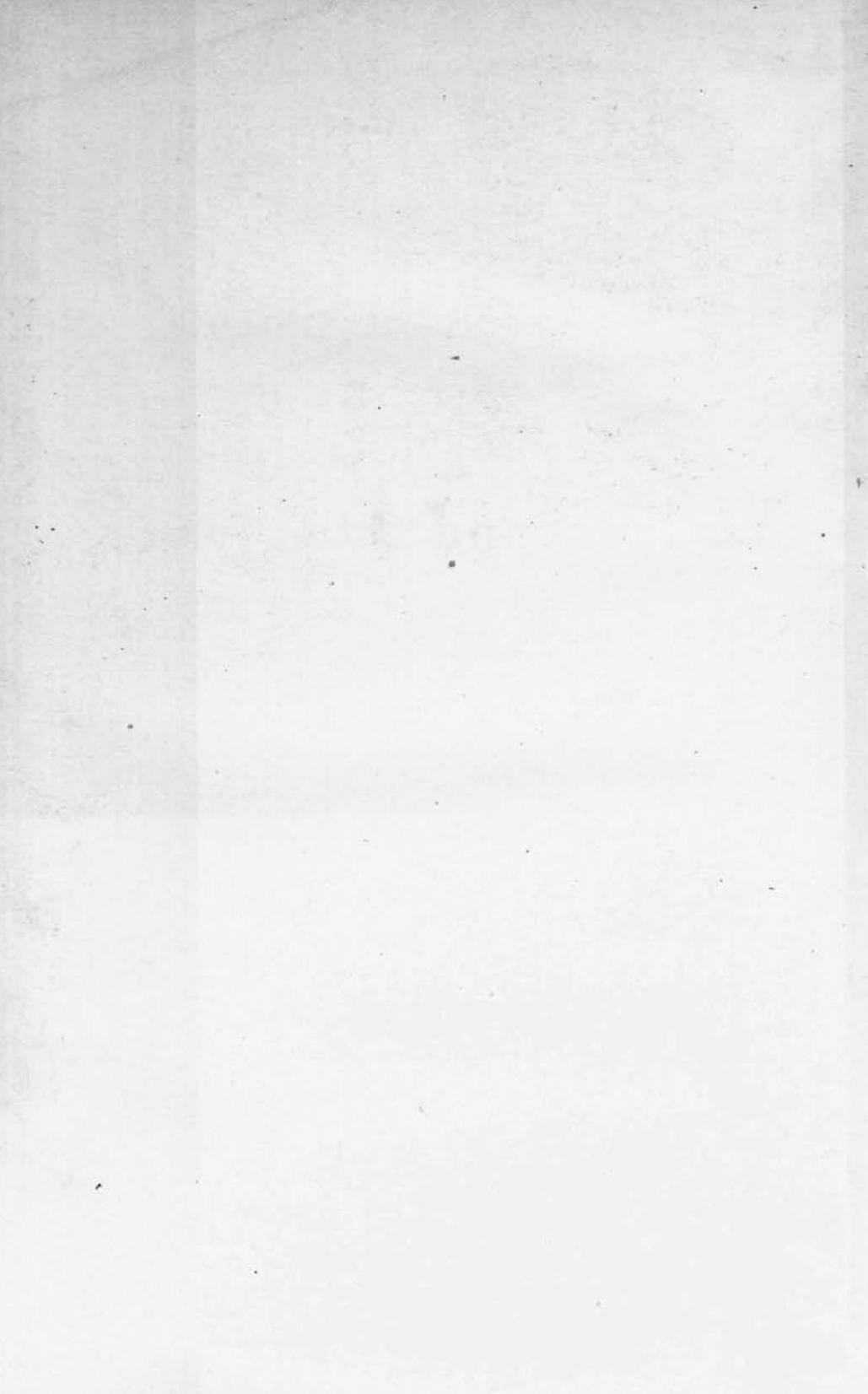


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# THIRTY-THIRD ANNUAL REPORT

OF

The Bureau of Statistics

OF

# Labor and Industries

OF

NEW JERSEY

For the Year Ending October 31st

1910

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STATE OF NEW JERSEY,  
OFFICE OF THE BUREAU OF STATISTICS,  
TRENTON, October 31st, 1910.

*To His Excellency John Franklin Fort, Governor:*

SIR: In accordance with the provisions of Chapter 105, Laws of 1878, and the several supplements thereto, I have the honor of submitting to the Senate and General Assembly, through you, the thirty-third annual report of the Bureau of Statistics of New Jersey.

WINTON C. GARRISON,  
*Chief.*



## INTRODUCTION.

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The various subjects presented in this volume—the thirty-third of the series of annual reports issued since the Bureau was organized in 1878, are all such as bear an intimate relation to the public interests assigned to its care by the act under which it was established thirty-three years ago. The duties of the Bureau as defined by the statute are: “To collect, assort, systematize and present in annual reports to the legislature, statistical details relating to all departments of labor in the State, especially in relation to the *commercial, industrial, social, educational, and sanitary condition of the working classes, and in all suitable and lawful ways to foster and encourage our manufacturing and every other form of productive industry, with a view to their permanent establishment on a prosperous basis for both employers and wage earners.*”

The field of activity thus prescribed for the Bureau is not exceeded in importance, if indeed it is equalled by that assigned to any other department of the State government. The prosperity of our people and the general progress of our State are dependent on the success of our efforts to create a demand for profitable labor by extending every proper encouragement that may promote the growth and expansion of manufacturing industry, in the various forms of which, at the present time, upwards of three hundred and twenty-five thousand, or 13 per cent. of our total population, are employed.

Although ranking only eleventh among the States in the matter of population, we occupy sixth place in the value of annual product of manufactured goods, which, as shown by the statistics forming a part of this report, is now in round figures \$900,000,000. Besides this army of factory and workshop employes, the term “working classes” as used in the act was intended to apply to practically all those who work for wages, so that the constituency dependent upon the Bureau for keeping the public informed regarding its widely varying conditions, risks, burdens, trials, and triumphs, includes a large majority of our entire population.

The annual reports convey no adequate idea of the work performed in this wide field; in these volumes only the results of certain more or less fixed forms of inquiry carried on year after year are shown, but little or no suggestion can be obtained from them of the vast amount of work which is being performed in disseminating information relating to industrial, commercial, social, and other interests of our State, for which there is a large and constantly growing demand. In fact the Bureau has become in respect to this particular phase of its work, a combination of clearing house and enlarged Board of Trade, for all matters relating to the material and sociological interests of our State. Among the most numerous subjects of correspondence are inquiries as to the most desirable locations for factories with relation to transportation and labor supply; opportunities for foreign trade extension; the labor laws of the State; industrial education; wages and earnings of various classes of labor; the work at which women and children are employed; the trades union movement and mutual benefit organizations or cooperative associations of workingmen. In fact the Bureau is constantly endeavoring by every possible means to keep its work abreast of advancing industrial conditions and making it productive of the greatest possible good to all our people, particularly those engaged in industrial pursuits either as employers or wage earners, in whose especial interest the office was first established.

For the past twelve years an annual census of the manufacturing industries of the State, equal in point of accuracy to the work of the Federal decennial census has been made by the Bureau, which, while showing from year to year the wonderful progress we are making in the development of manufacturing industry, has attracted population and wealth to our State. The beneficial influence of this work is powerfully assisted by the Industrial Directory of New Jersey, which, there are the best of reasons for believing, has done more toward attracting desirable attention to our State and the industrial opportunities which it offers, than any previous publication issued under either public or private auspices. The earliest possible information relating to foreign trade opportunities are now being sent daily to our manufacturers, a majority of whom show their appreciation of the service thus rendered them by acknowledging receipt of the information bulletins with cordial letters of thanks, combined with commendation of the work, as the most valuable assistance to their business interests that had as yet been received from public sources. During the year 1910, 1,200 of these trade bulletins were mailed from the Bureau to

the same number of New Jersey manufacturers, and there are reasons for believing that many of the number brought about the opening of new outlets for our manufactured products, the existence of which would have remained unknown had it not been for this service.

On behalf of our army of wage earners the Bureau has striven incessantly to awaken the public conscience to the unjust character of existing law governing the relations of master and servant in this State, and much of the public interest now being manifested in the subject is traceable to its steadily maintained agitation for the past twelve years, in favor of statutory regulation of these relations on a just and fair basis. During that entire time a chapter of each annual report was devoted to a record of the industrial accidents of the year, and in reviewing the same, the cruel injustice of saddling both the physical suffering and financial loss on the victims, was always pointed out.

The first bill dealing with the subject of employers liability introduced in 1898, was based on a report made that year by the Bureau; it provided merely for the appointment of a commission for the purpose of considering the then state of the law, with permission to recommend such statutory changes of the same as seemed just and expedient. The bill failed of passage at that time, but was revived later, and finally became law in 1907. The progress of the movement since then is too well known to require further reference, but it may be added that last year's chapter on the subject which formed as usual a part of the Bureau's report, contained a reprint of the very latest statutes regulating employers liability in every State of the Union, and also the Dominion of Canada. In the broad discussion which the subject will undoubtedly receive during some part of this legislative session, members will have for guidance a perfect knowledge of how far other states have gone in the matter of establishing liability, thus enabling them to place New Jersey abreast of the most advanced industrial states, while seeing to it that injury is not inflicted on our industries and wage earners by a too radical departure from the old order of things.

Much of the foregoing is of course, not exactly pertinent to the purposes of an "introduction," but there certainly is no impropriety in calling public attention in this way to the large amount of important and highly productive work which the Bureau is doing every day, the details of which cannot be given in the annual reports.

The present volume is divided into three parts, the first containing the Statistics of Manufactures for the twelve months ending December 31st, 1909, which are condensed into the

briefest possible form consistent with leaving the data understandable. These statistics occupy from page 1 to page 127, and are interspersed with analytical reviews intended to fix attention on the significance of the figures. This compilation is arranged throughout on the basis of industries and not by localities. The inquirer can therefore ascertain through this report practically everything that may be desired relating to any particular industry carried on in the State, such as the number of establishments engaged in it, the capital invested, number of persons employed, value of material used, and of finished products; but the same information cannot be given for localities for the perfectly obvious reason that the multiplication of details required to furnish separate compilations by counties or municipalities, would be prohibitive because of its expensiveness and bulk, besides which the Industrial Directory, which is revised every three years, gives a full list of the manufacturing establishments with the number of wage earners for every city, town and village in the State.

The Statistics of Manufactures show that our industries are now in a highly prosperous condition, having almost completely recovered from the depression caused here and elsewhere throughout the country by the money panic of 1907-1908.

Part Two, which extends from page 131 to 191, contains chapters on Employment, Working Hours and Wages on Steam Railroads in New Jersey; Cost of Living in New Jersey and Europe; Fruit and Vegetable Canning Industry of New Jersey; The Relation of Occupation to Health, and an article descriptive of the means whereby the Bureau is endeavoring to assist the manufacturers and exporters of our State to secure foreign trade in their respective lines. Part Three, consists entirely of the Industrial Chronology, which is a record of occurrences of general public interest—but especially important to employers and wage earners, for the twelve months ending September 30th, 1910. A separate introductory review accompanies such of the subjects presented in Parts One and Two as appear in tabular form; the others being self explanatory require no further introductory notice, except to say that the purpose of the chapter on the relation of occupation to health was designed to point out the justice of placing the unnecessary impairment of health where the same could be avoided, if proper precautions were taken and safeguards provided, on the same basis with regard to right to compensation, as an accidental injury suffered in the performance of duty. The introduction of this topic seems timely in view of the fact that legislation of an advanced character relating to employers liability is now pending in our

own and other large manufacturing states. In the judgment of those having a broad acquaintance with factory and workshop conditions, these non-essential ill health factors where they exist, are a far greater menace to the wage earner than the liability to accident; he can to a measureable extent protect himself against accidental injury, but his employer only can guard him against danger of the other kind.

One of the most interesting and timely features of the Industrial Chronology which constitutes Part III of the report, is the record of industrial accidents for the year. These are divided among six occupational groups, and again subdivided according to their seriousness into major and minor injuries. The total number of wage earners injured during the year, was 1,875; of these 970 were serious, and 905, of a comparatively minor character. Of the 970 serious injuries, 360, or 37.1 per cent resulted in death either immediate, or shortly after the accident occurred. In four instances the accident victims lost both legs; in two, both feet; in two, one leg and one arm. Twenty suffered the loss of one leg, and nine the loss of one arm. Thirty-seven had from one to four fingers amputated; forty-one suffered fracture of the skull, and ten unfortunates had their eyesight either totally or partly destroyed.

The list is given in full in its proper place, and a perusal of it should quicken interest in the question of how this deplorable total of human suffering can be most effectively and permanently reduced. The number of accidents resulting fatally was ten per cent. greater in 1910 than in 1909. In the occupational division of accidents, "factories and workshops" are charged with a total of 644, or 34.3 per cent of the total number; "building and construction," 323, or 17.2 per cent; "transportation," 365, or 19.4 per cent; "tunnelmen, miners, and excavators," 170, or 9.1 per cent; "linemen and other electrical workers," 59, or 3.1 per cent; and various "unclassified occupations," 317, or 16.9 per cent.

The strikes recorded for the year are quite numerous as compared with other years, but happily only a few of them were of extended duration. The total number of strikes was 112, while the record of the preceding year was only 93. The total number of wage earners involved was 14,044, and the total wage loss reported was \$439,088. Practically 50 per cent. of the strikes were for wage increases, and next in the order of numerical importance were sympathy with other strikers, and against working with non-union men. A more cheering chapter of the chronology is that which shows the growth of factory industries in our State during the year. On page 243 is a

table which shows that during the twelve months ending September 30th, 1910, the enormous sum of \$5,495,755 was invested in factory construction and improvement. Of this amount, \$3,230,000 was expended in the erection and equipment of 70 entirely new plants, 33 of which number, representing an investment of \$1,290,450, were located in the city of Newark.

This great addition to the sum total of our industries is offset—but only to a slight extent, by the loss of five manufacturing establishments that left our State to settle elsewhere during the year. Of these, one assigned labor troubles as the reason for moving, the others went because of advantageous inducement of one or another kind held out by the localities to which they moved.

During the year, factory and workshop property to the value of \$2,853,041 was destroyed by fire; the number of fires was 118, and the loss suffered in each instance ranged from \$10 to \$250,000. Approximately eighty per cent of the fires were so slight that the ordinary operation of the plants suffered but little interruption while the work of restoration, promptly begun, was going on.

WINTON C. GARRISON,  
*Chief of Bureau.*

## PART I.

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Statistics of Manufactures in New Jersey.

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Capital Invested, Number of Operatives Employed.

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Cost Value of Material Used.

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Selling Value of Goods Made.

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Average Working Hours.

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Classified Weekly Wages.

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Average Yearly Earnings of Labor.

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# Statistics of Manufactures of New Jersey

For the Year Ending December 31, 1909.

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This year's presentation of the Statistics of Manufactures is compiled from full and complete reports of their operations for the twelve months ending December 31st, 1909, filed in the office of the Bureau by corporations, firms and individuals who own and operate 2,291 manufacturing plants located in New Jersey, all of which are conducted on what may be designated as the factory system. These establishments are all of a permanent character, and none among them employ less than ten persons, or have less than \$5,000 invested capital. The list includes all manufacturing plants in the State capable of furnishing from their records the species of information required for these statistics.

In the reports for 1907 and 1908, the fact was pointed out that the Statistics of Manufactures for both these years showed a very decided falling off in the volume of industry, as compared with the immediately preceding years, due altogether, it was explained, to the financial stringency which set in during the last quarter of 1907, and produced a depression in practically every line of industrial activity that continued throughout 1908, which has not as yet entirely passed away, although the improvement shown this year brings the totals nearly up to what might be expected had there been no interruption of the normal rate of increase that has characterized the progress of industry in this State for the past fifteen or twenty years.

The statistics for 1906 showed the manufacturing plants of the State had that year been operated to 79.02 per cent. of full capacity, the highest recorded since the annual compilation of these statistics was begun; the money panic which set in on October 1907, reduced the proportion of business done for that year to 78.22 per cent., while the continued depression extending over the entire twelve months of 1908, brought the proportion down to 66.80, the lowest known since the depression which was coincident with the tariff agitation of 1893. As a matter of course there was a large falling off in the volume of products, and a

still larger decline in their total value, part of which was due to a falling off of prices consequent upon a greatly shrunken market.

During even the most acute period of the depression a feeling of confidence in the future and a conviction that normal business conditions would soon succeed, existing uncertainty and confusion appeared to animate our manufacturers, many of whom utilized the opportunities afforded by a period of partial or total idleness to repair overworked machinery and otherwise enlarge and improve facilities against the time when these would again be fully required. The progress toward recovery during the year 1909 fully justified the confidence of these manufacturers, and probably realized their most hopeful anticipations; the "proportion of business done" rose from 66.80 to 74.38 per cent., and the total value of products from \$669,853,206 to \$824,218,796. This great increase in the value of products is due principally to increased activity in our manufacturing plants, but improvement in prices contributed, as did also the opening of new establishments from which reports included in this year's compilation were received for the first time.

As a matter of course there has also been a very gratifying increase in the number of persons employed, the amount paid to them as wages, and the cost value of stock and material used in the production of finished goods, which is far greater than the advance indicated by the increase in the proportion of business done as compared with 1908; in fact the totals shown in these tables exceed those of any previous year.

During the year 1909 five manufacturing firms moved their plants from New Jersey and settled them elsewhere; in two instances the removals were charged to dissatisfaction with our labor laws. One of these—a firm of worsted spinners, whose plant was moved from Camden, N. J., to Valley Forge, Pa., gives as the reason for making the change—"We removed our plant from Camden because of better inducements and more favorable labor laws in our present location. We had to compete with Philadelphia manufacturers, and found it practically impossible to do so; because of being limited to only fifty-five hours work per week while our competitors across the river were running sixty hours." Another large firm that manufactures steam engines and other heavy machinery of the highest grade, left Hoboken, N. J., and settled at New London, Conn., partly, as they state, on account of more satisfactory labor conditions at the latter place. The others moved for business reasons that are in no way interesting to the public.

Eleven factories were closed permanently during the year,

most of them because of the severe strain to which they had been subjected during the money stringency depression of 1907-1908. A large manufactory of woolen goods located at Passaic, was closed because the firm "could make no profit on its particular line of goods in competition with larger concerns." The failures in a majority of instances were due to insufficient capital and the strain to which the credit of the firms involved was subjected during the long continued depression. The reports state that all debts and claims growing out of these unsuccessful business enterprises were paid in full.

The statistics of manufactures are divided into eighty-eight general industry classifications, each of them including from four to one hundred and eighty-two establishments, and one large group under the heading "unclassified," numbering ninety-two plants. Under the "unclassified" group are many varieties of industry outside of these in the regular industry classifications, but for the reason that not more than two of them in any case are engaged in producing the same line of goods, distinct headings indicative of the character of their products cannot be given to any of them. The rule that has been invariably followed in the compilation of these statistics, is to group not less than three establishments under any one heading. Failure to observe this precaution might lead to an exposure of a manufacturer's business to unauthorized persons, and would be a violation of the pledge of absolute secrecy under which individual reports are obtained. To guard against the possibility of such exposure, every possible precaution is taken. The tables as published are in the form of abstracts containing only the *totals* relating to each industry, and the figures reported by any one establishment cannot by any possible means be separated from those of the industry group with which it is merged.

The presentation is arranged in the form with which all who follow these annual statistics of manufactures are familiar, that is to say, there are ten general tables which show for each industry:

First, the character of management, whether the same be by corporation, partnership or individual owner, and the number of establishments controlled by each form of ownership, with the number of stockholders, private partners, and individual owners.

Second, the total amount of capital invested, and the various forms and purposes for which it is employed—that is to say, how much in machinery, tools and implements used in manufacturing; how much in land and buildings, and how much in cash on hand, in bank, or in outstanding accounts.

Third, the cost value of all stock or material used in manufacture—that is to say, the merchandise consumed in the operation of the works, such as fuel for power and heating purposes, gas, electricity, or other means of illumination, oil, cotton waste, packing cases, etc., and the material which forms the bases of and is worked into the finished goods, such as leather in a shoe factory and raw silk in a silk mill. This table contains also the selling value of goods made or work done.

Fourth, the greatest, least, and average number of persons employed, classified as men, 16 years old and over; women, 16 years old and over; and young persons of either sex under the age of 16 years.

Fifth, the average number of persons employed by *months*, divided as to sex and age, the same as in table number four.

Sixth, the total amount paid in wages, and the average yearly earnings per employee.

Seventh, the classified weekly earnings of all classes of wage earners—men, women and young persons of either sex.

Eighth, the number of days in operation, the average number of hours worked per day and per week, and the amount of overtime worked, if any.

Ninth, the proportion of business done, or the extent to which the year's operations of the plants grouped under each industry heading approached their full productive capacity.

Tenth, the power used; number and character of engines and motors in use, together with the aggregate driving capacity in horse power of each and all varieties.

Incidental to the analysis of the ten general tables which follows, are several briefer compilations in which the data for twenty-five selected industries are compared with those of 1908; and the increases or decreases shown to have taken place are noted in absolute numbers and also by percentages.

These selected industries are chosen for the purposes of the annual statistical comparisons because of their being the most important in the entire industry classification in respect to number of establishments, number of wage earners employed, amount paid in wages, and selling value of products.

The importance and value to the State of these annual statistics as the only existing means of showing the growth and progress of our great industrial interests from year to year, cannot be overestimated. Without them we should have no official record of our standing as a manufacturing commonwealth, except the latest published reports of the United States Census, from which no suggestion whatever can be obtained of the expansion that

has taken place during all the years between the date to which they apply, and the next census period.

The National Government itself, recognizing the inadequacy of the ten year census, has provided by law for a special count of manufactures every five years, the first of which was made in 1905. This change is a distinct recognition of the value of the yearly census, and indicates a desire on the part of the Federal Government to place its own investigations as nearly as possible on the same basis.

The comparisons are really very complete, for although the totals of only twenty-five industries are specifically presented side by side, much more than half the number of establishments and a much larger proportion of all the other totals included in the compilation, are among them. Then too, both years aggregate totals of the industries not included in these twenty-five, are brought together and compared under the title "other industries," and finally a comparison is made in which all establishments embraced in the compilation, are included. In this way the trend of industrial activity from year to year is clearly shown, and the space occupied by the tables is not more than one-half that which would be required for a direct comparison of separate totals of each of the eighty-nine general industries, with those of the previous year.

#### ANALYSIS OF THE GENERAL TABLES.

Table No. I shows the form of ownership controlling the establishments included in each of the eighty-nine industry classifications; the number owned by corporations, with the stockholders—male, female and trustees of estates of minors; the number of establishments owned by partnerships, private firms and individuals, with the number of partners—male, female and special who are interested in them.

As stated in previous publications of these statistics, the experience of the Bureau has been that in the case of many of the largest corporations, particularly those operating branch works elsewhere, it is practically impossible to secure a statement of the number of stockholders that will be, even for the date on which it is rendered, approximately correct. The very obvious reason for this is that the securities of these corporations are constantly changing hands through the medium of purchase and sale on the stock markets; for this reason the officials who usually fill out the annual statistical reports are not in a position to state accurately the number of persons among whom the stock of their respective corporations may be distributed at any particular time.

Such securities change hands very frequently and the aggregate holdings of one hundred investors to-day may have been a few days ago, the property of only one person. However, the best that could be done in the matter was to accept as correct the showing of the stock books of these corporations when their latest elections were held.

Of the 2,291 establishments considered, 751, or 32.8 per cent. are controlled either by private firms, partnerships, or individual owners, and 1,540, or 67.2 per cent., are under the corporate form of management. This represents a gain for corporate management of 1.1 per cent., as compared with 1908, and as a matter of course, there has been a corresponding percentage of reduction in private management. In 1907 the percentage of establishments under private management was 35.7, and plants under the corporate form of administration, 64.3 per cent., which shows that during the past two years corporate management has grown and private management diminished to the extent of 2.9 per cent., or an average of only a small fraction less than one and one-half per cent. per year. One year after another since the commencement of these annual statistics of manufactures, shows the same slow but steadily maintained movement in the corporate form of organization, which, under our laws, favors investors very materially, by limiting liability to the par value of stock held. That it promotes efficiency and economy of administration by bringing ample capital and the highest degree of technical skill to the prosecution of industrial enterprise, there can be no question. Another important merit of the system is, that under its operation, both the risks and the advantages of business, its losses and its profits, are distributed among so many that the participators are not, generally speaking, impoverished by occasional reverses, or unduly enriched by success. The reasonableness of this observation will be apparent when we consider the actual number of persons concerned in the ownership of establishments under both forms of organization.

The number of partners and individual owners in the 751 non-corporate concerns is 1,313, an average of only 1.7 per establishment. Of these, 1,243, or 94.6 per cent. are men; 50, or 3.8 per cent. are women; 6, or .5 per cent. are children, and 14, or 1.1 per cent. are estates of dead partners.

The stockholders in the 1,540 corporately managed establishments reaches the striking total of 103,824, which is an average of 67.4 individual stockholders for each establishment. This exhibit of comparative popularity should interest all who do not look with favor on centralization of power, whether the same be

in commerce, finance, or industry; less than two owners per establishment under private, and more than sixty-seven per establishment under corporate management.

As stated above, the stockholders in corporations number 103,824; of these, 62,059, or 59.7 per cent. are men; 35,957, or 34.7 per cent. are women; and 5,808, or 5.6 per cent. are banks or other fiduciary concerns acting as trustees for estates and trust funds, mostly the property of minor orphans.

The aggregate number of partners and stockholders concerned in the ownership of the entire 2,291 establishments considered is 105,137. In 1908, the number was 94,841, an increase in one year of 10,296, or nearly 10 per cent., all but fifty-one being stockholders in corporations.

The table which follows shows the changes in the character of management during the year 1909.

	1908.	1909.
Number of establishments owned by individuals or partnerships.....	721	751
Number of individual owners or partners.....	1,262	1,313
Average number of owners per establishment.....	1.7	1.7
Number of establishments owned by corporations.....	1,406	1,540
Number of stockholders.....	93,579	103,824
Average number of stockholders per establishment.....	66.5	67.4
Aggregate number of partners and stockholders.....	94,841	105,137

Table No. 2 shows the aggregate amount of capital invested in each industry, and the total for all industries considered. The table shows three distinct classifications and subdivisions of invested capital, viz.: That which is in "land and buildings," in "machinery and tools," and that which is represented by "bills receivable, stock in process of manufacture, and cash in bank" at the time of filling out the establishment reports.

The aggregate total of capital invested in all industries is shown by the table to be \$715,926,268, and three establishments of the total number considered, failed to report this item. The amount invested in lands and buildings is \$186,105,363, or 26 per cent. of the total; the value of machinery, tools and implements, is \$167,762,764, or 23.4 per cent. of the total; and the value of bills receivable, stock in process of manufacture, cash in bank and all other forms of invested capital is \$362,058,181, or 50.6 per cent. of the total.

The capital invested in land and buildings is reported only by such manufacturers as own the property occupied by their plants, and omitted entirely by the large number who hold the same on lease or rental. The value of the aggregate property thus passed

over is very great, particularly in the large cities and towns where many medium sized manufactories rent the space which they require in the same building. The lessees or tenants can place no valuation on such property, and the actual owners or their agents when found, are as a rule not disposed to give any information, suspecting apparently that it is sought for taxation or some other purpose inimical to their interests. In the absence of authority to insist on such valuations being furnished on request, the industries of the State must continue to show by official figures a much lower capitalization than that which actually exists, and would be shown if the value of all leased factory property were included.

In 1908, the capital invested in "land and buildings," was, as reported, \$169,974,987; in 1909, it is \$186,105,363, an increase of \$16,130,376, or 9.5 per cent. For ten years past practically the same ratio of annual increase is shown by this subdivision of capital invested, so that the gain for 1909, although large, is not in excess of the normal growth of recent years.

The capital invested in "machinery, tools and implements" in 1908, was \$152,422,199; in 1909, it is \$167,762,724, an increase of \$15,340,525, or a trifling fraction over 10 per cent.

The several forms of capital invested under the heading "bills receivable, stock in process of manufacture, and cash in bank," amounts together to \$362,058,181; in 1908, the amount was \$326,894,163. The increase in 1909, is therefore, \$35,164,018, or 10.7 per cent.

Comparisons are made in the table which follows, of the capital invested in twenty-five of the leading industries of the State, and the increases or decreases in 1909, compared with 1908, are given numerically and by percentages. The same table shows a condensed comparison of "other industries," by which is meant those not included in the twenty-five leading classifications, the totals for which are combined in one sum, and similarly a comparison is made of "all industries" for both years.

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INDUSTRIES.	Number of Establishments	Capital Invested		Increase (+) or Decrease (-) in 1909 as compared with 1908.	
		1908.	1909.	Amount.	Percentage.
Artisans' tools . . . . .	43	\$4,356,986	\$4,447,143	+\$ 90,157	+ 2.1
Boilers (steam) . . . . .	14	10,732,668	10,754,654	+ 21,986	+ 0.2
Brewery products . . . . .	37	33,586,139	34,901,378	+ 1,315,239	+ 3.9
Brick and terra cotta . . . . .	74	14,411,411	19,641,447	+ 5,230,036	+ 36.3
Chemical products . . . . .	66	30,037,306	31,322,270	+ 1,284,964	+ 4.3
Cigars and tobacco . . . . .	36	10,756,068	11,625,173	+ 869,105	+ 8.1
Drawn wire and wire cloth . . . . .	14	6,026,198	4,463,195	- 1,563,003	- 25.9
Electrical Appliances . . . . .	34	17,675,970	19,549,965	+ 1,873,995	+ 10.6
Furnaces, ranges and heaters . . . . .	13	8,737,739	7,074,973	- 1,662,766	- 19.0
Glass (window and bottle) . . . . .	23	5,321,017	5,597,577	+ 276,560	+ 5.2
Hats (men's) . . . . .	39	4,185,242	4,240,192	+ 54,950	+ 1.3
Jewelry . . . . .	100	7,276,747	8,856,559	+ 1,579,812	+ 21.7
Leather (tanned and finished) . . . . .	77	13,340,556	16,705,936	+ 3,365,380	+ 25.2
Lamps (electric and other) . . . . .	8	5,162,048	5,260,742	+ 98,694	+ 1.9
Machinery . . . . .	136	44,830,002	46,982,028	+ 2,152,026	+ 4.8
Metal goods . . . . .	71	11,453,458	12,461,227	+ 1,007,769	+ 8.8
Oils . . . . .	17	52,391,212	59,860,848	+ 7,469,636	+ 14.3
Paper . . . . .	44	10,109,635	11,553,736	+ 1,444,101	+ 14.3
Pottery . . . . .	49	8,704,253	8,763,754	+ 59,501	+ 0.7
Rubber products (hard and soft) . . . . .	48	20,331,839	25,633,889	+ 5,302,050	+ 26.1
Shipbuilding . . . . .	17	15,764,167	16,382,755	+ 618,588	+ 3.9
Silks (broad and ribbon goods) . . . . .	182	30,125,802	34,203,395	+ 4,077,593	+ 13.5
Steel and iron (structural) . . . . .	23	14,774,997	15,684,677	+ 909,680	+ 6.2
Steel and iron (forging) . . . . .	12	14,378,661	14,687,167	+ 308,506	+ 2.1
Woolen and worsted goods . . . . .	25	27,611,780	35,518,940	+ 7,907,160	+ 28.6
Twenty-five industries . . . . .	1,202	\$422,081,901	\$466,173,620	+\$44,091,719	+ 10.4
Other industries . . . . .	1,089	227,209,448	249,752,648	+ 22,543,200	+ 9.9
All industries . . . . .	2,291	\$649,291,349	\$715,926,268	+\$66,634,919	+ 10.3

Only two of the twenty-five selected industries—the manufacture of “furnaces, ranges and heaters” and “drawn wire and wire cloth,” show a falling off in capital invested during the year; all the others show increases, many of them quite large, as for instance “brick and terra cotta,” 36.3 per cent; “woolen and worsted goods,” 28.6 per cent; “rubber goods—hard and soft,” 26.1 per cent; and “leather—tanned and finished,” 25.2 per cent. The industries coming nearest to remaining unchanged during the year in the matter of capital invested, are “steam boilers” and “pottery”—practically the same for both years; “artisan’s tools,” “brewery products,” “hats—men’s,” “lamps—electric and other,” “shipbuilding,” and “steel and iron forgings” show increases of capital ranging from 1.3 to 3.9 per cent.

In 1908, nine of twenty-five selected industries decreases were shown which amounted in the aggregate to \$11,411,644. This

falling off as pointed out in the report of that year, was directly due to the shrinkage of production and consequent withdrawal of industrial investments which followed the money panic of 1907. In 1909, the same nine industries show an increase of capital as compared with 1908, of \$14,394,910, thus fully restoring the previous year's shrinkage and leaving a net increase of \$983,266 capital invested in these nine industries, and bringing them back to where they were before the depression.

The average annual increase of capital invested in manufacturing industry in New Jersey from 1850 to and including 1907, a period of fifty-seven years, was 9.5 per cent.; for the year 1908 the increase had fallen because, as before stated, of the financial panic, to only 3.1 per cent., the lowest shown by the records for any one year; while for 1909, the increase, as will appear from the above table, is 10.4 per cent. for the "twenty-five industries," 9.9 for "other industries," not included in these twenty-five, and 10.3 per cent. for the 2,291 establishments included in "all industries," all three subdivisions showing a substantial increase over the established annual average of 9.5 per cent.

The scale on which industry is operated in New Jersey, and average size of the plants considered in these statistics, are illustrated in the following table, showing the average amount of capital invested *per establishment*, for the "twenty-five selected industries;" "other industries;" and all industries. These averages are obtained by dividing the total capital invested in each industry by the number of establishments considered in that group, the product representing the average capitalization per plant of the group composing it.

The table presents the figures for 1909, in comparison with those of 1908, increases and decreases being noted numerically and by percentages.

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INDUSTRIES.	Number of Establishments.	Average Amount of Capital Invested per Establishment.		Increase (+) or Decrease (-) in 1909 as compared with 1908.	
		1908.	1909.	Amount.	Percentage.
Artisans' tools.....	43	\$111,717	\$103,422 -	\$8,295 -	7.4
Boilers (steam).....	14	766,619	768,189 +	1,570 +	0.2
Brewery products.....	37	907,733	943,280 +	35,547 +	3.9
Brick and terra cotta.....	74	215,095	265,425 +	50,330 +	23.4
Chemical products.....	66	484,472	474,580 -	9,892 -	2.0
Cigars and tobacco.....	36	298,779	322,921 +	24,142 +	8.1
Drawn wire and wire cloth.....	14	463,553	371,933 -	91,620 -	19.7
Electrical appliances.....	34	535,635	574,999 +	39,364 +	7.3
Furnaces, ranges and heaters.....	13	672,133	544,228 -	127,905 -	19.0
Glass (window and bottle).....	23	204,654	243,373 +	38,719 +	18.9
Hats (men's).....	39	126,825	108,723 -	18,102 -	14.3
Jewelry.....	100	86,627	88,566 +	1,939 +	2.2
Leather (tanned and finished).....	77	187,895	216,960 +	29,065 +	15.5
Lamps (electric and other).....	8	469,277	657,593 +	188,316 +	40.1
Machinery.....	136	344,846	345,456 +	610 +	0.3
Metal goods.....	71	168,433	175,510 +	7,077 +	4.2
Oil refining.....	17	3,274,450	3,521,226 +	246,776 +	7.5
Paper.....	44	240,705	262,585 +	21,880 +	9.1
Pottery.....	49	189,222	178,852 -	10,370 -	5.5
Rubber products (hard and soft).....	48	472,833	534,039 +	61,206 +	12.9
Shipbuilding.....	17	995,260	963,691 -	21,571 -	2.2
Silk (broad and ribbon goods).....	182	216,732	187,930 -	28,802 -	13.3
Steel and iron (structural).....	23	642,391	681,942 +	39,551 +	6.2
Steel and iron (forging).....	12	1,106,050	1,223,930 +	117,880 +	10.7
Woolen and worsted goods.....	25	1,061,991	1,420,758 +	358,767 +	33.8
Twenty-five industries.....	1,202	\$383,362	\$387,832 +	\$4,470 +	1.2
Other industries.....	1,089	221,451	229,342 +	7,891 +	3.6
All industries.....	2,291	\$305,261	\$312,495 +	\$7,234 +	2.4

As indicated by the above table, the manufacture of artisans tools; chemical products; drawn wire and wire cloth; furnaces, ranges and heaters; men's hats; pottery, shipbuilding, and silk goods—broad and ribbon, show reductions in average capital per establishment, ranging from 2.2 per cent.—the lowest, in “shipbuilding,” up to 19.7 per cent.—the highest, in “drawn wire and wire cloth.” All the other groups comprised in the twenty-five selected industries, show increases in the average per establishment ranging from a small fraction reported by “steam boilers” to 40.1 per cent. in the manufacture of “electric and other lamps.” Naturally the fact that six of the industrial groups named above as showing decreases in the average capital invested per establishment, appear on the next preceding table with total capitalizations exceeding those of the previous year will cause some surprise; the explanation of this apparent contradiction is, however,

very simple; several new establishments came into these six industries for the compilation of 1909 that were not included in that of 1908, and while the capital thus added swelled the totals, the division by an increased number of plants reduces the averages per establishment below those of 1908.

The average capitalization per establishment comprising the "twenty-five selected industries" was \$383,362 in 1908; in 1909, it is \$387,832, an increase of \$4,470, or 1.2 per cent. "Other industries," which includes 1,089 establishments, show an average of \$221,451 for 1908, and for 1909, \$229,342; an increase of \$7,891, or 3.6 per cent. For all industries combined—that is to say, the entire 2,291 establishments considered, the average capital invested per plant in 1908, was \$305,261; in 1909 the average has risen to \$312,495, an increase in the investment per plant of \$7,234, or 2.4 per cent.

In the twenty-five selected industries are three—"oil refining," "steel and iron forgings," and "woolen and worsted goods," with a capitalization per establishment in 1909, of \$3,521,226, \$1,223,930, and \$1,420,758, respectively. Other industries showing investments of capital almost as large are: "Shipbuilding," \$963,691; "brewery products," \$943,280, and "steam boilers," \$768,189. Many other industries show average capitalization ranging between five and six hundred thousand dollars per establishment, and the entire table is strikingly illuminative of the vast scale on which modern manufacturing industry is carried on, and the great sums of money which its promoters must be prepared to invest before entering the competition for business and profits.

The industry showing the lowest capitalization per establishment is the manufacture of "jewelry," in which line of production one hundred firms are engaged, all located in the city of Newark. The average capital invested in these establishments is \$88,566, a large amount certainly, but at least 25 per cent. less than it would be if it were not for the fact that about 90 per cent. of the firms occupy rented property, the value of which is, of course, not reported by these concerns as part of their capital invested.

Table No. 3 shows the cost value of material used in manufacture, and, also the selling value of all goods made, for each of the eighty-nine general industry classifications, and the totals of both for "all industries." Included in the totals of "material used" are the cost values of all kinds of merchandise, whether the same has been consumed in the processes of manufacture, such as oil, fuel, lighting, waste and packing cases, or has been

worked into and become a part of the finished product, such as pig iron, steel, etc., in the metal trades, raw cotton, raw silk, etc., in these textile trades, and leather in the manufacture of shoes, trunks, bags, etc. The figures relating to stock or material used for 1909 are placed in comparison with those of 1908 in the following table, the same rule being observed of comparing directly only the totals of the twenty-five selected industries, the aggregate totals of both years, for "other industries" and for "all industries," are compared separately.

INDUSTRIES.	Number of Establishments.	Value of Stock Used.		Increase (+) or Decrease (-) in 1909 as compared with 1908.	
		1908.	1909.	Amount.	Percentage
Artisans' tools.....	43	\$971,595	\$1,306,246	+	\$334,651 + 34.4
Boilers (steam).....	14	2,191,002	2,344,310	+	153,308 + 7.0
Brewery products.....	37	5,973,846	5,070,676	-	903,170 - 15.1
Brick and terra cotta.....	74	1,928,699	2,802,471	+	873,772 + 45.3
Chemical products.....	66	14,620,896	16,052,501	+	1,431,605 + 9.8
Cigars and tobacco.....	36	9,683,721	11,156,398	+	1,472,677 + 15.2
Drawn wire and wire cloth.....	14	18,520,236	20,271,338	+	1,751,102 + 9.5
Electrical appliances.....	34	5,143,638	8,414,297	+	3,270,659 + 63.5
Furnaces, ranges and heaters.....	13	1,961,133	2,764,715	+	803,582 + 41.0
Glass (window and bottle).....	23	2,150,329	1,912,563	-	237,766 - 11.1
Hats (men's).....	39	4,393,676	4,398,307	+	4,631 + 0.1
Jewelry.....	100	4,298,731	5,784,225	+	1,485,494 + 34.5
Leather (tanned and finished).....	77	13,645,892	19,798,197	+	6,152,305 + 45.1
Lamps (electric and other).....	8	1,798,719	2,155,928	+	357,209 + 19.9
Machinery.....	136	11,730,629	12,126,685	+	396,056 + 3.4
Metal goods.....	71	7,143,923	8,506,257	+	1,362,334 + 19.1
Oils.....	17	54,029,984	59,372,306	+	5,542,322 + 9.9
Paper.....	44	6,127,818	7,255,994	+	1,128,176 + 18.4
Pottery.....	49	1,809,544	2,397,358	+	587,814 + 32.5
Rubber products (hard and soft).....	48	15,852,257	19,049,186	+	3,196,929 + 20.1
Shipbuilding.....	17	2,896,046	3,995,284	+	1,099,238 + 38.0
Silks (broad and ribbon goods).....	182	23,465,043	28,894,619	+	5,429,576 + 14.6
Steel and iron (structural).....	23	3,149,935	5,029,832	+	1,879,897 + 59.7
Steel and iron (forging).....	12	2,177,177	3,172,769	+	995,592 + 45.7
Woolen and worsted goods.....	25	15,717,955	23,088,901	+	7,370,946 + 46.9
Twenty-five industries.....	1,202	\$231,382,424	\$277,121,363	+	45,738,939 + 19.8
Other industries.....	1,089	180,337,440	225,849,869	+	45,512,429 + 25.2
All industries.....	2,291	\$411,719,864	\$502,971,232	+	91,251,368 + 22.2

The above table shows more strikingly than any other of the series in the entire compilation, the great improvement that has taken place in the manufacturing industry, as compared with the conditions which prevailed in 1908, when twenty-one of the twenty-five selected industries, showed expenditures for ma-

terial far below the figures of the previous years. The shrinkage was exactly 11 per cent., while for 1909, as compared with the disastrous year 1908, the *increase* for all industries is 22.2 per cent.

As shown by this table, the value of stock or material used by the twenty-five selected industries in 1908, was \$231,382,424; in 1909, the value is \$277,121,363, an increase of \$45,738,939, or 19.8 per cent; the value of the same reported by "other industries" is, for 1908, \$180,337,440, and for 1909, \$225,849,869; the increase is therefore \$45,512,429, or 25.2 per cent. The total expenditure for material reported by "all industries" for 1908, was \$411,719,864, and for 1909, \$502,971,232; an increase, as pointed out above, of \$91,251,368, or 22.2 per cent. Only two of the twenty-five industries—"brewery products," and "glass-window and bottle," show a falling off in the value of material used; all the others made large increases, the absolute amounts and percentages of which are in a number of instances suggestive of a resumption of business after an almost complete suspension of the same. Without exception the industries showing the greatest increases in 1909, are those that reported the largest decreases in expenditures for material in 1908; in other words the industries that lost most by the financial depression, have gained most by the reaction.

The consumption of material by the "woolen and worsted goods" industry, embracing twenty-five establishments, shows an increase of \$7,370,946 in the value of material used in 1909, as compared with 1908; other notable increases are: "Leather—tanning and finishing," 77 establishments, \$6,152,305; "silk,—broad and ribbon," 182 establishments, \$5,429,576; "oil refining," 17 establishments, \$5,342,322; "electrical appliances," 34 establishments, \$3,270,659, and "rubber products—soft and hard," 48 establishments, \$3,196,929. The industry showing the largest proportionate increase in expenditures for stock or material used in manufacture, is "oil refining," with an average of \$314,254 per establishment, the manufacture of woolen and worsted goods being a close second, with an average of \$294,838.

The selling value of "goods made or work done," is also given on Table No. 3 for each industry separately, and collectively for all industries. In the following table selling values of products are shown for each of the "twenty-five selected industries," for "other industries," and for "all industries," the data for 1909 being placed in comparison with those of 1908, and the increases and decreases shown numerically and by percentages.

INDUSTRIES.	Number of Establishments.	Value of Goods Made.		Increase (+) or Decrease (-) in 1909 as compared with 1908.	
		1908.	1909.	Amount.	Percentage.
Artisans' tools.....	43	\$2,710,977	\$3,585,276 +	874,299	+ 32.2
Boilers (steam).....	14	3,982,460	4,062,696 +	80,236	+ 2.0
Brewery products.....	37	18,888,949	19,363,854 +	474,905	+ 2.5
Brick and terra cotta.....	74	5,056,155	8,690,903 +	3,634,748	+ 71.9
Chemical products.....	66	26,740,739	31,307,198 +	4,566,459	+ 17.1
Cigars and tobacco.....	36	19,925,573	23,606,489 +	3,680,916	+ 18.5
Drawn wire and wire cloth.....	14	27,351,312	30,236,929 +	2,885,617	+ 10.5
Electrical appliances.....	34	11,252,023	15,649,742 +	4,397,719	+ 39.1
Furnaces, ranges and heaters.....	13	3,893,413	5,324,512 +	1,431,099	+ 36.8
Glass (window and bottle).....	23	5,472,630	4,955,024 -	517,606	- 9.5
Hats (men's).....	39	9,002,109	9,073,186 +	71,077	+ 0.8
Jewelry.....	100	7,957,212	10,853,360 +	2,896,148	+ 36.4
Leather (tanned and finished).....	77	19,314,040	28,525,433 +	9,211,393	+ 47.7
Lamps (electric and other).....	8	4,640,071	6,617,777 +	1,977,706	+ 42.6
Machinery.....	136	29,166,355	30,817,937 +	1,651,582	+ 5.7
Metal goods.....	71	12,721,340	15,540,670 +	2,819,330	+ 22.2
Oils.....	17	63,610,458	70,131,795 +	6,521,337	+ 10.3
Papers.....	44	9,409,788	12,230,863 +	2,821,075	+ 30.0
Pottery.....	49	5,654,606	7,370,398 +	1,715,792	+ 30.3
Rubber products (hard and soft).....	48	24,494,363	30,616,077 +	6,121,714	+ 25.0
Shipbuilding.....	17	6,672,816	8,680,592 +	2,007,776	+ 30.1
Silk (broad and ribbon goods).....	182	42,827,396	53,763,579 +	10,936,183	+ 25.5
Steel and iron (structural).....	23	5,641,391	8,395,601 +	2,754,210	+ 48.8
Steel and iron (forging).....	12	4,175,090	6,078,708 +	1,903,618	+ 45.6
Woolen and worsted goods.....	25	22,496,197	33,200,409 +	10,704,212	+ 47.6
Twenty-five industries.....	1,202	\$393,057,463	\$478,679,008 +	\$85,621,545	+ 21.8
Other industries.....	1,089	276,795,743	345,539,788 +	68,744,045	+ 24.8
All industries.....	2,291	\$669,853,206	\$824,218,796 +	\$154,365,590	+ 23.0

Only one of the industries named in the table, "Glass—window and bottle" shows a falling off in the value of product in 1909 as compared with the next preceding year; the deficiency is accounted for by the fact that one medium sized plant engaged in the industry succumbed to the financial depression and went out of business in the early part of 1909, while in two others, work was, for financial reasons, suspended for the greater part of the year. All others show increases of astonishing magnitude, the largest—"brick and terra cotta," being 71.9 per cent. The numerical increases are also very great; "silk goods—broad and ribbon" shows a gain for the year of \$10,936,183; "woolen and worsted goods," \$10,704,212; "leather—tanned and finished," \$9,211,393; "oil refining," \$6,521,337; and "rubber goods—hard and soft," \$6,121,714.

