from the top of the car upon the track, where his legs were run over by the rear car of the train. The car on which the plaintiff attempted to set the brake was that of another company, which had been received for transportation at Buffalo. On an examination after the accident it appeared that the eyebolt, by which the chain had been attached to the foot of the brake staff, was broken. Evidence was given to the effect that the shank or pin of the eyebolt had been worn to such an extent that it was only half its original thickness; that this rendered the bolt liable to break, not only on account of the loss of metal, but because of the play which was given the pin in the hole in the brake shaft in which it was set. There was also evidence given from which the jury might have found that a reasonable inspection of the pin and brake shaft at this point would have disclosed the weakness of the parts. The car was inspected at Buffalo by the defendant's inspectors, but the condition of the eyebolt was not noticed. The jury rendered a verdict for the plaintiff, upon which, a motion for a new trial having been denied, a judgment was subsequently entered. On appeal the judgment and order were reversed by the appellate division, but, as stated in the order of that court, "upon questions of law only, the court having examined the facts and found no error therein."

The learned appellate division, in its discussion of the case, assumed that the question whether the defect in the eyebolt was discoverable or not by reasonable inspection was one of fact for the jury. This assumption, in our opinion, was warranted by the evidence, the details of which

it would not be profitable to recite. That it is the duty of the master to furnish his servants with safe and suitable appliances, so far as reasonable care will accomplish that result, may be now considered as an elementary rule of law, and this duty applies to cars received from other companies as well as to its own. "A railroad company is bound to inspect the cars of another company used upon its road, just as it would inspect its own cars. It owes this duty as master, and is responsible for the consequences of such defects as would be disclosed or discovered by ordinary inspection. When cars come to it from another road which have defects visible or discernible by ordinary examination, it must either remedy such defects or refuse to take them." (*Goodrich v. Railroad Co.*, 116 N. Y., 398; 22 N. E., 397.)

This doctrine was accepted by the learned court below, but it held that the defendant was exempted from liability because of the following rule prescribing the duty of its employees, to which plaintiff was deemed to have assented: "Rule 153. At all stoppings of trains the brakemen or trainmen must inspect the wheels, brakes, and trucks of the car, and report any defects immediately to the conductor." The court reasoned that under this rule the duty of an inspection was devolved upon the trainmen equally with the car inspectors at Buffalo; that the inspectors were fellow-servants of the trainmen in the duty of inspection; that the negligence of the former in the discharge of their duty was the negligence of fellow-servants; and that, if it was negligence on the part of the inspectors not to have discovered the defective character of the brake, similar omission on the part of the plaintiff or the trainmen constituted contributory negligence on the plaintiff's part. There can be no question that, apart from the rule quoted, inspectors are not fellow-servants of the trainmen, so as to relieve a railroad company from liability to the latter for injuries occasioned by the negligence of the former. The duty which the master, as such, owes to his employees, of exercising reasonable care that the appliances furnished them should be safe and suitable, can not be delegated so as to relieve the master from responsibility; and, so far as it is performed by others, the negligence of any servant, agent, or employee in the work is deemed not the negligence of a fellow-servant, but that of the master himself.

We may assume, for the argument, that it was within the power of the defendant to have so conducted its business as to have made its trainmen both brakemen and car inspectors. But the question remains whether it did so in this case, and whether such is the effect and object of the rule promulgated. If a brakeman is to act as car inspector, he must have the expert skill and knowledge which a jury might find was necessary to discharge the duties of the latter position, and the defendant might find itself very much circumscribed in its appointment of trainmen. We think it quite plain that the defendant never intended to blend, nor has blended, the two distinct positions of brakeman and inspector. It appears that, as a matter of fact, it has assumed to inspect cars at its terminus by servants especially designated for that purpose.

The rule promulgated by the company must have a reasonable construction. It imposed on the trainmen the obligation of examination of the appliances which their services compelled them to use, both for their own protection and the protection of the property of the master and the persons of their fellow-servants. The examination, however, was not necessarily to be that of an expert inspector, but such as the

ordinary knowledge of brakemen, and the time allowed for the purpose consistent with their other duties, would enable them to make. We concur in what is said by Justice Hatch in *Myers v. Railroad Co.*, 44 App. Div. 11; 60 N. Y., Supp. 422: "It is quite evident that the measure of obligation which is imposed upon an employee of this character by virtue of this rule is much less strict than is imposed upon employees of the defendant charged with the specific duty of inspecting cars for the express purpose of discovering their condition, and the reason for such distinction is obvious. A brakeman has other duties and obligations resting upon him than that of inspection, and in many cases such duties almost wholly exclude any opportunity to examine the various appliances which he is required to use. Under such circumstances the rule, interpreted in the strict sense, would impose an obligation which the employee would have little or no opportunity to discharge. It must, therefore, be subject to a reasonable interpretation, measured in degree by the opportunity to examine and the character of the existing defect."

Under this view, by reason of the difference between the duty of inspection, resting on the trainmen, and that imposed on the car inspectors, the two classes are not fellow-servants within the rule which exempts the master from liability.

There is this further to be said: Under the rule, the duty of inspecting the brakes on the train did not rest on the plaintiff alone, but on him and the other trainmen. The evidence tends to show that in the necessary division of duties between the several trainmen the inspection of the brake that proved defective did not fall upon the plaintiff. Assuming that there was negligence on the part of his fellow-brakemen, such negligence would not be imputable to the plaintiff, or preclude a recovery by him.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—EFFECT OF RELEASE OF CLAIM FOR DAMAGES EXECUTED UNDER MISAPPREHENSION—*Houston and Central Texas Railroad Co. v. Milam*, 58 *Southwestern Reporter*, page 735.—In the district court of Travis County, Tex., one J. W. Milam recovered a judgment for damages in a suit brought by him against the above-named railroad company to recover damages for injuries sustained by him while in its employ. The defendant company appealed the case to the court of civil appeals of the State, which rendered its decision October 24, 1900, and reversed the decision of the lower court. Upon one interesting question raised its decision was, however, in favor of the plaintiff.