The oil refining industry leads all others in total value of pro-

duct—which, as shown in the 1909 column of the foregoing comparison table, was \$70,131,795. Next in the order of importance comes silk goods, \$53,763,579; woolen and worsted goods, \$30,200,409; machinery, \$30,817,937; rubber goods—hard and soft, \$30,616,077; and drawn wire and wire cloth, \$30,236,929. From the standpoint of selling value of goods produced these industries are the most important in the State, their relative rank for the present at least, is indicated by the order in which they are named above.

The story of rapid recovery from temporary disaster, the fundamental soundness of our industries, and the wonderful recuperative powers imparted to them by modern forms of business organization, is told in the totals of this comparison table more clearly than it could be if pages of textual dissertation were devoted to the subject. In the statistical presentation of 1908, the counterpart of this table showed gains in product compared with 1907, by only three of the twenty-five selected industries, and these were so trifling in amounts as to be incapable of reduction to a practical percentage basis. The decrease in value of products of all industries in 1908, was \$103,333,093, or 13.4 per cent. as compared with 1907; while as shown by the table under consideration, the increase in 1909 over 1908 for all industries, reaches the enormous total of \$154,365,590, or almost exactly 23 per cent. The ground lost during 1908, has been regained, with in addition thereto a margin large enough to keep up the normal average annual increase in the value of products for both years.

Table No. 4 gives the greatest, least and average number of persons employed in the entire 2,291 establishments considered, these employees being classified as men, 16 years and over; women, 16 years and over; and young persons of either sex below the age of 16 years, who were employed in each particular industry, and the totals of these for all industries combined. As the minimum age at which children may be employed in factory or workshop occupations is fourteen years, it is assumed that none of these young people are below that age. The amount of idleness or unemployment experienced by each industry and by all industries is indicated by the difference between the least and the greatest number employed at any time during the year. To illustrate just what is meant by the term unemployment, it may be supposed that a certain industry when most active employs five hundred persons, and at other times during the same year work could be found for only three hundred; there would then be two hundred wage workers, or 40 per cent. of the total number dependent upon that industry who suffered more or less the con-

sequences of unemployment, or rather, irregular employment during the year. The unemployment shown by each industry and by all industries, is given numerically and by percentages.

The greatest number of persons employed in "all industries" during the year is, as shown by the table, 304,067; the least number, 252,836; and the average number, 279,351. The excess of greatest over least number employed is 51,231, or 16.8 per cent. of the greatest number, whose employment for one or another reason did not extend over the entire year. Chief among them are the workers in what may properly be designated as season trades, such as "brick and terra cotta," in which operations are very much curtailed—if not entirely suspended during the winter months; and the manufacture of "glass—window and bottle," in which operations are, by a custom of the trade, entirely suspended during the months of July and August. There are other seasonal industries, but these two, employing about fourteen thousand men, are the largest. Outside of the occupations just referred to, at least 50 per cent. of the unemployment is chargeable to the lingering consequences of the financial depression, which, being more or less active during the first quarter of the year, delayed a return to normal conditions of activity in hundreds of establishments. The recovery, however, was rapid and general thereafter, as shown by the following comparison of the number of persons employed in 1908 and 1909.

	1908	1909	Increase	
			Number	Per Cent.
Greatest number employed.....	270,013	304,067	34,054	12.6
Least " " .....	219,221	252,836	33,612	15.3
Average " " .....	245,712	279,351	33,638	13.7

Of the aggregate average number of persons employed in "all industries" (279,351), 202,715, or 72.6 per cent. are men—16 years old and over; 70,590, or 25.2 per cent. are women 16 years old and over; and 6,047, or 2.2 per cent. are children of either sex who are less than 16 years old.

The proportion which each of the three classes of labor employed bears to the total number, and also the proportion of unemployment or temporary idleness is given by percentages for 1909 in comparison with 1908, in the following table:

CLASSIFICATION OF EMPLOYES.	Percentages.		Increase (+)
	1908	1909	Decrease (-)
Men 16 years old and over.....	72.8	72.6	— .2
Women 16 years old and over.....	25.1	25.2	+ .1
Children under 16 years old.....	2.1	2.2	+ .1
Temporary idleness or unemployment.....	18.8	16.8	—2.0

The changes in the percentages of the three classes of labor are very minute and indicate nothing in the way of a disturbance in the balance of employment that has obtained between the three classes of workers for years; but so far as unemployment is concerned, a substantial reduction—2 per cent., is shown in the proportion of temporarily idle employees in 1909, as compared with 1908. The trifling differences in the percentages relating to labor show at once the care bestowed on the preparation of reports by manufacturers, and on the compilation of the data which they contain. The percentage of men employed is only two-tenths of one per cent. less, and that of women and of children only one-tenth of 1 per cent. greater in 1909 than in 1908.

The following table shows all the industries—sixty-five in number, in which the labor of women or children is employed in the processes of manufacture; the number of men, women and children is given separately for each occupation, and also by corresponding percentages.

Office Number	INDUSTRIES.	Number of Establishments Considered.	Average Number of Persons Employed.				Percentage of		
			Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.
2	Artisans' tools.	43	2,335	68	26	2,429	96.1	2.8	1.1
3	Art tile.	7	462	205	40	707	65.3	29.0	5.7
4	Boxes (wood and paper).	49	1,068	1,261	118	2,447	43.6	51.6	4.8
7	Brick and terra cotta.	74	7,052	12	29	7,093	99.5	0.1	0.4
8	Brushes.	13	205	108	11	324	63.3	33.3	3.4
9	Buttons (metal).	10	528	620	45	1,193	44.3	51.9	3.8
10	Buttons (pearl).	23	917	317	30	1,264	72.6	25.0	2.4
11	Carpets and rugs.	8	666	293	21	980	68.0	29.9	2.1
13	Chemical products.	66	5,369	1,861	86	7,316	73.4	25.4	1.2
14	Cigars and tobacco.	36	1,756	7,081	358	9,195	19.1	77.0	3.9
15	Clothing.	12	510	657	4	1,171	43.6	56.1	0.3
16	Confectionery.	7	180	251	41	472	38.1	53.2	8.7
18	Corsets and corset waists.	10	169	1,888	102	2,159	7.8	87.5	4.7
19	Cutlery.	13	1,103	135	28	1,266	87.1	10.7	2.2
20	Cotton goods.	49	1,797	4,828	376	7,001	25.7	69.0	5.3
21	Cotton goods (finishing & dyeing).	18	3,319	697	39	4,055	81.9	17.2	0.9
22	Drawn wire and wire cloth.	14	8,798	679	5	9,482	92.8	7.2	0.0
23	Electrical appliances.	34	5,097	888	25	6,010	84.8	14.8	0.4
25	Food products.	30	2,308	548	59	2,915	79.2	18.8	2.0
26	Foundry (brass).	22	1,196	52	15	1,263	94.7	4.1	1.2
27	Foundry (iron).	57	8,074	93	10	8,177	98.8	1.1	0.1
28	Furnaces, ranges and heaters.	13	1,700	91	3	1,794	94.9	5.1	0.0
29	Gas and electric light fixtures.	13	420	30	3	453	92.7	6.6	0.7
30	Glass (cut table ware).	8	304	39	4	347	87.6	11.2	1.2
31	Glass (window and bottle).	23	5,047	109	267	5,423	93.1	2.0	4.9
32	Glass mirrors.	4	119	17	14	150	79.4	11.3	9.3
33	Graphite products.	6	886	953	83	1,922	46.1	49.6	4.3
34	Hats (fur and felt).	39	3,424	1,107	25	4,556	75.2	24.3	0.5
35	Hats (straw).	3	105	101	0	206	51.0	49.0	0.0
36	High explosives.	8	1,676	40	4	1,720	97.5	2.3	0.2
38	Jewelrv.	100	2,573	829	99	3,501	73.5	23.7	2.8
39	Knit goods.	21	992	2,762	280	4,034	24.6	68.5	6.9
40	Leather.	77	5,707	68	26	5,801	98.4	1.2	0.4
41	Leather goods.	17	639	393	54	1,086	58.8	36.2	5.0
42	Lamps.	8	1,317	3,213	43	4,573	28.8	70.3	0.9
44	Machinery.	136	17,474	653	34	18,161	96.2	3.6	0.2
45	Mattresses and bedding.	9	438	75	2	515	85.1	14.5	0.4
46	Metal goods.	71	5,685	1,644	135	7,464	76.2	22.0	1.8
47	Metal novelties.	22	851	197	30	1,078	78.9	18.3	2.8
49	Musical instruments.	17	1,391	276	16	1,683	82.6	16.4	1.0
50	Oilcloth (floor and table).	10	2,057	18	27	2,102	97.9	0.8	1.3
51	Oils.	17	7,082	17	54	7,153	99.0	0.2	0.8
52	Paints.	17	1,049	90	14	1,153	91.0	7.8	1.2
53	Paper.	44	2,769	272	42	3,083	89.8	8.8	1.4
55	Pottery.	49	4,170	822	77	5,069	82.3	16.2	1.5
56	Printing and book binding.	18	808	427	12	1,247	64.8	34.2	1.0
59	Rubber goods (hard and soft).	48	6,194	1,172	84	7,450	83.2	15.7	1.1
61	Saddlery and harness hardware.	12	632	109	36	777	81.4	14.0	4.6
62	Scientific instruments.	20	4,180	698	66	4,944	84.6	14.1	1.3
64	Shoes.	29	2,444	1,452	115	4,011	60.9	36.2	2.9
65	Shirts.	22	607	2,515	127	3,249	18.7	77.4	3.9
66	Shirt waists (women's).	5	14	597	23	634	2.2	94.2	3.6
68	Silk (broad and ribbon).	182	11,064	11,000	743	22,807	48.6	48.1	3.3
69	Silk dyeing.	22	5,008	590	15	5,613	89.2	10.5	0.3
70	Silk throwing.	37	676	1,051	154	1,881	35.9	55.9	8.2
71	Silk mill supplies.	32	564	148	31	743	75.9	19.9	4.2
72	Silver goods.	18	950	245	29	1,224	77.6	20.0	2.4
74	Soap and tallow.	19	1,419	471	38	1,928	73.6	24.4	2.0
78	Textile products.	9	842	455	87	1,384	60.8	32.9	6.3

## STATISTICS OF LABOR AND INDUSTRIES.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Average Number of Persons Employed.				Percentage of		
			Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.
79	Thread.....	6	1,591	3,028	657	5,276	30.2	57.4	12.4
81	Trunk and bag hardware.....	10	1,065	367	107	1,539	69.2	23.8	7.0
83	Underwear (women's & children's).....	21	116	1,512	77	1,705	6.8	88.7	4.5
85	Watches cases and material.....	11	1,407	653	82	2,142	65.7	30.5	3.8
88	Woolen and worsted goods.....	25	5,536	6,449	597	12,582	44.0	51.3	4.7
89	Unclassified.....	92	6,103	1,096	105	7,304	83.6	15.0	1.4
	Sixty-five industries.....	1,945	172,004	70,393	5,989	248,386	69.3	28.3	2.4
	Other industries.....	346	30,711	197	57	30,965	99.2	0.6	0.2
	All industries.....	2,291	202,715	70,590	6,046	279,351	72.6	25.2	2.2

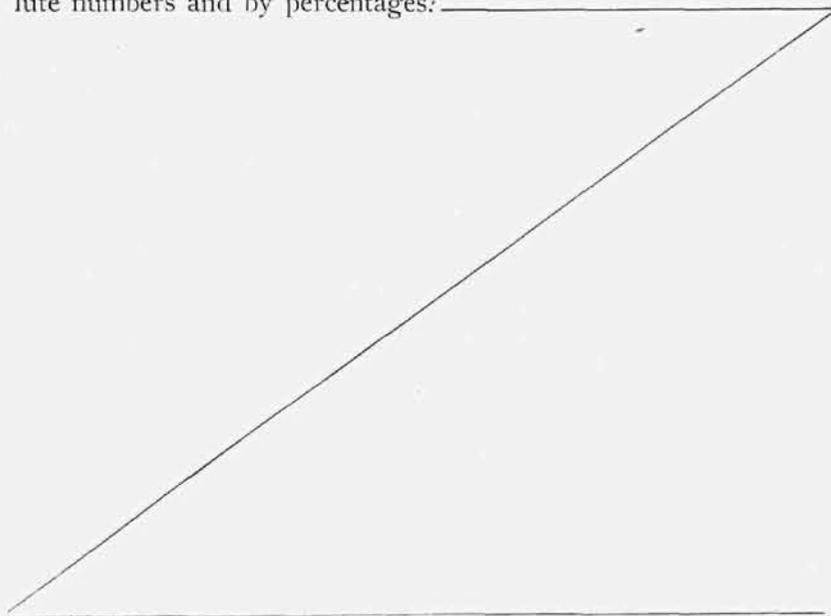
The sixty-five industries presented in the above table include all but 346 of the entire number of establishments considered; all but 30,711 of the entire number of men; all but 197 of the entire number of women; and all but 57 children of the totals of "all industries." As the labor of women, and in a lesser degree of children also, is a distinguishing feature of this large group of industries, the proportion of men employed is, as a matter of course, smaller, and that of women and children proportionately greater than in "all industries" without such distinction. As is shown by this table, in the 346 establishments included in "other industries," which, in this case, means those not employing women or children, 99.2 per cent. of the employees are men, 0.6 per cent. women, and only 0.2 per cent. children under 16 years old. The table is therefore a most accurate chart of employment by sexes and ages in the factory industries of New Jersey, showing the occupations in which women and children in varying proportions are regularly employed in the processes of manufacture. The proportion of these two classes of labor is very small in the case of many of the industries, but without their inclusion, the list of occupations employing women and children, would not be complete. Besides which the fact of sociological interest is that they—the women and children, have secured a foothold in these lines of manufacture, the growth or decline of which may be determined by future comparisons with these figures.

In seventeen of the sixty-five industries, the proportion of women and children employed is more than 50 per cent., and in

several of these, the percentage ranges upward from that figure to 94 per cent. The totals of these sixty-five industries show that of every 1,000 wage earners employed, 693 are men, 16 years old and over, 283 are women, 16 years old and over, and 24 are children below the age of 16 years. This is a record in no way discreditable to the industries of New Jersey, and the fact that the relative proportions of the three classes of labor have not materially changed for many years past, proves that their record in the matter of child labor is, and always has been, as free from reproach as that of the most advanced and progressive State of the Union.

To extend the analysis of these sixty-five occupations any further would necessarily take the form of a mere repetition of the figures on the table, without adding in any to their significance. Sufficient to say that at a glance those who are interested may identify the industries in this State which utilize the labor of women and children, and also note how many of these are employed in each particular occupation and in all occupations.

Resuming the study of employment without reference to sex or age, the number of persons employed in each of the "twenty-five selected industries;" the number in "other industries," and in "all industries," is given on the following table for 1909, in comparison with 1908. The increases and decreases are shown in absolute numbers and by percentages:



INDUSTRIES.	Number of Establishments.	Average Number of Persons Employed by Industries.		Increase (+) or Decrease (-) in 1909 as compared with 1908.	
		1908.	1909.	Number.	Percentage.
Artisans' tools.....	43	2,077	2,429	+ 352	+ 16.9
Boilers (steam).....	14	1,276	1,456	+ 180	+ 14.1
Brewery products.....	37	2,134	2,173	+ 39	+ 1.8
Brick and terra cotta.....	74	4,792	7,093	+ 2,301	+ 48.0
Chemical products.....	66	6,711	7,316	+ 605	+ 9.0
Cigars and tobacco.....	36	8,690	9,195	+ 505	+ 5.8
Drawn wire and wire cloth.....	14	7,381	9,482	+ 2,101	+ 28.5
Electrical appliances.....	34	4,243	6,010	+ 1,767	+ 41.6
Furnaces, ranges and heaters.....	13	1,460	1,794	+ 334	+ 22.9
Glass (window and bottle).....	23	6,202	5,423	- 779	- 12.6
Hats (men's).....	39	4,938	4,556	- 382	- 7.7
Jewelry.....	100	2,917	3,501	+ 584	+ 20.0
Leather (tanned and finished).....	77	4,406	5,801	+ 1,395	+ 31.7
Lamps (electric and other).....	8	3,891	4,573	+ 682	+ 17.5
Machinery.....	136	16,788	18,161	+ 1,373	+ 8.2
Metal goods.....	71	6,444	7,464	+ 1,020	+ 15.8
Oils.....	17	7,594	7,153	- 441	- 5.8
Paper.....	44	2,889	3,083	+ 194	+ 6.7
Pottery.....	49	4,403	5,069	+ 666	+ 15.1
Rubber products (hard and soft).....	48	6,641	7,450	+ 809	+ 12.2
Shipbuilding.....	17	4,024	4,380	+ 356	+ 8.8
Silk (broad and ribbon goods).....	182	18,657	22,807	+ 4,150	+ 22.2
Steel and iron (structural).....	23	2,046	2,784	+ 738	+ 36.1
Steel and iron (forging).....	12	2,382	2,837	+ 455	+ 19.1
Woolen and worsted goods.....	25	10,434	12,582	+ 2,148	+ 20.6
Twenty-five industries.....	1,202	143,420	164,572	+ 21,152	+ 14.7
Other industries.....	1,089	102,292	114,779	+ 12,487	+ 12.2
All industries.....	2,291	245,712	279,351	+ 33,639	+ 13.7

Twenty-three of the twenty-five specially selected industries show increases in the number of wage earners, that are with few exceptions, very large. The greatest is shown by the occupations chiefly concerned in the building and construction trades, that is—"brick and terra cotta," 48.0 per cent.; "steel and iron—structural," 36.1 per cent.; and "electrical appliances," 41.6 per cent. The only industries showing decreases, are the manufacture of "glass—window and bottle," "hats—men's," and "oil refining."

The increase in the average number of wage earners employed in the "twenty-five selected industries" is 14.7 per cent.; in "other industries" the increase is 12.2 per cent., and "all industries" combined—that is, the entire 2,291 establishments show for 1909 an increase in the aggregate average number of wage earners employed, of 33,639, or 13.7 per cent.

Table No. 5 shows the average number of persons employed by months, classified as men, women and young persons under 16 years of age. The figures of monthly employment are given separately for each industry, and for the entire 2,291 establishments included in "all industries." The purpose of this table is to show the fluctuations, if any, that take place in the working force of each industry, and to do so in a manner that indicates the months when they occurred. The industries follow each other on the table in alphabetical order, and the periods of greatest and least activity are shown to be the months during which, respectively, the greatest and the least number of wage earners were employed.

The last subdivision of Table No. 5 is a condensed summary in which the number of persons employed—men, women and children, is given for the entire 2,291 establishments included in "all industries." Employment is shown by this summary to have been lowest in the month of January, when a total of 269,051 wage earners were employed; February shows a gain over that total of only 169 employed, but beginning with March, the increase is both large and steadily maintained until in the month of November, when the maximum number—293,701 is reported on the pay rolls of our workshops and factories. The difference between the maximum and minimum number of wage earners is 24,650.

The month of highest employment for men, and also for women and children, was November, when 213,796; 73,537 and 6,378, respectively, were employed. The month of least employment for men was February—194,042, and for women and children, January—68,752 and 5,813, respectively. The reduction in working force between periods of greatest and least employment was for men, 19,754, or 9.2 per cent.; for women, 4,786, or 6.5 per cent., and for children, 565, or 8.8 per cent. These percentages show practically the same fluctuation in employments of men and children, the difference between them being only four-tenths of one per cent. The variation for women—6.5 per cent., is the least of the three classes of labor, showing that the industries in which they are employed were operated on a basis of more nearly uniform activity than the others.

Table No. 6 shows the total amount paid in wages by each of the eighty-nine industries, and also the aggregate amount paid by all industries included in the compilation. This table also includes the average yearly earnings per individual wage worker for each industry and the average per wage earner for all industries.

The aggregate amount paid in wages for labor during the year is \$144,304,773, and the average yearly earnings per employee is \$516.57. These figures relate only to actual wage workers, and do not include the salaries paid to company or corporation officers, managers, superintendents, bookkeepers, agents, salesmen and others, whose compensation is based on a yearly amount which is not subject to deduction on account of time lost through sickness or other causes. Officials such as these are classed as non-producers in industry for the reason that while their services are indispensable in effective business organization, they are not directly applied to the processes by which finished products are evolved from raw material. In considering the average yearly earnings per employee here presented, it should be borne in mind that the figures include earnings of women and children as well as those of men, and also that the averages are not calculated on the basis of any given weekly or daily wage rate, but on the amounts reported by individual establishments in each industry as having been paid to wage earners—either piece workers or day workers after all deductions on account of lost time or other causes had been made.

The industries that paid out the largest amounts in wages are, in the descending order of gradation, "Machinery," \$11,110,145; "silk—broad and ribbon," \$11,062,996; "woolen and worsted goods," \$5,171,278; "oil refining," \$4,773,921, and "foundry—iron," \$4,743,312. The pay tolls of eleven other industries are over \$3,000,000, but under \$4,000,000; nine are \$2,000,000, but under \$3,000,000; sixteen are \$1,000,000 but under \$2,000,000, and all others are under \$1,000,000.

The average yearly earnings per employee for "all industries," including all classes of wage workers, men, women and children, skilled and unskilled, is, as before noted, \$516.41; the increase of yearly earnings in 1909, is therefore, \$16.16, or 3.2 per cent. Taking the three classes of labor separately, the average yearly earnings of men 16 years old and over, including skilled and unskilled, is \$643.76; for women, \$376.94; and children, \$211.80. By far the largest earnings as shown by the table, are enjoyed by brewery workmen, whose average for the year is \$912.08, and the makers of straw hats, with earnings amounting to \$825.24. Next after these come the workmen in "varnish," \$789.04; "cornices and skylights," \$750.79; "furnaces, ranges and heaters," \$722.77; "inks and mucilage," \$706.43; "shipbuilding," \$700.43, and "pottery," \$700.29. Fifteen industries show average yearly earnings ranging between \$600 and \$700; thirty-one report earnings between \$500 and \$600; twenty-one between \$400 and \$500;

thirteen between \$300 and \$400, and one industry, in which 95 per cent. of the employees are women or young girls, reports yearly earnings of \$292.82.

In the industries reporting earnings of less than \$500 per year, the labor employed is largely that of women and children, as will be seen by referring to table on page 21; in all the exclusively man industries, even those in which a large proportion of unskilled labor is employed, average yearly earnings are above that figure. The occupations employing more skilled than unskilled labor, are, of course, the best paid, in these, average yearly earnings are not less than \$600.

The following table gives yearly earnings per employee for 1909, in comparison with the same of 1908, for the "twenty-five selected industries," for "other industries," and for "all industries." Such increases and decreases as there may be, are given in absolute amounts and by percentages.

INDUSTRIES.	Number of Establishments.	Average Yearly Earnings per Employee.		Increase (+) or Decrease (-) as compared with 1908.	
		1908.	1909.	Amount.	Percentage.
Artisans' tools.....	43	\$548.08	\$593.37	+ \$45.29	+ 8.3
Boilers (steam).....	14	618.27	674.91	+ 56.64	+ 9.2
Brewery products.....	37	902.40	912.08	+ 9.68	+ 1.1
Brick and terra cotta.....	74	430.00	484.27	+ 54.27	+ 12.6
Chemical products.....	66	521.03	525.67	+ 4.64	+ 0.9
Cigars and tobacco.....	36	313.08	323.54	+ 10.46	+ 3.3
Drawn wire and wire cloth.....	14	407.06	383.90	- 23.16	- 5.7
Electrical appliances.....	34	628.52	609.66	- 18.86	- 3.0
Furnaces, ranges and heaters.....	13	724.17	722.77	- 1.40	- 0.2
Glass (window and bottle).....	23	620.36	589.33	- 31.03	- 5.0
Hats (men's).....	39	585.85	642.59	+ 56.74	+ 9.7
Jewelry.....	100	601.71	661.19	+ 59.48	+ 9.9
Leather (tanned and finished).....	77	613.50	585.94	- 27.56	- 4.5
Lamps (electric and other).....	8	386.85	425.61	+ 38.76	+ 10.0
Machinery.....	136	598.81	611.76	+ 12.95	+ 2.2
Metal goods.....	71	474.86	483.49	+ 8.63	+ 1.8
Oils.....	17	617.21	667.40	+ 50.19	+ 8.1
Paper.....	44	529.95	529.64	- .31	- .05
Pottery.....	49	633.45	700.29	+ 66.84	+ 10.5
Rubbers products (hard and soft).....	48	521.17	510.08	- 11.09	- 2.1
Shipbuilding.....	17	733.06	700.43	- 32.63	- 4.4
Silk (broad and ribbon goods).....	182	444.61	485.07	+ 40.46	+ 9.1
Steel and iron (structural).....	23	689.44	678.60	- 10.84	- 1.6
Steel and iron (forging).....	12	554.36	658.94	+ 104.58	+ 18.9
Woolen and worsted goods.....	25	390.27	411.00	+ 20.73	+ 5.3
Twenty-five industries.....	1,202	\$524.28	\$538.25	+ \$13.97	+ 2.7
Other industries.....	1,089	466.94	485.47	+ 18.53	+ 4.0
All industries.....	2,291	\$500.41	\$516.57	+ \$16.16	+ 3.2

Sixteen of the industries named on the above table show increases in average yearly earnings, ranging from 0.9 per cent. in chemical products, to 18.9 per cent. in "steel and iron forgings." Numerically the increases range from \$4.64 in the first, to \$104.58 per year in the second of these industries. Nine industries show decreases ranging from \$1.40, or 0.2 per cent. in "furnaces and ranges," to \$23.16, or 5.7 per cent. in "drawn wire and wire cloth." In several of the industries showing reductions, the extent of the falling off is so slight as to be merely nominal; in the case of one industry it is only \$1.40, and in another only thirty-one cents.

The average yearly earnings for the "twenty-five selected industries" is shown by the table to have been \$524.28 in 1908; in 1909 it is \$538.25, an increase of \$13.97, or 2.7 per cent. Earnings in "other industries" have increased \$18.53, or 4.0 per cent., and "all industries," including the entire 2,291 establishments considered, show an advance over the previous year, of \$16.16, or 3.2 per cent. While this increase over the earnings of the disastrous year 1908 is very gratifying, the figures—\$516.57, are still sixty-seven cents less than the average of 1907, which was \$517.24.

Table No. 7 contains the classified weekly earnings of all wage workers—men, women and children, by industries. On this table is shown for each industry and for all industries, the actual number of wage earners who, during the week of highest employment in each of the establishments considered, received the several amounts which appear in the classification, beginning with "under \$3 per week," and advancing one dollar or more through the various grades up to \$25 per week and over. As the table shows for each industry the actual number of the three classes of wage earners, men, women and children, who received the amounts specified therein, as weekly earnings, the subject cannot be made clearer by extending the explanation or analysis further.

The final division of this table is a summary giving the classification of weekly earnings for "all industries" in the same form as that employed for each of the individual industries. This condensed presentation shows clearly the range of weekly earnings in the factory industries of the State, dividing as it does, the entire force of operatives into thirteen groups, each of them including only those whose weekly earnings are practically the same. The division is carried out for men, women and children, so that the investigator may see at a glance the number of wage earners receiving any given amount of weekly compensation, thus arriving at a much clearer understanding of the question of actual earnings than could by any possibility be conveyed through the

medium of averages. Although the use of averages in statistical presentation cannot be dispensed with, they are at times liable to be quite misleading because of the wide dissimilarity of the units from which they are derived; a case in point is the wage statistics now under consideration, in the discussion of which the average yearly earnings of men are shown to be \$643.76; those of women, \$376.94, and of children, \$211.80, while the general average for all three classes of labor combined is \$516.57. Although these figures correctly represent the average earnings of all employes, they are still so far below the averages for men separately, and above those for women and children, as to suggest no approximate standard of earnings for either of the three classes of labor.

The number of wage earners for which classified weekly earnings are given in this summary, is 224,789 men; 76,819 women; and 6,811 children. A calculation based on this summary shows the average weekly earnings of men to be \$12.53; women, \$7.25; and children, \$4.07 after all deductions had been made.

The percentages of each of the three classes of wage earners who receive the various specified wage rates, are given for all industries in the following table:

CLASSIFICATION OF WEEKLY EARNINGS.	Percentage of Wage Earners Receiving Specified Rates.			
	Men.	Women.	Children.	Total.
Under \$3.00.	0.5	1.9	10.9	1.0
\$3.00 but under \$4.00	0.9	4.8	35.7	2.6
4.00 " " 5.00	2.1	12.0	30.6	5.2
5.00 " " 6.00	3.0	17.4	16.0	6.9
6.00 " " 7.00	4.4	18.3	5.5	7.9
7.00 " " 8.00	5.8	15.0	1.3	8.0
8.00 " " 9.00	7.5	10.2		8.0
9.00 " " 10.00	14.4	7.9		12.5
10.00 " " 12.00	16.6	6.8		13.8
12.00 " " 15.00	17.7	4.3		14.0
15.00 " " 20.00	17.8	1.3		13.3
20.00 " " 25.00	5.9	0.1		4.3
25.00 and over	3.4			2.5
Total	100.0	100.0	100.0	103.0

Reading the percentages above with the summary of wage classifications which forms the concluding part of Table No. 7, and on which these percentages are based, will convey an absolutely correct understanding of current weekly earnings in manufacturing industry. It will be noted that while only 24.2 per

cent of the men are in the classes under \$10 per week, 87.5 per cent of the total number of women are found in the rates below that figure, and all the children are in the classifications under \$8 per week.

Table No. 8 gives for each industry and for all industries, the average number of days in operation during the year; the average daily and weekly working hours of employes; the number of establishments reporting overtime, and the number of extra hours worked by each industry and by "all industries." The aggregate average number of days in operation during the year 1909, is shown by the table to be 287.38; for 1908, the average was 278.53; the increase for 1909, is therefore 8.85 days, or 3.2 per cent. The industry reporting the lowest working time is "brick and terra cotta," which was operated only 227.54 days; the highest is the manufacture of "pig iron," 338.50 days of 12 hours duration. Fifteen general industries report having been in operation for 300 days and over during the year, and of the remainder, none worked less than 227 days. The greatest increase in working time is shown by the "pig iron" industry, which in 1908 was in operation only 250 days, as against 338.50 days in 1909.

The aggregate average number of working hours per day for all industries is 9.71, a small fraction over that for 1908, when the figures were 9.66; this slight difference is significant only because it continues the tendency to increased working hours shown by these statistics for the past four years. Average working hours per day as they appear on this table should be regarded as not applying to Saturday, it being apparent from the average working hours per week as reported—55.64, that in all but a few establishments, the Saturday half holiday throughout the entire year is now firmly established. Twelve industries including 238 establishments and employing 27,132 operatives, work ten hours per day; with a few exceptions however, the working hours per week are not in excess of 55.

Overtime as it appears on this table, is computed on the basis of the actual number of hours worked, multiplied by the number of operatives engaged in it. By this means, if one hundred men in an establishment worked one hour beyond the usual limit of a day's work, the overtime credited to that plant would be 100 hours; if the same number put in two hours extra duty, the credit would be two hundred hours overtime. As will be seen on this table, 341 establishments representing 74 of the 89 general industries have been obliged to resort to overtime at some period of the year in order to meet demands for their products which

could not be supplied otherwise. The aggregate number of hours worked as overtime is 1,305,050. In 1908, the overtime reported was 811,080 hours; the increase in 1909, is therefore 493,970 hours, or 60.9 per cent; reduced to days of average length—9.71 hours, the overtime reported would be equal to the labor of 467 wage earners, working 287.38 days, which is the average time in operation during the year for all establishments considered.

The industries showing the largest amount of overtime are: "Shipbuilding," 252,318 hours; "rubber goods—hard and soft," 162,880 hours; "electrical appliances," 150,332; "lime and cement," 139,373; "chemical products," 119,868; "boilers," 87,712; "machinery," 77,264; and "smelting and refining precious metals," 51,840. Only fifteen of the eighty-nine general industries reported no overtime.

Table No. 9 shows the average "proportion of business done" for each of the eighty-nine industries, and the same for all industries. The purpose of this table is to show how nearly actual operation of each industry measured by the volume of products, approached full productive capacity—full capacity being indicated by 100 per cent—and also to show the amount of productive power not called into activity by the business demands of the year. The proportion of business done is reported by each of the 2,291 establishments considered, on the basis of its actual output of goods for the year compared with what it might have been had it been necessary to use all the existing facilities of the plant.

The aggregate average "proportion of business done" by all industries during the year 1909, as shown by the table, is 74.38 per cent, which is 25.62 per cent below full capacity. In 1908, the proportion was 66.80 per cent for all industries, or 5.88 per cent less than in 1909. The principal significance of these figures representing the "proportion of business done" is in their showing that the enormous output of manufactured goods during the year, could have been increased to the extent of more than twenty-five per cent, without in any way adding to existing facilities for manufacture. As a matter of fact, every industry group included in the presentation has a number of individual establishments that were operated not only to full capacity, but were also obliged to work overtime. The "proportion of business done" reported by these is 100 per cent, but the larger number fell far enough below maximum operation to produce the averages shown on the tables.

In the following table comparisons are made of the proportion

of business done in 1909 and 1908, as reported by the "twenty-five selected industries," and also for "other industries" and for "all industries."

INDUSTRIES.	Number of Establish- ments.	Average Proportion of Business Done. Per Cent.		Increase (+) or Decrease (-) in 1909 as compared with 1908.
		1908.	1909.	Per Cent.
Artisans' tools.....	43	63.20	63.25	+ .05
Boilers (steam).....	14	55.72	69.28	+ 13.56
Brewery products.....	37	68.90	75.15	+ 6.25
Brick and terra cotta.....	74	55.30	71.62	+ 16.32
Chemical products.....	66	73.62	78.00	+ 4.38
Cigars and tobacco.....	36	71.53	79.00	+ 7.47
Drawn wire and wire cloth.....	14	76.92	82.31	+ 5.39
Electrical appliances.....	34	55.63	64.26	+ 8.63
Furnaces, ranges and heaters.....	13	57.69	71.92	+ 14.23
Glass (window and bottle).....	23	70.19	74.00	+ 3.81
Hats (men's).....	39	69.38	62.37	- 7.01
Jewelry.....	100	65.86	69.64	+ 3.78
Leather (tanned and finished).....	77	67.80	76.75	+ 8.95
Lamps (electric and other).....	8	71.36	73.12	+ 1.76
Machinery.....	136	56.92	66.76	+ 9.84
Metal goods.....	71	65.44	71.93	+ 6.49
Oils.....	17	76.78	81.92	+ 5.14
Paper.....	44	80.53	85.75	+ 5.22
Pottery.....	49	41.88	77.09	+ 35.21
Rubber products (hard and soft).....	48	67.67	77.39	+ 9.72
Shipbuilding.....	17	63.37	65.12	+ 1.75
Silk (broad and ribbon goods).....	182	71.02	76.23	+ 5.21
Steel and iron (structural).....	23	59.78	67.83	+ 8.05
Steel and iron (forging).....	12	58.46	69.58	+ 11.12
Woolen and worsted goods.....	25	74.42	84.38	+ 9.96
Twenty-five industries.....	1,202	65.57	73.10	+ 7.53
Other industries.....	1,089	68.10	76.30	+ 8.20
All industries.....	2,291	66.80	74.38	+ 7.58

The table shows only one industry, the manufacture of "men's hats," that has not increased its proportion of business done in 1909, as compared with 1908; in the presentation of last year this state of things was exactly reversed, there being then only one industry, "oil refining," that reported an increase over the year 1907, and that a small one—a fraction more than one per cent. The falling off in "men's hats" in 1909, was doubtless due to partial disorganization of business following the great strike which extended into the first quarter of the year.

The "twenty-five selected industries" show an increase of 7.53 per cent; "other industries" an increase of 8.20 per cent; and "all industries" combined, an increase of 7.58 per cent in 1909, compared with 1908.

Table No. 10, the last of the series included in this statistical presentation, shows the power used in New Jersey manufacturing

plants, its character, and quantity of each variety measured by horse power units. These are: Steam engines, gas and gasoline engines, turbine water wheels and other water motors, electric motors, and motors operated by compressed air. A comparison is made on the following table of the motors and horse power used in 1909 and 1908, showing also such increases or decreases as have occurred during 1909.

CHARACTER OF POWER.	Number of Motors.		Horse Power.		Increase (+) or Decrease (-) in 1909.	
	1908.	1909.	1908.	1909.	Motors.	Horse Power.
Steam engines.....	3,994	4,629	421,667	555,859	+ 635	+ 134,192
Gas and gasoline engines.....	266	304	8,059	9,999	+ 38	+ 1,940
Water wheels (turbine).....	153	150	10,496	10,130	- 3	- 366
Water motors.....	8	14	65	315	+ 6	+ 250
Electric motors.....	8,890	10,893	107,255	129,958	+ 2,003	+ 22,703
Compressed air motors.....	49	71	3,171	4,558	+ 22	+ 1,387
Totals.....	13,360	16,061	550,713	710,819	+ 2,701	+ 160,106

The totals appearing on the above table show very great increases both in the number of steam engines and the horse power which they produce; a large increase is also shown in the number and power of electric motors. The only species of power that shows a falling off is turbine water wheels, of which in 1909, three less were used than in 1908.

The total number of motors and power generating devices of all kinds in use in 1908 was 13,360, and their aggregate horse power, 550,713; in 1909, the total number of motors reported is 16,061, and the horse power 710,819. The gain for the year is, of motors, 2,701, and horse power, 160,106.

TABLE No. 1.—Private Firms and Corporations, Partners and Stockholders.—By Industries, 1909.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Number of Private Firms.	Proprietors and Firms-Members.					Number of Corporations.	Stockholders.				Aggregates. Partners and Stockholders.
				Males.	Females.	Special.	Estates.	Total.		Males.	Females.	Banks and Trustees.	Total.	
1	Agricultural implements. . . . .	7	4	4					3	61	13	1	75	79
2	Artisans' tools. . . . .	43	21	27	5				22	200	61	25	286	318
3	Art tile. . . . .	7	1		1				6	88			97	98
4	Boilers. . . . .	14	6	9					8	316	171	24	511	520
5	Boxes (wood and paper). . . . .	49	32	41	2		1		44	73	15	2	90	134
6	Brewing (lager beer, ale and porter). . . . .	37	1	1					36	1,005	119	10	1,134	1,135
7	Brick and terra cotta. . . . .	74	27	36	1	1	1		39	1,886	720	52	2,658	2,697
8	Brushes. . . . .	13	10	10	1		1		12	9			9	21
9	Buttons (metal). . . . .	10	3	8					8	33	7		40	48
10	Buttons (pearl). . . . .	23	14	19					19	32	4	2	38	57
11	Carpets and rugs. . . . .	8	2	6					6	29	11		40	46
12	Carriages and wagons. . . . .	29	18	24					11	76	18	2	96	120
13	Chemical products. . . . .	66	3	6	1				7	2,052	1,531	229	3,812	3,819
14	Cigars and tobacco. . . . .	36	18	23					18	844	275	20	1,139	1,162
15	Clothing. . . . .	12	10	14	1				15	6			6	21
16	Confectionery. . . . .	7	1	2					2	44	4	3	51	53
17	Cornices and skylights. . . . .	23	11	17					17	43	15		58	75
18	Corsets and corset waists. . . . .	10	2	2					2	47	12	2	61	63
19	Cutlery. . . . .	13	7	12					12	29	6	3	38	50
20	Cotton goods. . . . .	49	23	36	4	2			42	242	73	1	331	373
21	Cotton goods (finishing and dyeing). . . . .	18	1	2					2	573	315	101	989	991
22	Drawn wire and wire cloth. . . . .	14	1	1					1	235	138	27	400	401
23	Electrical appliances. . . . .	34	5	5					5	3,420	301	59	3,780	3,785
24	Fertilizers. . . . .	12	4	5					8	2,295	2,200	5	4,500	4,508
25	Food products. . . . .	20	6	15					15	2,633	1,022	6	3,661	3,676
26	Foundry (brass). . . . .	13	8	9	1				10	114	18		132	142
27	Foundry (iron). . . . .	57	17	31	1				32	2,755	301	59	3,115	3,147
28	Furnaces, ranges and heaters. . . . .	13	2	4					4	577	386	39	1,002	1,006
29	Gas and electric light fixtures. . . . .	13	4	9					9	54	13		67	76
30	Glass (cut tableware). . . . .	8	5	9	2				11	37	3	3	43	54
31	Glass (window and bottle). . . . .	23	4	6	1		1		8	244	36	10	290	298

32 Glass mirrors.....	4	2	4			4	2	16			16	20
33 Graphite products.....	6	2	2			2	4	107	61	27	195	197
34 Hats (fur and felt).....	39	19	40	1		41	20	198	71	5	274	315
35 Hats (straw).....	3	2	3			3	1	15			15	18
36 High explosives.....	8						8	1,015	390	80	1,485	1,485
37 Inks and muelage.....	7	1	2			2	6	71	5	2	78	80
38 Jewelry.....	100	54	116	2	1	119	46	184	33	1	218	337
39 Knit goods.....	21	11	15	1		16	10	113	89	34	236	252
40 Leather.....	77	30	52	2	1	55	17	4,044	2,024	559	6,627	6,682
41 Leather goods.....	17	9	15			15	8	37	14		51	66
42 Lamps.....	8	1	2			2	7	4,517	4,004	1,002	9,527	9,525
43 Lime and cement.....	11	3	6	1		7	8	399	173	30	602	609
44 Machinery.....	136	32	44	2	2	48	104	1,593	623	116	2,332	2,390
45 Mattresses and bedding.....	9	1	2			2	8	41	16		57	59
46 Metal goods.....	71	12	22			22	59	1,231	610	138	1,979	2,001
47 Metal novelties.....	22	9	12	1		13	13	77	16		93	106
48 Mining (iron ore).....	6					6	6	383	303	101	787	787
49 Musical instruments.....	17	2	3			3	15	126	21	5	152	155
50 Oilcloth (floor and table).....	10	3	6			6	7	310	162	15	487	493
51 Oils.....	17					17	17	2,802	2,727	655	6,184	6,184
52 Paints.....	17	6	16	5	2	23	11	348	92	23	463	486
53 Paper.....	44	6	11	2		13	38	1,032	129	15	1,176	1,189
54 Pig iron.....	5					5	5	139	53	10	202	202
55 Pottery.....	49	10	20	1		21	39	418	202	41	661	682
56 Printing and bookbinding.....	18	6	8		1	9	12	91	18		109	118
57 Quarrying stone.....	17	4	6			6	13	35	8		43	49
58 Roofing (metal and tar).....	8					8	8	49	11	3	63	63
59 Rubber goods (hard and soft).....	48	1	1	1		2	47	4,917	3,016	201	8,134	8,136
60 Saddles and harness.....	6	2	4			4	4	11	2		13	17
61 Saddlery and harness hardware.....	12	6	7			7	6	31	16		47	54
62 Scientific instruments.....	20	3	7			7	17	279	47	14	340	347
63 Sash, blinds and doors.....	25	13	23	1		24	12	85	17		102	126
64 Shoes.....	29	14	27			27	15	74	14	5	93	120
65 Shirts.....	22	13	27	1		28	9	60	11		71	99
66 Shirt waists (women's).....	5	4	6			6	1	3			3	9
67 Shipbuilding.....	17	4	11			11	13	127	48	13	188	199
68 Silk (broad and ribbon).....	182	75	130	1	2	133	107	520	111	30	661	794
69 Silk dyeing.....	22	6	8			8	16	149	16	5	170	178
70 Silk throwing.....	32	13	20			20	19	54	16	2	72	92
71 Silk mill supplies.....	17	13	21			21	4	16	6		22	43
72 Silver goods.....	18	5	10			10	13	87	40	9	136	146
73 Smelting and refining (gold, silver, copper, etc.).....	9					9	9	2,380	1,890	306	4,576	4,576
74 Soap and tallow.....	19	3	5			5	16	2,669	16	1	2,686	2,691
75 Steel and iron (bar).....	75					75	6	42	5	1	48	48
76 Steel and iron (structural).....	23	3	4			4	20	410	74	49	533	537
77 Steel and iron (forging).....	12	3	3		1	4	9	196	117	19	332	336

TABLE No. 1.—Private Firms and Corporations, Partners and Stockholders.—By Industries, 1909.—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Proprietors and Firms-Members.					Number of Corporations.	Stockholders.				Aggregates. Partners and Stockholders.	
			Private Firms.						Males.	Females.	Banks and Trustees.	Total.		
			Males.	Females.	Special.	Estates.	Total.							
78	Textile products. . . . .	9	1	2			2	8	60	28		88	90	
79	Thread. . . . .	6					6		*918	*901	*2	*1,821	1,821	
80	Trunks and traveling bags. . . . .	11	6	10		1	11	5	18	10	1	29	40	
81	Trunk and bag hardware. . . . .	10	5	7	1		8	5	38	2	2	42	50	
82	Typewriters and supplies. . . . .	4					4	4	19			19	19	
83	Underwear (women's and children's). . . . .	21	11	19	1		20	10	30	8	1	39	59	
84	Varnishes. . . . .	17	3	6			6	14	103	38	13	154	160	
85	Watches, cases and material. . . . .	11	5	8			6	6	26	2	2	30	38	
86	Window shades. . . . .	4					3	2	8			10	13	
87	Wooden goods. . . . .	36	18	28	1		29	18	110	28	3	141	170	
88	Woolen and worsted goods. . . . .	25	7	21		2	23	18	271	73	32	376	399	
89	Unclassified. . . . .	92	16	22	4		26	76	†8,905	†9,751	†1,535	†20,191	20,217	
	All industries. . . . .	2,291	751	1,243	50	6	14	1,313	1,540	62,059	35,957	5,808	103,824	105,137

\*Two establishments not reporting these items.

†One establishment not reporting these items.

## STATISTICS OF MANUFACTURES.

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TABLE No. 2.—Capital Invested—By Industries, 1909.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Capital Invested in			
			Land and Buildings.	Machinery and Tools.	Bills, Receivable, Stock in Process of Manufacture, Cash on hand.	Total Amount of Capital Invested.
1	Agricultural implements.	7	\$833,483	\$365,524	\$2,839,776	\$3,598,783
2	Artisan tools.	43	992,326	1,341,940	2,112,877	4,447,143
3	Art. die.	7	436,578	94,822	3,001,678	831,078
4	Boilers.	14	2,458,391	1,469,513	6,826,750	10,754,654
5	Boxes (wood and paper).	49	711,090	528,736	867,260	2,107,086
6	Brewing (lager beer, ale and porter).	37	11,798,674	5,678,901	17,428,803	34,901,378
7	Brick and terra cotta.	74	10,606,205	3,232,858	5,802,384	19,641,447
8	Brushes.	102	102,881	39,787	145,809	288,567
9	Buttons (metal).	13	102,881	39,787	145,809	288,567
10	Buttons (pearl).	10	217,554	548,382	748,823	1,514,759
11	Carriages and rugs.	23	161,130	157,190	520,594	808,914
12	Carriages and wagons.	8	507,827	525,041	1,240,873	2,273,741
13	Chemical products.	29	560,773	260,632	9,006,518	11,736,923
14	Cheese and tobacco.	66	8,464,554	9,403,379	13,454,357	31,322,270
15	Clothing.	36	2,372,397	1,542,988	7,709,788	11,625,173
16	Confectionery.	12	113,000	63,400	393,291	809,118
17	Corsets and sky lights.	7	218,159	223,069	654,407	834,519
18	Corsets and corset wa stes.	23	159,447	139,191	1,239,227	953,135
19	Cotton goods.	10	124,737	158,944	1,522,908	1,522,908
20	Cotton goods (finishing and dyeing).	49	268,655	283,333	697,196	1,249,184
21	Cotton goods (finishing and dyeing).	13	2,721,541	2,972,398	3,997,803	9,691,742
22	Drawn wire and wire cloth.	18	2,616,283	3,128,144	2,151,377	7,895,804
23	Electrical appliances.	14	922,882	1,469,287	2,071,026	34,463,195
24	Fertilizers.	34	2,681,923	3,798,831	13,069,211	19,549,965
25	Food products.	12	722,603	594,875	4,007,156	5,324,634
26	Food products.	30	2,823,731	2,080,702	4,305,556	9,209,989
27	Foundry (brass).	22	744,562	414,442	1,342,669	2,501,673
28	Foundry (iron).	57	4,822,753	3,086,334	9,080,734	16,998,821
29	Furnaces, ranges & heaters.	13	1,776,253	483,983	4,814,737	7,074,973
30	Gas and electric light fixtures.	13	178,513	298,807	457,792	935,112
31	Glass (cut tableware).	8	30,650	42,997	233,256	306,898
32	Glass (window and bottle).	23	1,921	890,370	3,040,286	4,957,577
33	Glass mirrors.	4	9,000	69,500	282,500	431,000
34	Graphic products.	6	343,500	465,627	1,343,964	42,153,001
35	Hats (fur and felt).	39	1,147,789	662,485	2,439,918	4,240,192
36	Hats (straw).	3	170,000	59,000	2,260,000	4,510,000
37	High explosives.	8	64,765,035	59,000	2,583,611	7,348,646
38	Inks and mucilage.	7	193,670	104,658	331,473	629,806
39	Jewelry.	100	401,002	854,994	7,690,568	48,859,258
40	Knit goods.	21	736,840	1,642,638	5,273,051	8,692,538
41	Leather.	77	3,592,616	1,845,599	11,270,784	16,703,999
42	Leather goods.	17	386,101	166,308	1,808,946	3,531,355
43	Lamps.	8	1,419,855	1,050,845	2,790,909	5,260,742
44	Lime and cement.	11	4,822,797	4,634,343	2,498,405	11,855,640
45	Machinery.	136	12,197,698	10,199,017	24,283,342	46,982,028
46	Mattresses and bedding.	9	2,840,666	3,213,076	6,387,938	12,491,227
47	Metals and metal products.	71	2,961,051	340,761	889,293	1,673,075
48	Metal novelties.	22	1,000,150	390,000	886,971	2,226,701
49	Mining (from ore).	17	761,321	890,709	1,812,829	3,434,839
50	Musical instruments.	10	2,652,227	1,804,904	2,894,114	7,081,247
51	Oldcloth (floor and table).	17	4,508,680	10,346,522	29,288,941	59,860,848
52	Paints.	17	2,108,295	1,469,900	2,652,933	6,261,128
53	Paper.	44	3,271,288	4,351,530	3,930,938	11,553,756

TABLE No. 2.—Capital Invested.—By Industries, 1909.—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Capital Invested in			Total Amount of Capital Invested.
			Land and Buildings.	Machinery and Tools.	Bills Receivable, Stock in Process of manufacture. Cash on hand.	
54	Pig iron.....	5	3,757,000	1,137,000	1,577,888	6,471,888
55	Pottery.....	49	2,540,419	852,223	5,371,112	8,763,754
56	Printing and book-binding.....	18	333,978	1,086,983	779,330	2,200,291
57	Quarrying stone.....	17	297,232	405,736	616,256	1,319,224
58	Roofing (metal and tar).....	8	698,599	805,827	444,819	1,949,245
59	Rubber goods (hard & soft).....	48	4,776,199	5,193,898	15,663,792	25,633,889
60	Saddles and harness.....	6	15,000	12,100	38,320	65,420
61	Saddles and harness hardware.....	12	175,000	264,662	642,989	1,082,651
62	Scientific instruments.....	20	2,201,649	1,583,179	4,298,326	8,083,154
63	Sash, blinds and doors.....	25	440,797	206,494	1,279,487	2,016,778
64	Shoes.....	29	346,314	621,140	1,721,349	2,688,803
65	Shirts.....	22	245,903	151,090	2,253,867	2,650,860
66	Shirt waists (women's).....	5	8,800	9,800	25,500	44,100
67	Shipbuilding.....	17	4,774,944	3,388,384	8,219,427	16,382,755
68	Silk (broad and ribbon).....	182	4,329,700	9,676,209	20,197,486	34,203,395
69	Silk dyeing.....	22	2,330,556	2,625,323	8,280,414	13,236,293
70	Silk throwing.....	32	323,777	787,433	243,889	1,355,099
71	Silk mill supplies.....	17	225,975	207,900	314,001	747,876
72	Silver goods.....	18	353,487	541,629	1,517,160	2,412,276
73	Smelting and refining (gold, silver, copper, etc.).....	9	3,214,225	3,665,634	8,873,580	b15,753,439
74	Soap and tallow.....	19	3,021,733	1,924,735	4,568,490	9,514,958
75	Steel and iron (bar).....	6	857,588	929,691	1,180,583	2,967,862
76	Steel and iron (structural).....	23	2,837,742	9,394,866	3,452,069	15,684,677
77	Steel and iron (forging).....	12	6,022,824	6,177,657	2,486,686	14,687,167
78	Textile products.....	9	597,512	880,314	1,350,083	2,827,909
79	Thread.....	6	750,872	641,047	2,126,455	a3,518,374
80	Trunks and traveling bags.....	11	119,300	81,845	492,100	693,245
81	Trunk and bag hardware.....	10	228,865	461,352	748,755	1,438,972
82	Typewriters and supplies.....	4	115,321	277,971	518,464	911,756
83	Underwear (women's and children's).....	21	142,600	150,584	865,972	1,159,156
84	Varnishes.....	17	1,155,419	359,779	2,415,265	3,930,463
85	Watches, cases and material.....	11	1,206,319	1,405,578	4,039,936	6,651,833
86	Window shades.....	4	59,000	40,426	96,247	195,673
87	Wooden goods.....	36	553,558	380,714	923,346	1,857,618
88	Wooden and worsted goods.....	25	7,452,435	9,253,172	18,813,333	35,518,940
89	Unclassified.....	92	9,401,712	5,910,165	15,634,964	bg30,946,841
	All industries.....	2,291	\$186,105,363	167,762,724	\$362,058,181	\$715,926,268

- a. Two establishments. Capital not reported.  
 b. One establishment. Capital not reported.  
 c. Three establishments. Capital not sub-divided.  
 d. One establishment. Capital not sub-divided.  
 e. Including machinery, tools and equipments.  
 f. Six establishments. Capital not sub-divided.  
 g. Two establishments. Capital not sub-divided.

TABLE No. 3.—Stock or Material Used, Goods Made or Work Done.—  
By Industries, 1909.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Cost Value of Stock Used.	Selling Value at Manufactory of Goods Made.
1	Agricultural implements.....	7	\$678,497	\$1,676,622
2	Artisans' tools.....	43	1,306,246	3,585,276
3	Art tile.....	7	205,295	762,699
4	Boilers.....	14	2,344,310	4,062,696
5	Boxes (wood and paper).....	49	1,897,404	3,426,930
6	Brewing (lager beer, ale and porter).....	37	5,070,676	19,363,854
7	Brick and terra cotta.....	74	2,802,471	8,690,903
8	Brushes.....	13	156,641	418,471
9	Buttons (metal).....	10	571,557	1,757,974
10	Buttons (pearl).....	23	753,484	1,682,030
11	Carpets and rugs.....	8	904,057	1,944,955
12	Carriages and wagons.....	29	852,927	1,975,496
13	Chemical products.....	66	16,052,501	31,307,198
14	Cigars and tobacco.....	36	11,156,398	23,606,498
15	Clothing.....	12	1,172,726	2,048,048
16	Confectionery.....	7	944,972	1,318,337
17	Cornice and skylights.....	23	736,628	1,459,641
18	Corsets and corset waists.....	10	1,482,318	3,607,933
19	Cutlery.....	13	311,073	1,197,863
20	Cotton goods.....	49	8,926,759	12,973,020
21	Cotton goods (finishing and dyeing).....	18	5,518,683	9,539,372
22	Drawn wire and wire cloth.....	14	20,271,338	30,236,929
23	Electrical appliances.....	34	*8,414,297	*15,649,742
24	Fertilizers.....	12	5,640,694	7,740,479
25	Food products.....	30	23,270,594	29,540,908
26	Foundry (brass).....	22	2,090,368	3,306,117
27	Foundry (iron).....	57	8,798,657	15,998,961
28	Furnaces, ranges and heaters.....	13	2,764,715	5,324,512
29	Gas and electric light fixtures.....	13	376,038	740,786
30	Glass (cut tableware).....	8	168,850	424,219
31	Glass (window and bottle).....	23	1,912,563	*4,955,024
32	Glass mirrors.....	4	273,486	434,492
33	Graphite products.....	6	*577,912	*1,265,010
34	Hats (fur and felt).....	39	4,398,307	9,073,186
35	Hats (straw).....	3	260,000	600,000
36	High explosives.....	8	4,560,759	9,511,685
37	Inks and mucilage.....	7	171,216	435,273
38	Jewelry.....	100	5,784,225	*10,853,360
39	Knit goods.....	21	2,599,535	5,462,178
40	Leather.....	77	19,798,197	28,525,433
41	Leather goods.....	17	1,137,131	1,875,237
42	Lamps.....	8	2,155,928	6,617,777
43	Lime and cement.....	11	2,282,569	3,477,686
44	Machinery.....	136	12,126,685	30,817,937
45	Mattresses and bedding.....	9	906,485	1,439,798
46	Metal goods.....	71	8,506,257	15,540,670
47	Metal novelties.....	22	816,344	1,786,013
48	Mining (iron ore).....	6	356,618	1,429,562
49	Musical instruments.....	17	1,394,100	3,487,596
50	Oilcloth (floor and table).....	10	6,934,778	10,291,770
51	Oils.....	17	59,372,306	70,131,795
52	Paints.....	17	6,237,041	9,293,115
53	Paper.....	44	7,255,994	12,230,863
54	Pig iron.....	5	4,117,126	4,639,997
55	Pottery.....	49	2,397,358	7,370,398
56	Printing and book-binding.....	18	1,024,423	2,726,292
57	Quarrying stone.....	17	362,438	1,439,415
58	Roofing (metal and tar).....	8	1,567,907	2,237,816
59	Rubber goods (hard and soft).....	48	19,049,186	30,616,077
60	Saddle and harness.....	6	48,440	103,614
61	Saddlery and harness hardware.....	12	538,257	1,081,613
62	Scientific instruments.....	20	6,652,391	9,790,647
63	Sash, blinds and doors.....	25	1,470,919	2,399,890
64	Shoes.....	29	4,058,101	7,127,419
65	Shirts.....	22	2,084,985	3,870,831

TABLE No. 3.—Stock or Material Used, Goods Made or Work Done.—  
By Industries, 1909.—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Cost Value of Stock Used.	Selling Value at Manufactory of Goods Made.
66	Shirt waists (women's).....	5	\$176,705	\$455,898
67	Shipbuilding.....	17	3,995,284	8,680,592
68	Silk (broad and ribbon).....	182	28,894,619	53,763,579
69	Silk dyeing.....	22	3,864,356	8,803,826
70	Silk throwing.....	32	200,998	919,065
71	Silk mill supplies.....	17	384,709	1,013,974
72	Silver goods.....	18	950,987	2,724,934
73	Smelting and refining (gold, silver, copper, etc.).....	9	35,333,007	43,985,334
74	Soap and tallow.....	19	13,728,795	20,640,757
75	Steel and iron (bar).....	6	869,562	1,548,387
76	Steel and iron (structural).....	23	*5,029,832	*8,395,601
77	Steel and iron (forging).....	12	3,172,769	6,078,708
78	Textile products.....	9	2,151,066	3,043,371
79	Thread.....	6	*2,387,366	†2,973,308
80	Trunks and traveling bags.....	11	418,889	835,170
81	Trunk and bag hardware.....	10	826,426	2,202,019
82	Typewriters and supplies.....	4	250,456	618,234
83	Underwear (women's and children's).....	21	1,492,745	2,585,037
84	Varnishes.....	17	2,249,566	4,464,825
85	Watches, cases and material.....	11	1,545,378	3,614,942
86	Window shades.....	4	204,193	346,750
87	Wooden goods.....	36	1,828,505	3,531,029
88	Woolen and worsted goods.....	25	23,088,901	33,200,409
89	Unclassified.....	92	*41,094,977	*51,485,138
	All industries.....	2,291	\$502,971,232	\$824,218,796

\*One establishment not reporting these items.

†Two establishments not reporting this item.

TABLE No. 4.—Average, Greatest and Least Number of Wage Earners Employed.—By Industries, 1909.—  
Aggregates.

Office Number.	DUSTRIES.	Number of Establishments Considered.	Average Number of Persons Employed.				Number of Persons Employed at Period of Employment of the		Excess of Greatest over Least Number.	
			Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total.	Greatest number.	Least number.	Number.	Per cent.
1	Agricultural implements. . . . .	7	529		2	531	642	473	169	26.3
2	Artisans' tools. . . . .	43	2,335	68	26	2,429	2,542	2,332	210	8.3
3	Art tile. . . . .	7	462	205	40	707	745	669	76	10.2
4	Boilers. . . . .	14	1,456			1,456	1,645	1,276	369	22.4
5	Boxes (wood and paper). . . . .	49	1,068	1,261	118	2,447	2,706	2,271	435	16.1
6	Brewing (lager beer, ale and porter). . . . .	37	2,160		13	2,173	2,255	2,109	146	6.5
7	Brick and terra cotta. . . . .	74	7,052	12	29	7,093	8,525	4,745	3,780	44.3
8	Brushes. . . . .	13	205	108	11	324	336	303	33	9.8
9	Buttons (metal). . . . .	10	528	620	45	1,193	1,266	1,131	135	10.7
10	Buttons (pearl). . . . .	23	917	317	30	1,264	1,332	1,217	115	8.6
11	Carpets and rugs. . . . .	8	666	293	21	980	1,039	928	111	10.7
12	Carriages and wagons. . . . .	29	1,054			1,054	1,110	967	143	12.9
13	Chemical products. . . . .	66	5,369	1,861	86	7,316	7,575	6,934	641	8.5
14	Cigars and tobacco. . . . .	36	1,756	7,081	358	9,195	9,780	8,760	1,020	10.4
15	Clothing. . . . .	12	510	657	4	1,171	1,239	1,098	141	11.4
16	Confectionery. . . . .	7	180	251	41	472	567	385	182	32.1
17	Cornices and skylights. . . . .	23	540	3		543	594	479	115	19.4
18	Corsets and corset waists. . . . .	10	169	1,888	102	2,159	2,258	2,026	232	10.3
19	Cutlery. . . . .	13	1,103	135	28	1,266	1,366	1,171	195	14.3
20	Cotton goods. . . . .	49	1,797	4,828	376	7,001	7,338	6,611	727	9.9
21	Cotton goods (finishing and dyeing). . . . .	18	3,319	697	39	4,055	4,155	3,887	268	6.4
22	Drawn wire and wire cloth. . . . .	14	8,798	679	5	9,482	9,587	9,308	279	2.9
23	Electrical appliances. . . . .	34	5,097	888	25	6,010	7,162	5,141	2,021	28.2
24	Fertilizers. . . . .	12	1,210	14	2	1,226	1,515	1,095	420	27.7
25	Food products. . . . .	30	2,308	548	59	2,915	3,666	2,478	1,188	32.4
26	Foundry (brass). . . . .	22	1,196	52	15	1,263	1,374	1,190	184	13.4
27	Foundry (iron). . . . .	57	8,074	93	10	8,177	8,953	7,670	1,283	14.3

TABLE No. 4.—Average, Greatest and Least Number of Wage Earners Employed.—By Industries, 1909.—  
Aggregates.—(Continued).

Office number.	INDUSTRIES.	Number of Establishments Considered.	Average Number of Persons Employed.				Number of Persons Employed at Period of Employment of the		Excess of Greatest over Least Number.	
			Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total.	Greatest Number.	Least Number.	Number.	Per cent.
28	Furnaces, ranges and heaters.	13	1,700	91	3	1,794	1,973	1,647	326	16.5
29	Gas and electric light fixtures.	13	420	30	3	453	522	406	116	22.2
30	Glass (cut tableware).	8	304	39	4	347	391	325	66	16.9
31	Glass (window and bottle)*	23	5,047	109	267	5,423	6,905	1,045	5,860	84.9
32	Glass mirrors.	4	119	17	14	150	164	132	32	19.5
33	Graphite products.	6	886	953	83	1,922	2,030	1,767	263	12.9
34	Hats (fur and felt).	39	3,424	1,107	25	4,556	5,899	2,816	3,083	52.3
35	Hats (straw)	3	105	101	.....	206	370	64	306	82.7
36	High explosives.	8	1,676	40	4	1,720	1,860	1,510	350	18.8
37	Inks and mucilage.	7	78	6	.....	84	87	81	6	8.9
38	Jewelry.	100	2,573	829	99	3,501	3,696	3,371	325	8.8
39	Knit goods.	21	992	2,762	280	4,034	4,188	3,887	301	7.2
40	Leather.	77	5,707	68	26	5,801	6,395	5,479	916	14.3
41	Leather goods.	17	639	393	54	1,086	1,148	1,022	126	11.0
42	Lamps.	8	1,317	3,213	43	4,573	4,803	4,397	406	8.5
43	Lime and cement.	11	1,865	15	3	1,883	2,201	1,289	912	41.4
44	Machinery.	136	17,474	653	34	18,161	20,294	17,241	3,053	15.0
45	Mattresses and bedding.	9	438	75	2	515	612	380	232	37.9
46	Metal goods.	71	5,685	1,644	135	7,464	8,006	6,879	1,127	14.1
47	Metal novelties.	22	851	197	30	1,078	1,210	937	273	22.6
48	Mining (iron ore)	6	1,630	.....	.....	1,630	1,688	1,545	143	8.5
49	Musical instruments.	17	1,391	276	16	1,683	1,716	1,610	106	6.2
50	Oilcloth (floor and table).	10	2,057	18	27	2,102	2,211	2,016	195	8.8
51	Oils.	17	7,082	17	54	7,153	7,498	6,667	831	11.1
52	Paints.	17	1,049	90	14	1,153	1,205	1,090	115	9.5
53	Paper.	44	2,769	272	42	3,083	3,372	2,895	477	14.1
54	Pig iron.	5	755	.....	.....	755	1,094	538	556	50.8

55 Pottery . . . . .	49	4,170	822	77	5,069	5,331	4,884	447	8.4
56 Printing and book-binding . . . . .	18	808	427	12	1,247	1,420	1,154	266	18.7
57 Quarrying stone . . . . .	17	1,068			1,068	1,328	751	577	43.4
58 Roofing (metal and tar) . . . . .	8	510	19		529	546	494	52	9.5
59 Rubber goods (hard and soft) . . . . .	48	6,194	1,172	84	7,450	7,921	7,156	765	9.7
60 Saddles and harness . . . . .	6	73	4		77	107	64	43	40.2
61 Saddlery and harness hardware . . . . .	12	632	109	36	777	797	713	84	10.5
62 Scientific instruments . . . . .	20	4,180	698	66	4,944	5,883	4,322	1,561	26.5
63 Sash, blinds and doors . . . . .	25	810			810	849	767	82	9.7
64 Shoes . . . . .	29	2,444	1,452	115	4,011	4,058	3,928	130	3.2
65 Shirts . . . . .	22	607	2,515	127	3,249	3,384	3,154	230	6.8
66 Shirt waists (women's) . . . . .	5	14	597	23	634	662	589	73	11.0
67 Shipbuilding . . . . .	17	4,380			4,380	4,696	4,072	624	13.3
68 Silk (broad and ribbon) . . . . .	182	11,064	11,000	743	22,807	23,727	22,093	1,634	6.9
69 Silk dyeing . . . . .	22	5,008	590	15	5,623	6,073	4,936	1,137	18.7
70 Silk throwing . . . . .	32	676	1,051	154	1,881	1,923	1,814	109	5.7
71 Silk mill supplies . . . . .	17	564	148	31	743	777	701	76	9.8
72 Silver goods . . . . .	18	950	245	29	1,224	1,320	1,158	162	12.3
73 Smelting and refining (gold, silver, copper, etc.) . . . . .	9	3,599	5		3,604	3,901	3,318	583	14.9
74 Soap and tallow . . . . .	19	1,419	471	38	1,928	2,038	1,737	301	14.8
75 Steel and iron (bar) . . . . .	6	879	49		928	1,248	726	522	41.8
76 Steel and iron (structural) . . . . .	23	2,784			2,784	3,022	2,455	567	18.7
77 Steel and iron (forging) . . . . .	12	2,818	16	3	2,837	3,363	2,515	848	25.2
78 Textile products . . . . .	9	842	455	87	1,384	1,442	1,314	128	8.9
79 Thread . . . . .	6	1,591	3,028	657	5,276	5,401	4,811	590	10.9
80 Trunks and traveling bags . . . . .	11	403	23	2	428	455	385	70	15.4
81 Trunk and bag hardware . . . . .	10	1,065	367	107	1,539	1,886	1,305	581	30.8
82 Typewriters and supplies . . . . .	4	193	14		207	259	169	90	34.7
83 Underwear (Women's and Children's) . . . . .	21	116	1,512	77	1,705	1,785	1,611	174	9.7
84 Varnishes . . . . .	17	318	13		331	344	323	21	6.1
85 Watches, cases and material . . . . .	11	1,407	653	82	2,142	2,240	2,059	181	80.2
86 Window shades . . . . .	4	78	1		79	85	73	12	14.1
87 Wooden goods . . . . .	36	1,521	15	32	1,568	1,672	1,457	215	12.9
88 Wooden and worsted goods . . . . .	25	5,536	6,449	597	12,582	13,500	11,724	1,776	13.2
89 Unclassified . . . . .	92	6,103	1,096	105	7,304	7,814	6,414	1,400	17.9
All industries . . . . .	2,291	202,715	70,590	6,046	279,351	304,067	252,836	51,231	16.8

\*Closing down for the months of July and August is an established practice in all glass factories.

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.

## AGRICULTURAL IMPLEMENTS—SEVEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	533	....	2	535
February .....	565	....	2	567
March .....	611	....	1	612
April .....	641	....	1	642
May .....	600	....	1	601
June .....	555	....	1	556
July .....	474	....	2	476
August .....	470	....	3	473
September .....	472	....	2	474
October .....	471	....	2	473
November .....	479	....	1	480
December .....	485	....	2	487

## ARTISANS' TOOLS—FORTY-THREE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	2,258	66	24	2,348
February .....	2,265	72	27	2,364
March .....	2,306	68	23	2,397
April .....	2,247	64	21	2,332
May .....	2,326	66	25	2,417
June .....	2,348	67	26	2,441
July .....	2,343	69	27	2,439
August .....	2,307	68	27	2,402
September .....	2,347	68	35	2,450
October .....	2,403	73	29	2,505
November .....	2,419	69	27	2,515
December .....	2,446	70	26	2,542

## ART TILE—SEVEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	429	203	41	673
February .....	425	205	39	669
March .....	449	208	44	701
April .....	462	200	43	705
May .....	458	201	37	696
June .....	467	197	40	704
July .....	500	206	39	745
August .....	470	198	40	708
September .....	457	206	38	701
October .....	464	211	42	717
November .....	478	209	37	724
December .....	494	214	36	744

**TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).****BOILERS—FOURTEEN ESTABLISHMENTS.**

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,310	.....	.....	1,310
February .....	1,276	.....	.....	1,276
March .....	1,414	.....	.....	1,414
April .....	1,290	.....	.....	1,290
May .....	1,283	.....	.....	1,283
June .....	1,368	.....	.....	1,368
July .....	1,473	.....	.....	1,473
August .....	1,636	.....	.....	1,636
September .....	1,531	.....	.....	1,531
October .....	1,634	.....	.....	1,634
November .....	1,645	.....	.....	1,645
December .....	1,606	.....	.....	1,606

**BOXES (WOOD AND PAPER)—FORTY-NINE ESTABLISHMENTS.**

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	997	1,236	117	2,350
February .....	962	1,196	113	2,271
March .....	986	1,215	113	2,314
April .....	1,006	1,212	110	2,328
May .....	1,033	1,202	116	2,351
June .....	1,043	1,213	116	2,372
July .....	1,038	1,229	119	2,486
August .....	1,071	1,257	119	2,447
September .....	1,123	1,283	125	2,536
October .....	1,166	1,310	127	2,603
November .....	1,191	1,381	123	2,695
December .....	1,199	1,388	119	2,706

**BREWING (LAGER BEER, ALE AND PORTER)—THIRTY-SEVEN ESTABLISHMENTS.**

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	2,100	.....	9	2,109
February .....	2,101	.....	9	2,110
March .....	2,096	.....	10	2,106
April .....	2,135	.....	11	2,146
May .....	2,175	.....	15	2,190
June .....	2,203	.....	16	2,219
July .....	2,237	.....	18	2,255
August .....	2,209	.....	17	2,226
September .....	2,210	.....	15	2,225
October .....	2,161	.....	12	2,173
November .....	2,150	.....	11	2,161
December .....	2,140	.....	10	2,150

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## BRICK AND TERRA COTTA—SEVENTY-FOUR ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	4,726	6	13	4,745
February .....	4,748	4	14	4,766
March .....	5,365	5	14	5,384
April .....	7,049	17	36	7,102
May .....	8,088	17	47	8,152
June .....	8,267	17	41	8,325
July .....	8,431	16	45	8,492
August .....	8,463	17	45	8,525
September .....	8,426	17	31	8,474
October .....	7,955	17	31	8,003
November .....	7,059	7	16	7,082
December .....	6,051	5	16	6,072

## BRUSHES—THIRTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	201	121	11	333
February .....	204	121	11	336
March .....	212	113	11	336
April .....	213	103	11	327
May .....	210	103	11	324
June .....	208	98	11	317
July .....	201	97	11	309
August .....	199	93	11	303
September .....	199	112	11	332
October .....	202	112	11	325
November .....	204	112	11	327
December .....	211	110	11	332

## BUTTONS (METAL)—TEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	476	625	40	1,141
February .....	514	626	43	1,183
March .....	550	639	45	1,234
April .....	547	618	47	1,212
May .....	531	624	45	1,200
June .....	527	616	38	1,181
July .....	527	625	41	1,203
August .....	505	643	42	1,190
September .....	529	627	45	1,201
October .....	563	653	50	1,266
November .....	538	583	53	1,174
December .....	529	554	48	1,131

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## BUTTONS (PEARL)—TWENTY-THREE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	933	308	23	1,264
February .....	941	303	29	1,273
March .....	929	302	29	1,260
April .....	919	305	30	1,254
May .....	909	306	28	1,243
June .....	897	299	28	1,224
July .....	877	307	33	1,217
August .....	887	317	33	1,237
September .....	910	326	28	1,264
October .....	924	333	33	1,290
November .....	949	356	33	1,332
December .....	926	345	34	1,305

## CARPETS AND RUGS—EIGHT ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	638	274	23	935
February .....	661	288	26	975
March .....	644	277	19	940
April .....	677	281	20	978
May .....	672	289	18	979
June .....	632	278	18	928
July .....	673	289	25	987
August .....	707	308	24	1,039
September .....	669	308	20	997
October .....	660	306	23	989
November .....	670	306	19	995
December .....	692	310	17	1,019

## CARRIAGES AND WAGONS—TWENTY-NINE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	967	.....	.....	967
February .....	974	.....	.....	974
March .....	1,006	.....	.....	1,006
April .....	1,032	.....	.....	1,032
May .....	1,057	.....	.....	1,057
June .....	1,059	.....	.....	1,059
July .....	1,089	.....	.....	1,089
August .....	1,090	.....	.....	1,090
September .....	1,072	.....	.....	1,072
October .....	1,110	.....	.....	1,110
November .....	1,087	.....	.....	1,087
December .....	1,108	.....	.....	1,108

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## CHEMICAL PRODUCTS—SIXTY-SIX ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	5,188	1,664	82	6,934
February .....	5,227	1,660	85	6,972
March .....	5,346	1,776	91	7,213
April .....	5,402	1,824	98	7,324
May .....	5,291	1,913	92	7,296
June .....	5,269	2,014	85	7,368
July .....	5,309	1,943	86	7,338
August .....	5,324	1,923	78	7,325
September .....	5,418	1,913	77	7,408
October .....	5,509	1,913	75	7,497
November .....	5,543	1,912	92	7,547
December .....	5,599	1,888	88	7,575

## CIGARS AND TOBACCO—THIRTY-SIX ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,670	6,784	306	8,760
February .....	1,690	6,876	313	8,879
March .....	1,744	7,001	319	9,064
April .....	1,748	6,882	321	8,951
May .....	1,686	6,768	336	8,790
June .....	1,689	6,909	340	8,938
July .....	1,724	7,061	359	9,144
August .....	1,785	7,283	380	9,448
September .....	1,789	7,201	371	9,361
October .....	1,827	7,243	384	9,454
November .....	1,857	7,494	429	9,780
December .....	1,865	7,474	434	9,773

## CLOTHING—TWELVE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	458	640	....	1,098
February .....	506	635	....	1,141
March .....	515	635	5	1,155
April .....	504	613	4	1,121
May .....	512	633	5	1,150
June .....	547	660	6	1,213
July .....	541	683	6	1,230
August .....	554	670	5	1,229
September .....	488	663	4	1,155
October .....	518	718	3	1,239
November .....	474	690	2	1,166
December .....	500	648	2	1,150

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## CONFECTIONERY—SEVEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	176	232	44	452
February .....	175	246	39	460
March .....	176	230	40	446
April .....	165	236	34	435
May .....	165	237	39	441
June .....	159	223	35	417
July .....	145	212	28	385
August .....	167	235	39	441
September .....	198	275	36	509
October .....	214	293	57	564
November .....	216	301	50	567
December .....	206	297	48	551

## CORNICES AND SKYLIGHTS—TWENTY-THREE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	488	3	....	491
February .....	476	3	....	479
March .....	478	3	....	481
April .....	529	3	....	532
May .....	547	3	....	550
June .....	543	3	....	546
July .....	547	3	....	550
August .....	557	3	....	560
September .....	567	3	....	570
October .....	591	3	....	594
November .....	586	3	....	589
December .....	573	3	....	576

## CORSETS AND CORSET WAISTS—TEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	169	1,765	101	2,026
February .....	162	1,805	102	2,069
March .....	168	1,871	99	2,138
April .....	168	1,870	103	2,141
May .....	166	1,920	100	2,186
June .....	168	1,897	101	2,166
July .....	166	1,853	104	2,123
August .....	169	1,873	101	2,143
September .....	172	1,920	102	2,194
October .....	177	1,959	105	2,241
November .....	176	1,977	105	2,258
December .....	177	1,944	106	2,227

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## CUTLERY—THIRTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,027	126	25	1,178
February .....	1,022	124	25	1,171
March .....	1,057	119	28	1,204
April .....	1,095	122	30	1,247
May .....	1,137	125	28	1,290
June .....	1,095	121	32	1,248
July .....	1,096	131	34	1,261
August .....	1,108	132	26	1,266
September .....	1,143	137	29	1,309
October .....	1,179	160	27	1,366
November .....	1,181	173	27	1,331
December .....	1,148	151	26	1,325

## COTTON GOODS—FORTY-NINE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,707	4,556	348	6,611
February .....	1,739	4,656	352	6,747
March .....	1,751	4,715	359	6,825
April .....	1,761	4,761	353	6,875
May .....	1,770	4,788	363	6,921
June .....	1,754	4,827	371	6,952
July .....	1,744	4,885	389	7,018
August .....	1,794	4,862	389	7,045
September .....	1,832	4,905	384	7,121
October .....	1,857	4,968	402	7,227
November .....	1,927	5,001	402	7,330
December .....	1,928	5,008	402	7,338

## COTTON GOODS (FINISHING AND DYEING)—EIGHTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	3,197	659	31	3,887
February .....	3,245	673	36	3,954
March .....	3,303	682	44	4,029
April .....	3,334	699	40	4,073
May .....	3,375	720	37	4,132
June .....	3,317	725	35	4,077
July .....	3,292	695	36	4,023
August .....	3,386	731	38	4,155
September .....	3,396	710	38	4,144
October .....	3,327	711	42	4,080
November .....	3,321	680	42	4,043
December .....	3,340	673	47	4,060

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## DRAWN WIRE AND WIRE CLOTH—FOURTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	8,666	639	3	9,308
February .....	8,681	655	3	9,339
March .....	8,645	671	3	9,319
April .....	8,710	695	3	9,408
May .....	8,769	700	4	9,473
June .....	8,822	696	4	9,522
July .....	8,842	677	6	9,525
August .....	8,885	677	6	9,568
September .....	8,907	673	7	9,587
October .....	8,884	679	7	9,570
November .....	8,884	690	7	9,581
December .....	8,878	699	7	9,584

## ELECTRICAL APPLIANCES—THIRTY-FOUR ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	4,337	780	24	5,141
February .....	4,475	839	27	5,341
March .....	4,581	842	24	5,447
April .....	4,501	726	24	5,251
May .....	4,786	735	26	5,547
June .....	5,012	829	27	5,868
July .....	5,328	832	22	6,182
August .....	5,420	891	25	6,336
September .....	5,387	954	19	6,360
October .....	5,452	1,028	19	6,499
November .....	5,854	1,097	32	6,983
December .....	6,032	1,099	31	7,162

## FERTILIZERS—TWELVE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,076	17	2	1,095
February .....	1,160	17	3	1,180
March .....	1,495	17	3	1,515
April .....	1,473	19	2	1,494
May .....	1,161	16	1	1,178
June .....	1,111	13	1	1,125
July .....	1,108	11	1	1,120
August .....	1,178	9	1	1,188
September .....	1,230	10	2	1,242
October .....	1,192	15	1	1,208
November .....	1,179	12	1	1,192
December .....	1,163	12	2	1,177

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## FOOD PRODUCTS—THIRTY ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	2,283	510	61	2,854
February .....	2,225	510	53	2,788
March .....	2,184	426	50	2,660
April .....	2,147	443	46	2,636
May .....	2,207	419	48	2,674
June .....	2,215	445	46	2,706
July .....	2,094	321	63	2,478
August .....	2,280	541	69	2,890
September .....	2,707	894	65	3,666
October .....	2,589	806	68	3,463
November .....	2,403	670	66	3,139
December .....	2,364	594	69	3,027

## FOUNDRY (BRASS)—TWENTY-TWO ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,124	60	16	1,190
February .....	1,125	52	17	1,194
March .....	1,136	52	16	1,203
April .....	1,166	51	17	1,234
May .....	1,185	53	16	1,254
June .....	1,213	54	14	1,281
July .....	1,228	54	14	1,296
August .....	1,221	53	14	1,288
September .....	1,184	52	16	1,252
October .....	1,221	52	15	1,288
November .....	1,241	49	15	1,305
December .....	1,308	51	15	1,374

## FOUNDRY (IRON)—FIFTY-SEVEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	7,588	74	8	7,670
February .....	7,585	79	8	7,672
March .....	7,611	97	8	7,716
April .....	7,779	104	9	7,892
May .....	7,913	79	8	8,005
June .....	8,138	86	11	8,235
July .....	7,945	89	10	8,044
August .....	8,088	89	11	8,188
September .....	8,360	101	12	8,473
October .....	8,482	104	13	8,599
November .....	8,656	112	14	8,882
December .....	8,786	103	14	8,953

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## FURNACES, RANGES AND HEATERS—THIRTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,562	82	3	1,647
February .....	1,636	91	3	1,730
March .....	1,648	91	3	1,742
April .....	1,644	92	3	1,739
May .....	1,617	90	4	1,711
June .....	1,623	88	4	1,715
July .....	1,587	88	4	1,670
August .....	1,740	91	4	1,835
September .....	1,811	92	4	1,907
October .....	1,874	92	3	1,969
November .....	1,875	95	3	1,973
December .....	1,787	98	5	1,888

## GAS AND ELECTRIC LIGHT FIXTURES—THIRTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	378	27	1	406
February .....	379	30	2	411
March .....	404	36	2	442
April .....	407	33	2	442
May .....	399	31	2	432
June .....	404	26	3	433
July .....	393	27	3	423
August .....	413	25	3	444
September .....	430	27	4	461
October .....	466	30	5	501
November .....	481	31	5	517
December .....	484	34	4	522

## GLASS (CUT TABLEWARE)—EIGHT ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	301	36	4	341
February .....	302	37	4	343
March .....	310	37	4	351
April .....	303	38	4	345
May .....	291	37	4	332
June .....	281	40	4	325
July .....	285	37	4	326
August .....	297	38	4	339
September .....	304	38	4	346
October .....	311	41	4	356
November .....	322	41	4	367
December .....	345	42	4	391

**TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).**

GLASS (WINDOW AND BOTTLE)—TWENTY-THREE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	6,340	122	350	6,812
February .....	6,347	131	345	6,823
March .....	6,406	141	334	6,881
April .....	6,447	142	316	6,905
May .....	6,251	148	310	6,709
June .....	5,646	131	292	6,069
July .....	1,188	72	13	1,273
August .....	1,009	24	12	1,045
September .....	2,596	59	229	2,884
October .....	5,492	107	322	5,921
November .....	6,427	114	342	6,883
December .....	6,421	113	335	6,869

GLASS MIRRORS—FOUR ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	107	18	10	135
February .....	105	15	12	132
March .....	116	14	10	140
April .....	115	21	12	148
May .....	114	20	16	150
June .....	123	19	12	154
July .....	120	16	21	157
August .....	121	13	22	156
September .....	124	17	23	164
October .....	127	17	15	159
November .....	127	18	10	155
December .....	131	19	7	157

GRAPHITE PRODUCTS—SIX ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	828	867	72	1,767
February .....	842	888	75	1,805
March .....	849	896	80	1,825
April .....	862	919	82	1,863
May .....	872	940	84	1,896
June .....	894	963	84	1,941
July .....	902	970	85	1,957
August .....	916	979	86	1,981
September .....	914	1,002	86	2,002
October .....	909	994	87	1,990
November .....	926	1,015	89	2,030
December .....	916	1,000	90	2,006

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## HATS (FUR AND FELT)—THIRTY-NINE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	3,869	1,224	14	5,107
February .....	2,064	736	16	2,816
March .....	2,313	799	22	3,134
April .....	2,746	852	27	3,625
May .....	3,055	946	25	4,026
June .....	3,241	1,065	28	4,334
July .....	3,592	1,138	30	4,760
August .....	3,774	1,211	31	5,016
September .....	3,835	1,271	28	5,134
October .....	3,810	1,244	28	5,082
November .....	4,326	1,393	25	5,744
December .....	4,469	1,406	24	5,899

## HATS (STRAW)—THREE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	100	190	....	290
February .....	120	190	....	310
March .....	150	220	....	370
April .....	200	170	....	370
May .....	90	65	....	155
June .....	35	29	....	64
July .....	45	19	....	64
August .....	90	29	....	119
September .....	100	65	....	165
October .....	100	65	....	165
November .....	100	85	....	185
December .....	125	86	....	211

## HIGH EXPLOSIVES—EIGHT ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,555	34	2	1,591
February .....	1,548	34	3	1,585
March .....	1,519	35	4	1,558
April .....	1,470	34	6	1,510
May .....	1,606	34	4	1,644
June .....	1,677	36	5	1,718
July .....	1,786	41	6	1,833
August .....	1,784	41	5	1,830
September .....	1,790	44	5	1,839
October .....	1,769	47	2	1,818
November .....	1,799	51	3	1,853
December .....	1,804	52	4	1,860

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## INKS AND MUCILAGE—SEVEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	82	5	....	87
February .....	80	5	....	85
March .....	80	4	....	84
April .....	81	6	....	87
May .....	75	6	....	81
June .....	75	6	....	81
July .....	75	7	....	82
August .....	74	8	....	82
September .....	78	8	....	86
October .....	78	8	....	86
November .....	77	6	....	83
December .....	77	5	....	82

## JEWELRY—ONE HUNDRED ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	2,525	810	90	3,425
February .....	2,506	819	93	3,418
March .....	2,513	809	86	3,408
April .....	2,506	806	88	3,400
May .....	2,506	813	89	3,408
June .....	2,514	812	91	3,417
July .....	2,469	810	92	3,371
August .....	2,599	830	102	3,531
September .....	2,693	848	111	3,652
October .....	2,709	864	114	3,687
November .....	2,712	869	115	3,696
December .....	2,627	858	113	3,598

## KNIT GOODS—TWENTY-ONE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	943	2,680	267	3,890
February .....	946	2,671	270	3,887
March .....	959	2,677	277	3,913
April .....	966	2,701	279	3,946
May .....	973	2,737	280	3,990
June .....	971	2,743	272	3,986
July .....	996	2,768	283	4,047
August .....	1,012	2,790	284	4,086
September .....	1,022	2,817	289	4,128
October .....	1,037	2,862	287	4,186
November .....	1,049	2,856	283	4,188
December .....	1,031	2,845	282	4,158

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## LEATHER—SEVENTY-SEVEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	5,400	54	25	5,479
February .....	5,546	51	26	5,623
March .....	5,598	50	23	5,671
April .....	5,506	56	28	5,590
May .....	5,450	55	24	5,529
June .....	5,421	59	26	5,505
July .....	5,602	77	24	5,703
August .....	5,696	80	29	5,805
September .....	5,818	80	28	5,926
October .....	5,939	81	26	6,045
November .....	6,222	92	26	6,340
December .....	6,284	86	25	6,395

## LEATHER GOODS—SEVENTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	670	429	49	1,148
February .....	659	424	54	1,137
March .....	639	352	56	1,077
April .....	615	362	45	1,022
May .....	616	365	50	1,031
June .....	611	363	55	1,029
July .....	618	374	66	1,058
August .....	632	383	63	1,078
September .....	649	396	54	1,099
October .....	659	420	41	1,120
November .....	656	417	53	1,126
December .....	647	403	54	1,104

## LAMPS—EIGHT ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,256	3,345	41	4,642
February .....	1,332	3,427	44	4,803
March .....	1,331	3,025	41	4,397
April .....	1,325	3,121	40	4,486
May .....	1,259	3,093	45	4,397
June .....	1,320	3,176	43	4,539
July .....	1,270	3,139	40	4,449
August .....	1,321	3,195	43	4,559
September .....	1,393	3,086	45	4,524
October .....	1,427	3,238	46	4,711
November .....	1,280	3,355	46	4,681
December .....	1,293	3,352	46	4,691

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## LIME AND CEMENT—ELEVEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,276	13	....	1,289
February .....	1,623	15	....	1,638
March .....	1,835	15	....	1,850
April .....	2,018	17	1	2,036
May .....	1,953	17	1	1,971
June .....	1,935	15	2	1,952
July .....	2,184	15	2	2,201
August .....	2,152	15	6	2,173
September .....	2,075	15	6	2,096
October .....	2,059	17	6	2,082
November .....	1,855	15	7	1,877
December .....	1,412	13	3	1,428

## MACHINERY—ONE HUNDRED AND THIRTY-SIX ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	16,665	620	35	17,320
February .....	16,662	620	38	17,320
March .....	16,583	623	35	17,241
April .....	16,576	631	36	17,243
May .....	16,914	642	34	17,590
June .....	16,996	656	30	17,682
July .....	16,998	651	33	17,682
August .....	17,483	643	34	18,165
September .....	17,957	673	32	18,662
October .....	18,287	685	39	19,011
November .....	19,085	688	36	19,809
December .....	19,571	692	31	20,294

## MATTRESSES AND BEDDING—NINE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	307	71	2	380
February .....	340	70	2	412
March .....	382	71	2	455
April .....	394	73	2	469
May .....	384	73	2	459
June .....	462	74	2	538
July .....	475	74	2	551
August .....	477	74	2	553
September .....	503	77	3	583
October .....	477	80	3	560
November .....	524	81	4	609
December .....	531	77	4	612

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## METAL GOODS—SEVENTY-ONE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January	5,202	1,550	127	6,879
February	5,365	1,558	129	7,052
March	5,567	1,627	135	7,329
April	5,585	1,658	130	7,373
May	5,674	1,572	129	7,375
June	5,631	1,600	129	7,360
July	5,603	1,599	140	7,342
August	5,655	1,655	138	7,448
September	5,860	1,698	135	7,693
October	5,932	1,723	136	7,841
November	5,996	1,732	140	7,868
December	6,103	1,749	154	8,006

## METAL NOVELTIES—TWENTY-TWO ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January	732	174	31	937
February	773	179	32	984
March	813	199	35	1,047
April	797	191	31	1,019
May	812	195	28	1,035
June	824	199	26	1,049
July	843	206	27	1,076
August	852	193	27	1,072
September	916	212	27	1,155
October	989	178	31	1,198
November	960	219	31	1,210
December	907	219	33	1,159

## MINING (IRON ORE)—SIX ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January	1,659	.....	.....	1,659
February	1,663	.....	.....	1,663
March	1,608	.....	.....	1,608
April	1,545	.....	.....	1,545
May	1,558	.....	.....	1,558
June	1,615	.....	.....	1,615
July	1,675	.....	.....	1,675
August	1,610	.....	.....	1,610
September	1,644	.....	.....	1,644
October	1,688	.....	.....	1,688
November	1,624	.....	.....	1,624
December	1,672	.....	.....	1,672

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

MUSICAL INSTRUMENTS—SEVENTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,363	274	15	1,652
February .....	1,399	283	16	1,698
March .....	1,408	289	15	1,712
April .....	1,418	286	12	1,716
May .....	1,387	282	11	1,680
June .....	1,393	296	10	1,699
July .....	1,377	266	20	1,663
August .....	1,348	246	16	1,610
September .....	1,392	264	19	1,675
October .....	1,407	262	21	1,690
November .....	1,378	287	18	1,683
December .....	1,416	278	20	1,714

OILCLOTH (FLOOR AND TABLE)—TEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,996	25	27	2,048
February .....	1,997	17	28	2,042
March .....	1,976	17	26	2,019
April .....	1,974	17	25	2,016
May .....	2,042	17	24	2,083
June .....	2,031	17	25	2,073
July .....	2,055	17	26	2,098
August .....	2,149	17	28	2,194
September .....	2,139	17	28	2,184
October .....	2,163	17	31	2,211
November .....	2,039	17	31	2,087
December .....	2,127	17	30	2,174

OILS—SEVENTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	7,393	17	60	7,470
February .....	7,420	17	61	7,498
March .....	7,126	17	53	7,196
April .....	6,599	17	61	6,667
May .....	6,854	17	48	6,919
June .....	7,115	16	52	7,183
July .....	7,256	16	61	7,333
August .....	7,356	16	51	7,423
September .....	7,184	17	51	7,252
October .....	6,955	17	50	7,022
November .....	6,927	17	51	6,995
December .....	6,805	17	55	6,877