This part of the decision, together with a sufficient statement of the facts in the case, is clearly set out in the opinion of the court of civil appeals, delivered by Judge Collard, who, in this connection, used the following language:

The first assignment of error is not well taken. It assails the court's charge upon the question of a release to defendant signed by the plaintiff the 19th of January, 1899, which, for \$207.85, released and discharged defendant from all liability for personal injury and damages sustained by him September 27, 1898, while attempting to get

on the footboard of the Southern Pacific Railroad engine, for which this suit is now brought. The proof sustained the reply of plaintiff to the defense set up, that the \$207.85 was in full satisfaction of the damages caused by the accident. Plaintiff set up that the amount paid him was for half wages for the time he had, at the date of the payment, been laid up with his injuries; that defendant's agent, who procured the receipt, so represented the matter to him; that he was suffering pain at the time, and did not read the paper, but relied upon the representations of the agent, and that he would not have signed it if he had known its contents; and that he did not know the contents of the paper until the 20th of September, 1899, when he was informed by his attorneys that it was set up in defendant's answer as a defense to his suit, when he tendered the money back to defendant's attorney of record, who refused to accept it. The court charged, in effect, that, if plaintiff read the release, he could not be heard to say that he did not understand it, and that, if he failed to read it before signing, he could not avoid its effect unless he was induced not to read it by the representations of defendant's employee who procured it, that it was only a receipt for partial wages allowed him while he was disabled. The charge proceeded further to state that if such representation was made to plaintiff by the employee of defendant, and he relied upon it, and by reason of such reliance he failed to read it, it would be void. The court charged that the burden of proof upon the issue was upon the plaintiff.

Appellant contends that the naked representation of defendant's agent, though untrue, would not relieve plaintiff of the duty of reading the instrument, nor release him from being bound thereby, and that his reliance upon such representation, in the absence of fraud, would be immaterial.

The proof offered by plaintiff sustained his replication to the defense, and it was shown that his eyes were in such a condition that he could not read at the time. Under the decisions of the courts of this State, we believe the court's charge stated the law of the case. The court's charge on the subject of the release, as we find it in the record, was sufficient and correct, and there was no error in refusing special charges presented by defendant.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—EMPLOYEE RIDING AS A PASSENGER, BUT PAYING NO FARE—*Chattanooga Rapid-Transit Co. v. Venable*, 58 *Southwestern Reporter*, page 861.—Action was brought by George E. Venable against the above-named company to recover damages for personal injuries incurred by him. A judgment in his favor was rendered in the circuit court of Hamilton County, Tenn., and the defendant company appealed the case to the supreme court of the State, which rendered its decision October 13, 1900, and affirmed the judgment of the lower court.

The opinion of the supreme court, delivered by Judge Beard, contains a statement of the facts in the case, and reads, in part, as follows:

The defendant in error [Venable], at the time of the injury he complains of in this action, was in the service of the plaintiff in error [the rapid-transit company]. On account of a slight injury previously

received, he had laid off from service for a few days. About 8.30 o'clock of the morning of the day of the accident in question in this case he boarded one of the trains of the plaintiff in error at a point near his home, a short distance outside of Chattanooga, to ride to the station or depot of his employer, to report his readiness to return to duty the coming night. Just before reaching his destination the train on which he was riding had a head-end collision with a train of the Chattanooga, Rome and Southern Railway Company, which, under a contract with the plaintiff in error, had the right to use its tracks at intervals. The injury for which the defendant sues resulted from this collision.

The chief controversy in the case was as to the status of the defendant in error at the time of the accident, or, rather, as to the relation he then sustained to the plaintiff in error. The insistence of the rapid-transit company was that Venable was an employee of the company, riding on one of its trains, in full knowledge of the fact that he was violating one of its rules, which forbade anyone to ride without the payment of fare or a pass from a superior officer, and in doing so he was a trespasser, to whom no duty was owed save not to inflict upon him wanton injury. On the other hand, the contention of the defendant in error was that he was a passenger, entitled to all the protection which the law attaches to the passenger relation.

On this point the testimony of the plaintiff below [Venable] was that ever since his employment by the company he had ridden on its trains to and from his work without a pass or the payment of fare, and his right to do so had never been questioned by any of the conductors or other officers of the company, and that he had never heard of any rule requiring an employee to exhibit a pass or pay fare in order to ride. On the other hand, the conductor of the train testified that there was a rule of the company posted in conspicuous places by which conductors were forbidden to permit parties to ride without a pass or the payment of fare, save employeés of the company going to or returning from their work, and that he had called the attention of Venable to this rule more than once, and had said to him on such occasions that he must either pay his fare or get a pass. He admitted, however, that he had never enforced this rule against him or any other employee of the company, and that on the morning of the accident, and a little while before it occurred, he saw Venable on the train, but did not demand fare from him.

On the point raised by this testimony of the conductor, the trial judge said to the jury that "if the plaintiff had been notified that he would not be allowed to ride on its trains by virtue of his position as an employee of the road, and had been notified that he could not ride on its trains without a pass or the payment of fare, and he was undertaking to ride, at the time he claims to have been injured, without a pass or the payment of fare, and if there is nothing in the evidence to show he was on the train by the consent or permission of the conductor, he would not be entitled to recover." Again, putting his view of the law on this subject, so as to save all misapprehension on the part of the jury, he says: "If the proof shows that the plaintiff was on the defendant's [rapid-transit company's] train with the knowledge or by the consent of the conductor, then he occupied the position of a stranger, and not that of an employee of the defendant company, and it would owe him the same duty that a common carrier owes a passenger for hire. * * * And if he was on the train under that state of

facts, and the proof shows there was a head-end collision, * * * the law would presume that there was negligence on the part of the defendant, the rapid-transit company, and your verdict should be for the plaintiff, provided he was injured."

It is insisted that there is error in this charge of the court. A railroad company, beyond question, has the right to make and enforce reasonable rules for the control of its trains and persons thereon, not only to provide for the security of its passengers and employees but to protect itself from imposition and wrong and such rules can not be abrogated by subordinate employees. If, therefore, the instruction of the trial judge is to be taken as announcing a contrary view, it would undoubtedly be error. But we do not so understand it. It must be considered, and was no doubt so understood by the jury, in the light of the evidence of the case relied on by the defendant company. As has been seen from the testimony of the conductor, he had never exacted fare from Venable on any occasion when traveling on his train. The most he had ever done was to call his attention to the rule, and then permit him to travel unmolested. He had at no time put defendant in error to the alternative of paying his fare or getting off, as he had no pass, nor did he the morning of the accident. Before it happened he saw Venable riding in his train, yet he did not approach him. He not only did not ask him for fare, but he makes no pretense of a purpose on his part to do so. The presumption is that every one, not an employee in the service of the company in running the train, and traveling openly in the coaches upon a passenger train, is a passenger, and if riding with the knowledge of the conductor, and without interference from him, that he has been accepted by the company as such. The fact that he is riding without the payment of fare makes him none the less the stranger or passenger. And it is evident that such a person can not be converted into a trespasser until he resists or refuses to comply with the reasonable demand of him who is in charge of the train to pay his fare. That person is the conductor. He is the alter ego of the master, clothed with authority to control the train, and, among other things, to determine who shall or shall not be carried on it. He also, for himself, decides when he will demand fare, requiring a party either to pay it or leave the train.