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## PAINTS—SEVENTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,047	89	10	1,146
February .....	1,063	92	12	1,167
March .....	1,064	95	12	1,171
April .....	1,095	97	13	1,205
May .....	1,063	95	11	1,169
June .....	1,073	90	14	1,177
July .....	986	90	14	1,090
August .....	1,020	86	14	1,120
September .....	1,083	89	12	1,184
October .....	1,021	87	13	1,121
November .....	1,036	87	20	1,143
December .....	1,034	86	21	1,141

## PAPER—FORTY-FOUR ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	2,601	288	41	2,930
February .....	2,748	286	45	3,079
March .....	2,759	274	44	3,077
April .....	2,735	281	47	3,063
May .....	2,702	255	44	3,001
June .....	2,630	224	41	2,895
July .....	2,712	253	36	3,001
August .....	2,754	245	39	3,038
September .....	2,710	247	40	2,997
October .....	2,900	293	39	3,232
November .....	2,961	307	47	3,315
December .....	3,017	308	47	3,372

## PIG IRON—FIVE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	633	....	....	633
February .....	631	....	....	631
March .....	587	....	....	587
April .....	553	....	....	553
May .....	538	....	....	538
June .....	663	....	....	668
July .....	733	....	....	733
August .....	775	....	....	775
September .....	878	....	....	878
October .....	938	....	....	938
November .....	1,034	....	....	1,034
December .....	1,094	....	....	1,094

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## POTTERY—FORTY-NINE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	3,919	802	59	4,780
February .....	3,989	827	68	4,884
March .....	4,061	833	78	4,972
April .....	4,088	815	77	4,980
May .....	4,153	811	73	5,037
June .....	4,085	803	73	4,961
July .....	4,094	789	77	4,960
August .....	4,209	808	76	5,093
September .....	4,310	806	75	5,191
October .....	4,396	841	81	5,318
November .....	4,367	860	90	5,317
December .....	4,373	863	95	5,331

## PRINTING AND BOOKBINDING—EIGHTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	767	406	9	1,182
February .....	758	386	10	1,154
March .....	796	397	11	1,204
April .....	787	374	11	1,172
May .....	811	401	11	1,223
June .....	845	472	11	1,328
July .....	814	458	12	1,284
August .....	776	419	13	1,208
September .....	781	423	13	1,217
October .....	840	432	13	1,285
November .....	894	513	13	1,420
December .....	831	443	10	1,284

## QUARRYING STONE—SEVENTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	751	....	....	751
February .....	771	....	....	771
March .....	847	....	....	847
April .....	996	....	....	996
May .....	1,162	....	....	1,162
June .....	1,071	....	....	1,071
July .....	1,211	....	....	1,211
August .....	1,208	....	....	1,208
September .....	1,328	....	....	1,328
October .....	1,303	....	....	1,303
November .....	1,195	....	....	1,195
December .....	984	....	....	984

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## ROOFING (METAL AND TAR)—EIGHT ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	477	17	....	494
February .....	475	19	....	494
March .....	495	18	....	513
April .....	527	18	....	545
May .....	525	19	....	544
June .....	523	18	....	541
July .....	514	21	....	535
August .....	520	17	....	537
September .....	504	19	....	523
October .....	517	19	....	536
November .....	527	19	....	546
December .....	521	18	....	539

## RUBBER GOODS (HARD AND SOFT)—FORTY-EIGHT ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	6,178	1,131	68	7,377
February .....	6,251	1,191	74	7,516
March .....	6,171	1,187	78	7,436
April .....	6,080	1,187	82	7,349
May .....	6,009	1,211	79	7,299
June .....	5,957	1,208	80	7,245
July .....	5,936	1,132	88	7,156
August .....	6,070	1,153	90	7,313
September .....	6,130	1,121	88	7,339
October .....	6,350	1,142	89	7,581
November .....	6,574	1,199	93	7,866
December .....	6,619	1,205	97	7,921

## SADDLES AND HARNESS—SIX ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	60	4	....	64
February .....	61	4	....	65
March .....	67	4	....	71
April .....	67	4	....	71
May .....	83	4	....	87
June .....	77	4	....	81
July .....	68	4	....	72
August .....	103	4	....	107
September .....	92	4	....	96
October .....	71	4	....	75
November .....	64	4	....	68
December .....	60	4	....	64

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## SADDLERY AND HARNESS HARDWARE—TWELVE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	591	92	30	713
February .....	618	107	32	757
March .....	639	109	31	779
April .....	637	112	36	785
May .....	644	110	38	792
June .....	639	111	36	786
July .....	642	115	40	797
August .....	635	113	40	788
September .....	631	113	38	782
October .....	641	112	39	792
November .....	647	108	37	792
December .....	622	104	35	761

## SCIENTIFIC INSTRUMENTS—TWENTY ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	5,035	786	62	5,883
February .....	4,302	724	66	5,092
March .....	4,304	718	66	5,088
April .....	4,377	728	63	5,168
May .....	4,077	674	75	4,826
June .....	3,870	648	61	4,579
July .....	3,746	648	68	4,462
August .....	3,616	640	66	4,322
September .....	3,634	660	57	4,351
October .....	4,045	685	64	4,794
November .....	4,443	707	72	5,222
December .....	4,717	754	75	5,546

## SASH, BLINDS AND DOORS—TWENTY-FIVE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	770	...	...	770
February .....	767	...	...	767
March .....	769	...	...	769
April .....	796	...	...	796
May .....	798	...	...	798
June .....	828	...	...	828
July .....	827	...	...	827
August .....	849	...	...	849
September .....	836	...	...	836
October .....	834	...	...	834
November .....	828	...	...	828
December .....	814	...	...	814

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## SHOES—TWENTY-NINE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	2,413	1,439	110	3,962
February .....	2,458	1,487	113	4,058
March .....	2,472	1,471	115	4,058
April .....	2,456	1,422	114	3,992
May .....	2,471	1,453	114	4,038
June .....	2,473	1,444	118	4,035
July .....	2,423	1,456	122	4,001
August .....	2,452	1,508	121	4,081
September .....	2,429	1,487	122	4,038
October .....	2,400	1,413	115	3,928
November .....	2,435	1,459	105	3,999
December .....	2,449	1,382	108	3,939

## SHIRTS—TWENTY-TWO ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	593	2,458	132	3,183
February .....	591	2,493	130	3,214
March .....	586	2,493	132	3,211
April .....	582	2,455	132	3,169
May .....	581	2,436	137	3,154
June .....	616	2,530	139	3,285
July .....	620	2,460	127	3,207
August .....	620	2,467	131	3,218
September .....	616	2,519	125	3,260
October .....	632	2,611	114	3,357
November .....	616	2,621	109	3,346
December .....	633	2,640	111	3,384

## SHIRT WAISTS (WOMEN'S)—FIVE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	14	606	21	641
February .....	14	624	24	662
March .....	15	599	22	636
April .....	14	606	22	642
May .....	13	577	21	611
June .....	12	557	20	589
July .....	12	576	23	611
August .....	13	586	28	627
September .....	14	615	26	655
October .....	15	616	27	658
November .....	15	610	23	648
December .....	16	586	21	623

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## SHIPBUILDING—SEVENTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	4,259	....	....	4,259
February .....	4,137	....	....	4,137
March .....	4,377	....	....	4,377
April .....	4,696	....	....	4,696
May .....	4,508	....	....	4,508
June .....	4,072	....	....	4,072
July .....	4,345	....	....	4,345
August .....	4,626	....	....	4,626
September .....	4,407	....	....	4,407
October .....	4,464	....	....	4,464
November .....	4,277	....	....	4,277
December .....	4,386	....	....	4,386

## SILK (BROAD AND RIBBON)—ONE HUNDRED AND EIGHTY-TWO ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	11,024	11,134	735	22,893
February .....	11,242	11,282	721	23,245
March .....	11,522	11,436	769	23,727
April .....	11,407	11,317	732	23,456
May .....	11,179	11,173	730	23,082
June .....	10,926	10,977	727	22,630
July .....	10,808	10,900	772	22,480
August .....	11,051	10,810	788	22,649
September .....	11,059	10,743	747	22,549
October .....	10,975	10,782	752	22,509
November .....	10,883	10,750	733	22,366
December .....	10,692	10,694	707	22,093

## SILK DYEING—TWENTY-TWO ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	5,279	582	18	5,879
February .....	5,379	677	17	6,073
March .....	5,318	688	16	6,022
April .....	5,315	685	14	6,014
May .....	5,018	571	15	5,604
June .....	4,426	497	13	4,936
July .....	4,667	500	15	5,182
August .....	4,841	568	14	5,423
September .....	4,806	579	14	5,399
October .....	4,930	593	13	5,536
November .....	5,138	612	14	5,764
December .....	4,979	523	13	5,515

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## SILK THROWING—THIRTY-TWO ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	702	982	157	1,841
February .....	678	1,008	160	1,846
March .....	710	1,056	155	1,921
April .....	691	1,074	153	1,918
May .....	697	1,067	159	1,923
June .....	698	1,051	157	1,906
July .....	706	1,061	153	1,920
August .....	674	1,062	140	1,876
September .....	657	1,077	148	1,882
October .....	635	1,102	149	1,886
November .....	629	1,045	164	1,838
December .....	633	1,021	160	1,814

## SILK MILL SUPPLIES—SEVENTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	564	162	40	766
February .....	580	165	32	777
March .....	580	154	30	764
April .....	571	147	23	741
May .....	583	142	26	751
June .....	560	147	34	741
July .....	567	149	34	750
August .....	558	138	29	725
September .....	555	137	31	723
October .....	559	142	26	727
November .....	566	147	34	747
December .....	519	150	32	701

## SILVER GOODS—EIGHTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	916	244	31	1,191
February .....	926	236	29	1,191
March .....	918	237	30	1,185
April .....	912	248	29	1,189
May .....	948	222	25	1,195
June .....	923	230	25	1,178
July .....	908	225	25	1,158
August .....	957	241	26	1,224
September .....	988	261	28	1,277
October .....	1,002	272	30	1,304
November .....	1,016	273	31	1,320
December .....	988	258	34	1,280

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

SMELTING AND REFINING (GOLD, SILVER, COPPER, ETC.)—NINE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	3,690	6	....	3,696
February .....	3,584	6	....	3,590
March .....	3,681	5	....	3,686
April .....	3,509	4	....	3,513
May .....	3,510	4	....	3,514
June .....	3,397	4	....	3,401
July .....	3,331	4	....	3,335
August .....	3,314	4	....	3,318
September .....	3,591	6	....	3,597
October .....	3,817	6	....	3,823
November .....	3,874	5	....	3,879
December .....	3,897	4	....	3,901

SOAP AND TALLOW—NINETEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,354	344	39	1,737
February .....	1,406	409	38	1,853
March .....	1,460	456	37	1,953
April .....	1,444	473	38	1,955
May .....	1,374	449	36	1,859
June .....	1,375	438	35	1,848
July .....	1,417	444	38	1,899
August .....	1,427	479	39	1,945
September .....	1,426	525	38	1,989
October .....	1,439	543	36	2,018
November .....	1,443	557	37	2,037
December .....	1,462	537	39	2,038

STEEL AND IRON (BAR)—SIX ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	839	31	....	870
February .....	813	31	....	844
March .....	827	35	....	862
April .....	803	47	....	850
May .....	814	46	....	860
June .....	832	62	....	894
July .....	699	59	....	758
August .....	672	54	....	726
September .....	888	55	....	943
October .....	1,082	57	....	1,139
November .....	1,085	60	....	1,145
December .....	1,190	58	....	1,248

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## STEEL AND IRON (STRUCTURAL)—TWENTY-THREE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	2,455	.....	.....	2,455
February .....	2,490	.....	.....	2,490
March .....	2,620	.....	.....	2,620
April .....	2,816	.....	.....	2,816
May .....	2,757	.....	.....	2,757
June .....	2,838	.....	.....	2,838
July .....	2,957	.....	.....	2,957
August .....	3,022	.....	.....	3,022
September .....	2,933	.....	.....	2,933
October .....	2,885	.....	.....	2,885
November .....	2,833	.....	.....	2,833
December .....	2,800	.....	.....	2,800

## STEEL AND IRON (FORGING)—TWELVE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	2,670	11	3	2,684
February .....	2,631	11	3	2,645
March .....	2,669	12	3	2,684
April .....	2,601	12	3	2,616
May .....	2,501	11	3	2,515
June .....	2,612	12	3	2,627
July .....	2,681	13	3	2,697
August .....	2,791	14	3	2,808
September .....	3,060	21	3	3,084
October .....	3,090	24	3	3,117
November .....	3,178	24	4	3,206
December .....	3,330	29	4	3,363

## TEXTILE PRODUCTS—NINE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	806	436	72	1,314
February .....	842	467	78	1,387
March .....	872	446	82	1,400
April .....	828	480	83	1,391
May .....	854	452	82	1,388
June .....	850	436	85	1,371
July .....	833	420	96	1,349
August .....	838	456	92	1,386
September .....	859	453	84	1,396
October .....	842	462	87	1,391
November .....	831	462	100	1,393
December .....	854	488	100	1,442

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## THREAD—SIX ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,600	3,144	657	5,401
February .....	1,587	3,127	664	5,358
March .....	1,587	3,121	685	5,393
April .....	1,595	3,062	672	5,329
May .....	1,579	3,062	669	5,310
June .....	1,577	3,091	664	5,332
July .....	1,585	2,997	638	5,220
August .....	1,579	3,016	650	5,245
September .....	1,582	2,570	659	4,811
October .....	1,591	3,027	646	5,264
November .....	1,610	3,055	643	5,308
December .....	1,635	3,063	645	5,343

## TRUNKS AND TRAVELING BAGS—ELEVEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	377	23	1	401
February .....	426	23	1	450
March .....	400	23	2	425
April .....	404	23	2	429
May .....	428	23	2	453
June .....	430	23	2	455
July .....	412	23	2	437
August .....	398	23	2	423
September .....	406	25	2	433
October .....	410	25	2	437
November .....	383	25	2	410
December .....	359	24	2	385

## TRUNK AND BAG HARDWARE—TEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	914	301	90	1,305
February .....	916	308	92	1,316
March .....	934	320	96	1,350
April .....	940	325	93	1,358
May .....	950	341	98	1,389
June .....	954	354	97	1,405
July .....	982	344	93	1,419
August .....	1,063	401	113	1,577
September .....	1,150	430	119	1,699
October .....	1,309	434	130	1,873
November .....	1,318	429	136	1,883
December .....	1,344	412	130	1,886

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## TYPEWRITERS AND SUPPLIES—FOUR ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	159	10	....	169
February .....	164	11	....	175
March .....	168	12	....	180
April .....	172	13	....	185
May .....	181	14	....	195
June .....	180	14	....	194
July .....	197	14	....	211
August .....	199	14	....	213
September .....	203	14	....	217
October .....	222	15	....	237
November .....	226	17	....	243
December .....	240	19	....	259

## UNDERWEAR (WOMEN'S AND CHILDREN'S)—TWENTY-ONE ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	116	1,532	80	1,728
February .....	116	1,487	83	1,686
March .....	115	1,542	81	1,738
April .....	120	1,549	79	1,748
May .....	116	1,544	78	1,738
June .....	114	1,519	80	1,713
July .....	113	1,432	70	1,615
August .....	114	1,420	77	1,611
September .....	117	1,459	78	1,654
October .....	112	1,537	66	1,715
November .....	115	1,536	75	1,726
December .....	118	1,588	79	1,785

## VARNISHES—SEVENTEEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	310	13	....	323
February .....	316	13	....	329
March .....	313	13	....	326
April .....	312	13	....	325
May .....	314	13	....	327
June .....	318	13	....	331
July .....	317	13	....	330
August .....	318	13	....	331
September .....	319	13	....	332
October .....	323	13	....	336
November .....	331	13	....	344
December .....	323	13	....	336

**TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).**

WATCHES, CASES AND MATERIAL—ELEVEN ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,508	651	81	2,240
February .....	1,478	654	99	2,231
March .....	1,449	676	96	2,221
April .....	1,458	654	78	2,190
May .....	1,443	667	82	2,192
June .....	1,415	653	81	2,149
July .....	1,374	639	82	2,095
August .....	1,347	646	81	2,074
September .....	1,332	659	77	2,068
October .....	1,334	650	75	2,059
November .....	1,371	644	78	2,093
December .....	1,376	641	70	2,087

WINDOW SHADES—FOUR ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	77	1	.....	78
February .....	79	2	.....	81
March .....	76	1	.....	77
April .....	76	1	.....	77
May .....	72	1	.....	73
June .....	72	1	.....	73
July .....	74	1	.....	75
August .....	77	1	.....	78
September .....	82	1	.....	83
October .....	83	1	.....	84
November .....	83	1	.....	84
December .....	84	1	.....	85

WOODEN GOODS—THIRTY-SIX ESTABLISHMENTS.

Months.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total Number Employed.
January .....	1,420	15	22	1,457
February .....	1,436	15	26	1,477
March .....	1,472	17	30	1,519
April .....	1,514	16	29	1,559
May .....	1,518	16	31	1,565
June .....	1,503	14	33	1,550
July .....	1,499	14	28	5,541
August .....	1,485	14	42	1,541
September .....	1,573	14	37	1,624
October .....	1,612	14	33	1,659
November .....	1,626	14	32	1,672
December .....	1,590	14	49	1,653

TABLE No. 5.—Number of Wage Earners, Including Piece-Workers Employed by Industries, 1909.—Aggregates by Months.—(Continued).

## WOOLEN AND WORSTED GOODS—TWENTY-FIVE ESTABLISHMENTS.

Months.	Men	Women	Children	Total
	16 years and over.	16 years and over.	under 16 years.	Number Employed.
January .....	5,136	6,005	583	11,724
February .....	5,216	6,114	605	11,935
March .....	5,295	6,156	614	12,065
April .....	5,282	6,282	581	12,145
May .....	5,387	6,203	565	12,155
June .....	5,520	6,351	573	12,454
July .....	5,603	6,526	590	12,719
August .....	5,660	6,505	594	12,759
September .....	5,773	6,585	607	12,965
October .....	5,859	6,780	615	13,254
November .....	5,816	6,874	626	13,316
December .....	5,879	7,008	613	13,500

## UNCLASSIFIED—NINETY-TWO ESTABLISHMENTS.

Months.	Men	Women	Children	Total
	16 years and over.	16 years and over.	under 16 years.	Number Employed.
January .....	5,339	992	83	6,414
February .....	5,440	1,007	81	6,528
March .....	5,696	1,050	88	6,834
April .....	6,015	1,092	93	7,200
May .....	6,132	1,097	103	7,332
June .....	6,297	1,134	127	7,558
July .....	6,170	1,136	102	7,408
August .....	6,259	1,142	127	7,528
September .....	6,533	1,153	109	7,795
October .....	6,605	1,111	98	7,814
November .....	6,544	1,118	123	7,785
December .....	6,210	1,125	120	7,455

## ALL INDUSTRIES—TWO THOUSAND, TWO HUNDRED AND NINETY-ONE ESTABLISHMENTS.

Months.	Men	Women	Children	Total
	16 years and over.	16 years and over.	under 16 years.	Number Employed.
January .....	194,486	68,752	5,813	269,051
February .....	194,042	69,246	5,932	269,220
March .....	197,480	69,692	6,043	273,215
April .....	199,870	69,707	5,933	275,510
May .....	201,152	69,276	5,967	276,395
June .....	200,630	69,846	5,954	276,432
July .....	197,750	69,641	5,848	273,239
August .....	201,280	71,084	5,968	278,332
September .....	206,123	71,069	6,100	283,292
October .....	211,429	72,601	6,229	290,259
November .....	213,796	73,527	6,378	293,701
December .....	213,261	73,164	6,348	292,773

TABLE No. 6.—Amount Paid in Wages; by Industries.—Average Yearly Earnings, per Employee, 1909.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Total Amount Paid in Wages or Earnings.	Average Yearly Earnings per Employee.
1	Agricultural implements.....	7	\$324,953	\$611.97
2	Artisans' tools.....	43	1,441,294	593.37
3	Art tile.....	7	319,974	452.58
4	Boilers.....	14	982,671	674.91
5	Boxes (wood and paper).....	49	903,124	380.56
6	Brewing (lager beer, ale and porter).....	37	1,981,958	912.08
7	Brick and terra cotta.....	74	3,434,938	484.27
8	Brushes.....	13	133,121	410.86
9	Buttons (metal).....	10	552,613	463.21
10	Buttons (pearl).....	23	571,495	452.13
11	Carpets and rugs.....	8	457,745	467.09
12	Carriages and wagons.....	29	645,500	612.43
13	Chemical products.....	66	3,845,827	525.67
14	Cigars and tobacco.....	36	2,974,921	323.54
15	Clothing.....	12	503,678	430.13
16	Confectionery.....	7	150,998	319.91
17	Cornices and skylights.....	23	407,683	750.79
18	Corsets and corset waists.....	10	792,203	366.93
19	Cutlery.....	13	531,506	419.83
20	Cotton goods.....	49	2,504,086	357.67
21	Cotton goods (finishing and dyeing).....	18	2,153,950	531.18
22	Drawn wire and wire cloth.....	14	3,640,094	383.90
23	Electrical appliances.....	34	3,664,064	609.66
24	Fertilizers.....	12	667,560	544.50
25	Food products.....	30	1,624,683	557.35
26	Foundry (brass).....	22	665,586	526.99
27	Foundry (iron).....	57	4,743,312	580.08
28	Furnaces, ranges and heaters.....	13	1,296,657	722.77
29	Gas and electric light fixtures.....	13	257,785	569.06
30	Glass (cut tableware).....	8	148,858	428.99
31	Glass (window and bottle).....	23	3,195,939	589.33
32	Glass mirrors.....	4	83,511	556.74
33	Graphite products.....	6	761,450	396.18
34	Hats (fur and felt).....	39	2,927,632	642.59
35	Hats (straw).....	3	170,000	825.24
36	High explosives.....	8	1,074,211	624.54
37	Inks and mucilage.....	7	59,340	706.43
38	Jewelry.....	100	2,314,838	661.19
39	Knit goods.....	21	1,287,906	319.26
40	Leather.....	77	3,399,034	585.94
41	Leather goods.....	17	476,628	438.88
42	Lamps.....	8	1,946,300	425.61
43	Lime and cement.....	11	1,036,158	550.27
44	Machinery.....	136	11,101,145	611.76
45	Mattresses and bedding.....	9	244,993	475.71
46	Metal goods.....	71	3,608,747	483.49
47	Metal novelties.....	22	548,990	509.27
48	Mining (iron ore).....	6	700,451	429.72
49	Musical instruments.....	17	878,239	521.83
50	Oilcloth (floor and table).....	10	1,247,447	593.46
51	Oils.....	17	4,773,921	667.40
52	Paints.....	17	621,040	538.63
53	Paper.....	44	1,632,886	529.64
54	Pig iron.....	5	409,470	542.34
55	Pottery.....	49	3,549,770	700.29
56	Printing and bookbinding.....	18	701,146	562.27
57	Quarrying ston.....	17	573,096	536.61
58	Roofing (metal and tar).....	8	294,118	555.99
59	Rubber goods (hard and soft).....	48	3,800,066	510.08
60	Saddles and harness.....	6	31,506	409.17

TABLE No. 6.—Amount Paid in Wages, by Industries.—Average Yearly Earnings, per Employee, 1909.—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Total Amount Paid in Wages or Earnings.	Average Yearly Earnings per Employee.
61	Saddlery and harness hardware. . . . .	12	401,011	516.10
62	Scientific instruments. . . . .	20	2,538,769	513.51
63	Sash, blinds and doors. . . . .	25	506,161	624.89
64	Shoes. . . . .	29	1,878,494	468.34
65	Shirts. . . . .	22	1,151,150	354.31
66	Shirt waists (women's). . . . .	5	185,654	292.82
67	Shipbuilding. . . . .	17	3,067,886	700.43
68	Silk (broad and ribbon). . . . .	182	11,062,996	485.07
69	Silk dyeing. . . . .	22	2,988,892	532.49
70	Silk throwing. . . . .	32	605,805	322.07
71	Silk mill supplies. . . . .	17	343,287	462.03
72	Silver goods. . . . .	18	775,769	633.80
73	Smelting and refining (gold, silver, copper, etc.). . . . .	9	2,271,934	630.39
74	Soap and tallow. . . . .	19	1,050,753	545.00
75	Steel and iron (bar). . . . .	6	434,347	468.05
76	Steel and iron (structural). . . . .	23	1,889,231	678.60
77	Steel and iron (forging). . . . .	12	1,869,402	658.94
78	Textile products. . . . .	9	545,301	394.00
79	Thread. . . . .	6	2,092,061	396.52
80	Trunks and traveling bags. . . . .	11	246,498	575.93
81	Trunk and bag hardware. . . . .	10	720,722	468.31
82	Typewriters and supplies. . . . .	4	122,643	592.48
83	Underwear (women's and children's). . . . .	21	567,294	332.72
84	Varnishes. . . . .	17	261,171	789.04
85	Watches, cases and material. . . . .	11	1,123,999	524.74
86	Window shades. . . . .	4	49,997	632.87
87	Wooden goods. . . . .	36	875,467	558.33
88	Woolen and worsted goods. . . . .	25	5,171,278	411.00
89	Unclassified. . . . .	92	3,724,986	509.99
	All industries. . . . .	2,291	\$144,304,773	\$516.57

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.

## AGRICULTURAL IMPLEMENTS—SEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	.....	.....
\$3 but under \$4.....	1	.....	.....	1
4 " " 5.....	2	.....	1	3
5 " " 6.....	12	.....	.....	12
6 " " 7.....	8	.....	.....	8
7 " " 8.....	13	.....	.....	13
8 " " 9.....	39	.....	.....	39
9 " " 10.....	150	.....	.....	150
10 " " 12.....	82	.....	.....	82
12 " " 15.....	153	.....	.....	153
15 " " 20.....	169	.....	.....	169
20 " " 25.....	20	.....	.....	20
25 and over.....	4	.....	.....	4
Total.....	653	.....	1	654

## ARTISANS' TOOLS—FORTY-THREE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	2	7	9
\$3 but under \$4.....	22	.....	15	37
4 " " 5.....	53	8	6	67
5 " " 6.....	98	19	2	119
6 " " 7.....	88	14	.....	102
7 " " 8.....	138	17	.....	155
8 " " 9.....	136	4	.....	140
9 " " 10.....	256	3	.....	259
10 " " 12.....	404	4	.....	408
12 " " 15.....	503	4	.....	507
15 " " 20.....	517	.....	.....	517
20 " " 25.....	264	.....	.....	264
25 and over.....	74	.....	.....	74
Total.....	2,553	75	30	2,658

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## ART TILE—SEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	4	5	....	9
\$3 but under \$4.....	2	4	8	14
4 " " 5.....	25	92	20	137
5 " " 6.....	34	44	....	78
6 " " 7.....	18	66	....	84
7 " " 8.....	28	24	12	64
8 " " 9.....	37	2	....	39
9 " " 10.....	117	7	....	124
10 " " 12.....	69	1	....	61
12 " " 15.....	82	....	....	82
15 " " 20.....	49	....	....	49
20 " " 25.....	26	....	....	26
25 and over.....	14	....	....	14
Total.....	496	245	40	781

## BOILERS—FOURTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	13	....	....	13
\$3 but under \$4.....	4	....	....	4
4 " " 5.....	5	....	....	5
5 " " 6.....	11	....	....	11
6 " " 7.....	25	....	....	25
7 " " 8.....	44	....	....	44
8 " " 9.....	88	....	....	88
9 " " 10.....	167	....	....	167
10 " " 12.....	396	....	....	396
12 " " 15.....	374	....	....	374
15 " " 20.....	498	....	....	498
20 " " 25.....	159	....	....	159
25 and over.....	54	....	....	54
Total.....	1,838	....	....	1,838

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

BOXES (WOOD AND PAPER)—FORTY-NINE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	12	35	25	72
\$3, but under \$4.....	51	154	40	245
4 " " 5.....	71	215	39	325
5 " " 6.....	91	259	6	356
6 " " 7.....	89	180	3	272
7 " " 8.....	79	159	2	240
8 " " 9.....	109	108	1	218
9 " " 10.....	142	94	....	236
10 " " 12.....	183	57	....	240
12 " " 15.....	204	19	....	223
15 " " 20.....	154	4	....	158
20 " " 25.....	18	....	....	18
25 and over.....	24	....	....	24
Total.....	1,227	1,284	116	2,627

BREWING (LAGER BEER, ALE AND PORTER)—THIRTY-SEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	....	....	1
\$3 but under \$4.....	2	....	....	2
4 " " 5.....	8	....	4	12
5 " " 6.....	7	....	6	13
6 " " 7.....	19	....	3	22
7 " " 8.....	4	....	3	7
8 " " 9.....	17	....	....	17
9 " " 10.....	15	....	....	15
10 " " 12.....	96	....	....	96
12 " " 15.....	201	....	....	201
15 " " 20.....	1,586	....	....	1,586
20 " " 25.....	235	....	....	235
25 and over.....	74	....	....	74
Total.....	2,265	....	16	2,281

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## BRICK AND TERRA COTTA—SEVENTY-FOUR ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	16	....	....	16
\$3 but under \$4.....	45	....	22	67
4 " " 5.....	64	....	20	84
5 " " 6.....	121	9	9	139
6 " " 7.....	173	1	15	189
7 " " 8.....	569	1	....	570
8 " " 9.....	1,428	....	....	1,428
9 " " 10.....	3,289	....	....	3,289
10 " " 12.....	1,502	....	....	1,502
12 " " 15.....	1,003	....	....	1,003
15 " " 20.....	634	....	....	634
20 " " 25.....	186	....	....	186
25 and over.....	95	....	....	95
Total.....	9,125	11	66	9,202

## BRUSHES—THIRTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	14	9	23
\$3 but under \$4.....	4	11	1	16
4 " " 5.....	21	26	1	48
5 " " 6.....	18	17	....	35
6 " " 7.....	17	19	....	36
7 " " 8.....	13	8	....	21
8 " " 9.....	18	8	....	26
9 " " 10.....	5	3	....	8
10 " " 12.....	47	3	....	50
12 " " 15.....	28	1	....	29
15 " " 20.....	31	2	....	33
20 " " 25.....	12	....	....	12
25 and over.....	8	....	....	8
Total.....	222	112	11	345

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

BUTTONS (METAL)—TEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	4	25	28	57
\$3 but under \$4.....	11	32	22	65
4 " " 5.....	26	74	2	102
5 " " 6.....	27	101	1	129
6 " " 7.....	38	123	....	161
7 " " 8.....	30	68	....	98
8 " " 9.....	16	50	....	66
9 " " 10.....	29	24	....	53
10 " " 12.....	39	23	....	62
12 " " 15.....	75	8	....	83
15 " " 20.....	131	....	....	131
20 " " 25.....	74	....	....	74
25 and over.....	65	....	....	65
Total.....	565	528	53	1,146

BUTTONS (PEARL)—TWENTY-THREE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	7	32	1	40
\$3 but under \$4.....	25	20	13	58
4 " " 5.....	59	56	11	126
5 " " 6.....	51	55	3	109
6 " " 7.....	62	48	....	110
7 " " 8.....	69	61	....	130
8 " " 9.....	58	29	....	87
9 " " 10.....	83	34	....	117
10 " " 12.....	121	6	....	127
12 " " 15.....	212	6	....	218
15 " " 20.....	151	1	....	152
20 " " 25.....	43	....	....	43
\$25 and over.....	23	....	....	23
Total.....	964	348	28	1,340

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## CARPETS AND RUGS—EIGHT ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	8	15	....	23
\$3 but under \$4.....	27	29	13	69
4 " " 5.....	41	57	9	107
5 " " 6.....	69	62	3	134
6 " " 7.....	61	41	....	102
7 " " 8.....	103	38	....	141
8 " " 9.....	68	36	....	104
9 " " 10.....	57	13	....	70
10 " " 12.....	88	35	....	123
12 " " 15.....	102	18	....	120
15 " " 20.....	98	....	....	98
20 " " 25.....	34	....	....	34
25 and over.....	8	....	....	8
Total.....	764	344	26	1,133

## CARRIAGES AND WAGONS—TWENTY-NINE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4.....	1	....	....	1
4 " " 5.....	5	....	....	5
5 " " 6.....	17	....	....	17
6 " " 7.....	14	....	....	14
7 " " 8.....	31	....	....	31
8 " " 9.....	67	....	....	67
9 " " 10.....	82	....	....	82
10 " " 12.....	176	....	....	176
12 " " 15.....	273	....	....	273
15 " " 20.....	321	....	....	321
20 " " 25.....	95	....	....	95
25 and over.....	9	....	....	9
Total.....	1,091	....	....	1,091

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## CHEMICAL PRODUCTS—SIXTY-SIX ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	38	65	4	107
\$3 but under \$4.....	18	90	29	137
4 " " 5.....	13	311	54	378
5 " " 6.....	133	407	17	557
6 " " 7.....	160	332	16	508
7 " " 8.....	252	290	4	546
8 " " 9.....	383	285	2	670
9 " " 10.....	746	135	....	881
10 " " 12.....	1,404	70	....	1,474
12 " " 15.....	1,295	22	....	1,317
15 " " 20.....	999	11	....	1,010
20 " " 25.....	213	1	....	214
25 and over.....	111	....	....	111
Total.....	5,765	2,019	126	7,910

## CIGARS AND TOBACCO—THIRTY-SIX ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	23	399	96	518
\$3 but under \$4.....	31	666	201	898
4 " " 5.....	65	1,218	80	1,363
5 " " 6.....	80	1,172	39	1,291
6 " " 7.....	138	1,072	12	1,222
7 " " 8.....	217	849	4	1,070
8 " " 9.....	177	673	1	851
9 " " 10.....	280	1,227	....	1,507
10 " " 12.....	297	452	....	749
12 " " 15.....	235	92	....	317
15 " " 20.....	284	8	....	292
20 " " 25.....	102	....	....	102
25 and over.....	26	....	....	26
Total.....	1,945	7,828	433	10,206

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## CLOTHING—TWELVE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	2	3	4	9
\$3 but under \$4.....	7	30	2	39
4 " " 5.....	17	64	1	82
5 " " 6.....	35	150	....	185
6 " " 7.....	41	136	....	177
7 " " 8.....	32	87	....	119
8 " " 9.....	60	144	....	204
9 " " 10.....	72	64	....	136
10 " " 12.....	63	68	....	131
12 " " 15.....	103	18	....	121
15 " " 20.....	98	8	....	106
20 " " 25.....	24	1	....	25
25 and over.....	16	....	....	16
Total.....	570	773	7	1,350

## CONFECTIONERY—SEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4.....	1	1	18	20
4 " " 5.....	16	57	30	103
5 " " 6.....	13	30	9	52
6 " " 7.....	39	90	....	129
7 " " 8.....	34	74	....	108
8 " " 9.....	30	18	....	48
9 " " 10.....	25	13	....	38
10 " " 12.....	19	11	....	30
12 " " 15.....	22	3	....	25
15 " " 20.....	21	3	....	24
20 " " 25.....	6	1	....	7
25 and over.....	3	1	....	4
Total.....	229	302	57	588

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## CORNICES AND SKYLIGHTS—TWENTY-THREE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	.....	.....
\$3 but under \$4.....	3	.....	.....	3
4 " " 5.....	16	.....	.....	16
5 " " 6.....	21	.....	.....	21
6 " " 7.....	20	2	.....	22
7 " " 8.....	14	1	.....	15
8 " " 9.....	23	.....	.....	23
9 " " 10.....	32	.....	.....	32
10 " " 12.....	40	.....	.....	40
12 " " 15.....	74	.....	.....	74
15 " " 20.....	79	.....	.....	79
20 " " 25.....	197	.....	.....	197
25 and over.....	39	.....	.....	39
Total.....	558	3	.....	561

## CORSETS AND CORSET WAISTS—TEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	77	23	101
\$3 but under \$4.....	2	191	39	232
4 " " 5.....	3	253	24	280
5 " " 6.....	5	239	10	254
6 " " 7.....	13	274	6	293
7 " " 8.....	13	274	1	288
8 " " 9.....	6	300	.....	306
9 " " 10.....	4	204	.....	208
10 " " 12.....	17	239	.....	256
12 " " 15.....	33	97	.....	130
15 " " 20.....	44	14	.....	58
20 " " 25.....	22	1	.....	23
25 and over.....	9	.....	.....	9
Total.....	172	2,162	103	2,438

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## CUTLERY—THIRTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	17	2	2	21
\$3 but under \$4.....	24	22	12	58
4 " " 5.....	37	27	7	71
5 " " 6.....	57	26	5	88
6 " " 7.....	59	28	.....	87
7 " " 8.....	64	8	.....	72
8 " " 9.....	93	11	.....	104
9 " " 10.....	97	6	.....	103
10 " " 12.....	119	1	.....	120
12 " " 15.....	197	.....	.....	197
15 " " 20.....	186	.....	.....	186
20 " " 25.....	37	.....	.....	37
25 and over.....	12	.....	.....	12
Total.....	999	131	26	1,156

## COTTON GOODS—FORTY-NINE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	18	71	141	230
\$3 but under \$4.....	9	423	117	549
4 " " 5.....	76	860	129	1,065
5 " " 6.....	115	1,117	21	1,253
6 " " 7.....	215	1,113	5	1,333
7 " " 8.....	250	737	.....	1,017
8 " " 9.....	195	356	1	552
9 " " 10.....	216	228	.....	444
10 " " 12.....	226	183	.....	409
12 " " 15.....	287	82	.....	369
15 " " 20.....	197	10	.....	207
20 " " 25.....	90	3	.....	93
25 and over.....	64	1	.....	65
Total.....	1,938	5,184	414	7,536

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## COTTON GOODS (FINISHING AND DYEING)—EIGHTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	2	....	3	5
\$3 but under \$4.....	....	3	2	5
4 " " 5.....	62	87	31	180
5 " " 6.....	205	374	10	589
6 " " 7.....	219	228	....	447
7 " " 8.....	685	32	....	717
8 " " 9.....	815	11	....	826
9 " " 10.....	582	5	....	587
10 " " 12.....	285	13	....	298
12 " " 15.....	303	7	....	310
15 " " 20.....	190	5	....	195
20 " " 25.....	50	....	....	50
25 and over.....	107	....	....	107
Total.....	3,505	765	46	4,316

## DRAWN WIRE AND WIRE CLOTH—FOURTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4.....	3	....	4	7
4 " " 5.....	43	5	....	48
5 " " 6.....	52	21	105	178
6 " " 7.....	167	32	....	199
7 " " 8.....	87	27	....	114
8 " " 9.....	123	27	....	150
9 " " 10.....	321	61	....	382
10 " " 12.....	307	17	....	324
12 " " 15.....	451	1	....	452
15 " " 20.....	402	1	....	403
20 " " 25.....	121	....	....	121
25 and over.....	53	....	....	53
Total.....	2,130	192	109	2,431

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## ELECTRICAL APPLIANCES—THIRTY-FOUR ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	65	48	....	113
\$3 but under \$4.....	63	44	....	107
4 " " 5.....	96	57	16	169
5 " " 6.....	233	232	21	486
6 " " 7.....	219	213	6	438
7 " " 8.....	376	175	....	551
8 " " 9.....	578	136	....	714
9 " " 10.....	557	79	....	636
10 " " 12.....	896	72	....	968
12 " " 15.....	1,095	12	....	1,107
15 " " 20.....	1,256	1	....	1,257
20 " " 25.....	583	....	....	583
25 and over.....	242	....	....	242
Total.....	6,259	1,059	43	7,371

## FERTILIZERS—TWELVE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	4	....	....	4
\$3 but under \$4.....	3	....	....	3
4 " " 5.....	1	....	....	1
5 " " 6.....	2	2	1	5
6 " " 7.....	37	4	3	44
7 " " 8.....	7	2	....	9
8 " " 9.....	27	2	....	29
9 " " 10.....	1,027	5	....	1,032
10 " " 12.....	226	5	....	231
12 " " 15.....	159	1	....	160
15 " " 20.....	130	....	....	130
20 " " 25.....	30	....	....	30
25 and over.....	28	....	....	28
Total.....	1,681	21	4	1,706

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## FOOD PRODUCTS—THIRTY ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	6	29	6	41
\$3 but under \$4.....	21	25	39	85
4 " " 5.....	45	117	23	185
5 " " 6.....	52	318	1	371
6 " " 7.....	92	289	1	382
7 " " 8.....	196	60	....	256
8 " " 9.....	166	31	....	197
9 " " 10.....	387	35	....	422
10 " " 12.....	639	14	....	653
12 " " 15.....	576	6	....	582
15 " " 20.....	622	3	....	625
20 " " 25.....	91	....	....	91
25 and over.....	50	....	....	50
Total.....	2,943	927	70	3,940

## FOUNDRY (BRASS)—TWENTY-TWO ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	23	2	4	29
\$3 but under \$4.....	26	4	4	34
4 " " 5.....	45	6	1	52
5 " " 6.....	55	5	4	64
6 " " 7.....	61	5	1	67
7 " " 8.....	103	10	1	114
8 " " 9.....	168	9	....	177
9 " " 10.....	273	5	....	278
10 " " 12.....	182	3	....	185
12 " " 15.....	150	2	....	152
15 " " 20.....	191	....	....	191
20 " " 25.....	57	....	....	57
25 and over.....	16	....	....	16
Total.....	1,350	51	15	1,416

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## FOUNDRY (IRON)—FIFTY-SEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	31	....	3	34
\$3 but under \$4.....	105	16	6	127
4 " " 5.....	135	32	1	168
5 " " 6.....	157	21	1	179
6 " " 7.....	245	12	1	258
7 " " 8.....	537	6	....	543
8 " " 9.....	906	6	....	912
9 " " 10.....	1,623	4	....	1,627
10 " " 12.....	1,396	6	....	1,402
12 " " 15.....	1,400	3	....	1,403
15 " " 20.....	1,889	....	....	1,889
20 " " 25.....	369	....	....	369
25 and over.....	138	....	....	138
Total.....	8,931	106	12	9,049

## FURNACES, RANGES AND HEATERS—THIRTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	3	....	....	3
\$3 but under \$4.....	17	....	1	18
4 " " 5.....	23	1	2	26
5 " " 6.....	39	84	....	123
6 " " 7.....	52	....	....	52
7 " " 8.....	38	4	....	42
8 " " 9.....	42	2	....	44
9 " " 10.....	173	1	....	174
10 " " 12.....	285	1	....	286
12 " " 15.....	436	1	....	437
15 " " 20.....	409	3	....	412
20 " " 25.....	237	....	....	237
25 and over.....	263	....	....	263
Total.....	2,017	97	2	2,117

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## GAS AND ELECTRIC LIGHT FIXTURES—THIRTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	....	....	1
\$3 but under \$4.....	11	5	4	20
4 " " 5.....	17	12	1	30
5 " " 6.....	28	6	....	34
6 " " 7.....	20	1	....	21
7 " " 8.....	34	6	....	40
8 " " 9.....	40	4	....	44
9 " " 10.....	30	5	....	35
10 " " 12.....	65	1	....	66
12 " " 15.....	87	....	....	87
15 " " 20.....	106	....	....	106
20 " " 25.....	24	....	....	24
25 and over.....	7	....	....	7
Total.....	470	40	5	515

## GLASS (CUT TABLEWARE)—EIGHT ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	6	....	2	8
\$3 but under \$4.....	33	3	....	36
4 " " 5.....	19	19	....	38
5 " " 6.....	32	6	....	38
6 " " 7.....	39	1	....	40
7 " " 8.....	22	6	....	28
8 " " 9.....	17	....	....	17
9 " " 10.....	20	2	....	22
10 " " 12.....	36	3	....	39
12 " " 15.....	61	1	....	62
15 " " 20.....	55	1	....	56
20 " " 25.....	8	....	....	8
25 and over.....	1	....	....	1
Total.....	349	42	2	393

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## GLASS (WINDOW AND BOTTLE)—TWENTY-THREE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	.....	.....
\$3 but under \$4.....	31	9	36	76
4 " " 5.....	164	38	125	327
5 " " 6.....	745	62	165	972
6 " " 7.....	907	13	.....	920
7 " " 8.....	672	11	.....	683
8 " " 9.....	405	.....	.....	405
9 " " 10.....	637	2	.....	639
10 " " 12.....	506	.....	.....	506
12 " " 15.....	460	.....	.....	460
15 " " 20.....	447	.....	.....	447
20 " " 25.....	550	.....	.....	550
25 and over.....	1,436	.....	.....	1,436
Total.....	6,960	135	326	7,421

## GLASS MIRRORS—FOUR ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	.....	.....
\$3 but under \$4.....	.....	.....	17	17
4 " " 5.....	5	1	4	10
5 " " 6.....	4	12	.....	16
6 " " 7.....	16	6	.....	22
7 " " 8.....	8	.....	.....	8
8 " " 9.....	9	.....	.....	9
9 " " 10.....	9	1	.....	10
10 " " 12.....	23	.....	.....	23
12 " " 15.....	25	.....	.....	25
15 " " 20.....	33	.....	.....	33
20 " " 25.....	1	.....	.....	1
25 and over.....	2	.....	.....	2
Total.....	135	20	21	176

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## GRAPHITE PRODUCTS—SIX ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	1	10	11
\$3 but under \$4.....	39	80	80	199
4 " " 5.....	73	217	....	290
5 " " 6.....	65	219	....	284
6 " " 7.....	98	200	....	298
7 " " 8.....	84	88	....	172
8 " " 9.....	58	83	....	141
9 " " 10.....	61	73	....	134
10 " " 12.....	123	49	....	172
12 " " 15.....	135	7	....	142
15 " " 20.....	126	6	....	132
20 " " 25.....	60	....	....	60
25 and over.....	18	....	....	18
Total.....	940	1,023	90	2,053

## HATS (FUR AND FELT)—THIRTY-NINE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	14	12	....	26
\$3 but under \$4.....	32	42	8	82
4 " " 5.....	58	187	16	261
5 " " 6.....	127	230	4	361
6 " " 7.....	164	147	2	313
7 " " 8.....	191	159	....	350
8 " " 9.....	183	165	....	348
9 " " 10.....	318	150	....	468
10 " " 12.....	550	167	....	717
12 " " 15.....	776	100	....	876
15 " " 20.....	1,224	70	....	1,294
20 " " 25.....	766	14	....	780
25 and over.....	270	4	....	274
Total.....	4,673	1,447	30	6,150

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## HATS (STRAW)—THREE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	.....	.....
\$3 but under \$4.....	2	.....	.....	2
4 " " 5.....	4	.....	.....	4
5 " " 6.....	6	7	.....	13
6 " " 7.....	17	36	.....	53
7 " " 8.....	18	36	.....	54
8 " " 9.....	29	34	.....	63
9 " " 10.....	42	17	.....	59
10 " " 12.....	35	82	.....	117
12 " " 15.....	37	26	.....	63
15 " " 20.....	34	11	.....	45
20 " " 25.....	8	5	.....	13
25 and over.....	4	.....	.....	4
Total.....	236	254	.....	490

## HIGH EXPLOSIVES—EIGHT ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	1	.....	1
\$3 but under \$4.....	2	.....	.....	2
4 " " 5.....	15	4	.....	19
5 " " 6.....	5	.....	3	8
6 " " 7.....	16	12	3	31
7 " " 8.....	26	10	.....	36
8 " " 9.....	34	12	.....	46
9 " " 10.....	429	10	.....	439
10 " " 12.....	339	3	.....	342
12 " " 15.....	574	.....	.....	574
15 " " 20.....	416	.....	.....	416
20 " " 25.....	46	.....	.....	46
25 and over.....	22	.....	.....	22
Total.....	1,924	52	6	1,982

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## INKS AND MUCILAGE—SEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	....	....	1
\$3 but under \$4.....	1	3	....	4
4 " " 5.....	3	3	....	6
5 " " 6.....	1	1	....	2
6 " " 7.....	1	1	....	2
7 " " 8.....	1	....	....	1
8 " " 9.....	3	....	....	3
9 " " 10.....	8	....	....	8
10 " " 12.....	13	....	....	13
12 " " 15.....	28	....	....	28
15 " " 20.....	11	....	....	11
20 " " 25.....	1	....	....	1
25 and over.....	7	....	....	7
Total.....	79	8	....	87

## JEWELRY—ONE HUNDRED ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	24	4	22	50
\$3 but under \$4.....	104	45	45	194
4 " " 5.....	94	77	31	202
5 " " 6.....	115	108	5	228
6 " " 7.....	93	81	....	174
7 " " 8.....	79	109	....	188
8 " " 9.....	81	91	1	173
9 " " 10.....	75	121	....	196
10 " " 12.....	196	104	....	300
12 " " 15.....	341	104	....	445
15 " " 20.....	684	35	....	719
20 " " 25.....	479	2	....	481
25 and over.....	437	....	....	437
Total.....	2,802	881	104	3,787

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## KNIT GOODS—TWENTY-ONE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	5	12	18
\$3 but under \$4.....	19	44	71	134
4 " " 5.....	50	203	69	322
5 " " 6.....	59	326	60	445
6 " " 7.....	70	504	49	623
7 " " 8.....	65	481	6	552
8 " " 9.....	79	505	....	584
9 " " 10.....	171	506	....	677
10 " " 12.....	201	210	....	411
12 " " 15.....	132	53	....	185
15 " " 20.....	80	10	....	90
20 " " 25.....	66	3	....	69
25 and over.....	104	....	....	104
Total.....	1,097	2,850	267	4,214

## LEATHER—SEVENTY-SEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	21	....	....	21
\$3 but under \$4.....	10	7	18	35
4 " " 5.....	73	12	5	90
5 " " 6.....	126	30	3	159
6 " " 7.....	273	17	....	290
7 " " 8.....	349	10	....	359
8 " " 9.....	372	6	....	378
9 " " 10.....	680	....	....	680
10 " " 12.....	1,050	4	....	1,054
12 " " 15.....	1,493	3	....	1,496
15 " " 20.....	1,108	1	....	1,109
20 " " 25.....	411	1	....	412
25 and over.....	240	....	....	240
Total.....	6,206	91	26	6,323

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## LEATHER GOODS—SEVENTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	1	4	5	10
\$3 but under \$4.....	48	103	50	201
4 " " 5.....	79	101	16	196
5 " " 6.....	49	104	1	154
6 " " 7.....	74	78	....	152
7 " " 8.....	36	28	....	64
8 " " 9.....	27	12	....	39
9 " " 10.....	21	8	....	29
10 " " 12.....	73	9	....	82
12 " " 15.....	169	6	....	175
15 " " 20.....	86	4	....	90
20 " " 25.....	26	....	....	26
25 and over.....	12	....	....	12
Total.....	701	457	72	1,230

## LAMPS—EIGHT ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	7	33	....	40
\$3 but under \$4.....	4	39	....	43
4 " " 5.....	12	217	....	229
5 " " 6.....	21	726	12	759
6 " " 7.....	49	519	18	586
7 " " 8.....	45	610	15	670
8 " " 9.....	225	618	1	844
9 " " 10.....	196	380	....	576
10 " " 12.....	215	293	....	508
12 " " 15.....	228	54	....	282
15 " " 20.....	274	13	....	287
20 " " 25.....	44	2	....	46
25 and over.....	8	1	....	9
Total.....	1,328	3,505	46	4,879

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## LIME AND CEMENT—ELEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	50	.....	.....	50
\$3 but under \$4.....	30	.....	2	32
4 " " 5.....	36	.....	3	39
5 " " 6.....	46	12	2	60
6 " " 7.....	66	9	.....	75
7 " " 8.....	238	.....	.....	238
8 " " 9.....	407	1	.....	408
9 " " 10.....	328	.....	.....	328
10 " " 12.....	439	.....	.....	439
12 " " 15.....	404	.....	.....	404
15 " " 20.....	258	.....	.....	258
20 " " 25.....	58	.....	.....	58
25 and over.....	33	.....	.....	33
Total.....	2,393	22	7	2,422

## MACHINERY—ONE HUNDRED AND THIRTY-SIX ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	109	6	17	132
\$3 but under \$4.....	287	29	12	283
4 " " 5.....	406	67	7	480
5 " " 6.....	413	159	.....	572
6 " " 7.....	513	128	.....	641
7 " " 8.....	820	94	.....	914
8 " " 9.....	1,185	82	.....	1,267
9 " " 10.....	1,811	61	.....	1,872
10 " " 12.....	2,750	44	.....	2,794
12 " " 15.....	4,675	22	.....	4,697
15 " " 20.....	6,119	2	.....	6,121
20 " " 25.....	1,114	1	.....	1,115
25 and over.....	322	.....	.....	322
Total.....	20,524	695	36	21,255

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

MATTRESSES AND BEDDING—NINE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	....	....	....	....
\$3 but under \$4.....	6	1	2	9
4 " " 5.....	15	13	2	30
5 " " 6.....	25	24	....	49
6 " " 7.....	65	13	....	78
7 " " 8.....	44	3	....	47
8 " " 9.....	46	4	....	50
9 " " 10.....	53	10	....	63
10 " " 12.....	73	8	....	81
12 " " 15.....	61	8	....	69
15 " " 20.....	83	1	....	84
20 " " 25.....	35	....	....	35
25 and over.....	15	1	....	16
Total.....	521	86	4	611

METAL GOODS—SEVENTY-ONE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	21	14	3	38
\$3 but under \$4.....	86	112	50	248
4 " " 5.....	227	430	48	705
5 " " 6.....	227	427	31	685
6 " " 7.....	465	292	9	766
7 " " 8.....	608	260	....	868
8 " " 9.....	615	122	1	738
9 " " 10.....	875	65	....	940
10 " " 12.....	907	61	....	968
12 " " 15.....	890	13	....	903
15 " " 20.....	1,001	2	....	1,003
20 " " 25.....	333	....	....	333
25 and over.....	190	....	....	190
Total.....	6,445	1,798	142	8,385

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## METAL NOVELTIES—TWENTY-TWO ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	15	11	3	29
\$3 but under \$4.....	32	23	18	73
4 " " 5.....	52	50	13	115
5 " " 6.....	59	61	5	125
6 " " 7.....	77	51	2	130
7 " " 8.....	48	36	....	84
8 " " 9.....	75	19	....	94
9 " " 10.....	83	10	....	93
10 " " 12.....	121	7	....	128
12 " " 15.....	191	2	....	193
15 " " 20.....	204	....	....	204
20 " " 25.....	62	....	....	62
25 and over.....	20	....	....	20
Total.....	1,039	270	41	1,350

## MINING (IRON ORE)—SIX ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	....	....	....	....
\$3 but under \$4.....	....	....	....	....
4 " " 5.....	1	....	....	1
5 " " 6.....	....	....	....	....
6 " " 7.....	11	....	....	11
7 " " 8.....	82	....	....	82
8 " " 9.....	128	....	....	128
9 " " 10.....	401	....	....	401
10 " " 12.....	733	....	....	733
12 " " 15.....	322	....	....	322
15 " " 20.....	41	....	....	41
20 " " 25.....	19	....	....	19
25 and over.....	....	....	....	....
Total.....	1,738	....	....	1,738

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## MUSICAL INSTRUMENTS—SEVENTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	11	7	1	19
\$3 but under \$4.....	19	19	11	49
4 " " 5.....	38	62	8	108
5 " " 6.....	57	60	2	119
6 " " 7.....	138	38	1	177
7 " " 8.....	84	47	....	131
8 " " 9.....	87	27	....	114
9 " " 10.....	156	11	....	167
10 " " 12.....	207	7	....	214
12 " " 15.....	297	5	....	302
15 " " 20.....	312	3	....	315
20 " " 25.....	66	....	....	66
25 and over.....	35	....	....	35
Total.....	1,507	286	23	1,816

## OILCLOTH (FLOOR AND TABLE)—TEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	21	....	2	23
\$3 but under \$4.....	14	....	3	17
4 " " 5.....	30	....	22	52
5 " " 6.....	34	....	3	37
6 " " 7.....	50	1	....	51
7 " " 8.....	118	....	....	118
8 " " 9.....	246	....	....	246
9 " " 10.....	418	16	....	434
10 " " 12.....	631	....	....	631
12 " " 15.....	356	....	....	356
15 " " 20.....	291	....	....	291
20 " " 25.....	59	....	....	59
25 and over.....	19	....	....	19
Total.....	2,287	17	30	2,334

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## OILS—SEVENTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	65	....	....	65
\$3 but under \$4.....	52	3	1	56
4 " " 5.....	54	7	36	97
5 " " 6.....	92	1	14	107
6 " " 7.....	129	3	10	142
7 " " 8.....	144	....	....	144
8 " " 9.....	171	....	1	172
9 " " 10.....	2,236	2	....	2,238
10 " " 12.....	1,532	1	....	1,533
12 " " 15.....	1,089	....	....	1,089
15 " " 20.....	2,338	....	....	2,338
20 " " 25.....	360	....	....	360
25 and over.....	223	....	....	223
Total.....	8,485	17	62	8,564

## PAINTS—SEVENTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	6	5	2	13
\$3 but under \$4.....	3	11	10	24
4 " " 5.....	13	11	3	27
5 " " 6.....	12	20	1	33
6 " " 7.....	21	10	....	31
7 " " 8.....	28	13	....	41
8 " " 9.....	56	7	....	63
9 " " 10.....	273	7	....	280
10 " " 12.....	301	12	....	313
12 " " 15.....	235	2	....	237
15 " " 20.....	134	....	....	134
20 " " 25.....	30	....	....	30
25 and over.....	7	....	....	7
Total.....	1,119	98	16	1,233

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## PAPER—FORTY-FOUR ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	.....	.....
\$3 but under \$4.....	12	1	.....	13
4 " " 5.....	46	33	15	94
5 " " 6.....	99	116	21	236
6 " " 7.....	149	94	.....	243
7 " " 8.....	208	28	.....	236
8 " " 9.....	221	26	.....	247
9 " " 10.....	314	11	.....	325
10 " " 12.....	485	5	.....	490
12 " " 15.....	445	5	.....	450
15 " " 20.....	336	1	.....	337
20 " " 25.....	150	.....	.....	150
25 and over.....	102	.....	.....	102
Total.....	3,067	320	36	3,423

## PIG IRON—FIVE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	.....	.....
\$3 but under \$4.....	.....	.....	.....	.....
4 " " 5.....	.....	.....	.....	.....
5 " " 6.....	1	.....	.....	1
6 " " 7.....	1	.....	.....	1
7 " " 8.....	97	.....	.....	97
8 " " 9.....	91	.....	.....	91
9 " " 10.....	250	.....	.....	250
10 " " 12.....	215	.....	.....	215
12 " " 15.....	334	.....	.....	334
15 " " 20.....	92	.....	.....	92
20 " " 25.....	11	.....	.....	11
25 and over.....	2	.....	.....	2
Total.....	1,094	.....	.....	1,094

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## POTTERY—FORTY-NINE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	38	20	15	73
\$3 but under \$4.....	40	71	43	154
4 " " 5.....	94	144	26	264
5 " " 6.....	67	211	7	285
6 " " 7.....	151	195	1	347
7 " " 8.....	224	172	1	397
8 " " 9.....	273	53	....	326
9 " " 10.....	600	34	....	634
10 " " 12.....	468	23	....	491
12 " " 15.....	474	14	....	488
15 " " 20.....	678	7	....	685
20 " " 25.....	697	1	....	698
25 and over.....	767	....	....	767
Total.....	4,571	945	93	5,609

## PRINTING AND BOOKBINDING—EIGHTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	5	6	....	11
\$3 but under \$4.....	7	23	6	36
4 " " 5.....	76	59	2	137
5 " " 6.....	54	78	....	132
6 " " 7.....	41	81	....	122
7 " " 8.....	56	77	....	133
8 " " 9.....	46	68	....	114
9 " " 10.....	54	48	....	102
10 " " 12.....	85	64	....	149
12 " " 15.....	147	35	....	182
15 " " 20.....	196	8	....	204
20 " " 25.....	139	1	....	140
25 and over.....	91	1	....	92
Total.....	997	549	8	1,554

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

QUARRYING STONE—SEVENTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	....	....	1
\$3 but under \$4.....	4	....	....	4
4 " " 5.....	10	....	....	10
5 " " 6.....	10	....	....	10
6 " " 7.....	48	....	....	48
7 " " 8.....	107	....	....	107
8 " " 9.....	401	....	....	401
9 " " 10.....	363	....	....	363
10 " " 12.....	158	....	....	158
12 " " 15.....	119	....	....	119
15 " " 20.....	141	....	....	141
20 " " 25.....	180	....	....	180
25 and over.....	60	....	....	60
Total.....	1,602	....	....	1,602

ROOFING (METAL AND TAR)—EIGHT ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4.....	....	....	....	....
4 " " 5.....	....	10	....	10
5 " " 6.....	11	1	....	12
6 " " 7.....	12	....	....	12
7 " " 8.....	52	1	....	53
8 " " 9.....	50	....	....	50
9 " " 10.....	85	1	....	86
10 " " 12.....	120	1	....	121
12 " " 15.....	86	....	....	86
15 " " 20.....	69	2	....	71
20 " " 25.....	37	....	....	37
25 and over.....	20	....	....	20
Total.....	542	16	....	558

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## RUBBER GOODS (HARD AND SOFT)—FORTY-EIGHT ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	8	2	23	33
\$3 but under \$4.....	19	7	47	73
4 " " 5.....	145	117	26	288
5 " " 6.....	232	234	7	473
6 " " 7.....	351	418	1	770
7 " " 8.....	484	290	....	774
8 " " 9.....	744	101	....	845
9 " " 10.....	1,143	72	....	1,215
10 " " 12.....	1,551	37	....	1,588
12 " " 15.....	1,419	19	....	1,438
15 " " 20.....	839	3	....	842
20 " " 25.....	144	....	....	144
25 and over.....	106	....	....	106
Total.....	7,185	1,300	104	8,589

## SADDLES AND HARNESS—SIX ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4.....	....	....	....	....
4 " " 5.....	1	....	....	1
5 " " 6.....	1	2	....	3
6 " " 7.....	2	....	....	2
7 " " 8.....	6	....	....	6
8 " " 9.....	5	....	....	5
9 " " 10.....	4	1	....	5
10 " " 12.....	9	1	....	10
12 " " 15.....	20	....	....	20
15 " " 20.....	17	....	....	17
20 " " 25.....	6	....	....	6
25 and over.....	....	....	....	....
Total.....	71	4	....	75

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

SADDLERY AND HARNESS HARDWARE—TWELVE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	20	20
\$3 but under \$4.....	3	....	19	22
4 " " 5.....	37	28	....	65
5 " " 6.....	50	24	....	74
6 " " 7.....	32	19	....	51
7 " " 8.....	52	17	....	69
8 " " 9.....	67	10	....	77
9 " " 10.....	61	5	....	66
10 " " 12.....	122	5	....	127
12 " " 15.....	99	3	....	102
15 " " 20.....	101	....	....	101
20 " " 25.....	35	....	....	35
25 and over.....	2	....	....	2
Total.....	661	111	39	811

SCIENTIFIC INSTRUMENTS—TWENTY ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	7	9	....	16
\$3 but under \$4.....	40	17	14	71
4 " " 5.....	134	126	8	268
5 " " 6.....	65	220	51	336
6 " " 7.....	263	246	....	509
7 " " 8.....	219	145	....	364
8 " " 9.....	147	57	....	204
9 " " 10.....	1,138	34	....	1,172
10 " " 12.....	967	26	....	993
12 " " 15.....	1,234	9	....	1,243
15 " " 20.....	1,014	....	....	1,014
20 " " 25.....	255	....	....	255
25 and over.....	74	....	....	74
Total.....	5,557	889	73	6,519

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## SASH, BLINDS AND DOORS—TWENTY-FIVE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4 .....	....	....	....	....
4 " " 5 .....	18	....	....	18
5 " " 6 .....	26	....	....	26
6 " " 7 .....	37	....	....	37
7 " " 8 .....	46	....	....	46
8 " " 9 .....	60	....	....	60
9 " " 10 .....	63	....	....	63
10 " " 12 .....	105	....	....	105
12 " " 15 .....	186	....	....	186
15 " " 20 .....	285	....	....	285
20 " " 25 .....	40	....	....	40
25 and over .....	13	....	....	13
Total .....	879	....	....	879

## SHOES—TWENTY-NINE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	12	37	22	71
\$3 but under \$4 .....	39	89	40	168
4 " " 5 .....	77	163	32	272
5 " " 6 .....	106	286	18	410
6 " " 7 .....	128	223	1	352
7 " " 8 .....	142	209	....	351
8 " " 9 .....	173	163	....	326
9 " " 10 .....	195	133	....	328
10 " " 12 .....	415	135	....	550
12 " " 15 .....	559	91	....	650
15 " " 20 .....	451	25	....	476
20 " " 25 .....	165	3	....	168
25 and over .....	65	....	....	65
Total .....	2,527	1,547	113	4,187

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## SHIRTS—TWENTY-TWO ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 y-ars and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	121	12	134
\$3 but under \$4.....	4	197	84	285
4 " " 5.....	16	311	14	341
5 " " 6.....	39	416	1	456
6 " " 7.....	34	407	....	441
7 " " 8.....	39	389	....	428
8 " " 9.....	37	260	....	297
9 " " 10.....	55	208	....	263
10 " " 12.....	82	218	....	300
12 " " 15.....	146	99	....	245
15 " " 20.....	151	23	....	174
20 " " 25.....	19	1	....	20
25 and over.....	2	....	....	2
Total.....	625	2,650	111	3,386

## SHIRT WAISTS (WOMEN'S)—FIVE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	12	8	20
\$3 but under \$4.....	....	49	10	59
4 " " 5.....	....	84	4	88
5 " " 6.....	....	125	....	125
6 " " 7.....	....	120	....	120
7 " " 8.....	....	97	....	97
8 " " 9.....	....	63	....	63
9 " " 10.....	....	36	....	36
10 " " 12.....	2	24	....	26
12 " " 15.....	2	27	....	29
15 " " 20.....	8	....	....	8
20 " " 25.....	1	2	....	3
25 and over.....	2	....	....	2
Total.....	15	639	22	676

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## SHIPBUILDING—SEVENTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4.....	10	....	....	10
4 " " 5.....	57	....	....	57
5 " " 6.....	13	....	....	13
6 " " 7.....	44	....	....	44
7 " " 8.....	434	....	....	434
8 " " 9.....	51	....	....	51
9 " " 10.....	688	....	....	688
10 " " 12.....	567	....	....	567
12 " " 15.....	777	....	....	777
15 " " 20.....	994	....	....	994
20 " " 25.....	577	....	....	577
25 and over.....	50	....	....	50
Total.....	4,262	....	....	4,262

## SILK (BROAD AND RIBBON)—ONE HUNDRED AND EIGHTY-TWO ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	96	177	105	379
\$3 but under \$4.....	146	402	380	928
4 " " 5.....	349	902	234	1,485
5 " " 6.....	483	1,178	100	1,761
6 " " 7.....	536	1,682	85	2,303
7 " " 8.....	604	1,942	24	2,570
8 " " 9.....	617	1,254	4	1,875
9 " " 10.....	1,032	839	....	1,871
10 " " 12.....	1,836	1,435	....	3,271
12 " " 15.....	2,958	1,616	....	4,574
15 " " 20.....	2,615	519	....	3,134
20 " " 25.....	654	23	....	677
25 and over.....	142	2	....	144
Total.....	12,068	11,971	933	24,972

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## SILK DYEING—TWENTY-TWO ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	10	....	....	10
\$3 but under \$4.....	31	10	7	48
4 " " 5.....	53	23	6	82
5 " " 6.....	74	102	....	176
6 " " 7.....	80	541	....	621
7 " " 8.....	224	25	....	249
8 " " 9.....	332	24	....	356
9 " " 10.....	364	7	....	371
10 " " 12.....	2,760	4	....	2,764
12 " " 15.....	1,143	3	....	1,146
15 " " 20.....	269	....	....	269
20 " " 25.....	88	....	....	88
25 and over.....	80	....	....	80
<b>Total.....</b>	<b>5,508</b>	<b>739</b>	<b>13</b>	<b>6,260</b>

## SILK THROWING—THIRTY-TWO ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	4	4	38	46
\$3 but under \$4.....	50	38	78	166
4 " " 5.....	64	83	22	169
5 " " 6.....	70	187	....	257
6 " " 7.....	88	306	....	394
7 " " 8.....	88	482	....	570
8 " " 9.....	105	118	....	223
9 " " 10.....	75	3	....	78
10 " " 12.....	39	1	....	40
12 " " 15.....	35	1	....	36
15 " " 20.....	51	....	....	51
20 " " 25.....	6	....	....	6
25 and over.....	7	....	....	7
<b>Total.....</b>	<b>682</b>	<b>1,223</b>	<b>138</b>	<b>2,043</b>

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## SILK MILL SUPPLIES—SEVENTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	4	....	8	12
\$3 but under \$4.....	25	20	16	61
4 " " 5.....	34	21	6	61
5 " " 6.....	22	38	2	62
6 " " 7.....	33	22	1	56
7 " " 8.....	42	18	....	60
8 " " 9.....	53	8	....	61
9 " " 10.....	65	7	....	72
10 " " 12.....	89	9	....	98
12 " " 15.....	124	9	....	133
15 " " 20.....	91	11	....	102
20 " " 25.....	17	....	....	17
25 and over.....	8	....	....	8
<b>Total.....</b>	<b>607</b>	<b>163</b>	<b>33</b>	<b>803</b>

## SILVER GOODS—EIGHTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	....	....	1
\$3 but under \$4.....	14	20	9	43
4 " " 5.....	45	17	18	80
5 " " 6.....	43	38	7	88
6 " " 7.....	47	25	....	72
7 " " 8.....	49	39	....	88
8 " " 9.....	26	36	....	62
9 " " 10.....	26	22	....	48
10 " " 12.....	54	22	....	76
12 " " 15.....	96	26	....	122
15 " " 20.....	367	10	....	377
20 " " 25.....	163	2	....	165
25 and over.....	97	1	....	98
<b>Total.....</b>	<b>1,028</b>	<b>258</b>	<b>34</b>	<b>1,320</b>

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## SMELTING AND REFINING (GOLD, SILVER, COPPER, ETC.)—NINE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	.....	.....
\$3 but under \$4.....	.....	.....	.....	.....
4 " " 5.....	14	.....	.....	14
5 " " 6.....	15	1	.....	16
6 " " 7.....	48	.....	.....	48
7 " " 8.....	16	1	.....	17
8 " " 9.....	165	1	.....	166
9 " " 10.....	638	.....	.....	638
10 " " 12.....	1,107	.....	.....	1,107
12 " " 15.....	1,245	1	.....	1,246
15 " " 20.....	625	1	.....	626
20 " " 25.....	147	.....	.....	147
25 and over.....	52	.....	.....	52
Total.....	4,072	5	.....	4,077

## SOAP AND TALLOW—NINETEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	1	1
\$3 but under \$4.....	3	11	4	18
4 " " 5.....	25	100	8	133
5 " " 6.....	84	82	25	191
6 " " 7.....	73	82	.....	155
7 " " 8.....	51	49	.....	100
8 " " 9.....	68	55	.....	123
9 " " 10.....	364	61	.....	425
10 " " 12.....	359	83	.....	442
12 " " 15.....	229	55	.....	284
15 " " 20.....	176	6	.....	182
20 " " 25.....	57	1	.....	58
25 and over.....	29	.....	.....	29
Total.....	1,518	585	38	2,141

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## STEEL AND IRON (BAR)—SIX ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	....	....	1
\$3 but under \$4.....	1	....	....	1
4 " " 5.....	15	39	....	54
5 " " 6.....	23	10	....	33
6 " " 7.....	12	10	....	22
7 " " 8.....	34	1	....	35
8 " " 9.....	274	....	....	274
9 " " 10.....	216	....	....	216
10 " " 12.....	194	....	....	194
12 " " 15.....	169	....	....	169
15 " " 20.....	150	....	....	150
20 " " 25.....	53	....	....	53
25 and over.....	42	....	....	42
<b>Total.....</b>	<b>1,184</b>	<b>60</b>	<b>....</b>	<b>1,244</b>

## STEEL AND IRON (STRUCTURAL)—TWENTY-THREE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	30	....	....	30
\$3 but under \$4.....	19	....	....	19
4 " " 5.....	19	....	....	19
5 " " 6.....	41	....	....	41
6 " " 7.....	43	....	....	43
7 " " 8.....	182	....	....	182
8 " " 9.....	253	....	....	253
9 " " 10.....	507	....	....	507
10 " " 12.....	643	....	....	643
12 " " 15.....	605	....	....	605
15 " " 20.....	605	....	....	605
20 " " 25.....	240	....	....	240
25 and over.....	187	....	....	187
<b>Total.....</b>	<b>3,374</b>	<b>....</b>	<b>....</b>	<b>3,374</b>

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## STEEL AND IRON (FORGING)—TWELVE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	26	2	....	28
\$3 but under \$4.....	21	....	2	23
4 " " 5.....	24	2	....	26
5 " " 6.....	56	9	....	65
6 " " 7.....	109	6	....	115
7 " " 8.....	142	2	....	144
8 " " 9.....	378	4	....	382
9 " " 10.....	639	1	....	640
10 " " 12.....	486	2	....	488
12 " " 15.....	533	....	....	533
15 " " 20.....	715	1	....	716
20 " " 25.....	163	....	....	163
25 and over.....	80	....	....	80
Total.....	3,372	29	2	3,403

## TEXTILE PRODUCTS—NINE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3.....	....	....	....	....
\$3 but under \$4.....	5	4	47	56
4 " " 5.....	90	80	46	216
5 " " 6.....	86	126	1	213
6 " " 7.....	110	130	....	240
7 " " 8.....	101	139	....	240
8 " " 9.....	115	17	....	132
9 " " 10.....	124	10	....	134
10 " " 12.....	112	5	....	117
12 " " 15.....	69	....	....	69
15 " " 20.....	78	....	....	78
20 " " 25.....	15	....	....	15
25 and over.....	7	....	....	7
Total.....	912	511	94	1,517

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## THREAD—SIX ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	2	6	9
\$3 but under \$4.....	....	3	82	85
4 " " 5.....	15	210	281	506
5 " " 6.....	49	231	187	467
6 " " 7.....	81	750	101	932
7 " " 8.....	105	637	9	751
8 " " 9.....	136	387	2	525
9 " " 10.....	118	137	....	255
10 " " 12.....	255	43	....	298
12 " " 15.....	302	3	....	305
15 " " 20.....	323	....	....	323
20 " " 25.....	71	....	....	71
25 and over.....	22	....	....	22
Total.....	1,478	2,403	668	4,549

## TRUNKS AND TRAVELING BAGS—ELEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4.....	....	1	....	1
4 " " 5.....	9	3	....	12
5 " " 6.....	13	5	1	19
6 " " 7.....	30	6	1	37
7 " " 8.....	39	1	....	40
8 " " 9.....	25	1	....	26
9 " " 10.....	36	1	....	37
10 " " 12.....	80	5	....	85
12 " " 15.....	68	1	....	69
15 " " 20.....	92	....	....	92
20 " " 25.....	28	....	....	28
25 and over.....	15	....	....	15
Total.....	435	24	2	461

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

TRUNK AND BAG HARDWARE—TEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1	2	13	16
\$3 but under \$4.....	20	15	37	72
4 " " 5.....	48	71	29	148
5 " " 6.....	100	68	17	185
6 " " 7.....	116	69	4	189
7 " " 8.....	95	56	5	156
8 " " 9.....	133	38	6	177
9 " " 10.....	177	32	....	209
10 " " 12.....	172	46	....	218
12 " " 15.....	158	24	....	182
15 " " 20.....	196	10	....	206
20 " " 25.....	136	....	....	136
25 and over.....	39	....	....	39
Total.....	1,291	431	111	1,933

TYPEWRITERS AND SUPPLIES—FOUR ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4.....	1	1	....	2
4 " " 5.....	6	2	....	8
5 " " 6.....	14	5	....	19
6 " " 7.....	13	6	....	19
7 " " 8.....	10	3	....	13
8 " " 9.....	6	....	....	6
9 " " 10.....	30	2	....	32
10 " " 12.....	44	....	....	44
12 " " 15.....	57	....	....	57
15 " " 20.....	44	....	....	44
20 " " 25.....	11	....	....	11
25 and over.....	4	....	....	4
Total.....	240	19	....	269

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## UNDERWEAR (WOMEN'S AND CHILDREN'S)—TWENTY-ONE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	72	8	80
\$3 but under \$4.....	....	121	42	163
4 " " 5.....	4	143	30	177
5 " " 6.....	3	249	2	254
6 " " 7.....	8	292	....	300
7 " " 8.....	3	246	....	249
8 " " 9.....	10	228	....	238
9 " " 10.....	11	162	....	173
10 " " 12.....	15	87	....	102
12 " " 15.....	17	58	....	75
15 " " 20.....	30	16	....	46
20 " " 25.....	9	10	....	19
25 and over.....	7	3	....	10
Total.....	117	1,687	82	1,886

## VARNISHES—SEVENTEEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	....	....	....	....
\$3 but under \$4.....	1	....	....	1
4 " " 5.....	1	....	....	1
5 " " 6.....	3	1	....	4
6 " " 7.....	17	....	....	17
7 " " 8.....	15	1	....	16
8 " " 9.....	13	....	....	13
9 " " 10.....	24	1	....	25
10 " " 12.....	55	4	....	59
12 " " 15.....	79	4	....	83
15 " " 20.....	61	1	....	62
20 " " 25.....	28	....	....	28
25 and over.....	38	....	....	38
Total.....	335	12	....	347

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

WATCHES, CASES AND MATERIAL—ELEVEN ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	10	10
\$3 but under \$4.....	9	2	30	41
4 " " 5.....	28	27	17	72
5 " " 6.....	53	113	.....	166
6 " " 7.....	43	117	.....	160
7 " " 8.....	54	178	2	234
8 " " 9.....	45	131	1	177
9 " " 10.....	98	75	.....	173
10 " " 12.....	184	38	.....	222
12 " " 15.....	362	4	.....	366
15 " " 20.....	392	4	.....	396
20 " " 25.....	162	.....	.....	162
25 and over.....	70	1	.....	71
Total.....	1,500	690	60	2,250

WINDOW SHADES—FOUR ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	.....	.....	.....	.....
\$3 but under \$4.....	.....	.....	.....	.....
4 " " 5.....	.....	.....	.....	.....
5 " " 6.....	.....	.....	.....	.....
6 " " 7.....	.....	.....	.....	.....
7 " " 8.....	.....	.....	.....	.....
8 " " 9.....	.....	1	.....	1
9 " " 10.....	1	.....	.....	1
10 " " 12.....	14	.....	.....	14
12 " " 15.....	14	.....	.....	14
15 " " 20.....	53	.....	.....	53
20 " " 25.....	3	.....	.....	3
25 and over.....	.....	.....	.....	.....
Total.....	85	1	.....	86

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## WOODEN GOODS—THIRTY-SIX ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	10	....	4	14
\$3 but under \$4.....	40	1	17	58
4 " " 5.....	46	1	11	58
5 " " 6.....	63	4	8	75
6 " " 7.....	108	2	....	110
7 " " 8.....	137	4	....	141
8 " " 9.....	119	....	1	120
9 " " 10.....	209	1	....	210
10 " " 12.....	216	....	....	216
12 " " 15.....	347	2	....	349
15 " " 20.....	375	....	....	375
20 " " 25.....	95	1	....	96
25 and over.....	29	....	....	29
Total.....	1,794	16	41	1,851

## WOOLEN AND WORSTED GOODS—TWENTY-FIVE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified Amounts who are—			Total Number Receiving Specified Amounts.
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	4	3	1	8
\$3 but under \$4.....	39	117	331	487
4 " " 5.....	372	756	237	1,365
5 " " 6.....	432	1,556	42	2,030
6 " " 7.....	827	1,386	9	2,222
7 " " 8.....	646	1,122	....	1,768
8 " " 9.....	746	654	....	1,400
9 " " 10.....	784	385	....	1,169
10 " " 12.....	780	524	....	1,304
12 " " 15.....	761	363	....	1,124
15 " " 20.....	551	138	....	689
20 " " 25.....	199	7	....	206
25 and over.....	136	....	....	136
Total.....	6,277	7,011	620	13,908

TABLE No. 7.—Classified Weekly Earnings of Wage-Earners, by Industries, 1909.—(Continued).

## UNCLASSIFIED—NINETY-TWO ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	116	38	11	165
\$3 but under \$4.....	54	95	37	186
4 " " 5.....	136	284	85	505
5 " " 6.....	205	309	5	519
6 " " 7.....	323	320	....	643
7 " " 8.....	279	157	....	436
8 " " 9.....	399	69	....	468
9 " " 10.....	1,243	33	....	1,276
10 " " 12.....	1,823	16	....	1,839
12 " " 15.....	1,263	13	....	1,276
15 " " 20.....	4	4	....	8
20 " " 25.....	338	2	....	340
25 and over.....	108	1	....	109
Total.....	6,291	1,341	138	7,770

## ALL INDUSTRIES—TWO THOUSAND TWO HUNDRED AND NINETY-ONE ESTABLISHMENTS.

Classification of Weekly Earnings.	Number of Persons Receiving Specified			Total Number Receiving Specified Amounts.
	Amounts who are—			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	
Under \$3 .....	1,048	1,434	737	3,219
\$3 but under \$4.....	2,050	3,657	2,427	8,134
4 " " 5.....	4,719	9,193	2,080	15,992
5 " " 6.....	6,864	13,390	1,085	21,339
6 " " 7.....	9,799	14,038	370	24,207
7 " " 8.....	12,982	11,547	89	24,618
8 " " 9.....	16,835	7,857	23	24,715
9 " " 10.....	32,434	6,069	....	38,503
10 " " 12.....	37,383	5,211	....	42,594
12 " " 15.....	39,863	3,294	....	43,157
15 " " 20.....	40,036	1,023	....	41,059
20 " " 25.....	13,160	89	....	13,249
25 and over.....	7,616	17	....	7,633
Total.....	224,789	76,819	6,811	308,419

TABLE No. 8.—Number of Days in Operation, Number of Hours Worked per Day, Number of Hours Worked per Week and Overtime, 1909. Averages by Industries.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Average Number of Days in Operation During the Year.	Average number of Hours Worked per Day (under Normal Conditions).	Average Number of Hours per Week (under Normal Conditions).	Establishments that Worked Overtime During the Year.	
						Number of Establishments.	Aggregate Number of Hours.
1	Agricultural implements. . . . .	7	299.71	9.85	56.71	1	600
2	Artisans' tools. . . . .	43	289.39	9.69	58.37	5	813
3	Art tile. . . . .	7	271.57	10.00	54.43	1	83,712
4	Boilers. . . . .	14	283.71	9.50	55.21	10	809
5	Boxes (wood and paper). . . . .	49	293.79	9.69	54.84	9	16,489
6	Brewing (lager beer, ale and porter). . . . .	37	299.50	8.81	52.77	14	15,196
7	Brick and terra cotta. . . . .	74	227.54	9.48	55.23	2	400
8	Brushes. . . . .	13	299.00	9.69	54.23	3	427
9	Buttons (metal). . . . .	10	297.60	9.70	55.70	1	68
10	Buttons (pearl). . . . .	23	292.04	10.00	57.04	7	119,868
11	Carpets and rugs. . . . .	8	259.57	10.00	55.71	8	1,919
12	Carriages and wagons. . . . .	29	297.03	9.69	57.07	1	80
13	Chemical products. . . . .	66	308.27	10.06	58.95	3	465
14	Cigars and tobacco. . . . .	36	284.33	9.05	51.97	3	879
15	Clothing. . . . .	12	285.17	9.25	53.42	1	110
16	Confectionery. . . . .	7	297.85	9.57	55.57	1	100
17	Cornices and skylights. . . . .	23	294.13	8.39	47.22	16	5,963
18	Corsets and corset waists. . . . .	10	300.22	9.56	52.78	7	2,120
19	Cutlery. . . . .	13	271.38	9.77	55.77	4	1,294
20	Cotton goods. . . . .	49	304.08	9.69	55.31	6	150,332
21	Cotton goods (finishing and dyeing). . . . .	18	287.72	9.94	57.22	3	162
22	Drawn wire and wire cloth. . . . .	14	286.08	9.69	55.46	7	16,838
23	Electrical appliances. . . . .	34	284.15	9.71	55.18	3	3,145
24	Fertilizers. . . . .	12	257.33	9.83	58.33	8	43,606
25	Food products. . . . .	30	290.47	10.07	59.00	2	440
26	Foundry (brass). . . . .	22	286.82	9.68	55.18	2	400
27	Foundry (iron). . . . .	57	286.21	9.46	55.96	3	1,830
28	Furnaces, ranges and heaters. . . . .	13	284.31	9.46	54.69	1	145
29	Gas and electric light fixtures. . . . .	13	294.62	9.31	53.08	3	3,497
30	Glass (cut tableware). . . . .	8	272.37	10.00	57.25	2	440
31	Glass (window and bottle). . . . .	23	283.40	9.20	53.65	2	400
32	Glass mirrors. . . . .	4	291.25	9.50	54.25	3	1,830
33	Graphite products. . . . .	6	306.16	10.50	58.16	1	145
34	Hats (fur and felt). . . . .	39	258.18	9.21	54.76	3	3,497
35	Hats (straw). . . . .	3	273.00	9.50	57.00	2	19,133
36	High explosives. . . . .	8	296.50	10.50	60.25	2	92
37	Inks and mucilage. . . . .	7	268.57	9.71	55.43	8	1,365
38	Jewelry. . . . .	100	283.69	9.34	53.77	10	1,147
39	Knit goods. . . . .	21	286.86	9.71	54.43	8	1,365
40	Leather. . . . .	77	292.82	9.83	57.18	8	5,429
41	Leather goods. . . . .	17	292.24	9.65	55.18	4	1,298
42	Lamps. . . . .	8	291.25	9.63	54.50	2	264
43	Lime and cement. . . . .	11	292.00	10.90	69.30	2	139,373
44	Machinery. . . . .	136	291.71	9.61	54.98	29	77,264
45	Mattresses and bedding. . . . .	9	301.89	9.56	54.66	1	75
46	Metal goods. . . . .	71	285.13	9.79	56.23	16	16,657
47	Metal novelties. . . . .	22	301.09	9.95	57.14	6	521
48	Mining (iron ore). . . . .	6	307.17	11.33	67.16	4	1,480
49	Musical instruments. . . . .	17	286.71	9.59	54.88	1	131
50	Oilecloth (floor and table). . . . .	10	297.00	9.80	57.40	2	3,200
51	Oils. . . . .	17	312.23	9.77	57.84	2	3,200

TABLE No. 8.—Number of Days in Operation, Number of Hours Worked per Day, Number of Hours Worked per Week and Overtime, 1909. Averages by Industries.—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Average Number of Days in Operation During the Year.	Average Number of Hours Worked per Day (under Normal Conditions.)	Number of Hours Worked per Week (under Normal Conditions.)	Establishments that Worked Overtime During the Year.	
						Number of Establishments.	Aggregate Number of Hours.
52	Paints. . . . .	17	291.47	9.71	56.11	2	1,092
53	Paper. . . . .	44	284.35	10.83	62.57	7	7,007
54	Pig iron. . . . .	5	338.50	12.00	78.00	1	120
55	Pottery. . . . .	49	293.37	9.49	54.02	5	20,645
56	Printing and book-binding. . . . .	18	304.33	8.89	51.83	1	100
57	Quarrying stone. . . . .	17	237.58	9.59	55.71	1	5,075
58	Roofing (metal and tar) . . . . .	8	269.75	9.87	56.87	14	162,880
59	Rubber goods (hard and soft) . . . . .	48	283.41	9.98	57.52	2	1,604
60	Saddles and harness. . . . .	6	293.33	9.50	54.00	3	5,000
61	Saddlery and harness hardware. . . . .	12	294.92	9.92	55.41	2	1,100
62	Scientific instruments. . . . .	20	301.85	9.65	55.10	3	640
63	Sash, blinds and doors. . . . .	25	300.36	9.16	52.60	2	2,856
64	Shoes. . . . .	29	288.93	9.89	55.10	3	640
65	Shirts. . . . .	22	289.41	9.77	54.33	2	2,856
66	Shirtwaists (women's). . . . .	5	289.40	9.60	52.40	5	252,318
67	Shipbuilding. . . . .	17	297.70	9.29	54.17	11	2,341
68	Silk (broad and ribbon). . . . .	182	291.75	9.99	55.01	4	2,615
69	Silk dyeing. . . . .	22	297.94	9.94	55.39	1	110
70	Silk throwing. . . . .	32	292.28	9.97	51.72	2	315
71	Silk mill supplies. . . . .	17	288.11	9.88	54.35	9	1,735
72	Silver goods. . . . .	18	287.16	9.72	55.44	1	51,840
73	Smelting and refining (gold, silver, copper, etc). . . . .	9	296.11	9.44	53.56	3	3,989
74	Soap and tallow. . . . .	19	301.94	9.63	55.37	6	32,280
75	Steel and iron (bar). . . . .	6	262.17	10.33	60.83	1	500
76	Steel and iron (structural). . . . .	23	298.30	9.39	54.74	2	1,300
77	Steel and iron (forging). . . . .	12	287.25	9.83	55.83	2	116
78	Textile products. . . . .	9	276.89	9.89	55.00	3	317
79	Thread. . . . .	6	274.33	10.00	55.83	17	302.23
80	Trunks and traveling bags. . . . .	11	297.45	9.82	58.09	11	276.45
81	Trunk and bag hardware. . . . .	10	291.15	9.90	57.60	4	290.00
82	Typewriters and supplies. . . . .	4	304.00	9.60	40.00	21	290.10
83	Underwear (women's and children's). . . . .	21	290.10	9.58	52.68	17	302.23
84	Varnishes. . . . .	17	302.23	9.18	53.00	11	276.45
85	Watches, cases and material. . . . .	11	276.45	9.91	55.73	4	290.00
86	Window shades. . . . .	4	290.00	9.60	54.75	1	305
87	Wooden goods. . . . .	36	291.83	9.78	56.22	2	260
88	Woolen and worsted goods. . . . .	25	278.60	9.60	55.12	3	1,620
89	Unclassified. . . . .	92	290.50	9.90	56.61	9	6,717
	All industries. . . . .	2,291	287.38	9.71	55.64	341	1,305,050

TABLE No. 9.—Average Proportion of Business Done, by Industries, 1909.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Average Proportion of Business Done—Percentage.
1	Agricultural implements. . . . .	7	69.21
2	Artisans' tools. . . . .	43	63.25
3	Art tile. . . . .	7	69.28
4	Boilers. . . . .	14	69.28
5	Boxes (wood and paper). . . . .	49	81.12
6	Brewing (lager beer, ale and porter). . . . .	37	75.15
7	Brick and terra cotta. . . . .	74	71.62
8	Brushes. . . . .	13	81.15
9	Buttons (metal). . . . .	10	68.49
10	Buttons (pearl). . . . .	23	72.39
11	Carpets and rugs. . . . .	8	60.00
12	Carriages and wagons. . . . .	29	72.93
13	Chemical products. . . . .	66	78.00
14	Cigars and tobacco. . . . .	36	79.00
15	Clothing. . . . .	12	72.83
16	Confectionery. . . . .	7	73.57
17	Cornices and skylights. . . . .	23	69.56
18	Corsets and corset waists. . . . .	10	91.67
19	Cutlery. . . . .	13	67.31
20	Cotton goods. . . . .	49	79.29
21	Cotton goods (finishing and dyeing). . . . .	18	76.94
22	Drawn wire and wire cloth. . . . .	14	82.31
23	Electrical appliances. . . . .	34	64.26
24	Fertilizers. . . . .	12	74.17
25	Food products. . . . .	30	78.67
26	Foundry (brass). . . . .	22	68.41
27	Foundry (iron). . . . .	57	71.58
28	Furnaces, ranges and heaters. . . . .	13	71.92
29	Gas and electric light fixtures. . . . .	13	69.23
30	Glass (cut tableware). . . . .	8	75.62
31	Glass (window and bottle). . . . .	23	74.00
32	Glass mirrors. . . . .	4	82.50
33	Graphite products. . . . .	6	90.00
34	Hats (fur and felt). . . . .	39	62.37
35	Hats (straw). . . . .	3	72.50
36	High explosives. . . . .	8	73.12
37	Inks and mucilage. . . . .	7	65.00
38	Jewelry. . . . .	100	69.64
39	Knit goods. . . . .	21	83.10
40	Leather. . . . .	77	76.75
41	Leather goods. . . . .	17	72.65
42	Lamps. . . . .	8	73.12
43	Lime and cement. . . . .	11	77.00
44	Machinery. . . . .	136	66.76
45	Mattresses and bedding. . . . .	9	76.67
46	Metal goods. . . . .	71	71.93
47	Metal novelties. . . . .	22	74.55
48	Mining (iron ore). . . . .	6	80.83
49	Musical instruments. . . . .	17	77.94
50	Oilcloth (floor and table). . . . .	10	89.00
51	Oils. . . . .	17	81.92
52	Paints. . . . .	17	82.35
53	Paper. . . . .	44	85.75
54	Pig iron. . . . .	5	68.75
55	Pottery. . . . .	49	77.09
56	Printing and book-binding. . . . .	18	78.89

TABLE No. 9.—Average Proportion of Business Done, by Industries, 1909.—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Average Proportion of Business Done—Percentage.
57	Quarrying stone. . . . .	17	57.06
58	Roofing (metal and tar). . . . .	8	71.88
59	Rubber goods (hard and soft). . . . .	48	77.39
60	Saddles and harness. . . . .	6	60.83
61	Saddlery and harness hardware. . . . .	12	69.58
62	Scientific instruments . . . . .	20	67.00
63	Sash, blinds and doors. . . . .	25	78.00
64	Shoes. . . . .	29	78.97
65	Shirts. . . . .	22	88.18
66	Shirt waists (women's). . . . .	5	67.00
67	Shipbuilding. . . . .	17	63.12
68	Silk (broad and ribbon). . . . .	182	76.23
69	Silk dyeing. . . . .	22	77.50
70	Silk throwing. . . . .	32	83.59
71	Silk mill supplies. . . . .	17	82.94
72	Silver goods. . . . .	18	75.56
73	Smelting and refining (gold, silver, copper, etc.). . . . .	9	81.12
74	Soap and tallow. . . . .	19	79.74
75	Steel and iron (bar). . . . .	6	55.83
76	Steel and iron (structural). . . . .	23	67.83
77	Steel and iron (forging). . . . .	12	69.58
78	Textile products. . . . .	9	73.89
79	Thread. . . . .	6	95.00
80	Trunks and traveling bags. . . . .	11	67.27
81	Trunk and bag hardware. . . . .	10	83.50
82	Typewriters and supplies. . . . .	4	88.75
83	Underwear (women's and children's). . . . .	21	74.74
84	Varnishes. . . . .	17	75.00
85	Watches, cases and material. . . . .	11	60.91
86	Window shades. . . . .	4	77.50
87	Wooden goods. . . . .	36	76.94
88	Woolen and worsted goods. . . . .	25	84.38
89	Unclassified. . . . .	92	75.59
	All industries. . . . .	2,291	74.38