The case at bar, according to the testimony most favorable for the company, is that of a party traveling on a passenger train under the eyes of the conductor, and who knows that under the rule his duty is to pay fare or furnish a pass, but who is not called upon to do either up to the time of the accident, and it is to this case that this instruction was directed. We think in such a case the railroad company can not be exonerated from responsibility to such a party who suffers injury as a consequence of its negligence or want of care. On the contrary, his presence on the train by the permission of the conductor, to be implied from his knowledge that the party was there, and his neglect to enforce the company's rule by requiring fare or a pass, made such person a passenger and entitled him to the highest degree of care for his safety.

The weight of authority and of sound policy, we think, is that where a servant performs all his work at a fixed place, and the master, either by custom or as a gratuity, carries him to and from his work, the servant doing no service for the master on the train, he is to be treated as a passenger. Finding no error in the action of the court below, the judgment is affirmed.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—LIABILITY OF A COMMON CARRIER TO EMPLOYEE INJURED WHILE BEING TRANSPORTED GRATUITOUSLY—*Dickinson v. West End Railway Co.*, 59 *Northeastern Reporter*, page 60.—Action was brought by Charles A. Dickinson, an employee of the above-named railway company, against the same, to recover damages for injuries incurred by him in an accident while riding home to his dinner, being off duty and gratuitously transported by the company. The defendant company claimed that as the accident was caused by the negligence of one of its motormen, the principle that an employer is not liable for an injury received by an employee when it was due to the negligence of another employee or fellow-servant engaged in the same service would apply, and the plaintiff would therefore not be entitled to recover. In the superior court of Suffolk County, Mass., where the case was tried, this claim was approved and a judgment was rendered in favor of the defendant corporation. The plaintiff then carried his case before the supreme judicial court of the State upon exceptions, making the claim, as he had in the lower court, that as he was off duty when injured the company owed him the same duties that it did an ordinary passenger upon its cars and that the fellow-servant rule could not apply. The supreme judicial court rendered its decision January 2, 1901, supporting his claim, and sustained his exceptions.

From the opinion of said court, delivered by Judge Knowlton, the following, showing the decision and the reasons therefor, is quoted:

The question in this case is whether the plaintiff was on the defendant's car as a passenger at the time of the accident, or whether he was at that moment in the service of the defendant, in such a sense that the negligent motorman was his fellow-servant.

The defendant had made a rule "permitting policemen, firemen, advertising agents, news agents, and employees of the defendant company in uniform, to ride free at any time; such persons being required to ride upon the front platform, so far as practicable." At the time of the accident the plaintiff was riding on the front platform, under this rule, wearing his uniform. Persons riding gratuitously under this rule are passengers, as well as those who pay their fare.

All members of the classes included in the rule stand alike in reference to the duty of care which the defendant owes them, whether they come within one part of the description or another. The rule in reference to employees permits them to ride at any time and place, and for any purpose, if they are in uniform. The reasons in each case for extending this privilege to members of these different classes are not material. Probably they are different in reference to different classes, but they are such as the defendant deems sufficient. So far as employees are concerned, it is enough that, except possibly in regard to wearing uniform, they are given the same rights as others who have no direct connection with the defendant by employment or otherwise. The question, then, is whether at the time of the accident the plaintiff

was riding in the full exercise of the rights given by this rule, or whether he was on the car in the performance of his duties as a servant of the defendant, so as to make him at that moment a fellow-servant of the motorman. The bill of exceptions answers this question in its statement, as follows: His work for the defendant "consisted of a certain number of trips at fixed and regular times each day. At the time of the accident he was not on actual duty, but at about noon had finished his work of that morning, got on the first car that came along, and was going home to dinner. That he took no part in the management of this car. That he usually had about three hours, between twelve and three o'clock, during which he was not on actual duty, and his time was his own, and he usually returned home about noon to dinner." The car on which he was riding was not on the line on which he was employed. At the time of the accident he did not stand in the relation of a servant to the defendant. His time was his own, and he owed the defendant no duties until the time arrived for resuming his work. It was no part of his duty to the defendant, as a servant, to take the car on which he was riding and go to a particular place for his dinner. He might go where he pleased and when he pleased during the interval before coming back to his work. This case is different in this particular from cases in which the plaintiff was riding in the line of his duty in the course of his employment. His rights were the same as if, after finishing his day's service, he had taken a car in the evening to visit a friend or to do any business of his own. The fact that he had been in the defendant's service during the day would not make him a fellow-servant with the motorman while riding in the evening under the rule, any more than if he had been a policeman or a news dealer. Exceptions sustained.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—VALIDITY OF RELEASE OF CLAIM FOR DAMAGES—*Great Northern Railway Co. v. Kasischke*, 104 *Federal Reporter*, page 440.—In the United States circuit court for the district of North Dakota a judgment was rendered in favor of Carl Kasischke, who had brought suit against the above-named railway company to recover damages for injuries incurred by him while in its employ. The defendant company sued out a writ of error and carried the case to the United States circuit court of appeals, which rendered its decision October 8, 1900, and affirmed the judgment of the lower court. The evidence showed that Kasischke had signed a release of all claims for damages after his injury, and this release was offered as a defense to his suit by the railway company. He claimed, however, that said release was obtained from him by fraud and misrepresentation, and was therefore void and of no effect.

Upon this point Circuit Judge Thayer, who delivered the opinion of the court of appeals, spoke as follows:

It is further urged by the defendant company that the plaintiff on December 12, 1898, for a valuable consideration, released it from all

causes of action then existing, and that this action is barred by the release, which is in the following form:

“Form 2704. Great Northern Railway Line. Great Northern Railway Company. Release of Damages.

“Know all men by these presents, that in consideration of the sum of medical attention ———, to me in hand paid by the Great Northern Railway Company, the receipt whereof is hereby acknowledged, I have released, acquitted, and discharged, and by these presents do release, acquit, and forever discharge, the said railway company, its successors and assigns, of and from any and all cause or causes of action, costs, charges, claim, or demand, of whatever name or nature, in any manner arising or to grow out of personal injuries received by me at Breckenridge on December 6, 1898, while assisting in coaling engine No. 200. I slipped and fell into tank pit, and coal from pocket fell on me, whereby I was severely injured. The receipt of said sum of medical attention ——— dollars being hereby acknowledged to be in full payment, satisfaction, and discharge of any and all such cause or causes of action, costs, charges, and demand arising or growing out of said personal injuries received as aforesaid.

“In witness whereof, I have hereunto set my hand and seal this 12th day of December, A. D. 1898.

“CARL KASISCHKE. [SEAL.]

“In presence of—

“J. C. NOLAN.

“E. ABIG.”

Along the margin of this release was written the following statement, but it was unsigned.

“This release read and explained to me before signature, and releases all claims for personal injury to date.”

With respect to this document the plaintiff testified, in substance, that on December 12, 1898, five days after the accident, he was sent for to come to the roundhouse; that he was somewhat affected by dizziness at that time, as a result of the accident; that on reaching the office in the roundhouse he was shown a paper by the division master mechanic, J. C. Nolan, and was asked if he understood it; that he told Nolan at the time that he could neither read nor write English; that Nolan then read the paper to him, but that he did not understand it fully or accurately; that, in the course of the conversation which ensued about the paper, he told Nolan that his doctor had asked him that morning for a dollar, and that Nolan replied, “The company will pay your doctor bill and give you a light job.” He further testified, in substance, that Nolan did not explain to him that the document was intended as a release of his claim for damages on account of the injury that he had sustained; that he did not understand it to be an agreement of that nature, but did suppose that it was an engagement on the company’s part to pay his doctor and give him a light job, because Nolan said they would do so when he was asked to sign the document. He also testified that the interview with Nolan, when the paper was signed, lasted only five or ten minutes; that no money was paid to him at that time or afterwards; that nothing was said about paying him any money; that he ascertained the real purport of the writing after it was signed, through a conversation with some of his fellow-workmen,

and that he would not have signed the paper had he known it to be a release of all claims against the company for being injured. The evidence for the defendant with respect to this transaction was, as a matter of course, entirely different, and tended to establish that the release in question was not only read by Nolan, but that the object thereof was fully explained to the plaintiff before it was signed, and that he executed it with a full knowledge of the language employed, even if he did not comprehend its legal effect.

It was clearly the duty of the master mechanic, when he was informed that the plaintiff could not read or write English, and that he relied upon him for an explanation of the contents of the paper, to explain its purport and the object of asking him to sign it, and to do so fully, in language which the plaintiff could comprehend. Because Nolan represented the defendant company in the transaction, it was his duty to exercise special care in explaining its contents to the plaintiff. It was likewise the plaintiff's duty to make reasonable efforts to obtain a correct understanding of the document before he signed it, and not to sign it until he had reasonable grounds for believing that he did understand it. We think, however, that the plaintiff had a right to rely upon Nolan for an explanation of the meaning and effect of the paper, inasmuch as he assumed the duty of interpreting and explaining it, and that the plaintiff was not bound to seek other advice on the subject. The result is that if Nolan, by his statements or conduct, misled the plaintiff in any manner as to the effect of the instrument and induced him to believe that it was merely a writing by which he was to have his doctor's bill paid and get a light job, and that it was not in fact a release of his cause of action, it ought not to stand or be accepted in the present action as a bar to a recovery.

The contention of the defendant company is that there was no evidence whatsoever which tended in any way to impeach the validity of the release, and that the court should have so declared. But, in the light of what has been said, we are unable to assent to that proposition. In the first place, the consideration recited in the release as moving from the defendant company, to wit, "medical attention," was trifling in comparison with the permanent bodily injury which the plaintiff appears to have sustained; and this in itself raises a suspicion of unfairness, and gives color to the claim that the plaintiff was in some way deceived, and did not understand that he was releasing his right of action. Aside from this view are the positive statements of the plaintiff that he was not advised that the instrument was intended as a release of his claim for damages; that he would not have signed it had he understood such to be the object of asking his signature; that statements or representations were made by Nolan, which are not embodied in the document, that gave him a different understanding of its purpose; and the obvious facts that the plaintiff was to some extent subject to the influence of his superior officer, and had a very imperfect knowledge of the language in which the paper was written, and in which the negotiations leading to its signature were conducted. These considerations, in our opinion, warranted the trial court in permitting the jury to determine whether the plaintiff had consciously released his right of action, or whether his signature to the release had been obtained by conduct or representations on the part of the company's agent which amounted to deceit.

While it is essential to the public welfare that the integrity of written contracts should be maintained, by requiring the parties thereto, before they sign the same, to exercise reasonable diligence in acquiring a correct knowledge of their meaning and effect, yet it is equally important that the rule of law in this respect should not be applied with such strictness as will enable persons who are so disposed to easily overreach those who are unlettered and unwary, and deprive them of valuable rights. In this instance we are satisfied that it was the function of the jury to decide whether the plaintiff was deceived as to the contents of the release, and also to determine whether he was guilty of any such negligence in executing it, under the circumstances disclosed by the proof, as should estop him from contesting its validity. The judgment below is accordingly affirmed.

EMPLOYERS' LIABILITY—VICE-PRINCIPAL—NEGLIGENCE OF FELLOW-SERVANT—*Small v. Allington and Curtis Manufacturing Co.*, 48 *Atlantic Reporter*, page 177.—Albert E. Small brought suit against the above-named company to recover damages for personal injuries incurred while in its employ and alleged to have been caused by the defendant's negligence. In the supreme judicial court in Cumberland County, Me., a verdict of \$500 damages was given for the plaintiff. The defendant company moved for a new trial and a hearing was had before the full bench of the supreme judicial court in law term. Said court rendered its decision January 29, 1901, and granted the motion.

From the opinion of the court, which shows the facts in the case and was delivered by Chief Justice Wiswell, the following is quoted:

At the time of the accident the plaintiff was in the employ of the defendant, and was engaged with others in the work of hoisting and placing in position a large metal appliance to be used for the purpose of collecting sawdust and shavings, and known as a "dust collector." The defendant, a corporation doing business in the State of Michigan, had made a contract with the Williams Manufacturing Company, of Portland, to furnish for the latter this dust collector, and to place the same in position on top of the boiler house of its plant. This appliance had arrived in Portland, the framework within which it was to be placed had been constructed by the manufacturing company as provided in the contract, and the plaintiff and other employees of the defendant had commenced hoisting the collector by means of ropes and blocks, sometimes called a "double fall and tackle." Just before the accident the collector had been hoisted nearly, but not quite, far enough, when the two blocks came together, and it became necessary to unfasten the tackle and rearrange the blocks so that the additional hoisting could be accomplished. To do this, it was necessary to temporarily secure the collector in place while the fall and tackle was unfastened and rearranged.

The plaintiff and other servants of the defendant, fellow-servants of the plaintiff, had placed planks, blocks, and props under the collector for this purpose, and the plaintiff was on top of the collector, unfastening the tackle, when it fell a few feet, and the plaintiff was thrown to

the roof of the boiler house, sustaining some, but not very serious, injury.

There is no intimation that any of the appliances furnished by the defendant were insufficient for the purpose, or that there was not an abundance of suitable materials of all kinds with which to do this work of hoisting. Nor is there any claim made that the servants employed by the defendant were incompetent or insufficient in number, and no allegation of that kind is contained in the writ.