TABLE NO. 10.—Power Used and Owned by Industries, 1909.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Character of Power Used.												
			Steam Engines.		Gas and Gasoline Engines.		Water Wheels.		Water Motors.		Electric Motors.		Air Compressors.		
			Number.	Total H. P.	Number.	Total H. P.	Number.	Total H. P.	Number.	Total H. P.	Number.	Total H. P.	Number.	Total H. P.	
1	Agricultural implements. . . . .	7	6	395	5	294	4	153			44	304			
2	Artisans' tools. . . . .	43	33	3,404	16	805	3	135			30	377			
3	Art tile. . . . .	7	9	530						1	10	11	65		
4	Boilers. . . . .	14	21	2,232	1	18						47	970		
5	Boxes (wood and paper). . . . .	49	30	1,763	8	65						46	321		
6	Brewing (lager beer, ale and porter). . . . .	37	231	13,823	1	12				4	27	294	1,542		
7	Brick and terra cotta. . . . .	74	128	14,778	5	186						123	3,600	2	23
8	Brushes. . . . .	13	3	72	6	42						5	22		
9	Buttons (metal). . . . .	10	7	325	5	67						116	542		
10	Buttons (pearl). . . . .	23	14	668	5	49						14	115		
11	Carpets and rugs. . . . .	8	11	845			4	312				9	195		
12	Carriages and wagons. . . . .	29	15	710	7	90						16	140		
13	Chemical products. . . . .	66	327	17,807	3	277	3	120				384	4,871		
14	Cigars and tobacco. . . . .	36	40	3,505	1	15	7	113		3	3	85	748		
15	Clothing. . . . .	12	2	9	1	23						17	122		
16	Confectionery. . . . .	7	7	512								19	131		
17	Cornices and skylights. . . . .	23	3	94	4	65						10	125		
18	Corsets and corset waists. . . . .	10	7	430								17	50		
19	Cutlery. . . . .	13	12	872	2	30						2	10		
20	Cotton goods. . . . .	49	67	7,065	8	102	11	693		1	10	163	1,857		
21	Cotton goods (finishing and dyeing). . . . .	18	204	7,921			5	375				78	1,811		
22	Drawn wire and wire cloth. . . . .	14	145	27,034	3	1,262						202	4,182		
23	Electrical appliances. . . . .	34	46	7,015	6	353	3	800				1,095	6,146		
24	Fertilizers. . . . .	12	23	2,195								56	1,169		
25	Food products. . . . .	30	68	3,756	4	82						80	970		
26	Foundry (brass). . . . .	22	12	689	5	42						72	815		
27	Foundry (iron). . . . .	57	82	5,853	16	1,965	1	20				512	7,891	31	746
28	Furnaces, ranges and heaters. . . . .	13	20	1,495	2	35	3	80				56	1,002	1	165
29	Gas and electric light fixtures. . . . .	13	7	353	3	53						7	36		
30	Glass (cut tableware). . . . .	8	5	155	2	22						1	5		

TABLE NO. 10.—Power Used and Owned by Industries, 1909.—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Character of Power Used.											
			Steam Engines.		Gas and Gasoline Engines.		Water Wheels.		Water Motors.		Electric Motors.		Air Compressors.	
			Number.	Total H. P.	Number.	Total H. P.	Number.	Total H. P.	Number.	Total H. P.	Number.	Total H. P.	Number.	Total H. P.
31	Glass (window and bottle).....	23	65	2,461	3	22					57	570	4	105
32	Glass mirrors.....	4	2	45						3	60			
33	Graphite products.....	6	11	1,585	1	40	3	250		87	842			
34	Hats (fur and felt).....	39	44	4,425	2	27	1	25		81	892			
35	Hats (straw).....	3	5	197										
36	High explosives.....	8	88	5,228	2	35				285	3,335	2	70	
37	Inks and mucilage.....	7	9	361						5	72			
38	Jewelry.....	100	44	997	11	145				52	273			
39	Knit goods.....	21	13	1,335	1	10	3	190		14	62			
40	Leather.....	77	99	9,048	1	14				229	2,878			
41	Leather goods.....	17	12	395	3	12				36	90			
42	Lamps.....	8	13	2,037	1	10				733	2,265	1	75	
43	Lime and cement.....	11	80	17,341	1	20	1	50		278	4,330			
44	Machinery.....	136	177	22,779	24	450	15	477	1	5	928	16,679	14	2,055
45	Mattresses and bedding.....	9	7	420	6	139				11	208			
46	Metal goods.....	71	74	9,644	20	255	2	40		345	1,123			
47	Metal novelties.....	22	17	684	3	42				8	105			
48	Mining (iron ore).....	6	31	5,425						6	400			
49	Musical instruments.....	17	15	1,281	5	112	2	45		19	146			
50	Oilcloth (floor and table).....	10	75	7,623						168	2,447			
51	Oils.....	17	651	126,000	3	251				123	2,711			
52	Paints.....	17	45	4,420			1	29		114	2,063			
53	Paper.....	44	144	19,110	1	500	27	2,602	2	235	165	1,562		
54	Pig iron.....	5	34	12,025						14	350			
55	Pottery.....	49	52	3,594			1	80		79	531			
56	Printing and book-binding.....	18	6	625	6	63				250	757			
57	Quarrying stone.....	17	26	2,700						18	241	1	150	
58	Roofing (metal and tar).....	8	18	1,674	2	22				4	40			
59	Rubber goods (hard and soft).....	48	117	21,741	3	35	9	945		144	1,580			
60	Saddles and harness.....	6			1	2				4	28			

61 Saddlery and harness hardware	12	8	520	1	5					4	12		
62 Scientific instruments	20	24	4,888	8	139					144	1,269		
63 Sash, blinds and doors	25	24	1,870	1	12					30	172		
64 Shoes	29	23	1,108	4	61			1	5	18	105		
65 Shirts	22	12	544	3	23					17	119		
66 Shirtwaists (women's)	5	3	50							4	23		
67 Shipbuilding	17	47	7,557	8	208					391	4,725		
68 Silk (broad and ribbon)	182	130	10,392	8	111	8	291			231	2,573		
69 Silk dyeing	22	147	4,668							36	733		
70 Silk throwing	32	22	1,723	2	25	10	445			55	574		
71 Silk mill supplies	17	7	545	3	29	1	12			8	45		
72 Silver goods	18	10	1,069	3	50					54	301		
73 Smelting and refining (gold, silver, copper, etc.)	9	128	26,682	1	35					358	5,674	1	375
74 Soap and tallow	19	51	3,594							104	1,040		
75 Steel and iron (bar)	6	44	4,190	1	10	2	160			54	980	10	40
76 Steel and iron (structural)	23	55	11,053	7	239					367	3,897	3	625
77 Steel and iron (forging)	12	43	7,999			5	575			289	3,838		
78 Textile products	9	9	1,597			1	40			26	1,117		
79 Thread	6	20	12,436										
80 Trunks and traveling bags	11	2	165	3	44					10	34		
81 Trunk and bag hardware	10	11	996							7	94		
82 Typewriters and supplies	4	3	432							26	190		
83 Underwear (women's and children's)	21	9	321	10	76					14	67		
84 Varnishes	17	9	524	1	6					39	453		
85 Watches, cases and material	11	10	486	2	190					94	803		
86 Window shades	3	4	220							1	2		
87 Wooden goods	36	29	2,025	3	46	1	80			16	142		
88 Woolen and worsted goods	25	66	18,222			8	736			134	3,440		
89 Unclassified	92	121	18,588	16	530	5	257	1	20	521	10,762	1	130
All industries	2,291	4,629	555,859	304	9,999	150	10,130	14	315	10,893	129,958	71	4,558



## PART II.

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Employment, Working Hours and Wages on Steam  
Railroads in New Jersey.

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Cost of Living in New Jersey and Europe.

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Fruit and Vegetable Canning Industry of New Jersey.  
Pack of 1909.

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The Relation of Occupation to Health.

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Assisting the Export Trade of New Jersey Manu-  
facturers and Exporters.

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# Statistics of Employment on Steam Railroads of New Jersey.

For the Year Ending June 30, 1910.

Number of Miles of Road in New Jersey, Number of Employes, Total Amount Paid in Wages, Average Daily and Yearly Earnings per Employe, Number of Employes Injured While on Duty During the Year, Number Whose Injuries Resulted in Death.

The series of tables which follow, one each for the seven trunk lines of steam railroads in New Jersey, and one summary embracing the totals for 1910, compared with those of 1909, presents in very complete form the statistics of labor employed on the steam railroads of New Jersey for the twelve months ending June 30, 1910. The figures presented relate only to the employes whose duties are performed wholly or for the most part within geographical limits of the State. In addition to the data relating to employment, wages, working time and accidents to workmen while on duty, the number of miles of road operated by each company in New Jersey is given, and the differences appearing in the comparison are shown in absolute numbers and also by percentages.

The totals are as follows:

PARTICULARS.	1909.	1910.	Increase (+) or decrease (-) in 1910 as compared with 1909.		
			Amount.	Percentages.	
Aggregate number of miles of road in New Jersey.....	1,634.83	1,673.86	+	39.03	2.4
Aggregate number of persons employed.....	39,277	43,831	+	4,554	11.6
Aggregate number of days worked.....	11,887,174	12,859,846	+	972,672	8.2
Average number of days worked per employe.....	302	293	-	9	3.0
Average number of hours worked per day.....	10.3	10.3			
Average number of days not on duty.....	63	72	+	9	14.3
Aggregate amount paid in wages.....	\$25,346,872.83	\$29,068,276.88	+	\$3,721,404.05	14.7
Average wages per day.....	\$2.14	\$2.26	+	.12	5.6
Average yearly earnings per employe.....	\$645.34	\$663.19	+	\$17.85	2.8
Aggregate number of employes injured at work.....	1,474	1,816	+	342	23.2
Aggregate number whose injuries resulted in death.....	65	89	+	24	36.9

The above table shows increases in all totals except the average number of days worked per employee during the year, which is nine less than it was in 1909. The greatest numerical increase—\$3,721,404.05, is shown by the total amount paid in wages. The mileage has increased 39.03, or 2.4 per cent. Only five of the seven trunk roads report accidents suffered by their employees for both years, but the totals for these show a very large increase in 1910 over last year. In 1909, there were 1,474 employees injured, of which number sixty-five were either killed outright or died within a short time after the accident. In 1910 the number injured is 1,816, of which 89 resulted in death. The increase in the number of workmen who suffered accidental injury is therefore, as shown by the table, 342, or 23.2 per cent., and the increase in the number of deaths is 24, or 36.9 per cent.

Average daily wages show an increase in 1910 of twelve cents, or 5.6 per cent., and average yearly earnings have advanced \$17.85, or 2.8 per cent.

On the whole the table shows that the railroads have enjoyed a prosperous year, and that, as shown by the liberal advance in wages, amounting to only a little less than \$4,000,000, the claims of faithful employees to a share in their prosperity were not overlooked.

Practically all of the accidents resulting in death or injury occurred in the class of employees known collectively as trainmen, together with those whose duties are in some way related to the movement of trains, such as switchmen, flagmen, yardmen, track walkers and road laborers. Carpenters, bridge builders and construction gangs also furnish a considerable proportion of the casualty list.

**CLASSIFICATION of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30, 1910.**

Number of Persons Employed, Number of Hours on Duty per Day, Total Amount Paid in Wages, Average Daily Wage Rates and Annual Earnings.

Pennsylvania Railroad Company. Number of Miles of Road in New Jersey—436.

CLASSIFICATION.	Number of persons employed.	Aggregate number of days employed.	Average number of days employed per employee.	Average number of hours employed per day.	Average number of days during year not on duty. Sundays included.	Aggregate amount paid in wages.	Average wages per day.	Average yearly earnings per employee.	Number of employees injured during year.	Number of employees whose injuries resulted in death.
Conductors.....	470	147,722	314	10	51	\$611,669.97	\$4.14	\$1,301.43	59	4
Brakemen.....	1,130	323,326	286	10	79	927,847.75	2.87	821.11	124	4
Engineers.....	708	233,554	330	10	35	1,067,584.36	4.57	1,507.89	10	3
Firemen.....	737	243,007	330	10	35	641,788.06	2.64	870.81	35	1
Switchmen.....	238	77,470	325	10	40	144,574.12	1.87	607.45	12	.....
Flagmen.....	218	57,032	262	10	103	161,187.31	2.82	739.39	8	.....
Engine wipers, etc. .	169	52,420	310	10	55	119,047.35	2.27	704.42	6	.....
Yardmen.....	826	264,298	320	10	45	815,309.25	3.08	987.06	12	.....
Trackmen.....	2,051	608,418	297	10	68	989,652.14	1.62	482.52	131	11
Agents.....	152	53,452	351	10	14	138,699.60	2.60	912.50	.....	.....
Assistant Agents. . .	4	1,278	319	10	46	5,793.25	4.54	1,448.31	.....	.....
Baggagemen.....	225	73,368	326	10	39	158,689.38	2.16	705.29	14	.....
Clerks.....	1,095	360,674	329	9	36	858,664.09	2.38	784.16	4	.....
Other depot men. . .	563	164,784	293	10	72	311,624.92	1.89	553.51	13	.....
Machinists and help- ers.....	805	235,311	292	9	73	696,433.90	2.96	865.14	111	.....
Blacksmiths and helpers.....	250	71,152	285	9	80	196,124.77	2.75	784.50	25	.....
Boilermakers and helpers.....	220	64,559	293	9	72	169,288.35	2.63	769.49	54	.....
Carbuilders and re- pairs.....	858	253,075	295	9	70	627,392.85	2.48	731.23	77	.....
Carpenters and bridgebuilders. . .	492	140,989	287	9	78	382,053.06	2.71	776.53	34	2
Construction gangs.	64	18,200	284	10	81	26,863.20	1.48	419.74	2	.....
Telegraph operators.	434	138,564	319	9	46	309,439.05	2.24	712.99	1	.....
Division Sup't office.	75	20,959	279	9	86	75,772.16	3.62	1,010.30	.....	.....
Supply department.	62	18,776	303	9	62	38,642.65	2.06	623.27	.....	.....
Other employees. . .	6,686	1,970,055	295	10	70	4,081,696.98	2.07	610.49	521	5
Total.....	*18,532	5,592,443	302	9.6	63	\$13,555,838.52	\$2.42	\$731.48	1,253	30

\*2,968 employes are required to pass into the States of New York and Pennsylvania in connection with their duties.

**CLASSIFICATION of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30, 1910.—(Continued).**

Number of Persons Employed, Number of Hours on Duty per Day, Total Amount Paid in Wages, Average Daily Wage Rates and Annual Earnings.

Philadelphia and Reading Railway Company (Atlantic City Railroad, Delaware and Bound Brook Railroad and Port Reading Railroad). Number of Miles of Road in New Jersey—221.57.

CLASSIFICATION.	Number of persons employed.	Aggregate number of days employed.	Average number of days employed per employee.	Average number of hours employed per day.	Average number of days during year not on duty. Sundays included.	Aggregate amount paid in wages.	Average wages per day.	Average yearly earnings per employee.	Number of employes injured during year.	Number of employes whose injuries resulted in death.
General officers. ....	20	7,075	353	....	12	\$ 21,759.40	\$3.08	\$1,087.97	.....	.....
Conductors. ....	70	19,544	279	....	86	66,861.59	3.42	955.17	.....	.....
Brakemen. ....	166	49,990	301	....	64	114,953.07	2.30	692.49	48	1
Engineers. ....	80	22,984	287	....	78	93,404.76	4.07	1,167.56	2	.....
Firemen. ....	83	23,271	280	....	85	59,445.07	2.56	716.21	13	2
Switchmen. ....	86	27,848	324	....	41	46,411.16	1.77	574.55	16	3
Flagmen. ....	35	11,285	322	....	43	18,422.71	1.63	526.36	1	.....
Engine wipers, etc. ....	121	32,144	265	....	100	53,358.89	1.66	440.98	.....	.....
Yardmen. ....	92	29,315	319	....	46	49,251.24	1.68	535.34	3	.....
Trackmen. ....	749	210,829	281	....	84	350,246.12	1.66	467.62	16	1
Agents. ....	80	25,819	323	....	42	49,378.20	1.91	617.22	.....	.....
Assistant Agents. ....	21	6,120	291	....	74	10,107.63	1.65	481.32	.....	.....
Baggagemen. ....	18	5,369	298	....	67	8,823.98	1.65	490.22	.....	.....
Clerks. ....	65	24,452	376	....	....	36,624.23	1.50	563.45	.....	.....
Other depot men. ....	336	112,252	334	....	31	183,073.11	1.63	544.86	5	.....
Machinists and helpers. ....	16	4,694	293	....	72	13,799.93	2.94	862.50	.....	.....
Blacksmiths and helpers. ....	6	2,117	353	....	12	5,369.59	2.53	894.93	.....	.....
Boilermakers and helpers. ....	9	2,542	282	....	83	6,458.29	2.54	717.59	.....	.....
Carbuilders and repairers, carpenters, and bridgebuilders. ....	53	15,713	296	....	69	38,492.60	2.45	726.27	.....	.....
Construction gangs. ....	76	16,891	222	....	143	28,376.26	1.68	373.37	.....	.....
Telegraph operators. ....	26	7,126	274	....	91	20,800.22	2.92	800.01	.....	.....
Division Supt's office. ....	8	3,191	398	....	....	4,945.73	1.55	618.22	.....	.....
Other employes. ....	382	124,142	325	....	40	206,365.26	1.66	540.22	.....	.....
Total. ....	2,598	784,713	302	....	63	\$1,486,729.04	\$1.89	\$572.26	104	7

CLASSIFICATION of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30, 1910.—(Continued).

Number of Persons Employed, Number of Hours on Duty per Day, Total Amount Paid in Wages, Average Daily Wage Rates and Annual Earnings.

Central Railroad of New Jersey. Number of Miles of Road in New Jersey—402.31.

CLASSIFICATION.	Number of persons employed.	Aggregate number of days employed.	Average number of days employed per employee.	Average number of hours employed per day.	Average number of days during year not on duty. Sundays included.	Aggregate amount paid in wages.	Average wages per day.	Average yearly earnings per employee.	Number of employes injured during year.	Number of employes whose injuries resulted in death.
Other officers.....	10	3,235	323	11	42	\$38,789.86	\$11.99	\$3,878.98	.....	.....
Station Agents.....	158	49,065	310	11	55	129,217.92	2.63	817.88	.....	.....
Other station men.....	1,037	297,871	287	11	78	657,778.19	1.96	361.88	.....	.....
Enginemen.....	327	115,814	354	10	11	457,077.86	3.95	1,397.79	3	1
Firemen.....	342	112,260	325	10	37	266,639.75	2.38	1,779.65	39	2
Conductors.....	262	85,226	325	12	40	304,110.59	3.57	1,160.73	17	1
Other trainmen.....	710	196,095	276	9	89	487,425.75	2.48	686.82	95	4
Mechanics.....	241	61,031	253	9	112	195,911.19	3.21	812.91	.....	.....
Carpenters.....	319	89,473	280	10	85	229,371.09	2.50	719.03	8	2
Other shopmen.....	916	247,570	270	9	95	550,352.03	2.34	633.57	.....	.....
Section foremen.....	129	38,853	297	10	68	94,976.69	2.48	736.25	.....	.....
Other trackmen.....	1,399	359,787	257	10	108	520,643.06	1.45	372.15	.....	.....
Switchmen, flagmen and watchmen.....	373	112,023	300	12	65	233,401.27	2.08	625.74	8	1
Telegraph operators and dispatchers.....	72	23,048	320	9	45	58,951.17	2.56	818.77	.....	.....
Employe's account floating equipment and laborers.....	337	89,773	266	9	99	238,845.39	2.66	708.74	.....	.....
.....	1,326	413,131	312	10	53	846,219.00	2.05	638.17	28	11
Totals.....	7,958	2,293,755	288	10	77	\$5,264,710.81	\$2.30	\$661.57	207	25

**CLASSIFICATION of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30, 1910.—(Continued).**

Number of Persons Employed, Number of Hours on Duty per Day, Total Amount Paid in Wages, Average Daily Wage Rates and Annual Earnings.

Delaware, Lackawanna and Western Railroad (Morris and Essex Division, and Sussex Railroad). Number of Miles of Road in New Jersey—206.99.

CLASSIFICATION.	Number of persons employed.	Aggregate number of days employed.	Average number of days employed per employee.	Average number of hours employed per day.	Average number of days during year not on duty, Sundays included.	Aggregate amount paid in wages.	Average wages per day.	Average yearly earnings per employee.	Number of employees injured during year.	Number of employees whose injuries resulted in death.
General officers.....	15	5,075	338	8	27	\$61,618.50	\$12.15	\$4,107.90	.....	.....
Conductors.....	104	35,464	341	12	24	139,016.16	3.92	1,336.69	.....	.....
Brakemen.....	232	79,112	341	12	24	199,056.05	2.52	858.00	23	.....
Engineers.....	189	64,449	341	12	24	252,648.07	3.92	1,336.76	2	.....
Firemen.....	198	67,518	341	12	24	157,481.28	2.33	795.36	2	.....
Switchmen.....	35	11,935	341	12	24	22,386.53	1.87	639.62	.....	.....
Flngmen.....	291	101,375	348	12	17	122,226.70	1.21	420.02	1	.....
Engine wipers, etc. ....	55	18,297	333	10	32	28,669.87	1.57	521.27	.....	.....
Yardmen.....	181	61,721	341	10	24	207,430.07	3.36	1,146.02	4	.....
Trackmen.....	1,139	261,248	229	10	136	386,943.92	1.49	339.72	11	.....
Agents.....	102	34,902	342	10	23	83,601.86	2.40	119.63	1	.....
Assistant Agents.....	2	730	365	8	.....	1,830.00	2.51	915.00	.....	.....
Baggagemen.....	101	34,489	341	11	24	68,944.13	2.00	682.62	1	.....
Clerks.....	248	81,089	327	10	38	172,546.17	2.13	695.75	.....	.....
Other depot men.....	665	219,815	330	11	35	386,390.81	1.76	581.04	2	.....
Machinists and helpers	187	53,752	287	10	78	117,613.78	2.19	628.95	1	.....
Blacksmiths and helpers.....	46	12,692	276	10	89	29,365.37	2.31	638.38	.....	.....
Boilermakers and helpers.....	75	22,823	304	10	61	55,351.69	2.43	738.02	1	.....
Carbuilders and repairers.....	680	201,284	296	10	69	432,716.92	2.15	636.35	2	.....
Carpenters and bridge-builders.....	183	54,328	297	10	68	142,175.92	2.62	776.92	5	.....
Telegraph operators.....	34	11,906	350	9	15	31,538.34	2.65	927.60	.....	.....
Division Supt's office.....	30	9,774	326	9	39	27,873.76	2.85	929.13	.....	.....
Supply Department.....	80	24,455	306	10	59	44,269.72	1.81	553.37	.....	.....
Other employes.....	2,077	578,788	279	10	86	1,188,446.15	2.06	572.19	9	.....
Total.....	6,949	2,047,021	295	10.5	70	\$4,360,441.77	\$2.13	\$627.50	72	17

**CLASSIFICATION of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30, 1910.—(Continued).**

Number of Persons Employed, Number of Hours on Duty per Day, Total Amount Paid in Wages, Average Daily Wage Rates and Annual Earnings.

Erie Railroad Company. Number of Miles of Road in New Jersey—143.303.

CLASSIFICATION.	Number of persons employed.	Aggregate number of days employed.	Average number of days employed per employee.	Average number of hours employed per day.	Average number of days during year not on duty. Sundays included.	Aggregate amount paid in wages.	Average wages per day.	Average yearly earnings per employee.	Number of employes injured during year.	Number of employes whose injuries resulted in death.
General officers.....	10	3,737	373	8	..	\$51,887.86	\$13.91	\$5,188.78	.....	.....
Conductors.....	69	21,856	317	10	48	74,300.17	3.40	1,076.81	.....	.....
Brakemen.....	197	54,779	278	10	87	136,908.44	2.50	1,694.97	.....	.....
Engineers.....	94	25,840	285	10	80	106,653.95	3.98	1,134.61	.....	.....
Firemen.....	103	27,977	271	10	94	68,117.69	2.44	661.34	.....	.....
Switchmen, flagmen, engine wipers, etc.	126	41,270	327	12	38	60,734.50	1.47	482.02	.....	.....
Yardmen.....	392	96,318	246	12	119	134,430.68	1.39	342.94	.....	.....
Trackmen.....										
Agents.....	38	13,274	349	12	16	25,571.14	1.93	672.92	.....	.....
Assistant Agents.....	589	166,270	282	12	83	292,266.45	1.76	496.21	.....	.....
Baggagemen.....										
Clerks.....	119	31,491	265	10	100	76,205.52	2.42	640.38	.....	.....
Other depot men.....										
Machinists.....	199	57,159	287	10	78	113,568.09	1.99	570.69	.....	.....
Boilermakers.....										
Carbuilders.....	55	18,176	330	10	35	32,631.14	1.80	593.29	.....	.....
Carpenters and bridgebuilders.....										
Telegraph operators.....	26	9,510	365	10	.....	24,880.21	2.62	956.93	.....	.....
Division Sup't Office.										
Supply Department.	485	137,860	284	12	81	253,842.54	1.84	523.39	.....	.....
Other employes.....										
Total.....	2,502	706,517	282	10.5	83	\$1,451,998.38	\$2.06	\$580.34	.....	.....

CLASSIFICATION of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30, 1910.—(Continued).

Number of Persons Employed, Number of Hours on Duty per Day, Total Amount Paid in Wages, Average Daily Wage Rates and Annual Earnings.

Lehigh Valley Railroad Company. Number of Miles of Road in New Jersey—131.63.

Conductors.....	74	25,237.5	341.12	24	\$86,623.13	3.43	\$1,170.58	15	3
Brakemen.....	256	57,410.8	224.12	131	156,915.62	2.74	612.95	47	3
Engineers.....	147	46,872.9	319.12	46	176,549.59	3.76	1,201.02	9	2
Firemen.....	165	50,016.9	303.12	62	122,600.59	2.45	743.03	20	.....
Switchmen and flagmen	214	60,764.3	284.12	81	174,290.52	2.87	814.44	4	.....
Engine wipers, etc.....	88	27,315.6	310.12	55	55,916.96	2.05	635.42	5	.....
Yardmen, policemen and watchmen.....	206	70,764.9	343.12	22	138,724.40	1.96	673.42	2	.....
Foremen.....	84	28,342.8	337.10	28	56,657.17	2.00	674.48	14	2
Agents, assistant agents, clerks, etc.....	142	50,403.	355.10	10	90,075.28	1.97	697.71	2	.....
Baggagemen and other stationmen.....	516	136,607.9	265.12	100	249,667.34	1.83	483.85	7	.....
Machinists and helpers	16	5,396.	337.10	28	13,304.99	2.48	837.19	2	.....
Blacksmiths and helpers.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boilermakers and helpers.....	208	61,830.2	297.10	68	118,768.92	1.92	571.00	10	1
Carbuilders and repairers.....	156	44,271.3	284.10	81	87,343.16	1.97	559.89	7	1
Carpenters.....	398	95,959.4	241.10	124	138,002.43	1.44	346.74	1	1
Construction gangs.....	17	5,645.2	332.8	33	10,681.45	1.89	628.32	.....	.....
Telegraph operators.....	83	28,252.1	340.11	26	53,003.56	1.88	638.60	.....	.....
Floating equipment.....	576	128,600.2	223.10	142	199,803.76	1.56	346.88	35	.....
Other Employees.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	3,346	923,691.8	276.10.8	89	\$1,938,018.87	\$2.10	\$579.21	180	10

**CLASSIFICATION of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30, 1910.—(Continued).**

Number of Persons Employed, Number of Hours on Duty per Day, Total Amount Paid in Wages, Average Daily Wage Rates and Annual Earnings.

New York, Susquehanna and Western Railroad Company. Number of Miles of Road in New Jersey—132.06.

CLASSIFICATION.	Number of persons employed.	Aggregate number of days employed.	Average number of days employed per employee.	Average number of hours employed per day.	Average number of days during year not on duty. Sundays included.	Aggregate amount paid in wages.	Average wages per day.	Average yearly earnings per employee.	Number of employes injured during year.	Number of employes whose injuries resulted in death.
General officers.....	4	1,339	334	8	31	\$6,700.00	\$5.01	\$1,675.00		
Conductors.....	64	21,026	328	10	37	68,313.72	3.25	1,067.40		
Brakemen.....	221	63,217	286	10	79	135,319.93	2.15	612.31		
Engineers.....	72	23,541	327	10	38	85,765.03	3.64	1,191.18		
Firemen.....	75	23,296	310	10	55	52,650.62	2.26	702.01		
Switchmen, flagmen, Engine wipers and yardmen.....	154	48,657	316	12	49	72,932.83	1.50	473.59		
Trackmen.....	301	70,018	233	12	132	97,698.15	1.39	324.58		
Agents and assistant agents.....	62	21,805	352	12	13	40,538.39	1.86	653.84		
Baggagemen, clerk and other depotmen.....	391	72,999	187	12	178	129,548.41	1.77	331.33		
Machinists and help- ers.....	80	22,008	275	10	90	51,669.98	2.35	645.87		
Blacksmiths and help- ers.....										
Boilermakers and help- ers.....										
Carbuilders and re- pairs.....										
Carpenters & bridge- builders.....	140	39,230	280	10	85	80,876.40	2.06	577.69		
Telegraph operators.....	65	21,892	337	10	28	33,298.15	1.52	512.28		
Division Sup't office.....	31	9,707	313	10	52	24,573.72	2.53	792.70		
Supply department and other employes.....	286	72,971	255	12	110	130,654.16	1.79	456.83		
Total.....	1,946	511,706	263	10.6	102	\$1,010,539.49	\$1.97	\$519.29		

CLASSIFICATION of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30th, 1910.

Number of Persons Employed, Number of Hours on Duty per Day, Total Amount Paid in Wages, Average Daily Wage Rates and Annual Earnings.

Summary of Table No. 1.—Aggregates and Averages, by Companies.

CLASSIFICATION.	Years.	Number of miles of road in New Jersey.	Number of persons employed.	Aggregate number of days employed.	Average number of days employed per employee.			Aggregate amount paid in wages.	Average wages per day.	Average yearly earnings per employee.	Number of employes injured during year.	Number of employes whose injuries resulted in death.
					Average number of days employed per day.	Average number of days during year not on duty, including Sundays.	Average number of hours employed per day.					
Pennsylvania Railroad Company.....	1909	402.56	15,890	5,199,690	327	9.9	38	\$11,280,935.03	\$2.17	\$709.94	1,021	22
	1910	436.	18,532	5,592,443	302	9.6	63	13,555,838.52	2.42	731.48	1,253	30
Philadelphia and Reading Railway Company.....	1909	221.57	2,483	753,501	303	.....	62	1,332,004.44	1.77	536.45	105	6
	1910	221.57	2,598	784,713	302	.....	63	1,486,729.04	1.89	572.26	104	7
Central Railroad Company of New Jersey.....	1909	398.65	7,281	2,103,825	289	10	76	4,843,423.87	2.30	665.21	144	21
	1910	402.31	7,958	2,293,755	288	10	77	5,264,710.81	2.30	661.57	207	25
Delaware, Lackawanna and Western Railroad Co. ....	1909	206.99	6,748	1,972,541	292	10	73	4,125,129.99	2.09	611.31	65	9
	1910	206.99	6,949	2,047,021	295	10.5	70	4,360,441.77	2.13	627.50	72	17
Erie Railroad Company.....	1909	141.93	2,312	636,676	275	10.5	90	1,271,201.82	2.00	549.82	.....	.....
	1910	143.303	2,502	706,517	282	10.5	83	1,451,998.38	2.06	580.34	.....	.....
Lehigh Valley Railroad Company.....	1909	131.63	2,796	753,338	269	10.7	96	1,584,061.17	2.11	566.55	.....	.....
	1910	131.63	3,346	923,691	276	10.8	89	1,938,018.87	2.10	579.21	180	10
New York Susquehanna and Western Railroad Co. ...	1909	131.50	1,767	467,603	265	10.6	100	910,116.51	1.94	515.06	.....	.....
	1910	132.06	1,946	511,706	263	10.6	102	1,010,539.49	1.97	519.29	.....	.....
Total.....	1909	1,634.83	39,277	11,887,174	302	10.3	63	\$25,346,872.83	\$2.14	\$645.34	1,474	65
	1910	1,673.86	43,831	12,859,846	293	10.3	72	29,068,276.88	2.26	663.19	1,816	89

## Cost of Living in New Jersey.

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Retail Prices for a Selected Bill of Food Supplies Obtained From Representative Dealers in Groceries and Meats, in the Twenty-One Counties of the State. Prices as they were in June, 1910.

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The following tables present for the year 1910 the results of the study of food prices which for many years has formed a regular feature of the reports of this Bureau. The prices quoted are for a bill of goods selected with a view to making the list as nearly as possible representative of the standard varieties of table supplies used by families of average incomes. In the large cities the dealers from whom the prices are obtained year after year are neither the highest nor the lowest priced, and care has been taken to exclude from the test list many varieties of articles that are rightly regarded as luxuries beyond the means of mechanics or others who support families on moderate wages or salaries.

The cost of living as an element of the economic problem of how to obtain from our labor the greatest possible amount of the good and desirable things of life is of equal importance with the question of income, whether the same be in the form of profits of business, salaries and fees for professional services, or wages for work performed with the hands. The reciprocal relations of both are such that the fairness or sufficiency of neither one can be passed upon without also considering the other. The value of incomes in any form, is, therefore, simply a question of how far the money will go toward supplying the things we want and must have according to the plane of living to which we aspire. In recognition of this economic interrelation of prices and incomes, the Bureau has endeavored for years back to give an accurate presentation of the trend of both of its annual reports. Current wages and earnings for approximately 310,000 persons employed in the factory and workshop industries of the State, are given in the annual "Statistics of Manufactures," and similar data are supplied for the upwards of 47,000 employed in steam railroad transportation within the geographical limits

of New Jersey. Both elements of the problem are thus presented year by year, thereby enabling us to determine the extent of such changes as may have occurred in their relations to each other.

To insure the utmost possible uniformity of conditions one year with another, the cost of living reports are furnished successively by the same dealers, and the prices furnished by all are those that prevailed during the month of June each year, thus assuring the fairest possible conditions for comparison, and showing such changes as may have occurred.

Following the forms of previous years, this presentation consists of three tables, No. 1 giving the cost of the entire bill of goods by localities, No. 2 giving the average prices which prevailed throughout the State, for each separate article in standard quantities, the prices of 1910 being placed in comparison with those of 1909, and No. 3, which is the same in form as No. 2, excepting only that the comparison covers a period of twelve years, or from 1898 to 1910.

Table No. 1 is so arranged as to show the relative costliness of the entire bill of goods; the city or town in which it is lowest appearing first on the list, the others following in the order in which prices increase, the highest being as a matter of course the place which appears last on the table.

Califon, Hunterdon county, still maintains the position of lowest in price, which it has held for the past six years, and is therefore by reasonable inference the most inexpensive location for residence in the entire State, so far as ordinary table supplies are concerned. The cost of the bill of goods there is \$10.745; in other towns it ranges from \$11.287 to \$11.814; twenty-nine localities report totals ranging from \$12.050 to \$12.980; twenty-six localities report totals ranging from \$13.084 to \$13.945, while five report totals of from \$14.027 to \$14.684, and five—the highest on the list, report totals of from \$15.141 to \$15.810. In presenting these totals, and prices appearing on the other tables, it has been found necessary to carry the decimal fraction to three figures in order to show the changes per article, which in one year are very slight either way.

The average cost of the bill of goods for the entire State is \$13.143. In 1909 the average cost was \$13.796, a decrease is therefore shown of \$0.653, or 4.8 per cent. An examination of the table will show that generally prices are highest in the larger cities and the suburban towns immediately about them, and lowest in the smaller communities where there is little or no competition, and to which all goods, with the exception of farm products, must be transported from distant wholesale

markets with, of course, some addition to the prices which the ultimate consumer must pay. The difference in prices under these circumstances can be accounted for only by the fact that country stores are not burdened with high rents, expenses of delivery and probably have to pay much lower wages for such help as may be employed. The country store also, as a rule, handle many other lines of goods, the profits on which help to defray fixed charges, and, most important advantage of all, usually do business on a strictly cash basis, and are not obliged to recoup themselves for losses through uncollectable debts.

Table No. 2 gives average prices throughout the State for each article included in the bill for 1910, in comparison with those reported for 1909. Flour in barrels—first and second quality, although having a place on this table for the purpose of comparison, is not included in the totals of either year, for the reason that these goods also appear in twenty-five pound bags, and their inclusion under both designations would result in doubling whatever difference there may be in price of flour as shown by the comparison.

An examination of the table will show only two articles—"bread, small loaf," and "prunes, second quality," selling for the same prices both years. Fourteen articles show decreases amounting in the aggregate to \$1.251, and thirty-six articles show increases which amount in the aggregate to \$0.598; the net decrease shown in prices for 1910 as compared with those of 1909, is therefore, as before stated, \$0.653, or 4.8 per cent. The preponderance of decreases over increases, notwithstanding the much greater number of the latter, is due entirely to two items out of the fourteen which show a reduction in prices; these are "new potatoes" and "old potatoes," which averaged \$0.589, and \$0.457 less respectively per bushel in 1910 than in 1909. Excluding potatoes from the bill of both years, the net decrease of \$0.653 pointed out above, is changed to an *increase* of \$0.393, or 2.8 per cent. in the prices for 1910.

Table No. 3 is the same in every respect as Table No. 2, except that 1910 prices are compared with those reported for the year 1898, when this annual inquiry was first begun. The comparison, it will be noticed, is based on a smaller number of articles, those only being used for which prices were quoted in 1898. Flour by the barrel is substituted in the comparison for the same goods in twenty-five pound bags, which will, as a matter of course, cause a very considerable enlargement in the aggregate amount of the bill for both years, as compared with totals on

Table No. 2. This comparison over the longest period of time (12 years) for which there is available data, is made for the purpose of presenting the changes in larger figures, the significance of which are much more striking than the small fractions required for recording the fluctuations from year to year. The increases and decreases are given in absolute numbers and by percentages.

In 1898, the forty-three articles appearing on Table No. 3 cost in the quantities specified for each, \$16.901; in 1910, the same list of goods is quoted at \$23.824, an increase of \$6.923, or 40.96 per cent. Granulated sugar is the only article on the bill that shows no variation in price for both years; that, however, must not be regarded as indicating absolutely stationary cost for this commodity during the entire twelve years covered by the comparison; as a matter of fact, fluctuations—but of a very minute character, were reported many times during the period covered by the comparison, and the agreement in price for 1898 and 1910 shown by the table is merely a coincidence.

Nine articles show a reduction of price in 1910, as compared with 1898, these are: N. O. molasses, 22.96 per cent.; Rio coffee, 3.16 per cent.; Java coffee, 24.69 per cent.; first quality black tea, 3.90 per cent.; first quality green tea, 1.75 per cent.; mixed tea, 0.34 per cent.; canned tomatoes, 14.68 per cent.; succotash, 0.86 per cent.; prunes—second quality, 3.49 per cent. All other articles show increases that are, with few exceptions, very large. Principal among these are, cheese—best creamery, 93.62 per cent.; butter—second quality, 92.31 per cent.; lard, 91.21 per cent.; flour—second quality, per barrel, 59.84 per cent.; flour—first quality, per barrel, 50.89 per cent., and butter—first quality, 59.36 per cent.

The advance in prices of meats during the twelve years covered by the comparison is very marked, but that recorded for pork products surpass all other varieties. The price of bacon has increased 107.44 per cent.; that of shoulder, 91.67 per cent.; salt pork, 87.37 per cent.; ham, 84.03 per cent., and fresh pork, 80.36 per cent.

The increases in price of beef, although much below pork, are also very large; the cheaper cuts show the greatest advance, as for instance, the 1910 prices quoted for corned brisket, corned round, round steak, and chuck roast, are 49.33 per cent., 40.88 per cent., 34.21 per cent., and 31.36 per cent. higher respectively than they were in 1898, while such choice cuts as surloin steaks and rib roast, have advanced only 31.36 per cent., and 27.81 per cent., respectively. Leg of mutton and breast of mutton show respective increases of 41.38 and 40.43 per cent.

To further particularize the increases shown by this comparison table, would be merely repeating the figures shown on the table. The fact of importance brought out by the comparison is that the list of food articles considered is in its entirety, 40.96 per cent. more costly in 1910 than it was twelve years ago, while the average wages of factory and workshop employees—skilled and unskilled included, have advanced during the same period only 22.2 per cent.; the increase of wages of these operatives, approximately 310,000 in number, has, therefore, fallen 18.7 per cent. short of keeping pace with the growing cost of food supplies. It is of course a matter of common knowledge that house rent, and practically everything in the nature of family and individual requirements have experienced an advance at least equal to the ratio shown for food.

The building trades workmen alone among wage workers have succeeded in keeping their earnings nearly abreast of the rising tide of prices, as will be seen by the figures below.

## WAGE INCREASES IN THE BUILDING TRADES.

OCCUPATION.	Wage Rates		Increase.	
	per day.		Amount	Per cent.
	1896	1908		
Carpenters and Builders.....	\$3.00	\$3.80	\$ .80	26.6
Bricklayers and Masons.....	4.00	4.77	.77	19.2
Painters, Decorators and Paperhangers.....	2.25	3.28	1.03	45.7
Plumbers and Steamfitters.....	3.00	4.00	1.00	33.3
Plumbers' Helpers.....	1.50	2.18	.68	45.3
Wooden Lathers.....	2.70	4.00	1.30	48.1
Stone and Marblecutters.....	3.50	4.50	1.00	28.5
Slate Roofers.....	2.50	4.00	1.50	60.0
Mantle and Tile Setters.....	3.00	4.00	1.00	33.3
Metal Cornice Workers.....	2.50	4.00	1.50	60.0
Cement Finishers.....	3.00	4.00	1.00	33.3
Floormakers and Stairbuilders.....	3.00	3.46	.46	15.3
Woodworkers .....	2.00	2.50	.50	25.0

The wages for 1908, quoted above, are union rates, and the latest for which official figures are available; if any change has been made since then it is in the direction of increase rather than decrease. Five of the trades named have secured advances in wages ranging from 45.3 per cent. for "plumbers' helpers," to 60.0 per cent for both "slate roofers" and "metal cornice workers." The upward advance of wages in these occupations has outstripped that of food supplies, but the others, although in the enjoyment of, in almost every instance, an equal daily wage at the present time, have received lower proportionate advances.

In 1896, few, if any, of the workmen in the building trades worked less than fifty-four hours per week, while at the present time none of them work more than forty-four hours, and prob-

ably the working time of a majority of the men employed in these trades is not more than forty-four hours per week.

TABLE No. 1.

The Cost of Living in New Jersey—Total Cost of the Entire List of Articles in the Various Cities and Towns of the State.

County.	City or Town.	Total Cost of Entire Bill.
Hunterdon.....	Califon.....	\$10,745
Hunterdon.....	Glen Gardner.....	11,065
Monmouth.....	Marlboro.....	11,287
Morris.....	Middle Valley.....	11,713
Morris.....	Flanders.....	11,814
Middlesex.....	Cheesequake.....	12,050
Hudson.....	Harrison.....	12,080
Monmouth.....	Allentown.....	12,134
Warren.....	Phillipsburg.....	12,215
Sussex.....	Stillwater.....	12,261
Hudson.....	Jersey City.....	12,272
Gloucester.....	Clayton.....	12,335
Monmouth.....	Matawan.....	12,385
Warren.....	Marksboro.....	12,445
Sussex.....	Swartswood.....	12,483
Cumberland.....	Bridgeton.....	12,550
Gloucester.....	Woodbury.....	12,585
Union.....	Elizabeth.....	12,603
Camden.....	Camden.....	12,620
Monmouth.....	Allenwood.....	12,631
Ocean.....	Colliers Mills.....	12,710
Morris.....	German Valley.....	12,712
Warren.....	Allamuchy.....	12,724
Hunterdon.....	Flemington.....	12,741
Monmouth.....	Asbury Park.....	12,743
Warren.....	Oxford.....	12,778
Hunterdon.....	New Germantown.....	12,831
Ocean.....	Manahawkin.....	12,840
Hunterdon.....	High Bridge.....	12,847
Warren.....	Belvidere.....	12,860
Middlesex.....	Cranbury.....	12,924
Monmouth.....	Freehold.....	12,926
Warren.....	Port Colden.....	12,929
Sussex.....	Monroe.....	12,980
Hudson.....	Hoboken.....	13,084
Passaic.....	Passaic.....	13,085
Burlington.....	Burlington.....	13,160
Morris.....	Boonton.....	13,160
Burlington.....	Mount Holly.....	13,215
Morris.....	Dover.....	13,227
Warren.....	Washington.....	13,262
Atlantic.....	Mays Landing.....	13,317
Morris.....	Drakestown.....	13,332
Essex.....	Newark.....	13,400
Warren.....	Beattystown.....	13,411
Bergen.....	Garfield.....	13,458
Salem.....	Salem.....	13,509
Essex.....	Orange.....	13,538
Somerset.....	Somerville.....	13,601
Atlantic.....	Hammonton.....	13,646
Cap May.....	Cape May.....	13,680

TABLE No. 1.—(Continued).

Essex. . . . .	Belleville. . . . .	\$13,717
Sussex. . . . .	Newton. . . . .	13,753
Burlington. . . . .	Bordentown. . . . .	13,790
Cumberland. . . . .	Millville. . . . .	13,795
Mercer. . . . .	Trenton. . . . .	13,856
Warren. . . . .	Blairstown. . . . .	13,857
Warren. . . . .	Hackettstown. . . . .	13,875
Ocean. . . . .	Lakehurst. . . . .	13,899
Passaic. . . . .	Paterson. . . . .	13,909
Morris. . . . .	Chester. . . . .	13,945
Burlington. . . . .	Moorestown. . . . .	14,027
Bergen. . . . .	Hackensack. . . . .	14,039
Mercer. . . . .	Princeton. . . . .	14,101
Bergen. . . . .	Rutherford. . . . .	14,487
Essex. . . . .	Montclair. . . . .	14,684
Middlesex. . . . .	New Brunswick. . . . .	15,141
Middlesex. . . . .	Metuchen. . . . .	15,292
Essex. . . . .	South Orange. . . . .	15,810

Total average for the entire State, \$13.143.

TABLE No. 2.

Cost of Living in New Jersey—Comparison of Average Retail Prices, per Article, Month of June, for 1909 and 1910.