The accident was unquestionably caused by the failure of those engaged in securing this collector in its temporary position, while the tackle was to be unfastened, to exercise sufficient care. But this was the fault of the plaintiff and his fellow-servants, or some one or more of them. The defendant had performed its full duty when it had provided suitable appliances necessary for the work of hoisting and placing in position this collector, and had employed competent and sufficient workmen.

But it is urged that the defendant's superintendent, by reason of his entire superintendence of this work, and of the absence of the employer, was not a fellow-servant of the plaintiff, but that he was a vice-principal; that he had the immediate supervision of the work, and that he was negligent in not giving more explicit instructions as to temporarily securing the collector, and in not himself seeing that this was properly and safely done; and that the defendant is liable for any negligence of his.

The doctrine that a superior servant is on that account a vice-principal, representing his master, rather than a fellow-servant with others employed by the same master and engaged in the same work, does not prevail in this State, and is not supported by the weight of authority. The master's liability to one servant for the negligence of another in no way depends upon the superior rank of the negligent servant. A servant of any grade may be employed in the discharge of the particular and personal duties which the master owes to the servant, as when he is engaged in the duty of providing safe, suitable, and sufficient machinery and appliances. While engaged in such employment, although at other times he may be only a fellow-servant with other employees, he becomes a vice-principal, and his master is liable for his negligence, because the performance of these duties can not be delegated by a master so as to relieve himself from the consequence of negligence in these respects. The test which determines the master's liability for the negligence of one employee, whereby injury is caused to another, is the nature of the duty that is being performed by the negligent servant at the time of the injury, and not the comparative grades of the two servants.

In this case the superintendent represented the defendant at Portland, and was undoubtedly in the position of a vice-principal while he was engaged in the performance of those duties that the defendant owed to its employees, in providing all necessary and proper appliances and materials, both as to quantity and quality. But in doing the work of hoisting this dust collector into its position he was a fellow-servant of the plaintiff, who was employed for and engaged in carrying out the same purpose; and, even if any negligence can be attributed to the superintendent in the performance of this work of temporarily securing the collector, necessarily incidental to the

employment of both the superintendent and the plaintiff, it was the negligence of the fellow-servant, for which the defendant is not liable, according to the unbroken line of authorities in this State.

The case discloses no negligence upon the part of the defendant, and no circumstances from which such negligence can properly be inferred. In rendering a verdict for the plaintiff the jury must have been influenced by some improper motive. Motion sustained. New trial granted.

NONLIABILITY OF COUNTY FOR WAGES DUE EMPLOYEES OF SUB-CONTRACTOR—EFFECT OF FAILURE TO REQUIRE EXECUTION OF BOND BY CONTRACTOR—*Rhea County v. Sneed*, 58 *Southwestern Reporter*, page 1063.—Action was brought by Robert Sneed against Rhea County, Tenn., for services rendered for a contractor in constructing a county bridge. In the circuit court of Rhea County a hearing was had and a judgment was rendered in favor of the plaintiff, Sneed. The county, as defendant, then carried the case, upon a writ of error, to the supreme court of the State, which rendered its decision November 10, 1900, and reversed the judgment of the court below.

Judge Caldwell delivered the opinion of the supreme court and stated the facts of the case and the reasons for the decision therein in the following language:

Under the appointment and authority of the county court of Rhea County, three commissioners contracted with the Groton Bridge Company to erect a bridge across Richland Creek, in that county, at the price of \$1,875, to be paid as follows: \$1,000 when the substructure should be ready for the superstructure, and the remaining \$875 when the entire structure should be completed. For some unexplained reason, the commissioners failed to exact the contractor's bond contemplated by chapter 182 of the acts of 1899, and it was not executed. The Groton Bridge Company sublet the construction of the substructure to Thompson, and he in turn sublet it to Nipper, who employed numerous laborers to do the work for him. While inspecting the work as it progressed, the commissioners, on different occasions, saw these laborers engaged upon the masonry in the abutments, but assumed no control of them, and made no contract with them. Robert Sneed was one of these laborers. When his services were ended, and his employer, Nipper, had paid him only a part of the compensation due him, he demanded the residue from the commissioners, who refused to pay it, upon the ground that they had not employed him, and therefore owed him nothing. This demand was made and payment refused after the substructure was completed, before final settlement with the original contractor, and when the county still owed it the latter installment of \$875. After the bridge had been finished, accepted, and paid for, Sneed, to whom the balance was still due from Nipper, brought this suit to recover the amount thereof from the county. The circuit judge tried the case without a jury, and adjudged the county liable, "both at common law and because of the failure of the commissioners to take bond as required by chapter 182, acts 1899." for the sum claimed, and the county appealed in error.

The learned trial judge was in error. Clearly, common-law responsibility on the part of the county for the debt could properly be based alone upon an express or an implied contract, and neither of these is shown in the proof. It is not contended that Sneed had an express contract with the county; nor is the fact that the commissioners frequently saw him with other laborers at work on the masonry, and afterwards accepted the completed structure, sufficient to raise an implied promise on the part of the county in his favor. They engaged the Groton Bridge Company to furnish a finished structure for an agreed price, and had the legal right to assume that it would pay for all labor and material employed, and by paying that price to that company they absolved the county from all liability for the benefits received.

If the Groton Bridge Company had abandoned its contract, and Sneed, with the knowledge of the commissioners, had then constructed the bridge, and it had been accepted, the case would be like that of *Madison Co. v. Gibbs*, 9 Lea, 383, and he, under the authority of that case and upon principle, would be entitled to a recovery against the county for the benefits conferred, on the ground of an implied promise to pay therefor. But, as has been seen, such is not the case presented in this record. Here the performance of the express contract by and with the Groton Bridge Company for the completed structure necessarily precludes the idea of an implied contract with Sneed or any other laborer doing a part of the work. An express contract with one person to perform the whole of a certain piece of work is utterly inconsistent with an implied contract with another person to do a part of the same work, and, being so, the two can not have legal efficacy at the same time. The law never implies a promise from a situation clearly covered by an express contract, as in this instance.

The object of chapter 182 of the acts of 1899, as recited in the title, is "to protect laborers and furnishers of materials on public works." The first section prohibits the letting of "any public work," for city, county, or State, "until the contractor shall first execute a good and solvent bond to the effect that he will pay for all materials and labor used in said contract;" the second and fourth sections authorize every unpaid laborer and material-man, who has given the prescribed notice of his demand, to bring an action upon that bond in his own name; and the third section makes it a misdemeanor for any officer to let a contract for any public work without requiring the bond provided for in the first section. Undoubtedly the structure erected by the Groton Bridge Company was a "public work," within the contemplation of this act, and the county's commissioners were as certainly guilty of a misdemeanor in letting the contract without first taking the required bond. Under a well-established rule of law, that marked dereliction of positive duty on the part of the commissioners constitutes negligence per se, and renders them liable, not only to a criminal prosecution for the statutory misdemeanor, but also to a civil action for damages resulting to laborers and material men, who would have been protected by the prescribed bond if executed.

It does not follow, however, that the county is liable for the neglect of its commissioners. The duty of requiring the prescribed bond is by the statute devolved upon the "public officer" charged with letting

the contract, and for the failure to perform that duty the statute declares "such officer shall be guilty of a misdemeanor." Sections 1, 3. The duty and liability for its breach are imposed on the same person. Consequently these commissioners who should have taken the bond, and not the county, are responsible for the omission disclosed in this case. The mere fact that the commissioners were appointees of the county, and acting for it, does [not] render it responsible for their failure to take the bond. Their departure from the course of duty in this regard was in no legal sense the act of the county, nor one for which any statute fixes liability upon the county. It is a general rule that a private action can not be maintained against a county for damages arising from the neglect of its officers in connection with public highways, unless some statute confers the right to do so.

RIGHT OF EMPLOYER TO STOP WAGES OF EMPLOYEE TO MAKE UP LOSS SUFFERED THROUGH EMPLOYEE'S MISTAKE—EFFECT OF RECEIPT IN FULL—*Georgia Railroad Co. v. Gouedy*, 36 *Southeastern Reporter*, page 691.—Action was brought by J. H. Gouedy against the above-named company to recover wages, the payment of which had been withheld. He recovered a judgment in a justice's court and the company appealed to the superior court of Fulton County, Ga., where, upon the trial, the jury returned a verdict in his favor. The company made a motion for a new trial, which was overruled, and the company then carried the case up on a writ of error to the supreme court of the State, which rendered its decision July 12, 1900, and affirmed the action of the lower courts. The evidence showed that Gouedy was employed as billing clerk by one Werner, the local agent of the railroad company in Atlanta, Ga.; that in rebilling a carload of corn sent by a dealer in Tennessee to a merchant in Union, S. C., he erroneously marked it for Marion, S. C.; that when it arrived in Marion there was no consignee there to receive it; that it was then sent to Union, its original destination, but the consignee there refused to accept it because of the delay; that it was sent to Greenville, S. C., and sold by the railroad company at a loss; that the loss was divided among the various railroad companies over whose lines the corn had passed, and the amount assessed against the Georgia railroad company was charged to its local agent at Atlanta, Werner; that he in turn charged it to Gouedy, and when the paymaster came to Atlanta to pay off the employees of the company, the pay roll showed that \$10 of Gouedy's wages had been marked "stopped;" that subsequently similar amounts were deducted from his wages, the amounts being given to Werner by the paymaster, until the amount assessed against the railroad company and by it charged to Werner had been paid; that Gouedy protested, but the paymaster said he had nothing to do with the matter, but that Gouedy must appeal to the officials of the road, and that so far as he

was concerned Gouedy must take the amount offered him or get nothing; that Gouedy took the amounts offered and upon each occasion signed the pay roll, thus receipting in full for all demands, but he had never agreed that Werner should "stop" any of his wages.

The opinion of the supreme court was delivered by Chief Justice Simmons, and the syllabus of the same, prepared by the court, reads in part as follows:

1. In a suit by an employee against a railroad company for the balance of his wages, the company can not legally defend by showing that the plaintiff had made a mistake whereby the company had suffered loss, which had been charged to an agent who was his superior, and under whom he was employed, and that in order to reimburse that agent it had stopped the wages of the plaintiff; such a course not being authorized by any rule of the company known to the employee, or agreed to by him.

2. The fact that the employee, when he received a part of his wages, gave a receipt in full for all demands, does not estop him to claim the balance, when it appears that he at the time protested against the "stoppage" of a portion of his wages.

LAWS OF VARIOUS STATES RELATING TO LABOR ENACTED SINCE JANUARY 1, 1896.

[The Second Special Report of the Department contains all laws of the various States and Territories and of the United States relating to labor in force January 1, 1896. Later enactments are reproduced in successive issues of the Bulletin from time to time as published.]

COLORADO.

ACTS OF 1901.

Liability of employers for injuries of employees.

SECTION 1. Every corporation, company or individual who may employ agents, servants or employees, such agents, servants or employees being in the exercise of due care, shall be liable to respond in damages for injuries or death sustained by any such agent, employee or servant, resulting from the carelessness, omission of duty or negligence of such employer, or which may have resulted from the carelessness, omission of duty or negligence of any other agent, servant or employee of the said employer, in the same manner and to the same extent as if the carelessness, omission of duty or negligence causing injury or death was that of the employer.

SEC. 2. All acts, and parts of acts, in conflict herewith, are hereby repealed: *Provided, however,* That this act shall not be construed to repeal or change the existing laws relating to the right of the person injured, or in case of death, the right of the husband or wife, or other relatives of a deceased person, to maintain an action against the employer.

Approved March 28, 1901.

MARYLAND.

ACTS OF 1900.

CHAPTER 71.—*Time to vote to be allowed employees.*

SECTION 1. An additional section is hereby added to article thirty-three of the Code of Public General Laws of Maryland, entitled "Elections," as reenacted by chapter two hundred and two of the acts of 1896, said section to follow section eighty-three of said article, and to be designated as section 83A, and to read as follows:

83A. At every election, whether national, State or municipal, hereafter held in this State, every employer, whether a body corporate, firm or individual, shall allow its or his employee or employees sufficient time, not exceeding four hours, within which to vote; provided, that the said employer shall have the right to designate the time when his employee or employees shall exercise the right herein granted, the employee or employees to be allowed sufficient time not exceeding four hours. Any employer, whether a body corporate, firm or individual, and any officer or agent of any employer, who shall refuse to allow its or his employee or employees sufficient time, not exceeding four hours, within which to vote, or who shall, directly or indirectly, prevent or hinder its or his employee or employees from exercising the right herein granted by any form of inducement whatever, or by threats, express or implied, that the exercise by said employee or employees of the right herein granted, will be followed by a discharge from said employment, or by a reduction in salary or wages, or who shall influence or attempt to influence its or his employee or employees not to exercise the right herein granted upon any pretext whatever, shall be guilty of a misdemeanor, and upon conviction thereof shall, for each and every offense, pay a fine not exceeding the sum of five hundred dollars and be imprisoned in jail for a period not exceeding six months, or both, in the discretion of the court.

SEC. 2. This act shall take effect from the date of its passage.

Approved March 20, 1900.