ARTICLES.	BASES OF QUANTITIES.	Average Retail Prices.		Increase (+) or Decrease (-) in 1910 as compared with 1909.
		1909.	1910.	
Flour, wheat, first quality.	Barrel	\$7.761	\$7.777	+ .016
Flour, wheat, second quality.	Barrel	6.977	6.985	+ .008
Flour, wheat, first quality.	Bag (25 pounds).	.892	.919	- .027
Flour, wheat, second quality.	Bag (25 pounds).	.891	.816	+ .075
Flour, prepared.	Pound.	.067	.088	+ .021
Oatmeal, loose.	Pound.	.050	.048	+ .002
Oatmeal, package.	Pound (2 pounds).	.105	.108	+ .003
Sugar, granulated.	Pound.	.056	.059	+ .003
Molasses, N. O.	Gallon.	.590	.589	+ .001
Syrup.	Gallon.	.474	.471	+ .003
Bread, large.	Loaf.	.091	.088	+ .003
Bread, small.	Loaf.	.049	.049	.....
Butter, first quality.	Pound.	.328	.349	+ .021
Butter, second quality.	Pound.	.280	.325	+ .045
Lard.	Pound.	.144	.174	+ .030
Eggs.	Dozen.	.269	.273	+ .004
Cheese, best.	Pound.	.190	.206	+ .016
Cheese, medium.	Pound.	.151	.167	+ .016
Coffee, Rio.	Pound.	.183	.184	+ .001
Coffee, Java.	Pound.	.236	.241	+ .005
Coffee, Maracaibo.	Pound.	.315	.317	+ .002
Tea, black, first quality.	Pound.	.604	.616	+ .012
Tea, green, first quality.	Pound.	.598	.616	+ .018
Tea, mixed, first quality.	Pound.	.590	.585	+ .005
Potatoes, old.	Bushel.	1.116	.659	- .457
Potatoes, new.	Bushel.	1.070	1.070	.....
Beef, roast, rib.	Pound.	.181	.195	+ .014
Beef, roast, chuck.	Pound.	.142	.155	+ .013
Beef, steak, sirloin.	Pound.	.224	.239	+ .015
Beef, steak, round.	Pound.	.188	.204	+ .016
Beef, corned, round.	Pound.	.157	.169	+ .012
Beef, corned, brisket.	Pound.	.102	.112	+ .010
Beef, smoked.	Pound.	.297	.301	+ .004
Pork, fresh.	Pound.	.162	.202	+ .040
Pork, salt.	Pound.	.141	.178	+ .037
Lamb.	Pound.	.187	.251	+ .064
Mutton.	Pound.	.162	.219	+ .057
Shoulder.	Pound.	.118	.161	+ .043
Mutton, leg.	Pound.	.183	.205	+ .022
Mutton, breast.	Pound.	.114	.132	+ .018
Haddock, salt, No. 1.	Pound.	.168	.169	+ .001
Haddock, salt, No. 2.	Pound.	.134	.130	- .004
Tomatoes.	Can.	.098	.093	- .005
Corn.	Can.	.110	.114	+ .004
Succotash.	Can.	.116	.115	- .001
Rice.	Pound.	.090	.086	- .004
Prunes, first quality.	Pound.	.113	.114	+ .001
Prunes, second quality.	Pound.	.083	.083	.....
Raisins, seeded.	Pound.	.106	.105	- .001
Vinegar.	Gallon.	.223	.225	+ .002
Soap, common.	Case.	.047	.049	+ .002
Kerosene oil.	Gallon.	.122	.115	- .007
Totals.		\$13.706	\$13.143	- \$0.563

TABLE No. 3.

Cost of Living in New Jersey—Comparison of Average Retail Prices,  
Month of June, for 1898 and 1910.

ARTICLES.	BASIS OF QUANTITIES.	Average Retail Prices.		Increase (+) or decrease (—) in 1910 as compared with 1898.	Percentage of increase or decrease.
		1898.	1910.		
Flour, wheat, first quality.....	Barrel.....	\$5.154	\$7.777	+ \$2.623	50.89
Flour, wheat, second quality.....	Barrel.....	4.370	6.985	+ 2.615	59.84
Oatmeal, loose.....	Pound.....	.044	.048	+ .004	9.09
Oatmeal, package.....	Pound (2 pounds).....	.106	.108	+ .002	1.89
Sugar, granulated.....	Pound.....	.059	.059	.....	.....
Molasses, N. O.....	Gallon.....	.479	.589	— .110	22.96
Syrup.....	Gallon.....	.401	.476	+ .075	18.70
Butter, first quality.....	Pound.....	.219	.349	+ .130	59.36
Butter, second quality.....	Pound.....	.189	.325	+ .156	92.31
Lard.....	Pound.....	.091	.174	+ .083	91.21
Cheese, best.....	Pound.....	.141	.273	+ .132	93.62
Cheese, medium.....	Pound.....	.110	.206	+ .096	87.27
Coffee, Rio.....	Pound.....	.190	.184	— .006	3.16
Coffee, Java.....	Pound.....	.320	.241	— .079	24.69
Coffee, Maracaibo.....	Pound.....	.250	.317	+ .067	26.80
Tea, black, first quality.....	Pound.....	.641	.616	— .025	3.90
Tea, green, first quality.....	Pound.....	.627	.616	— .011	1.75
Tea, mixed, first quality.....	Pound.....	.587	.585	— .002	.34
Beef, roast, rib.....	Pound.....	.156	.195	+ .039	25.00
Beef, roast, chuck.....	Pound.....	.118	.155	+ .037	31.36
Beef, steak, sirloin.....	Pound.....	.187	.239	+ .052	27.81
Beef, steak, round.....	Pound.....	.152	.204	+ .052	34.21
Beef, corned, round.....	Pound.....	.120	.169	+ .049	40.83
Beef, corned, brisket.....	Pound.....	.075	.112	+ .037	49.33
Beef, smoked.....	Pound.....	.249	.301	+ .052	20.88
Pork, fresh.....	Pound.....	.112	.202	+ .090	80.36
Pork, salt.....	Pound.....	.095	.178	+ .083	87.37
Bacon.....	Pound.....	.121	.251	+ .130	107.44
Ham.....	Pound.....	.119	.219	+ .100	84.03
Shoulder.....	Pound.....	.084	.161	+ .077	91.67
Mutton, leg.....	Pound.....	.145	.205	+ .060	41.38
Mutton, breast.....	Pound.....	.094	.132	+ .038	40.43
Mackerel, salt, No. 1.....	Pound.....	.154	.169	+ .015	9.74
Mackerel, salt, No. 2.....	Pound.....	.128	.130	+ .002	1.56
Tomatoes.....	Can.....	.109	.093	— .016	14.68
Corn.....	Can.....	.101	.114	+ .013	12.87
Succotash.....	Can.....	.116	.115	— .001	.86
Rice.....	Pound.....	.082	.086	+ .004	4.88
Prunes, first quality.....	Pound.....	.102	.114	+ .012	11.76
Prunes, second quality.....	Pound.....	.086	.083	— .003	3.49
Raisins, seeded.....	Pound.....	.095	.105	+ .010	10.53
Soap, common.....	Case.....	.043	.049	+ .006	13.95
Kerosene oil.....	Gallon.....	.100	.115	+ .015	15.00
Totals.....	.....	\$16.901	\$23.824	+ \$6.923	40.96

## Wages and Cost of Living Abroad.

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The interest awakened throughout the State and the country by the chapter relating to the cost of living which appeared in last year's report, resulted in the receipt by the Bureau of large numbers of requests for copies of the same, and also for such other information having a bearing on the subject of food prices and wage rates at home and abroad, as might be available for public distribution. The larger number of these letters came from official and public bodies, among them, committees of Congress, of the legislatures of several States, Chambers of Commerce, and Boards of Trade of municipalities. Approval of the report as a timely contribution to the discussion of a most interesting economic topic, was freely expressed by all correspondents, many of whom asked for extra copies, and also for the forms used in procuring the data on which the report was based.

Encouraged by this display of general interest, an effort was made to secure authoritative figures relating to wages and living expenses in other countries, which, through the courtesy of the United States Department of Commerce and Labor, and also a number of our Consular representatives in Germany, met with a fair degree of success. A very complete schedule of wage rates for a wide range of mechanical occupations was obtained from Germany and Austria, together with current prices of food supplies in the district to which the wage data applies.

The American Vice-Consul at Reichenberg, Austro-Hungary, reports that the Chamber of Commerce of that municipality, with the largest membership of any like organization in the dual monarchy, has suggested to all other Chambers of Commerce throughout both countries the expediency of opening an inquiry into the causes that have brought about the present high prices of food. Acting on this suggestion, the following statement, showing former and present prices of the necessaries of life was prepared and issued by the magistracy of Reichenberg.

By "former prices" is meant prices which prevailed about ten years ago; present prices apply to the early part of 1910.

ARTICLE	Quantity	Former Price.	Present Price.	Increase Per Cent.
Beef .....	Per Lb.	\$ .12	\$ .17	41.6
Fillet of Beef.....	"	.21	.27	28.5
Veal .....	"	.13	.19	46.1
Pork .....	"	.13	.22	69.2
Liver .....	"	—	.11	—
Wheat Flour.....	"	.04	.05	25.0
Sugar .....	"	.07	.08	14.2
Geese .....	Each	1.21	2.03	67.7
Beer .....	Quart	.07	.11	57.1
Anthracite Coal.....	Ton	6.12	9.65	57.6

As shown by the above figures the retail price of beef has increased during the past ten years, 41.6 per cent.; that of veal, 46.1 per cent.; pork, 69.2 per cent.; wheat flour, 25 per cent.; sugar, 14 per cent.; geese, 67.7 per cent.; beer, 57.1 per cent., and anthracite coal, 57.6 per cent.

The high prices of meat in this district are attributed chiefly to the fact that the supply of cattle and other meat producing animals has not kept pace with the growth of population. While prices have risen enormously as shown by the table, the average wages, which is less than one-half those of American workmen, have remained practically stationary during the past twenty years.

In Hamburg, Germany, according to a report of the American Consul-General at that city, the prices of meat have undergone a marked increase during the past few years; the figures supplied by him were furnished by an average dealer of good repute, whose prices are neither the highest nor the lowest. The prices per pound in American money now prevailing are as follows:

Beef: For boiling.....	19.5 cents.
Ribbs for boiling.....	19.5 to 28.8 "
For bullion.....	19.5 "
Roast .....	19.5 to 21.7 "
Roulade .....	25.9 "
Sirloin Steak.....	32.4 to 34.5 "
Tenderloin .....	43.3 "
Sausage and hash.....	17.4 to 21.7 "
Veal: Boiling.....	21.7 "
Leg .....	25.9 "
Saddle with kidneys.....	30.2 "
Chops .....	32.4 "
Calves liver.....	32.4 "
Mutton: Boiling.....	19.5 "
Chops, large.....	25.9 "
" small .....	39. " "
Pork: Boiling.....	17.4 to 21.7 "
Ribbs .....	21.7 "
Chops (loin).....	25.9 "
Fillet .....	32.4 "
Ham, smoked: For raw eating, whole.....	22.6 to 25.9 "
" " " " sliced .....	47.6 to 51.9 "
" " For boiling, whole.....	22.6 to 25.9 "

Ham, smoked: For boiling, sliced.....	43.3 cents.
Bacon, whole pieces.....	19.5 "
Sliced .....	21.7 "
Lard: In tierces.....	19.5 "
Smaller quantities.....	21.7 "

From Plauen, Saxony, come figures furnished by the American Consul at that place, which show meat prices varying but slightly from those appearing in the above table. Local prices generally, including house rents, transportation and luxuries, have gradually risen, and the consumption of meat is decidedly less because of higher prices. The market quotations furnished by the Consul are for the wholesale trade, and a few of them given below, will convey an idea of the prices paid by the consumer when the middleman's profits are added:

Fresh Beef per pound.....	18 to 19 cents.
Veal " " .....	20 to 22 "
Pork " " .....	22 to 23 "
Liver Sausage " " .....	17 to 26 "
Lard " " .....	21 to 22 "
Smoked ham " " .....	36 to 45 "
Bacon " " .....	22 to 24 "
Table butter " " .....	36 to 37 "

An American Consul, resident of Hanover, Germany, sends a review of food prices in that part of the German Empire, which shows them to be as high there as in the United States, although he says that "on the basis of income, the German in competitive occupations with the American workman, should not pay more than 50 per cent. of the prices he now pays for food, while in fact he pays practically the same as the American, with the exception of milk and vegetables, and these are kept down only by the labor of women on the farms."

"High price conditions are met by certain self denials, and by the economies of the German housekeepers, who in an ordinary household would be almost able to live well on the waste of many American families of similar position in life."

The Consul-General at London, England, furnishes an extensive list of food prices in that city, covering the articles that are consumed daily by the great majority of English people. The prices were obtained in widely separated parts of London, but do not include inferior provisions, such as are used only by the very poorest classes. The list, which includes practically everything in the line of table supplies, is too long to be reproduced here in its entirety, and therefore only the principal cuts of meat are given below, with flour per barrel. In presenting the prices English money has been converted into American, on the basis of one penny equaling two cents.

Beef: English, various cuts, per pound.....	18 to 26 cents.
" Foreign " " " " .....	10 to 19 "
Steak, fillet " " .....	28 to 36 "
Rump " " .....	24 to 32 "
Sirloin per pound.....	28 to 32 cents.
Other Steaks " " .....	24 to 30 "
Lamb cutlets " " .....	36 "
Liver " " .....	12 to 24 "
Ham, uncooked " " .....	20 to 28 "
" cooked " " .....	48 to 61 "
Flour, per barrel.....	\$6.72 to \$9.52

The prices quoted in the several preceding lists were recorded during the past six months, and if any change has taken place in the meantime, it is almost certain that most of them are now somewhat higher. In general it will strike the American housekeeper who examines them, that while some are higher and others lower in about the same proportion, the average prices do not differ materially from our own.

As showing the resources at command of workmen in continental Europe to meet the increased and increasing cost of living, wages paid per day or per week, to men engaged in various trades in Germany and Austria, are given in the subjoined tables:

The first table gives daily wages in Germany for 1898 and 1908, the increases and decreases which occurred during the ten year period being noted in absolute amounts and percentages; the second gives wages per week for adult males engaged in the various wood working industries, and the third shows the daily wage rates for workmen of various occupations in Vienna, Austria.

#### Trend of Wages in Germany from 1898 to 1908.

OCCUPATION.	Actual wages per day.		Increase	
	1898.	1908.	Amount.	Per cent.
Hard coal miners and other underground workers.....	\$0.75	\$0.96	\$0.21	28.0
Soft coal miners and other underground workers.....	.65	.86	.21	32.2
Salt miners and other underground workers.....	.85	.94	.09	10.5
Copper miners and other underground workers.....	.73	.84	.11	15.0
Iron miners and other underground workers.....	.64	.81	.20	31.2
Masons.....	1.18	1.44	.26	22.
Carpenters.....	1.11	1.39	.28	25.2
Building trades laborers.....	.79	1.03	.24	30.3
Painters.....	1.01	1.29	.28	27.3
Plumbers, gas and steamfitters.....	1.05	1.26	.21	20.0
Plumbers' helpers and laborers.....	.66	.94	.28	42.4
Stonecutters.....	1.29	1.64	.35	27.1
Metal workers and machinists.....	1.07	1.27	.20	18.6
Printers.....	.96	1.16	.20	20.8
Railway employes.....	.70	.79	.09	12.8

## Average Weekly Earnings of Adult Males in Woodworking Industries in Germany.

OCCUPATION.	Total Number Employed.	Weekly Earnings.
Joiners .....	88,214	\$6.29
Musical instrument makers .....	11,180	6.66
Chairmakers .....	2,496	5.06
Polishers .....	7,828	6.01
Patternmakers .....	4,563	6.90
Parquetry workers .....	675	7.22
Turners .....	4,934	5.55
Canemakers .....	1,369	6.19
Buttonmakers .....	1,754	4.41
Combmakers .....	811	5.36
Brushmakers .....	2,847	4.49
Basket makers .....	1,924	4.77
Cork cutters .....	461	4.31
Wheelwrights .....	5,822	6.27
Gilders .....	1,475	6.22
Woodenshoe makers .....	344	4.17
Box makers .....	2,597	5.27
Machine workers .....	17,542	5.52
Other woodworkers .....	10,441	4.55
Total .....	167,277	5.99

## Average Daily Wage Rates in Vienna, Austria.

OCCUPATION.	Wage Rate.
Stonecutters .....	\$0.97
Coremakers .....	.84
Molders .....	.92
Smelters .....	.98
Casters .....	.95
Rough filers, etc. ....	.74
Patternmakers .....	1.10
Skilled workers in machine shop .....	.80
Blacksmiths .....	.94
Blacksmiths' helpers .....	.81
Turners .....	.83
Locksmiths .....	.89
Metal grinders .....	1.05
Tinsmiths .....	.89
Skilled workers in metal working shops .....	.72
Other workers in metal working shops .....	.60
Coopers .....	.95
Mens' tailors .....	.98
Shoemakers .....	.92
Brewers .....	1.10
Coopers in breweries .....	1.27
Bakers .....	1.00
Plasterers .....	1.52



## The Canning Industry in New Jersey.

Season of 1909.

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The canning of vegetables and fruits is carried on in New Jersey on a scale that, relative to the area of land under cultivation, is not surpassed, if it is equalled in any other of our States. The industry is of particular value as an adjunct to farming interests, inasmuch as it furnishes an outlet for large quantities of a wide range of produce which could not be as profitably marketed in natural form. Wherever established, canneries have given an impetus to farming and truck gardening that has converted waste lands into cultivated farms, and in the preparation and packing of products a few months' employment is provided each season for a large number of persons in the vicinity of the canneries, who, in the absence of such opportunities would be idle during the entire year.

Another advantage resulting from the canning factories is the development of a large trade in the manufacture of glass jars, tin cans, and other vessels used in packing, which now furnishes employment for some thousands of wage earners in factories and workshops.

Many New Jersey canneries handle both vegetables and fruits, and a number of the largest firms utilize the time between packing seasons to make their own cans, for which purpose they have shops equipped with appropriate machinery attached to their plants. In such establishments work is steady throughout the year for the largest part of the working force.

The condition of the industry as reported for 1909, with full particulars relating to the pack, is shown in the three tables that follow. The first gives the amount of capital invested, number of persons employed, total amount paid in wages, number of days in active operation, and selling value of the pack, for each establishment. The second and third tables give respectively, the quantities of the several varieties of vegetables and fruits canned and marketed during the year. The following summary presents these conditions for 1909 in comparison with 1908, and shows also the increases and decreases that have taken place.

## Comparison of Financial Statement for the Year 1908-1909.

	Year.		Increase (+) or Decrease (-) in 1909.	
	1908.	1909.	Amount.	Per Cent.
Number of canning establishments. . .	43	43		
Capital invested. . . . .	\$935,754	\$817,116	\$118,638	12.6
Number of persons employed. . . . .	5,392	5,388	4	
Total amount paid in wages. . . . .	\$431,234	\$390,860	\$40,374	9.3
Total selling value of products. . . . .	\$2,209,612	\$2,219,152	\$9,540	0.4
Aggregate number of days in operation. . . . .	3,566	2,786	780	21.9
Average yearly earnings of labor. . .	\$79.97	\$72.54	\$7.43	9.3

The foregoing table shows that forty-three canneries were in operation both years. Capital invested in 1909 shows a falling off as compared with 1908, of \$118,638, or 12.6 per cent.; the number of persons employed is practically the same for both years, the difference in favor of 1908 being only four. A large decrease—\$40,374, or 9.3 per cent. is shown in the total amount paid in wages, and also in the aggregate number of days in operation, which is 780, or 21.9 per cent. less in 1909 than in 1908. The average yearly earnings of labor employed in the canning processes only, shows a falling off of 9.3 per cent., which corresponds exactly with the reduction in the number of persons employed. The only item in the table showing an increase, is the total selling value of products, which is \$9,540, or 0.4 per cent. greater in 1909 than in 1908. The gain in total selling value is very small and probably reflects the consequences of a slight fluctuation in prices with an upward tendency.

Table No. 1 shows seventeen establishments owned and operated by corporations; ten establishments owned by private firms or partners, and sixteen by individual proprietors. The aggregate number of stockholders in all establishments under corporate management is 344, and the number of partners and individual owners is 42. The aggregate amount of capital invested in all the canneries is \$817,116; the total number of persons employed during the year is 5,388, of which 2,173 are men and 3,215 women. The selling value of all products is \$2,219,152; the total amount paid in wages is \$390,860, and the aggregate number of days in operation is 2,786. The largest amount of capital invested—\$200,000, is shown by establishment No. 3, and the smallest—\$1,000, by No. 34. The average amount of capital invested per establishment is \$19,003.

Table No. 2 shows quantities of the various fruits canned during the year, the figures appearing just as reported, in dozens of

one, two, and three pound cans, and also gallons. The data for each establishment are given separately, and the totals of each variety for all establishments appear on the bottom line.

The following summary tables show the fruit pack for 1909, in comparison with that of 1908; the contents of the several varieties of standard cans, are all reduced to a common basis of pounds so as to present the comparison in the simplest possible form. The increases and decreases are given in absolute amounts and also by percentages.

Comparison of Fruit Pack in 1908 and 1909.

ARTICLES.	Basis of Quantities.	Quantities for the Year.		Increase (+) or Decrease (-) in 1909.	
		1908.	1909.	Amount.	Per cent.
Blackberries.....	Pounds.....	892,204	768,708	- 123,496	- 13.8
Pears.....	Pounds.....	3,679,428	1,514,748	- 2,164,680	- 58.8
Strawberries.....	Pounds.....	1,401,128	1,167,024	- 234,104	- 16.7
Cherries.....	Pounds.....	69,500	17,208	- 52,292	- 75.2
Pineapple.....	Pounds.....	25,200	8,916	- 16,284	- 64.6
Raspberries.....	Pounds.....	86,040	27,984	- 58,056	- 67.5
Blueberries.....	Pounds.....	1,500	110,004	+ 108,504	+ 7233.6
Gooseberries.....	Pounds.....	2,400	2,424	+ 24	+ 1.0
Peaches.....	Pounds.....	996	.....	.....	.....
Totals.....	.....	6,158,396	3,617,016	- 2,541,380	- 41.3

Eight varieties of fruit are shown on the above table for both years; of these only two—"blue berries" and gooseberries show an increase—the first named so large that, although some of the fruit was put up in 1908, the pack of 1909 was so much greater as to leave the comparison without value; 1909 may be regarded as the first year that the handling of this particular fruit was seriously undertaken by the packers.

Of the six other varieties, two—blackberries and strawberries, show decreases of 13.8 per cent and 16.7 per cent respectively, while the shrinkage in the quantities canned of pears, cherries, pineapple, and raspberries ranges from 58.8 per cent to 75.2 per cent.

The total quantity of fruit of all kinds reported in the pack of 1909, is 3,617,016 pounds, while that of 1908 was 6,158,396; the net decrease is therefore 2,541,380 pounds, or 41.3 per cent. Peaches, of which only a small quantity—996 pounds, was reported for 1908, have disappeared entirely from the pack of 1909. On the whole, notwithstanding the fact that higher prices were obtained for their products, the year 1909 was not a prosperous season for the fruit packers of New Jersey.

Table No. 3 shows the varieties and quantities of vegetable

produce handled in the canneries during the season of 1909. The products of each of the forty-three establishments are given separately, the individual reports being indicated by the office numbers, some of which indicate two or more plants under the same management. The fifteen varieties of vegetables are entered on the table as reported by the canneries, in dozens of one, two and three pound cans, and also in gallon cans, as in the fruit pack on Table No. 2. The totals of each variety are shown in the footings of the table. In the following table the vegetable pack is reduced to pounds, and the totals of each variety are shown in comparison with those of 1908, increases and decreases being entered numerically and by percentages.

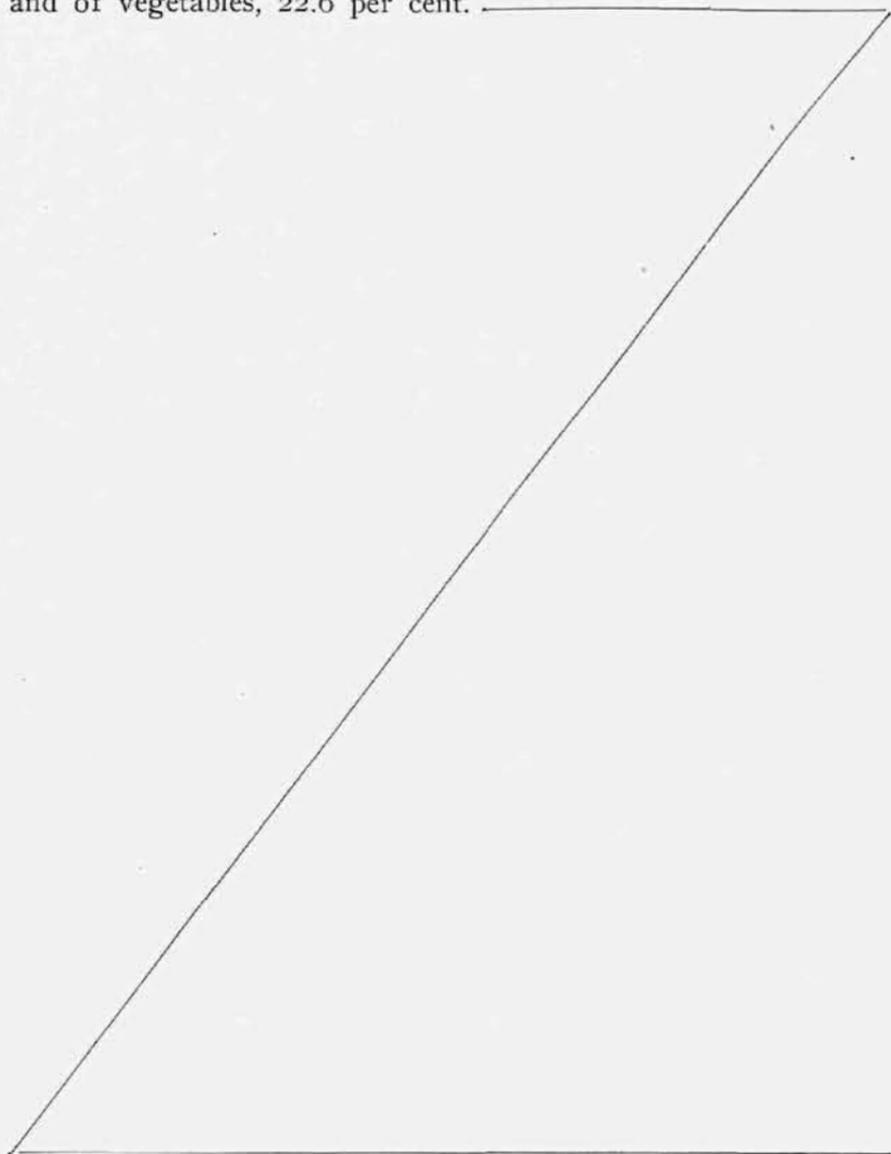
Comparison of Vegetable Pack in 1908 and 1909.

ARTICLES.	Basis of Quantities	Quantities for the Year.		Increase (+) or Decrease (-) in 1909.	
		1908.	1909.	Amount.	Per cent.
Tomatoes.....	Pounds.....	49,412,376	56,552,280	+ 7,139,904	+ 14.5
Asparagus.....	Pounds.....	1,156,308	232,512	- 923,796	- 79.9
Lima Beans.....	Pounds.....	17,525,184	5,883,744	- 11,641,440	- 66.4
Peas.....	Pounds.....	12,119,184	6,726,696	- 5,392,488	- 44.5
Pumpkins.....	Pounds.....	850,824	1,210,800	+ 359,976	+ 42.3
Squash.....	Pounds.....	12,142,944	1,474,536	- 10,668,408	- 87.8
Rhubarb.....	Pounds.....	1,386,096	875,004	- 511,092	- 36.9
Sweet Potatoes.....	Pounds.....	1,919,940	1,667,220	- 252,720	- 13.2
Spinach.....	Pounds.....	502,764	359,676	- 143,088	- 28.5
Pork and Beans.....	Pounds.....	12,132	7,128	- 5,004	- 41.2
Okra and Tomatoes.....	Pounds.....		7,848		
Tomato pulp.....	Pounds.....		168,468		
Beets.....	Pounds.....	30,000	6,000	- 24,000	- 80.0
Okra.....	Pounds.....	10,440			
String beans.....	Pounds.....	62,256			
Totals.....		97,130,448	75,171,912	- 21,958,536	- 22.6

The comparison shows the total quantity of vegetables of all kinds reported in the pack of 1909, to have been 75,171,912 pounds, as against 97,130,448 reported for 1908; the decrease is therefore 21,958,536 pounds, or 22.6 per cent. Of the fifteen articles appearing on the table only eleven are reported for both years; of these, tomatoes and pumpkins alone show an increase, the percentage of the first being 14.5, and of the second, 42.3. All the other articles show large decreases, the largest being squash, 87.8 per cent; beets, 80.0 per cent; and asparagus, 79.9 per cent. Okra, and string beans have disappeared entirely from the pack of 1909; okra in combination with tomatoes, and tomato pulp, were not in the pack of 1908, and are reported in that of 1909 for the first time since the season of 1906.

As usual the tomato maintains its position as the leading mater-

ial handled in the canneries, the number of pounds reported for 1909, being almost one-half of the combined totals of all other vegetables. Although several of the larger plants report increases of products, the year was far from being a prosperous one for the industry as a whole, the net decrease of the fruit pack in comparison with 1908, being as before stated, 41.3 per cent, and of vegetables, 22.6 per cent.



**THE FRUIT AND VEGETABLE CANNING INDUSTRY OF NEW JERSEY.**

Character of Management, Capital Invested, Number of Persons Employed, Total Amount Paid in Wages, Selling Value of Product, and Number of Days in Active Operation During the Year 1909.

TABLE No. 1.

OFFICE NUMBER.	Management.		Capital Invested.	Number of Persons Employed.			Total Amount Paid in Wages.	Selling Value of Product.	Number of Days in Operation.
	Private Firms. Number of Partners.	Corporations. No. of Stockholders.		Males.	Females.	Totals.			
1.....		5	\$25,000	69	63	132	\$14,360	\$77,924	144
2.....		3	30,000	70	125	195	26,452	160,000	158
3.....		3	13,000	45	75	120	6,500	43,800	40
4.....	1		12,000	40	45	85	1,800	10,000	65
5.....	1		25,000	50	70	120	6,964	77,200	88
6.....		3	200,000	350	200	550	97,743	322,000	150
7.....	2		14,559	24	36	60	2,296	21,500	75
8.....		169	18,000	76	82	158	10,453	57,185	60
9.....	2		40,000	51	125	176	6,250	35,000	30
10.....		3	15,000	62	125	187	12,357	85,089	80
11.....		3	48,086	250	375	625	34,110	183,000	70
12.....		3	24,321	75	200	275	20,108	125,510	120
13.....	1		2,000	6	7	13	280	1,825	20
14.....	2		5,000	16	32	48	847	7,500	27
15.....		53	6,000	15	75	90	3,179	16,956	48
16.....	1		2,500	15	30	45	1,351	11,697	54
17.....	2		25,000	85	156	235	30,000	240,000	150
18.....	3		15,000	45	45	90	2,696	17,000	50
19.....	1		2,500	2	4	6	250	1,000	30
20.....	1		2,500	4	7	11	400	3,500	30
21.....	1		2,000	7	12	19	700	6,600	32
22.....		14	6,000	65	75	140	1,434	77,934	75
23.....		56	5,900	18	20	38	2,280	11,000	28
24.....	1		20,000	99	95	194	20,000	64,620	250
25.....		3	10,000	25	65	90	3,200	16,500	30
26.....		5	60,000	80	130	210	10,720	69,000	100
27.....		4	15,250	40	100	140	5,638	38,000	50
28.....		2	12,000	40	90	130	6,000	65,000	90
29.....		5	60,000	150	250	400	18,726	59,983	38
30.....	1		3,500	7	13	20	585	4,675	40
31.....	3		10,000	50	85	135	5,135	39,500	48
32.....		9	12,000	22	13	35	1,739	16,395	15
33.....			16,000	35	70	105	6,627	67,250	38
34.....	1		1,000	4	12	16	1,000	12,800	54
35.....		3	30,000	80	125	205	12,000	67,000	90
36.....	12		12,000	16	25	41	1,200	7,000	39
37.....	12		12,000	55	90	145	6,548	38,830	90
38.....	12		4,000	30	74	104	8,932	59,379	190
Totals.....	32	344	\$817,116	2,173	3,215	5,388	\$390,860	\$2,219,152	2,786

THE FRUIT AND VEGETABLE CANNING INDUSTRY OF NEW JERSEY.

Product of Canned Fruits and Vegetables for the Year 1909.

TABLE No. 2.—FRUIT.

OFFICE NUMBER.	Blackberries.			Pears.			Strawberries.			Cherries.		Pineapple.		Raspberries. 2-pound cans. Dozens.	Blueberries. Gallon cans. Dozens.	Gooseberries. 2-pound cans. Dozens.
	3-pound cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.	3-pound cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.	3-pound cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.			
1.....	860		370				800		1,448							
2.....		1,300	1,000	9,654	3,543			8,600	1,600					1,150	1,100	
10.....		580	42					6,426		17						
11.....				5,160												
16.....				860		125						20				
17.....		6,000	2,000	16,000	1,300	2,000		6,200	2,800	200		100				
30.....				600												
37.....									440							
38.....		643		471	300							205	40	16		101
Totals.....	860	16,523	3,412	32,745	5,143	2,125	800	21,226	6,288	217	120	205	40	1,166	1,100	101

### THE FRUIT AND VEGETABLE CANNING INDUSTRY OF NEW JERSEY.

Product of Canned Fruit and Vegetables for the Year 1909.

OFFICE NUMBER.	Tomatoes.			Asparagus.			Lima Beans.			Peas.	
	3 lb. Cans Dozens	1 lb. Cans Dozens	Gallon Cans Dozens	3 lb. Cans Dozens	2 lb. Cans Dozens	Gallon Cans Dozens	3 lb. Cans Dozens	2 lb. Cans Dozens	Gallon Cans Dozens	3 lb. Cans Dozens	2 lb. Cans Dozens
1	17,590		11,781		95			9,684	210		10,914
2	44,000	18,000						3,400	300		
3	10,000	3,000	5,000					22,000	500		
4	2,000	4,000	4,000								
5							25,000			54,166	
6								153,972	2,506		143,180
7	36,000										
8	48,498	2,168	890								
9	50,000										
10	96,000										
11	218,000		13,000								
12	70,646	19,056	2,062								
13	2,000										
14	10,000										
15	15,780		100								
16		10,660						400			
17	108,030		16,000					16,000	3,000		
18	24,000										
19	1,030										
20	3,333										
21	9,450										
22	23	41,719									9,836
23	14,750										
24*	2,121		6,792								
25	22,000										
26	33,960		15,850								
27	400		18,900								
28	80,000										
29	90,200										
30	2,500										
31	21,400		3,750								
32								4,800			16,100
33		46,000						4,000			19,000
34			800								
35	60,000		9,000								
36	10,000										
37	28,000		7,115								
38	12,407	2,380	3,346	2,433	5,777	40					
Totals.....	1,144,058	146,983	118,386	2,433	5,872	40	25,000	214,256	6,516	54,166	199,030

\*This firm also reports 8,840 barrels tomato pulp.

## THE FRUIT AND VEGETABLE CANNING INDUSTRY OF NEW JERSEY.

Product of Canned Fruit and Vegetables for the Year 1909.

Pumpkins.		Squash.		Rhubarb.		Sweet Potatoes.		Spinach.		Pork and Beans.		Okra and Tomatoes.		Tomato Pulp.		Beets—Gallon Can, Dozen.
3 lb. Cans Dozens	Gallon Cans Dozens	3 lb. Cans Dozens	Gallon Cans Dozens	3 lb. Cans Dozens	Gallon Cans Dozens	3 lb. Cans Dozens	Gallon Cans Dozens	3 lb. Cans Dozens	Gallon Cans Dozens	3 lb. Cans Dozens	2 lb. Cans Dozens	3 lb. Cans Dozens	2 lb. Cans Dozens	1 lb. Can Dozens	2 lb. Cans Dozens	
.....	1,500	.....	.....	.....	.....	19,360	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	800	1,000	200	.....	3,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	18,750	.....	.....	.....	.....	.....	6,584	1,161	.....	.....	.....	.....	.....	.....	.....
.....	220	2,546	310	.....	.....	4,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	21,330	159	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	8,000	2,500	.....	2,500	4,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	925	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12,367	836	.....
.....	5,830	2,250	3,870	3,240	.....	1,180	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	774	372	.....	.....	.....	.....	182	.....	168	45	100	177	.....	.....	.....
14,050	7,050	26,940	5,047	2,500	7,850	45,870	159	6,766	1,161	168	45	100	177	12,367	836	60



## The Relation of Occupation to Health.

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"It is as essential to the medical man to acquaint himself with the occupation of a patient, as an important health factor, as with the hygiene of his home and neighborhood, or with his family history. And it is for him important to arrive at a correct estimate of the part played by employment in producing the symptoms he detects, or in causing the mortality he deploras."

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Many of the occupations in which men and women are employed have peculiarities distinctly injurious to health, by reason of conditions inseparable from them, in addition to which there are also closely associated circumstances leading to accidents that are often much more serious in their potency for evil. In other words, the risks of occupation are divisible into those that are *incidental*, apparently essential, and those that are *accidental*, or non-essential.

Of the two, the non-essential while not the most constantly active, is undoubtedly the most serious as a source of friction on the lives and health conditions of persons employed in such industries.

The physical conditions of trade and occupations differ widely, and it is not always easy to distinguish the incidental from the accidental evils against which those who follow them are forced to contend. Indoor labor of any kind is more or less hurtful, but its final effects will vary according to the peculiar environment of the place in which it is performed. Glass workers, blast furnace men and moulders are necessarily exposed to intense heat, but the extent of its effect on health is largely dependent on other conditions. Profuse perspiration is a normal incident of employment in such places, but reason does not—although it should, restrain the suffering, overheated workman from seeking relief in a cooling draught of air at an open door or window, although well aware that lingering sickness may be the immediate, and death itself the ultimate consequence of his indiscretion. The fact is that overtaxed endurance calling for immediate relief will not be denied, no matter what results may follow.

Liability to such forms of health impairment should therefore be regarded as an incident inseparable from these and other occupations of like character. Practically all forms of employment have their own peculiar incidental physical drawbacks, which should be taken into account in summing up the evil influence upon life and health appertaining to each occupation, and the effects of these are either increased or diminished by other circumstances

attending the labor itself, or connected with the individual employed, that is to say—his diet, habits of life, and general sanitary surroundings at home.

Naturally the more laborious occupations bring about a condition of incompetency for work at an earlier period of life, or produce at intervals, more or less serious ailments which necessitate a cessation of labor either permanent or for a time. Those who are forced out of such industries permanently by reason of failing muscular strength or impaired physical power, pass into others not so exacting with regard to these qualities, or cease working altogether; the consequence of this movement is that workers in the more laborious occupations are credited with lower death rates than are warranted by actual facts, as compared with persons whose employment requires less physical vigor, or who follow no occupation at all.

The selection of an occupation being largely a matter of personal judgment, it follows that such as require unusual physical strength and endurance will be avoided by men who are weak in these respects, and taken up generally by those who are more robust; and of these, many whose strength falls below the required standard, pass out to enroll themselves in less exacting occupations, against which medical statistics are sure to charge the impaired vitality for which it was only slightly if at all responsible. Extreme physical exertion is a cause of disease; but the whole frame or only a part may participate in the excess, and the injury suffered will depend on sex, age, habits of living, the social status of the worker, and other peculiarities of the occupation followed.

The circumstance whether an occupation is of an indoor or outdoor character, is of primary importance. Everything considered, outdoor labor is less unhealthy than indoor; some of its distinct advantages are free air, free movement, freedom from monotony and a wide intercourse with others, which assists mental development and encourages the social instinct. Farmers, sailors and railroad men are fair examples of these occupations, but in the case of the two latter callings there are incidental risks scarcely susceptible of mitigation, which probably more than offsets the hygienic advantages enjoyed by those who follow them.

The evils of dust producing trades are materially lessened when pursued in the open, or in only partially inclosed places to all parts of which the air has free access. This is proven by writers on the grinders' asthma, who state that at Sheffield, England, in former times, "when the men worked in rude sheds placed on the banks of streams with the object of securing water-power, their health was better, though they were exposed to winds, draughts and cold, than in subsequent years when after steam power came into use, they were transferred to inclosed workshops."

Indoor artisans of nearly all trades are affected more or less by vitiated air, even in factories constructed in accordance with the strictest rules of modern hygienic science, many fine examples of which are to be found in New Jersey. In the majority of manufactories engaged in the production of one or more standard articles there is great monotony in the methods of working, no matter what branch of employment is pursued. Specialization of work and the production of interchangeable parts which has been brought to a high degree of perfection in many factory industries, has reduced the workman to little more than a mere appendage of the machine.

Day by day he goes through the same stereotyped movements of hands or feet without a variation of any kind that would create a feeling of personal interests in the results of his labor, for the product is predetermined by the mechanical arrangement of the machine and his mind has nothing whatever to do with it. The hands become highly trained in rapidity of motion, and instinct usurps the place of mind, which, from long years of non-use while at such employment, loses much of its original power. The man continues his wearisome task from day to day, earning enough to supply his current requirement, but without prospect of escaping from toil while he is able to perform it, or hope that a time will come when a competence acquired by his labor will enable him to retire.

For the purpose of illustrating the health destroying and spirit crushing monotony of such work, the writer may mention an instance that came under his own observation in one of the greatest industrial establishments in the State, where the flooring consisting of pine boards one and one-half inches thick has to be renewed in front of certain machines once a year because the operator's feet, from its being necessary to stand in one position constantly, wear their way completely through the boards, leaving in their gradual descent, apertures the exact shape of his shoes and of a size not more than a couple of inches larger than the same. He has seen also steel and cast iron levers which actuated some of the machinery, worn completely through by the countlessly recurring grasp of the workman's hands, always necessarily in the same place.

Sedentary labor and indoor occupations of practically all kinds with their collateral circumstances, are now contributing a great deal, probably more than all other causes to the spreading of pulmonary consumption; there seems to be no doubt as to the alarmingly rapid growth of this dread disease having been coincident with the establishment and development of our modern factory system, and that the source of the trouble was to a large extent in the bad air of illy ventilated factory buildings of the earlier years. These structures are still very numerous, particularly in the large cities, but factory legislation of the past twenty-five years where faithfully and intelligently carried into effect, has brought about a modification of conditions which should and probably has, resulted in some improvement. These laws are directed primarily to the mitigation of avoidable or non-essential evils in indoor occupations responsibility for which is chargeable to the negligence or ignorance of employers, and in a lesser degree to employes also; but even with the most conscientious vigilance on the part of officials charged with their enforcement, the blight of unhealthfulness still remains, because of the many collateral conditions more or less intimately associated with indoor labor that cannot in the nature of things, be altered or abolished by legislation.

Sedentary labor is a term properly applied only to labor carried on in a sitting posture, but custom sanctions its application to all kinds of indoor employment demanding but little muscular activity, whether the work be performed sitting or standing. In fact, sedentary work might with propriety be defined as occupation with insufficient exercise for the whole body, and carried on indoors. In some of its varieties the movements required are very insignificant as in the case of those who attend many kinds of auto-

matic machinery; in others the action is greater, and so it goes along until by numerous and easy gradations it merges into the employments requiring the exercise of great muscular power. So much has been written on high medical authority relating to the manner in which health is affected by sedentary labor, that practically nothing new can be said on the subject; its leading and unquestioned results are: General stagnation of physical development; general torpidity of natural functions; reduction of lung capacity, and abbreviated respiration.

It is a demonstrated fact that the ratio of tuberculosis as compared with other diseases among wage-workers, is greatest where the amount of exertion is least, and lowest where it is greatest, the intermediate degrees showing an intermediate ratio. Work requiring unusual physical strength, such as is performed by stone-cutters, masons, and steel construction men, is not prejudicial to health and longevity by reason of any circumstance peculiarly relating to them. Indeed, being performed in the open air these and other outdoor occupations are practically free from the incidental circumstances which lead to pulmonary troubles, and their mortality ratio is much smaller than that of the comparatively unlaborious trades carried on indoors. In fact the experience is that trades requiring strong or even moderate physical exertion are far less unhealthful than those calling for little or no bodily effort, a proposition in harmony with natural law, which requires a reasonable exercise of the muscular system as an indispensable pre-requisite to good health.

The air of workshops has a direct relation to the nature of the occupations carried on, and the taints with which it is burdened may be regarded as incidental to the calling; its quality, however, is largely affected by the size of the building and the ventilation provided for in its construction. The incidental contaminations which are, however, susceptible of modification by the exercise of proper precautions, are the heated acid-laden vapors, noxious fumes, gases and dust, as in chemicals works, plating rooms, polishing and buffing shops, foundries, laundries, tanneries, potteries and textile mills. In fact, whatever the substance or material handled may be, particles thereof or some more or less noxious odors peculiar to the same, are always present in the air of even the most modern factories, equipped though they may be, with every known preventative and remedial device.

The wages to be earned is generally the chief consideration which governs a young person, either man or woman, in the choice of an occupation for upon them depends the possibility of living comfortably and acquiring the requisites for a healthy and enjoyable life. Low wages mean poor living accommodations, insufficient food, with infirm health, shortened days, and all other distressing consequences of poverty. Unfortunately on the other hand, the advantages which should follow sufficient earnings are often nullified by ignorance and improvident habits.

Steadiness or unsteadiness of employment is another element that powerfully affects the morale of workmen. Occupations that call for technical skill and steady work are those in which workmen generally receive the highest wages and are treated with the greatest degree of consideration. On the contrary in the numerous occupations known as season trades, such for instance as brick-making, fruit and vegetable canning, and in a somewhat less

degree, stone-cutting, mason work, painting, carpentering and other of the building trades, a period of active operation often with overtime and intense application to work, is followed by another equally long perhaps, during which nothing is earned, and the strictest economy is required to sustain life until the busy season returns. There is therefore a period of intense labor with an abundance of good food at one time, and enervating idleness without enough of even the common necessities of life at another. No argument is required to prove that the health of workers who follow occupations of this character must suffer directly and indirectly from such fluctuations.

The influence exercised by capital on the well-being of workers is most favorable in factory industries calling for a large outlay for buildings and machinery. Insufficient capital means inability to compete with those who have enough except on the basis of smaller profits, which in turn, prevents the installation of machinery and appliances suitable to the trade carried on. The work of such firms is usually done in old and ill-built factory buildings that are defective in general arrangement and without sufficient space for healthy work. Employers so situated may realize quite as fully as do their wealthier competitors the wisdom of promoting efficiency by giving their workmen the advantage of modern machinery and a place to work, in which they are surrounded by as near to perfect sanitary conditions as possible, but want of sufficient capital ties their hands, and to remain in the trade at all, they must be satisfied with profits distinctly inferior to those produced by the best equipped plants; and, generally speaking, their employes must be content with lower wages and in many instances, irregular employment.

The location of a factory cannot fail to exercise an influence on the health of those employed in it. The physical features and sanitary qualities of the works are bound to be practically the same as those of the district in which they are placed, and as its workpeople as a rule find it most convenient and economical to live near it, they are, as a matter of course, subject to the same sanitary conditions as other residents of the place. Therefore to get a fairly correct understanding of the effect on health of the work pursued, an accurate analysis of the general health conditions of the place, and of the people *not* employed in the factory in question, should be made in order to determine how far the diseases met with are chargeable to the general district conditions, and how far to circumstances peculiar to the trade. Failure to consider and give due weight to both these factors accounts for the widely divergent opinions expressed by different writers on trade diseases.

There is abundant evidence to prove that workmen employed in factories more or less distant from the congested centres of population, suffer less from sickness and have a lower rate of mortality than those engaged at the same trade in factories within the cities. The reasons for this are obvious. Factory buildings, because of the comparative inexpensiveness of land, are generally much more commodious, and, as a rule, constructed with due regard for the neutralization so far as possible, of the ill health producing factors peculiar to the character of the industry, in which, with the wider knowledge of hygienic law that now prevails, a fair approximation

to the desired results is usually attained. The workmen too, have much better homes in suburban localities, a six or seven room cottage with a garden for cultivation or recreation being as a rule, obtainable for a lower rental than would be required for a few cheerless rooms in a large city tenement. That a change from a crowded centre of population to the comparatively natural and uncontaminated environment of the country is of vast physical and moral advantage to the workmen, and that the improvement thereby brought about in his capacity as a producer, reacts to the advantage of his employer is shown by the steady movement of factories from the congested districts of our overgrown cities to places where the desire to erect large, commodious, well-ventilated plants suitable to the peculiar interrelated operations of the business, together with healthful homes for operatives and their families, is not confronted by the prohibitive cost of land.