CHAPTER 453.—*Payment of wages—Allegany County.*

SECTION 1. Sections one hundred and eighty-five and one hundred and eighty-six [of article one] of the Code of Public Local Laws, title "Allegany County," subtitle "Manufacturers and Miners," are hereby repealed and reenacted with amendments, so as to read as follows:

185. Every corporation engaged in mining or manufacturing or operating a railroad in Allegany County, and employing ten or more hands, shall pay its employees the full amount of their wages in legal tender money of the United States, and any contract by or on behalf of any such corporation for the payment of the whole or of any part of said wages, in any other manner than provided shall be and is hereby declared illegal, null and void; and every such employee shall be entitled to recover from any such corporation employing him, the whole or so much of the wages earned by him as shall not have been actually paid to him in legal tender money of the United States without set-off or deduction of his demand for or in respect of any account or claim whatever, but no such corporation employing hands as aforesaid shall issue any scrip or metallic or paper checks in payment of the sums due such employees, nor shall such employees make any contract with its [their] employers by which such employees shall be compelled to purchase their supplies, merchandise or goods from any private or company stores owned and operated by the said employers; nor shall said employers by means of such employment exercise any influence whatever on said hands by promises or threats to compel their employees to deal with any particular merchant or storekeeper.

186. Nothing in the preceding section shall be construed to prevent any such corporation from demising to any of its employees the whole or any part of any tenement in said county at any rent thereon reserved, or from contracting for or advancing money to supply him with medicine or medical attendance needed for himself or family, or smithing or fuel, and deducting from the wages of any such employee for and in respect of such rent, medicine, medical attendance, smithing or fuel, or money advanced as aforesaid, or deduction of dues for Miner's Mutual Aid Society; but no such corporation shall have the right to deduct any moneys from the wages of its employees in payment for merchandise of any other character than those hereinbefore in this section mentioned and specified, subject to all the penalties prescribed by section one hundred and eighty-eight.

SEC. 2. This act shall take effect from the date of its passage.

Approved April 7, 1900.

CHAPTER 589.—*Seats for female employees—Baltimore.*

SECTION 1. Section five hundred and five, chapter one hundred and twenty-three, acts of General Assembly passed January session, eighteen hundred and ninety-eight, is hereby repealed and reenacted to read as follows:

SEC. 505. Every employer of females and mercantile or manufacturing establishment in the city of Baltimore must provide and maintain suitable seats for the use of such employees. A person is deemed not to maintain suitable seats for the use of female employees unless he permits the use thereof by such employees to such extent as may be reasonable for the preservation of health and proper rest, and the question of what is thus reasonable is one for determination by the jury or the court acting as a jury in any prosecution hereunder.

SEC. 2. This act shall take effect from the date of its passage.

Approved April 10, 1900.

MISSISSIPPI.

ACTS OF 1900.

CHAPTER 18.—*Industrial education—Establishment of a textile school.*

SECTION 1. A textile school [shall] be established in connection with the Agricultural and Mechanical College, where young men and women may be educated in the art of manufacturing textile fabrics and where they may acquire a practical as well as theoretical and scientific knowledge of the art of manufacturing textile fabrics, and especially those made from cotton, or cotton and wool combined, including dyeing, designing and drawing.

SEC. 2. It shall be the duty of the board of trustees to cause to be erected the necessary building for the motive power and machinery of the factory building, for the accommodation of not more than one hundred pupils, and a dormitory building to

accommodate a like number and to supply the factory building with the necessary motive power of steam or electricity, in their discretion, and all other necessary machinery and appliances for manufacturing cotton and such other fabrics as may be agreed upon by the faculty and approved by the trustees and also for dyeing, having in view the purpose of this act, as defined in the first section thereof, and especially that relating to the manufacture of cotton fabrics.

Sec. 3. It shall be the duty of the board of trustees when said buildings have been erected, and equipped as provided for in this act, to elect a competent and efficient director of the textile school, who shall become thereby a member of the faculty of the said A. & M. College, and shall receive such salary as may be fixed by the board of trustees. They shall likewise employ or authorize the employment of such assistants in the various departments thereof as may be necessary to the thorough and efficient training and instruction of the students. The course of study shall be prescribed by the faculty with the approval of the board of trustees, and shall embrace carding, spinning, weaving, dyeing, harmony of colors, designing, drawing, fabric analysis and calculations, and such other branches as may be prescribed. There shall be a special course on the manufacture of cotton fabrics alone.

Sec. 4. No pupil shall be admitted to the textile school who is under fifteen years of age; and each pupil applying for admission shall be examined under rules to be prescribed by the faculty as to character, intelligence and learning, and they shall be governed by the rules and regulations prescribed for the government of said college, the trustees of which shall also fix and regulate the fees, cost and term of course of said textile department.

Sec. 5. The raw material to be manufactured in the course of study, shall be purchased by the president of the faculty, or under his direction, provided, that raised on the college farm shall be insufficient in quantity or quality. The fabrics manufactured by the school shall be sold by the president of the faculty, and the proceeds thereof and also all tuition fees shall be paid into the college treasury to the credit of the textile school, and full reports made thereof annually to the board of trustees.

Sec. 6. The board of trustees shall have authority to grant diplomas and certificates of proficiency upon the recommendation of the director of the textile school, and a majority of the faculty.

Sec. 7. The sum of forty thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any moneys in the treasury not otherwise appropriated, to enable the board of trustees to carry out the provisions of this act. The said sum herein appropriated may be drawn from the State treasury upon the warrant of the auditor of public accounts, issued upon the written request of the president of the college, approved by the governor.

Sec. 8. This act shall take effect and be in force from and after its passage.
Approved March 3, 1900.

CHAPTER 101.—*Laborer, etc., making a second contract without giving notice of the first.*

SECTION 1. Any laborer, renter or share cropper who has contracted with another person for a specified time in writing, not exceeding one year, who shall leave his employer or the leased premises before the expiration of his contract without the consent of the employer or landlord, and makes a second contract without giving notice of the first to said second party, shall be guilty of a misdemeanor, and on conviction shall be fined not exceeding fifty dollars.

Sec. 2. This act shall take effect and be in force from and after its passage.
Approved March 12, 1900.

CHAPTER 102.—*Enticing laborers, etc., to leave employers.*

SECTION 1. Section one thousand and sixty-eight of the code of eighteen hundred and ninety-two [shall] be amended as follows: If any person shall willfully interfere with, entice away, knowingly employ, or induce a laborer or renter who has contracted with another person for a specified time to leave his employer or the leased premises, before the expiration of his contract without the consent of the employer or landlord, he shall, upon conviction, be fined not less than \$25 nor more than \$100, and in addition shall be liable to the employer or landlord for all advances made by him to said renter or laborer by virtue of his contract with said renter or laborer, and for all damages which he may have sustained by reason thereof.

Sec. 2. This act [shall] take effect and be in force from and after its passage.
Approved March 12, 1900.

CHAPTER 119.—*Convict labor.*

SECTION 8. The board of supervisors [of any county] may require the contractor of any road to take and work the convicts sentenced to the county jail or committed to same to pay fine and cost imposed upon them, upon such terms and conditions as the said board and contractor may agree upon.

SEC. 11. The provisions of this act shall not apply to any county in the State, except by an order of the board of supervisors to that effect, same to be duly entered on the minutes of said board.

SEC. 13. This act shall not apply to any county that is already working its roads under special contract unless the board of supervisors of said county elects to come under the provisions of this act.

SEC. 14. This act [shall] take effect and be in force from and after its passage.

Approved March 12, 1900.

UNITED STATES.

ACTS OF 1900-01.

Common carriers to report accidents to the Interstate Commerce Commission.

SECTION 1. It shall be the duty of the general manager, superintendent, or other proper officer of every common carrier engaged in interstate commerce by railroad to make to the Interstate Commerce Commission, at its office in Washington, District of Columbia, a monthly report, under oath, of all collisions of trains or where any train or part of a train accidentally leaves the track, and of all accidents which may occur to its passengers or employees while in the service of such common carrier and actually on duty, which report shall state the nature and causes thereof, and the circumstances connected therewith.

SEC. 2. Any common carrier failing to make such report within thirty days after the end of any month shall be deemed guilty of a misdemeanor and, upon conviction thereof by a court of competent jurisdiction, shall be punished by a fine of not more than one hundred dollars for each and every offense and for every day during which it shall fail to make such report after the time herein specified for making the same.

SEC. 3. Neither said report nor any part thereof shall be admitted as evidence or used for any purpose against such railroad so making such report in any suit or action for damages growing out of any matter mentioned in said report.

SEC. 4. The Interstate Commerce Commission is authorized to prescribe for such common carriers a method and form for making the reports in the foregoing section provided.

Approved March 3, 1901.

LEADING ARTICLES IN PAST NUMBERS OF THE BULLETIN.

- No. 1. Private and public debt in the United States, by George K. Holmes.
Employer and employee under the common law, by V. H. Olmsted and S. D. Fessenden.
- No. 2. The poor colonies of Holland, by J. Howard Gore, Ph. D.
The industrial revolution in Japan, by William Eleroy Curtis.
Notes concerning the money of the U. S. and other countries, by W. C. Hunt.
The wealth and receipts and expenses of the U. S., by W. M. Steuart.
- No. 3. Industrial communities: Coal Mining Co. of Anzin, by W. F. Willoughby.
- No. 4. Industrial communities: Coal Mining Co. of Blanzzy, by W. F. Willoughby.
The sweating system, by Henry White.
- No. 5. Convict labor.
Industrial communities: Krupp Iron and Steel Works, by W. F. Willoughby.
- No. 6. Industrial communities: Familistère Society of Guise, by W. F. Willoughby.
Cooperative distribution, by Edward W. Bemis, Ph. D.
- No. 7. Industrial communities: Various communities, by W. F. Willoughby.
Rates of wages paid under public and private contract, by Ethelbert Stewart.
- No. 8. Conciliation and arbitration in the boot and shoe industry, by T. A. Carroll.
Railway relief departments, by Emory R. Johnson, Ph. D.
- No. 9. The padrone system and padrone banks, by John Koren.
The Dutch Society for General Welfare, by J. Howard Gore, Ph. D.
- No. 10. Condition of the Negro in various cities.
Building and loan associations.
- No. 11. Workers at gainful occupations at censuses of 1870, 1880, and 1890, by W. C. Hunt.
Public baths in Europe, by Edward Mussey Hartwell, Ph. D., M. D.
- No. 12. The inspection of factories and workshops in the U. S., by W. F. Willoughby.
Mutual rights and duties of parents and children, guardianship, etc., under the law, by F. J. Stimson.
The municipal or cooperative restaurant of Grenoble, France, by C. O. Ward.
- No. 13. The anthracite mine laborers, by G. O. Virtue, Ph. D.
- No. 14. The Negroes of Farmville, Va.: A social study, by W. E. B. Du Bois, Ph. D.
Incomes, wages, and rents in Montreal, by Herbert Brown Ames, B. A.
- No. 15. Boarding homes and clubs for working women, by Mary S. Fergusson.
The trade-union label, by John Graham Brooks.
- No. 16. Alaskan gold fields and opportunities for capital and labor, by S. C. Dunham.
- No. 17. Brotherhood relief and insurance of railway employees, by E. R. Johnson, Ph. D.
The nations of Antwerp, by J. Howard Gore, Ph. D.
- No. 18. Wages in the United States and Europe, 1870 to 1898.
- No. 19. Alaskan gold fields and opportunities for capital and labor, by S. C. Dunham.
Mutual relief and benefit associations in the printing trade, by W. S. Waudby.
- No. 20. Condition of railway labor in Europe, by Walter E. Weyl, Ph. D.
- No. 21. Pawnbroking in Europe and the United States, by W. R. Patterson, Ph. D.
- No. 22. Benefit features of American trade unions, by Edward W. Bemis, Ph. D.
The Negro in the black belt: Some social sketches, by W. E. B. Du Bois, Ph. D.
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- No. 23. Attitude of women's clubs, etc., toward social economics, by Ellen M. Henrotin.
The production of paper and pulp in the U. S. from Jan. 1 to June 30, 1898.
- No. 24. Statistics of cities.
- No. 25. Foreign labor laws: Great Britain and France, by W. F. Willoughby.
- No. 26. Protection of workmen in their employment, by Stephen D. Fessenden.
Foreign labor laws: Belgium and Switzerland, by W. F. Willoughby.
- No. 27. Wholesale prices: 1890 to 1899, by Roland P. Falkner, Ph. D.
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- No. 28. Voluntary conciliation and arbitration in Great Britain, by J. B. McPherson.
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- No. 29. Trusts and industrial combinations, by J. W. Jenks, Ph. D.
The Yukon and Nome gold regions, by S. C. Dunham.
Labor Day, by Miss M. C. de Graffenried.
- No. 30. Trend of wages from 1891 to 1900.
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- No. 31. Betterment of industrial conditions, by V. H. Olmsted.
Present status of employers' liability in the U. S., by S. D. Fessenden.
Condition of railway labor in Italy, by Dr. Luigi Einaudi.
- No. 32. Accidents to labor as regulated by law in the U. S., by W. F. Willoughby.
Prices of commodities and rates of wages in Manila.
The Negroes of Sandy Spring, Md.: A social study, by W. T. Thom, Ph. D.
The British Workmen's Compensation Act and its operation, by A. M. Low.
- No. 33. Foreign labor laws: Australasia and Canada, by W. F. Willoughby.
The British Conspiracy and Protection of Property Act and its operation, by
A. M. Low.