A marked influence is exerted on the consequences of employment by the sanitary habits of workmen themselves, and these in turn, are almost irresistably influenced by the environment in which they work and the wages they are capable of earning. In ill constructed factory buildings of the old type, the toilet arrangements are usually crude and unsanitary, individual inclination regulates the extent of the midday and evening wash-up, and also the conveniences provided for that purpose, which at best can consist of nothing more than a wooden bucket, that in time, becomes so coated with grease and other sedimentary matter as to make its use rather productive of contamination than cleanliness; this with a very infrequently laundered towel, usually constitutes the entire outfit. The clothing removed during working hours which is generally hung in an exposed position upon the factory wall, is resumed at quitting time without the formality of brushing, and at least some part of the dust accumulated upon the various articles in the course of the day is thus transferred from the workshop to the home. A sentiment of individual and collective indifference to sanitary conditions naturally grows up under such circumstances, and the habit contracted during working hours of disregarding the rules of health, is quite likely to manifest itself elsewhere and at other times.

As pointed out above, the question of wages earned, is a very important factor in modifying the consequences of labor, for on it depends the quality and quantity of food the recipient is able to procure, the locality in which he resides, and the health preserving necessities of life with which it is possible to equip his home. The ill-nourished man having a poorly equipped home—and both conditions are almost universally found to go together, is much more susceptible to the disease producing contingencies of an occupation than one who is comfortably housed and well fed, and when attacked by sickness is less able than his more fortunate brethren to make a successful struggle for restoration to health. This being so, the direct relation existing between wages and physical vigor will be readily recognized. In fact a sympathetic observer cannot fail to perceive the amount of sickness and misery prevailing in employments that are productive of only the bare necessities of animal existence.

It is a subject for congratulation that so many employers in our own state and elsewhere, perceiving the evils attendant upon these conditions,

are making earnest efforts for their correction and have already accomplished much toward rendering factory environment as free from all menace to health as the character of the industry carried on will allow. State and municipal building laws have done much toward bringing these changes about, but by far the greater part of the improvement may justly be attributed to a popular sense of equity and fairness which is more or less faithfully reflected in all enactment of like character.

Of the hundreds of large industrial plants attracted to our state during recent years by low priced lands and perfect transportation facilities, practically all are constructed with a view to providing the most perfect possible protection for the health and comfort of the workers. Employers have in many instances gone far beyond the requirements of law or even public sentiment in these respects, and establishments under their control present a most surprising demonstration of what can be accomplished where "the will and the way" are combined, toward divesting factory life of not alone many of the most serious physical evils once regarded as without remedy, but also imparting to it many features of a social and educational character that should exert an improving influence on the lives of workpeople who fortunately enjoyed such advantages.

Several years ago the results of a study by this Bureau of these superiorly organized establishments in New Jersey, were exhibited in the form of illustrations, charts, and descriptive text, in the sociological department of the St. Louis Exposition, and the admirable arrangements there portrayed for protecting the health, and strengthening the sense of self-respect among employes, attracted world-wide attention. Copies of a descriptive pamphlet relating to the subject published by the state, were sent on request to many of the large industrial centres of our own and other countries. Since then leading publications—literary and sociological, together with conservative associations for the elevation of labor like the Civic Federation of America, have taken up the discussion of improved factory conditions, and the Bureau is rightfully entitled to the satisfaction of knowing that its work on these humane lines has been the means wherever known, of proving the material and moral value of the policy described, and also extending the sphere of its application.

A brief review of the measures adopted in one or two progressively managed plants, for the protection of the health of employes and the promotion of contentment among them, will serve to show what may be accomplished by interest in the welfare of employes, good business sense, and a knowledge of the laws of modern sanitation and hygiene in combination with sufficient capital to carry out the plans of the management.

The Sherwin-Williams Co., manufacturers of paints and varnish, operates ten plants in as many towns of the United States; one of these is located in the city of Newark on the banks of the Passaic River; the bulidings are large, modern structures of brick in the construction of which every feature required for perfect ventilation and sanitation was incorporated. In this model factory, order and cleanliness is the basis of all measures for the welfare of employes. In giving primacy to these, the ground that the first requisite of good health is to take care of it in the proper place; that is to say, where it may be most subject to the danger of impairment.

In these works, cleanliness extends not only to the floors and machinery of the workshops, but to the employes as well, and in order to insure its thorough observance, the factory is provided with a large number of lavatories and shower baths, and a plentiful supply of clean towels is furnished from the company's own steam laundry.

Employes are encouraged in every way to use the shower-baths freely, but in the dry-cooler department, in order to guard against lead poisoning, the frequent use of the baths is compulsory. As a further safeguard, each employe is provided with an entire change of clothing every day. As a result of this caution, the average man who before could not work in the dry-cooler department with safety to his health for more than one month, can now remain in it as long as he cares to, or is wanted by the management. Where in the past at least one out of every two men were affected by the lead, there is now not more than one in twenty injured by it, and almost always only those suffer who do not make proper use of the system. Recognizing the importance of proper nourishment in the maintenance of good health and the promotion of efficiency, a part of the factory building is set apart and used exclusively as a lunch-room and kitchen. Either a soup or a stew with tea and coffee are served free every day, while the balance of a well-selected bill-of-fare is served at cost prices. The employes bring their own lunches and are served with the free hot dishes, or they may order their entire meal, and get a good one, for an average of eight or ten cents. Whenever night work is necessary during the busy season, special dinners are served for all employes at the expense of the firm.

Much more space than can be afforded for the purpose would be required to give an understandable outline of the features maintained by this company and its employes; there is a benefit society that takes care of the sick and buries the dead, the funds for the maintenance of which were furnished by the company, until, from the growth of membership it came to be on a self-sustaining basis. Rest rooms are provided for female employes where they can lie down at noon or receive attention in case of illness; a club room for men, furnished with a piano, game tables and good reading matter; supplementing these there is an annual banquet and outing for all employes and their families, the expenses of which are paid by the company.

Thanksgiving Day has been observed for many years by presenting each employe with a basket containing a turkey and cranberries, proportioned in size to the number of his family, and *no deduction of pay is ever made on account of this or any other holiday.*

One of the best results of the betterment work carried on by this company is the desire of employes to remain in its service. Among them are many of the rank and file who have been in the service more than twenty-five years.

The company has made it a custom to present everyone who has been with it in any capacity for that length of time with a gold watch and chain. This is not given as a reward for faithful service, but rather as a badge of honor.

That the system briefly outlined above has now been in successful operation for upwards of twenty-five years is the best possible proof of its having met with an appreciative and loyal support from the employes, for whose

welfare it was originally adopted. The sentiments of the company regarding the results produced, and the lofty view taken of the responsibility devolving upon employers, are beautifully expressed in the two concluding paragraphs of a letter from the president on the subject addressed to the Bureau in connection with the general inquiry before referred to. These are the paragraphs, and it is doubtful whether more true kindness of spirit, together with broad, practical, but thoroughly humane business sense, could be combined in the same number of words:

"The care and improvement of animate machinery is at least as important to the manufacturer as the care and improvement of the inanimate machinery.

"The three most important matters for attention should be health, morals, and education; because a vigorous employe can do more work, a conscientious employe will do more work, and an intelligent employe will do more intelligent work."

This modest but comprehensive confession of faith in which the mutual obligation of employers and employes are fully epitomized, should be memorized by every employer of labor in the land.

The social economics of the Weston Electrical Instrument Co., whose works are situated in the Waverly section of Newark, are on a much more extensive scale than those just described; in fact it may be said that no where else in the country, nor perhaps in the world, has so much been done toward making the factory life of employes both healthful and morally elevating. The ventilation and sanitation of the immense workshops are absolutely perfect, and the surroundings are all of a character that appeal to the personal self-respect of the workmen.

The main factory building is one vast room 250 by 200 feet, with an 18 foot ceiling. The roof is on the saw-tooth model, and the north light is diffused equally throughout the vast interior, leaving no where a shadow or a dark corner. To increase the effect of light and cheerfulness, the columns, machinery, shafting, railings and all other stationary fittings, are painted in aluminum.

Immaculate cleanliness prevails everywhere, because the health of employes and the fine quality of work done by the Weston Company demands an atmosphere not only free from grit and dirt, but as nearly free from dust as can be attained by human ingenuity. It is interesting to note how frequently the health of the employes and the requirements of business are best served by identical conditions. The even diffusion of light permits the use of double work-benches with the operators facing each other, and such economy of space is effected that one square foot of the Weston floor is estimated to be equal to two and one-half feet in the ordinary scheme of factory buildings.

Drinking water of excellent quality and temperature is supplied by an artesian well, and is distributed throughout the departments by automatic jet fountains, thus doing away with the use of cups or glasses.

In the matter of ventilation the air space allowed each employe when the work-rooms are manned to full capacity, is about seven times that required by the most progressive modern hospital practice.

No drain pipes come into any part of the main buildings or work-rooms;

all closets, lavatories and toilets are in wings independently ventilated, and so divided from the main building that gases and odors are excluded. There is a lavatory 75 by 40 feet with a 16 foot ceiling, lighted and ventilated by many windows, with an individual porcelain wash-basin, individual soap, individual mirror and individual clothes locker for each man. The toilets are in every respect of equal grade with the lavatories—marble stalls, tiled floors and walls, with hardwood doors and seats, and both are in all particulars of as high quality as are to be found in any hotel of the land.

When the plant was erected about nine years ago, the company reserved the most desirable portions of the premises consisting of several commodious halls, and furnished them as recreation rooms, library, gymnasium, natatorium, emergency hospital, dining room and kitchen.

The furnishings and requirements for these purposes, all of the best quality obtainable, were provided by the company, and the entire club outfit with a working capital of \$1,000, contributed by a director, was transferred to the employes, who took over the management under the title—Weston Employes' Club of Newark, N. J. Twenty-five cents per month is charged as dues, and all Weston Company employes are eligible to membership. The club controls and directs every feature of welfare work without interference by the company.

In a large, tastefully decorated and furnished dining hall, a dinner, table d'hote, is served to employes for 20 cents. For the convenience of those who do not care to take the full dinner, there is a lunch-counter where employes may buy what they choose. At the lunch-counter plates of roast beef, lamb, beef a la mode, or baked or broiled fish, with two kinds of vegetables, and bread and butter, is served for eight cents.

Directly under the dining-hall is the natatorium—160 feet by 35—with a 20 foot ceiling, light, bright and cheerful. The swimming tank of cement and enameled brick, is 150 feet long, 18 feet wide, and from  $4\frac{1}{2}$  to 9 feet deep. The flooring is a handsome white mosaic tiling, tastefully bordered in green, with marble steps about 75 feet long leading from the pool to showers, needle and tub baths—six of each, which are ranged along the opposite side of the hall. A filtering plant forms part of the natatorium outfit. Here, as in the lavatories, the plumbing is of the finest quality. No where is there a bath, public, private or club, so roomy or so finely housed and equipped as this bath of the Weston employes' club. Connecting on the north is a large dressing-room, and the arrangements are such that the men may go directly to or from bath or work. Certain hours and days are set apart for women employed in the works.

A fair sized volume might be written about the peculiar features of this wonderful industrial organization, all designed for the pleasure and welfare of its employes, without exhausting the subject. The moving spirit of the whole—scientifically, mechanically, and altruistically, is the head of the company—Mr. Edward Weston.

With regard to the realization of his hopes, it probably is safe to say that no where else in the world has so much been done to make employment safe, healthful and comfortable.

A visitor to the works—an educator of national reputation and large experience in public life, after spending several hours examining the various

departments, industrial and social, said: "Had I not had this practical demonstration, nothing could have made me believe that any manufacturing concern on earth was so interested in the health, the comfort, the pleasure and the general welfare of its employes."

The entire system of welfare work is under control of a club, to membership in which all employes of the company are eligible. The dues are twenty-five cents a month, and practically every operative in the plant is a member.

To use the language of one who has written authoritatively on the subject of the social economics of the Weston Company, "the basic idea was the conviction of the head of the concern that the weightiest question confronting the twentieth century is the relation between capital and labor; that there must be a drawing together, or a still further pulling apart; that harmonious relations and community of interest must be established if we are to escape a disastrous and destructive conflict, and that therefore, it is the duty of every employer to contribute by all reasonable means to a peaceful and satisfactory solution of existing differences. It was hoped that the social and other plans of the Weston organization, designed for the pleasure and welfare of its employes, would not only shed a little sunshine day by day, but would also yield their "mite" of illumination on this momentous problem, and indicate other steps along the same road."

This brief reference to improved factory organization and management, is introduced here because the true interests of labor lies in the direction of giving the widest possible publicity to such work, hoping thereby to interest other employers in doing likewise, for it is only by the adoption of similar protective measures, that the present unnecessary friction on the lives of factory workers can be largely reduced, if not totally removed. To be sure the number of employers who can afford to surround their workmen with the many comforts provided by the Weston Company is small, but cleanliness—or as near thereto as the nature of the business will allow, with ventilation and sanitation, which forms the basis of the admirable systems outlined above, being comparatively inexpensive, are attainable by all, and failure to adopt them might justify an extension of the law of liability placing impairment of the health of operatives traceable to such neglect, on the same footing as accidental injury, so far as recovery of damages is concerned. A provision of this character now forms part of Workmen's Compensation Act of England.

However, in the best factory environment, after everything possible has been done for improvement, there will still remain certain unchangeable conditions productive of health deterioration, such as indoor confinement, want of sufficient physical exercise, and at least equally with these, monotony of work. Some mitigation of these hurtful influences can surely be brought about through a reduction in working hours, which would place factory industries on the same plane in this respect as most outdoor occupations. But for some reason indoor workers, who, on physical grounds, have the best claim to a shorter workday, have made the least progress toward obtaining it. Probably this is due to timidity and lack of self assertion arising from causes already indicated. Whatever way their failure to benefit by the progressive movement toward a shorter workday may be explained, the fact remains that

while the building trades generally worked forty-four hours per week, the average time in New Jersey factory industries is only a little less than fifty-six—or to be exact, 55.83 hours per week. The usual arrangement is ten hours and from fifteen to thirty minutes per day with a half holiday on Saturday, but among the various industries there are eighty-three establishments employing upwards of thirteen thousand operatives—male and female, in which the working hours range from sixty and one-half to eighty-four hours per week, and these are without exception the industries in which working conditions are most severe.

What, therefore, should be the duration of labor in any particular industry is a problem practically incapable of definite solution, because the data for any group of individuals is variable and fluctuating. The muscular or physical power of a dozen workers cannot be determined by a multiplication of the ascertained measurements of one, because the nervous force which sustains and directs physical power shows many varying degrees of development among individuals. A task that the personal qualities of one man will enable him to perform with ease, another will, with the expenditure of vastly more labor, perform very clumsily, although both may be much alike in physical endowments.

The endurance of labor again is largely influenced by habit and familiarity. A man inured to the performance of some simple mechanical operation or of some task of a noxious character, will carry the work on apparently without being influenced by it, whereas a stranger would find the same employment absolutely impossible. The high rate of mortality shown by the statistics of some active occupations is not wholly attributable to the degree and duration of the physical labor demanded, but more or less to the frequency of accidents in such employments, and to the circumstance that not a few enter upon them who are unfit for the work by reason of constitutional debility or by drinking habits where the occupation is heavy and exhausting.

The practical conclusions suggested by a consideration of the hygienic differences of occupations are, that if public opinion, or the law is to interpose for the purpose of limiting the hours of labor, the workers having the first claim to relief are those engaged in pursuits which are demonstrably inimical to health and life, in other words, the sedentary workers, of whom there are upwards of 310,000 in the factories and workshops of New Jersey at the present time.

## Promoting the Export Trade of New Jersey.

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The remarkable development of facilities for the production of all kinds of manufactured goods that has marked the progress of our country since the Civil War period nearly fifty years ago, has raised to national importance the question of what can be done toward enlarging and extending our export trade, so as to furnish steady employment for our growing population of wage earners and profitable returns on the capital invested in manufacturing industry.

To the group of manufacturing states of which New Jersey is one of the most important, the question of how this can be most effectively done is one of vital importance to their prospects of future growth and prosperity.

Ordinary competition for advantages in the home markets has brought about an extension of facilities for production that in many lines of industry are now far in excess of domestic trade requirements, and the need has become imperative of finding an outlet for the growing surplus in the foreign markets of the world. On the success that attends our efforts in this direction depends the maintenance of our present exalted rank among industrial nations of the earth.

The Federal government shapes its foreign policy with a view to securing and preserving for our people the utmost possible freedom of opportunity for trade in all parts of the world, and in its hundreds of consular officers the business interests of the nation has at command, the advice and assistance of a large corps of patriotic, intelligent and trained officials distributed among all the nations and peoples of the world. The consuls are purely commercial officers whose duties are strictly confined to the study of social, commercial and industrial conditions in their jurisdictions, and reporting fully thereon to the Department of Commerce and Labor, at Washington. Compilations and digests of these reports abounding in information and advice of the highest value to American manufacturers and exporters seeking foreign markets for their products, are published monthly by the government in pamphlet form and distributed without cost to all interested applicants.

No other government has done and is doing so much work of this character as ours, and many manufacturers of our own and other States are, as a matter of course, availing themselves to the fullest possible extent of the advantages thus freely placed within their reach; but the growth of our export trade is not commensurate with these efforts for its improvement, and the reiterated complaints of the consuls in various jurisdictions about the lack of attention by shippers to important trade requirements, shows conclusively that very many are either unaware of the opportunity to secure governmental guidance, or else in their foreign trade ventures, choose to ignore its tender of assistance altogether.

All that government can do is being done and it only remains for our manufacturers and exporters to act in all things on its well considered advice in order to bring about a large increase of our foreign trade and place us where we should be, in the lead of all exporting nations. We enjoy the reputation of being the most thoroughly skillful mechanical people in the world, and doubtless we are so; the facilities we possess for the production of every commodity included in the range of human wants are unsurpassable; the merit of our goods is recognized wherever they go, but efforts to market them abroad are handicapped by ignorance or indifference in the important matter of packing with reference to the distance to be traversed and the means of transportation that must be employed. Other requirements vital to success are frequently overlooked or misunderstood, notwithstanding the campaign of education which is being ceaselessly carried on by the government in order to bring home to manufacturers and exporters a convincing understanding of the error of their ways.

Our growth in population was marked by a coincident but vastly greater proportionate increase of manufacturing facilities which were, generally speaking, fully occupied until a comparatively recent date in meeting the widely varying demands of the home market; but how far the supply has come to exceed the demands is shown by the fact that while in New Jersey the selling value of goods manufactured during the year 1909, was nearly \$1,000,000,000, the mills, factories and workshops of our State, notwithstanding this enormous product—nearly equal in value to that of the entire country in 1860, were operated to an average of less than 75 per cent. of full capacity. It is therefore evident that had the demand arisen, additional value to the amount of \$250,000,000 could have been produced by the aggregate manufacturing plants of our State without increase of present facilities; a most striking disparity between the capacity of existing machin-

ery of production and the extent to which it is actually employed, that can be abolished in whole or in part only by a large increase in the foreign demand for our goods.

To further the prospect for such an increase, a systematic plan of advertising the State and its industrial advantages, both at home and abroad, was developed and put in operation by this Bureau several years ago, and the results are now becoming manifest in an increase of trade secured from foreign countries by many of our manufacturers, so that the extent to which the operation of factories and workshops approaches their full productive capacity is slowly but steadily increasing year by year, and it seems not unreasonable to expect that in time an approximate equipoise of possible supply and demand will be established. As a means to that much desired end, the Bureau has successfully invoked the assistance of the United States Consuls abroad and also that of the Department of Commerce and Labor at Washington. A copy of that fine compendium of information relating to our State—the "Industrial Directory of New Jersey," has been placed in the library of every American consulate, and the name and address of every manufacturer in New Jersey is thus brought to the notice of persons interested in industry, trade, and commerce in every center of population in which an official representative of our country is permanently stationed.

Information of the most valuable character to the industries of our State, such as exhaustive descriptions of trade conditions and requirements, character and quality of goods, the manner in which merchandise should be packed to reach their destination in satisfactory form, methods of canvassing for orders, trade customs in the matter of credits, and other interesting details such as only an intelligent and interested observer actually on the ground and familiar with every phase of the subject could impart, has been accumulated by the Bureau from this correspondence, and is now at the service of our manufacturers.

A few letters selected from the many that have passed between the Bureau and the consuls will serve to more fully illustrate the character of the work undertaken, and the conditions that will have to be observed in a successful competition for foreign trade. The correspondence was opened on February 1, 1910, by the following letter, copies of which were mailed to all American consuls serving abroad:

United States Consul at \_\_\_\_\_

DEAR SIR:—With the approval of the United States Department of State, we have mailed to you under separate cover, a copy of a publication issued by this Bureau bearing the title—

Industrial Directory of New Jersey, which we trust will reach you in due time and in good condition. The book, as you will see, is an amplified gazetteer and compendium of information relating to the material interests of our State, with the opportunities here open to home seekers and industrialists who desire to establish themselves where natural and other conditions are most favorable, and where intelligently directed enterprise is sure of proportionate reward.

The Directory is designed to advertise the State and its advantages generally, but it is particularly desired to give the widest possible publicity to its large manufacturing interests, for which purpose a complete list of our manufacturing corporations and firms with description of goods made and office address, is included in its contents.

May we ask you to favor our State by calling the attention of people in your consular jurisdiction to the directory, if proper occasion should arise for doing so. On our part we beg to assure you that all inquiries relating to New Jersey addressed to this office from your district, will receive prompt attention.

Respectfully yours,

Bureau of Statistics of New Jersey.

Acknowledging the hundreds of replies received during the succeeding three months, the following letter was addressed to each of the consuls about June 15, 1910.

United States Consul at \_\_\_\_\_

DEAR SIR:—Your reply to our letter of February 1st, with kind expression of readiness to assist our manufacturers in their efforts to secure a foothold in foreign markets for their products is received, and we wish to offer thanks on their behalf and our own for its encouraging and courteous character. May we request the further favor of sending us a list of importers and merchants in your jurisdiction who either handle American made goods at the present time, or would be willing to do so in the future, together with their addresses and the special lines of products in which they deal.

There is a great awakening of interest in everything relating to foreign trade among the manufacturers of New Jersey, and already we are in receipt of many requests for the names of persons to whom correspondence should be addressed. It is our desire with your kind assistance to bring together so far as possible through the medium of correspondence, catalogs, descriptive literature and price lists, the dealers whose names you may favor us by sending, and the manufacturers in our State who produce

the several lines of goods which these merchants express a desire to handle.

Again thanking you for your kind assistance, we are, dear sir,

Respectfully yours,

Bureau of Statistics of New Jersey.

Upwards of five hundred communications were received in reply to these letters, the largest part of them accompanied by lists of merchants and importers of the consular districts from which they came; others stating that the lists asked for were in course of preparation and would be sent when completed, and the remainder suggesting that application for names of dealers in these particular jurisdictions should be made to the Bureau of Manufactures at Washington, where such lists were on file.

A compilation of these letters, containing as they do, advice relating to the mistakes to be avoided and the correct methods to pursue in order to ensure success, would furnish material for one of the most interesting and instructive hand-books of correct information on the subject of foreign trade that has ever appeared. A few of them are reproduced below, and later on when the comparatively small number still outstanding are received, all of these being from the parts of the earth that are most remote, either in actual distance, or by reason of primitive and difficult means of transportation, a comprehensive digest of the entire correspondence will be made by the Bureau, and the same placed in the hands of our manufacturers, for their guidance. The consul at Tsingtan, China, writes under date of August 2, 1910, as follows:

"I am in receipt of your favor of June 10, 1910, wherein you request this office to forward you a list of importers in this Consular District who are handling American goods at present, or who would be willing to do so in the future.

"My experience in the service tends to the belief that the catalogue system of working up an interest in our home products is the wrong one to pursue. The various consulates are teeming with catalogues, filed and indexed for ready reference, and yet I cannot recall in my twelve years' experience five demands for these neatly and expensively prepared works.

"To one contemplating opening up foreign markets for American products, I would suggest that he either send a suitable and authorized representative to study trade conditions and the possible demand for his goods, and be prepared to meet these demands, whether it be in the manner of taste, construction, cut to suitable lengths, or in the matter of credit terms. All dealers in countries foreign to the United States give long credits, which condition is, no doubt, brought on by keen competition; and while they are most reputable and will meet their payments at the stipulated time, they are, owing to the fact that their own outstanding accounts are collected only semi-annually or even annually in some instances, averse to meeting the usual thirty and sixty days demand of American exporters.

"Should the sending of a representative to ascertain just what the trade demands be considered inexpedient, I would then urge that some established house be induced to handle the goods as a side line; or if the demand was thought sufficient, to locate an agent or representative at some central point, and let him supply the trade from there. Every item of export, no matter what it is, must be pushed and the merits of the same demonstrated before a sale can be assured. Cards, catalogues, and printed matter of any sort are usually relegated to the waste basket without so much as a notice; more particularly is this so if the matter is printed in English to one who knows nothing of that language.

"I will be greatly pleased to call the attention of business men to what your manufacturers offer, and in every other way co-operate with you in placing your goods on the market in my district."

The Consul at Valencia, Spain, writes under date of May 26, 1910:

"In reply to your letter of April 28, I enclose a list of merchants and importers interested in foreign trade. While not all of them sell American goods at the present time, all import or sell foreign goods of one sort or another, and by following the selling methods to which they are accustomed, it should be possible to interest a far larger number in our products.

"In general there are two main difficulties in the way of creating a market for American exports in this district through correspondence and trade literature; first there is an exceedingly small proportion of business men who understand English, and second, there exists a rooted prejudice against buying any article, a sample of which has not been seen. Practically no wholesale business or manufacturing exists here, and our competitors in importing, especially the Germans, attempt little by catalogues or other publications alone. They are in the habit of sending out traveling salesmen who speak Spanish, or are Spaniards, know the customs of the country, show samples, quote prices in pesetas on goods laid down in Valencia, and usually grant long terms of credit. While it is extremely difficult to sell in competition with these methods through correspondence or printed matter in any case, you will appreciate the particular futility of sending such correspondence or literature in our language (English).

"On the other hand many American products are known and very much liked here, and there ought to be opportunities to introduce others, like agricultural machinery and implements of small and medium size adopted to one and two horse power farming, light steel plows with one handle and double moldboard extensively used here in the cultivation of vines, rice hulling and milling machinery, lumber saw mill supplies, hardware, tools, surgical and dental instruments, freezers and icemaking machinery, knitting and sewing machines, high class leather, especially light and medium weight patent kid (Dongolas), and chrome finished goods.

"If our manufacturers and exporters would make a determined effort to meet the business methods of their competitors in placing these and other articles on this market, there is no question but what a flourishing trade could be opened up."

The Consul at Singapore, Straits Settlements, writes to the Bureau under date of June 6, 1910:

"Too little interest in foreign trade has heretofore been exhibited by American manufacturers, and this office notes with great satisfaction and pleasure the statement you make concerning the awakening of interest among manufacturers of New Jersey. I might take this opportunity, however, for suggesting the importance of impressing upon the minds of our manufacturers the absolute necessity for properly packing for export. This, unfor-

unfortunately has been one of the most serious obstructions to the expansion of American trade, but if manufacturers realize the opportunities open to them, use a little foresight and discretion, and be content with smaller profits at the beginning of their export trade with the knowledge that, if handled properly, it will develop into a valuable commercial asset, the American export trade will rapidly extend and in a short time outlive the reputation which has been given it in some places through the follies of a few.

"It is a deplorable fact that in a great many instances American goods of superior quality are supplanted by inferior foreign goods, mainly because the foreign manufacturers make a careful study of the export trade, understand the importance of packing properly, and thoroughly appreciate the importance of long time credits, which is such an essential factor, especially with the more remote countries. They send personal representatives with a thorough knowledge of the most efficient methods for the introduction of their goods, and their agencies are placed as a rule, in charge of fellow countrymen, who put forth their best efforts, not only with a view to making the trade a success from a commercial standpoint, but because they are influenced by the spirit of patriotism to forward the interests of their native land. On the other hand, American manufacturers have, in a great many instances, placed agencies in charge of foreigners, and it has been a well known fact that these latter work for the advance of American trade only in so far as it affects their personal commercial standing, but some of them are not at all loath to indulge in certain reprehensible practices, which not only result in the ultimate decline of American trade, but enable foreign manufacturers to enter the market with cheaper imitations of American goods. Trade marks have been imitated and valuable commercial secrets have been disclosed to the detriment of our foreign commercial relations.

"One other important point which should be considered is the reluctance which American manufacturers display in changing certain trade practices to conform to those employed by foreign manufacturers. In many places where the superiority of American goods is readily recognized, our market is very limited, for the reason that our manufacturers refuse to follow the commercial traditions which have been in vogue many years. American methods are as a rule up to date in every respect as related to home trade, but the hesitancy of American manufacturers to abandon these methods where they manifestly will not succeed, has been, and still is, a serious fault.

"It should be remembered that in many of the countries where the greatest opportunities for the expansion of our export trade exist, national traditions and prejudices have been dealt with and overcome by tact and diplomacy. When American manufacturers are willing to give this phase of export trade due attention, send qualified personal representatives to introduce their goods, establish agencies in charge of their own countrymen, and conform to existing commercial customs, little fear need be entertained for the rapid expansion of our export trade."

The Consul at Calcutta, India, under date of June 12, 1910, writes an interesting letter on the general trade condition in his consular jurisdiction, to which is appended a long list of corporations and firms handling American made goods in Calcutta and other centers of population in Southern India. The Consul, who writes hopefully of trade prospects if certain indispensable requirements are observed, concludes his letter with some words of advice to manufacturers contemplating entering the Indian field:

"I may say to you as I have said to others, that the only way to secure a foothold in the Indian commercial field is by personal representation.

Those who have entered the field and made a success of their efforts have done so by personal representation, in some instances by sending an agent who was maintained in the field until he became thoroughly acquainted with the commercial wants of the country, the methods of doing business and learned something of the vernaculars; in other cases, where it was practicable, American firms have appointed exclusive agents engaged in business, and have worked out good results in that way. Advertising by catalogues and otherwise as a rule does no good in India until after the goods have been introduced and exhibited to some extent. Advertising in India is good only as a means of calling attention to goods already introduced.

"I shall be very glad to aid you in any other way that may be in my power."

The Consul at Cologne, Germany, writes that in his judgment it is of very little use to try to establish direct trade there by means of catalogues, circulars, or any other form of advertising literature unless the same are printed in German, with sizes in metric measure; prices in marks; weights in kilos, and also rates of duty and other charges required for the delivery of the goods at their destination. The Consul says in part:

"Germany is a country of short distances and small business. The entire empire is but little if any larger than the State of Texas, and therefore freight rates are very light; practically all packages are sent by mail, and the average charge for a package of eleven pounds is about twelve cents. Any part of the Empire can be reached in twenty-four hours, so that there need be very little delay in getting return shipments for an order. These being the facts, as a rule only small orders are given, for the retailer reasons that as he can quickly replenish his supplies it would be a waste of capital to purchase a large stock at once. You can therefore see how much advantage an American firm would have if it had in some central place a stock of goods to sell from. When ordering goods from America is suggested to merchants here, the answer is generally—'O, it takes too long. I have not seen the goods and do not know what I will get, neither do I know how much the freight, duty and other charges will be, so I prefer buying where I know the goods, so that if they are not all right I can refuse to receive them.' Nearly all successful sellers of American goods have stocks here and I would recommend others who desire to get into the trade successfully, to go and do likewise."

The Consul at Birmingham, England, writes under date May 10, 1910, in part, as follows:

"I shall be glad to do all in my power to assist the manufacturers of New Jersey, or any other part of the United States to introduce their goods abroad, and your request for a list of importers and merchants in this consular district will be complied with to the best of my ability; but in the first place I desire to say that it is practically impossible to name all who sell American products, because it is not a habit for merchants and importers to emphasize the fact that goods they have for sale are made in the United States or elsewhere outside the United Kingdom. In only exceptional cases is the sale of an article promoted by having it known that it is of American or other foreign manufacture. In typewriters, sewing machines, and a few other articles, the fact that it is of American invention and make is an advertisement of value; but in general, knowing that a thing is made outside of the United Kingdom is an obstacle to its sale. One constantly notices in connection with advertisements here, the advice to "patronize British labor and industry by buying British goods." The whole tendency

is to appeal to the patriotism of the purchaser, and as a consequence, the sentiment for British goods grows stronger each year.

"Naturally, of course, this sentiment is not effective where foreign goods of equal quality are sold at a price lower than the home made article, but it is a striking fact that Englishmen generally regard goods of foreign make as not so good as their own. When you contrast this sentiment with that which exists in the United States, that goods are necessarily better because they are imported, you will have a better understanding of the situation."

It is further urged that comparatively little can be done in England toward the introduction of foreign goods by correspondence. The British merchant does not buy an article he has not seen, and is shy of a manufacturer whose reputation he does not know. As a rule he stands by those with whom he is acquainted, and who have served him well, but if once convinced that goods are up to the standard in every respect and answer his requirements, his trade, which is very desirable, may be easily secured.

"The best way to secure trade is for manufacturers to have their own representatives in England, or, in case that should not be expedient, to have their goods handled by agents in the great commercial centers. If catalogues are sent over it is important that prices should be in English money and quoted delivered at the nearest English port, and not, as is often the case, f. o. b. at American port of shipment. The purchaser will then know what his goods are going to cost him delivered. Another indispensable requirement is that goods furnished shall be up to the standard of the samples; neglect of this fundamental rule of fair dealing has blighted many fair business opportunities. A serious detriment to our trade is the frequently occurring delay in delivery. The English merchant very naturally objects to being served promptly only when the demand in the United States is light, and being obliged to wait months beyond the time appointed, when the demand is heavy.

"It is also highly important that when a sole agency is given to a merchant or agent in the United Kingdom, there should be the utmost care that no orders from other sources should be filled, and it is also important that when articles are sold to merchants or agents to be marketed at a fixed price, that price under no circumstances shall be cut. Many instances are known wherein the market for American articles of standard character and excellent quality has been seriously interfered with through certain dealers in the United Kingdom having cut prices so that they were sold as an advertisement with practically no profit."

The concluding paragraph of the letter is quoted entire:

"I have endeavored to comply with your request as fully as possible, but would like to say that if you give me a particular line of manufactures—not too many at a time, and ask specific questions as to the customs of the market, opportunities for sale, and best method of introducing them, I can be of far greater use than by writing in a general way. I trust you will understand that it will be a pleasure rather than a trouble to answer any questions you forward to me, and to furnish you information that benefit the manufacturers, not only of New Jersey, but of our whole country."

From many of the large cities of the Orient, come statements to the effect that business in these places is largely in the hands of European merchants—British and German principally, and that there are grounds for suspicion that the natural predilection

in favor of goods manufactured in their own country is so strong, that American goods for which they become agents are not given a fair chance on the market. The policy urged as best in the entire correspondence is the establishment wherever business is sought, of agencies in charge of American citizens, actuated in all they do by patriotism, equally with a desire for profit. Where this is not practicable, the best course is to employ bright, energetic salesmen thoroughly well acquainted with everything relating to the goods to be marketed, provided with samples where possible, and able to speak and write the language of the country correctly and fluently. Seeking to establish trade for or even to attract serious attention to American goods, solely by means of circulars, catalogues and other similar methods of advertising, is, in the judgment of our correspondents, an utterly profitless waste of time and money; particularly when such literature, printed in English, is distributed in non-English speaking countries, where, like a large portion of South America and the countries of middle and southeastern Europe, comparatively few understand our language. The Consul at Belgrade, Servia, writes:

"Unfortunately, most of the American catalogues and price lists are printed in English only, a language that is very little understood here. To get over this difficulty I have devised a plan by which catalogues received from American firms at this Consulate are sent to the business firms here with a notice that the Consulate is at their service for translation and other information. The Consulate is frequently visited by those who have received catalogues seeking advice relative to the goods advertised."

The Consul at Liege, Belgium, says in reference to the same subject:

"Of course, our export trade is at a decided disadvantage as compared with that of other countries, owing mainly to our lack of a sufficient number of trained and well equipped commercial travelers who speak the language of the country, and unless our exporters take this matter in hand and adopt measures to meet this much needed want, there seems little hope of being able to accomplish much in the way of actively pushing our export trade."

The same note runs throughout the entire correspondence: an immense accession of trade awaits American manufacturers just as soon as they see fit to discard the antiquated methods pursued by many of them at present and adopt those of other nations, more particularly the Germans, who, everywhere throughout the world, study with the most painstaking care, not only the needs, tastes, means and convenience of the peoples whose trade they are seeking, but are careful to observe also a deferential attitude toward their prejudices. Conciliation and accommodation, in the broadest possible sense of these terms, is the keynote of their commercial activity, and this wise policy has

won for them a rich harvest of trade in all the open markets of the world. That a large number of our manufacturers are either unaware of this valuable service, placed at their disposal by the government, or for one or another reason have failed to profit by it, seems clearly evident from the tenor of the letters received from the Consuls, in which the comparatively crude methods of American exporters and salesmen in foreign countries are contrasted with the up-to-date policy and careful attention to every detail given to the foreign trade propaganda by representatives of European manufacturers, by whom, as a rule, nothing in the way of concessions to local business customs or even prejudices is overlooked or refused.

The difference in the attitude of German, English and American manufacturers toward foreign trade opportunities, is well illustrated by an instance cited in the "Exporters Review," an American trade publication: "A commission house in Lima, Peru, received an inquiry for a machine in regard to which it had no information. Pro forma orders were sent to New York, London and Hamburg. In from four to six months a short answer arrived from New York quoting a price in United States gold at which the manufacturers would deliver the machine at some interior point in Michigan; no other information.

"In from three to five months the answer from London was received, quoting a price in Sterling at which they would deliver in London, sent a photograph of the machine with a politely expressed wish for the order.

"The answer from Hamburg came by return mail. It consisted of a pro forma invoice made out in Peruvian money, showing all the expenses that would be incurred and giving the cost delivered in Callio Bay, together with a blue print of the machine and instructions in Spanish for setting it up."

This thoroughness of method which seeks to smooth the way for the buyer, and remove every possible obstacle to the consummation of sales, fully accounts for why the Germans are getting more and more of the business. The reasons advanced by intelligent foreigners in explanation of the small sales of American goods in their respective countries as shown in the correspondence of the Bureau, may be briefly summarized as follows:

"Little effort is made by American manufacturers to get our trade."

"When they send salesmen to our part of the world, they are usually men who do not speak the language and who make no effort to understand the people."

"They try to force on us things they wish to sell, instead of

offering to supply us with something we wish to buy; as a rule they do not study our needs."

"Goods shipped from the United States are often carelessly packed, and consequently the percentage of loss through breakage and other causes is often very great."

"Shipping rates from European are generally lower than from American ports."

If these handicaps were removed, and our manufacturers made to see the wisdom of conforming to the business methods of our most successful rivals, the superior quality of our goods—which is acknowledged even where lack of attention to essential details in marketing them is condemned, would soon give us the leading place in the export trade of the world. That the transcendent importance of the subject is receiving recognition, both from a patriotic and a business point of view is shown by the fact that very recently some hundreds of the leading manufacturers of the United States, representing upwards of \$300,000,000 of invested capital came together in New York City, and organized the "American Manufacturers Export Association." It is asserted by those who have brought about this organization, that patriotism, no less than a desire to increase the foreign business of our manufacturers is the inspiration, and that united action and interchange of experiences on the part of American shippers, will do for American export trade what commercial organizations in Germany have done for German export trade in the last ten or fifteen years.

Within its comparatively limited sphere, the duties of this Bureau as prescribed by law, are practically the same as those of the Federal Department of Commerce and Labor; one must endeavor to help along the industrial and commercial interests of the State, as the other strives in its immensely larger field for the advancement of the same interests throughout the entire country. The act under which this Bureau was organized thirty-three years ago, provides that it shall, among other things: "In all appropriate and lawful ways encourage, foster and enlarge the manufacturing and every other form of productive industry, with a view to their permanent establishment upon a prosperous basis, both to employer and employed."

Various means are employed to foster and enlarge our manufacturing industry and to carry out the particular purpose indicated by the above extract, all contributing in some way to the desired end, but none of these has been more productive of tangible and enduring results than that which is now being done in bringing home to each and every manufacturer in our State,

accurate information relating to his trade in all parts of the world, which, if acted upon, may open new outlets for his products in directions that were unknown to him before.

The information and data which forms the basis of this service is derived from the direct correspondence before referred to with American Consuls in all parts of the world, and also from the consular and trade reports which are issued daily by the Federal Bureau of Manufactures. Through the courtesy of the National Department of Commerce and Labor, a copy of this invaluable publication, of which only a limited edition is printed, is received every day in this office where it is carefully examined, the trade information of its contents classified under proper industry headings, and sent out in the form of bulletins or circular letters to all manufacturing corporations or firms in New Jersey that are interested in the production of these several lines of goods. For example: We learn that in the district of which Vancouver, B. C., is the commercial center, there is great activity in building, and that permits for new structures of various kinds aggregating \$5,000,000 in cost, were at that time on record, in consequence of which there is a large demand for hardware, especially that used in the construction of buildings. Immediately a circular letter setting forth all the facts in the case, with the names of dealers in the district to whom correspondence should be addressed, is drawn up and mailed to every manufacturer in New Jersey engaged in the production of such goods. Again, a manufacturing firm in Germany, one that supplies a large proportion of the leather goods used in the Imperial German Army and Navy, writes expressing a desire to be placed in communication with manufacturers of certain varieties of leather with a view to opening trade negotiations. At once an English translation of the letter is mailed to every manufacturer of leather in the State, thus affording an equal opportunity to all who might feel themselves capable of handling the trade to which their attention is invited.

The same course is pursued with regard to all other industries; every particle of information relating to foreign trade gleaned from the daily consular reports, or secured by any other means that offers a prospect of trade extension, is placed as promptly as possible in possession of every manufacturer who, from the character of his business, may be interested, to be acted upon or not as personal inclination or the exigencies of business may determine.

During the twelve months ending September 30, 1910, approximately two thousand copies of circular letters or bulletins

on trade subjects were sent out by the Bureau to an equal number of our manufacturers, and details relating to the tariff laws of various foreign nations, with names of merchants and importers in foreign cities, were furnished to all applicants for such information.

## PART III.

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Industrial Chronology of New Jersey.

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Accidents to Workmen While on Duty.

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Permanent or Temporary Suspension of Work in  
Manufacturing Establishments.

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Changes in Working Hours and Wages.

---

New Manufacturing Plants Established and Old Ones  
Enlarged.

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Industrial Property Destroyed by Fire or Flood.

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Trade and Labor Unions Organized.

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Strikes and Lockouts.

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## **Industrial Chronology of New Jersey.**

**For the Twelve Months Ending September 30, 1910.**

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The series of tables which follow contain a record of occurrences affecting the interests of labor and industry throughout the State, covering a period of twelve months. The compilation includes first: "Accidents to workmen while on duty"; second, "Closing up, or temporary suspension of work in manufacturing plants"; third, "Changes in working hours and wages"; fourth, "New manufacturing plants erected and old ones enlarged; fifth, "Manufacturing plants destroyed or damaged by fire or flood"; and sixth, "Organization of new trade and labor unions."

The accidents to workmen are subdivided into six groups—viz.: "Factory and workshop operatives"; "buildings and construction workmen"; "transportation employees"; "tunnelmen, miners, and excavators"; "linemen and other electrical workers"; and "unclassified" workers, which includes persons engaged in a wide range of occupations not classifiable under either of the five definite headings. The accidents are divided into two classes—those that resulted in major or serious injuries, and those that resulted in minor, or comparatively trifling injuries. A complete list of serious accidents is given on the table with as many essential details relating to each case as the restricted space will allow. Formerly the practice has been to make each serious accident the subject of a brief descriptive note setting forth the circumstances under which it occurred, thus affording the investigator some material for determining whether or not they were preventable, and if so, what means should be employed to guard against their recurrence. For the purpose of reducing the cost of printing, these notes were excluded from the report of 1909 by order of the official supervisor, and the discussion of employers liability, now one of the most serious of the economic problems engaging the minds of law makers and people throughout the entire country, is deprived of the suggestive assistance that might have been derived from their contents. However, the textual notes have been prepared as usual, and

although not printed, any further information desired relating to the cases appearing on the table will be furnished on application to the Bureau.

The table of minor injuries gives for each of the six subdivisions of occupation referred to above, simply the number who suffered from them grouped together according to the general bodily location of the injury.

*Strikes and lockouts* is the only subdivision of the Industrial Chronology that appears in both textual and tabular form. Each particular strike is noted briefly or more extensively as their importance seem to demand.

The tables follow in numerical order, each prefaced by a brief review of its contents.

#### TABLE NO. I.

##### ACCIDENTS TO WORKMEN WHILE ON DUTY.

The accidents from which this table is compiled are, as before explained, all of a character that resulted either in death, permanent disability, or injury serious enough to render those who suffered them incapable of following their usual occupations for a time not less than one month. The main table in which the names of all who were injured are entered in chronological order, according to occupational classifications, is preceded by one summary of all major injuries, and another in which these are again subdivided into six occupational groups, showing the number that suffered each particularly designated form of injury.

The accidents resulting in minor injuries of which there was a total of 905, are divided among the industrial classifications as follows:

Factories and workshops.....	350
Building and construction.....	157
Transportation .....	124
Tunnelmen, miners, excavators and other laborers.....	50
Linemen and other electrical workers.....	30
Unclassified .....	194

Classified according to the character of the injury suffered, it is shown that 212 were external injuries to the body; 186 affected the head; 154 involved the hands; 109 the legs and hips; 77 the feet; 51 the back; 34 the arms; 23 were internal, and 59 were of various kinds not accurately defined in the reports relating to them.

Industrial accidents are a matter of careful record in almost every State in the union, and in the principal European countries, and practically everyone concerned in their compilation agree as to the apparent impossibility of finding a satisfactory definition of the term "serious" as applied to industrial accidents, or drawing a just and fair line of separation between those that should be classified respectively as "major" and "minor." The dangers latent in what appear to be trifling injuries when received, are not apparent to the layman, and quite often not even to the physician or surgeon. Under these circumstances the best that can be done is to observe the rule followed here and elsewhere by all associated with this form of statistical presentation, which is to classify as "major" or serious, all injuries that, when they occur, have obviously disabled the sufferers for life, or rendered them incapable of following their regular occupations for one or more months. All injuries of less seriousness are classed as "minor," although doubtless a very large proportion of them ultimately turn out to be quite serious, as for instance where slight bruises or abrasions of the skin develop into blood poisoning which furnishes an item of considerable magnitude in the list of serious injuries.

The following table contains a summary of all major accidents reported for all industrial classifications.

**General Summary of Accidents to Workmen. Including Persons Injured Under All Industrial Classifications.**

RESULTS OF ACCIDENTS.	Number Injured.
Fatal at time of injury or shortly after.....	360
Both legs amputated.....	4
Both feet amputated.....	2
Leg and arm amputated.....	2
One leg amputated.....	26
Arm amputated.....	9
One foot amputated.....	6
Hand amputated.....	11
From one to four fingers amputated.....	37
Eyesight totally or partly destroyed.....	16
Skull fractured.....	41
Both legs broken.....	12
Both arms broken.....	2
One leg broken.....	71
One leg and one arm broken.....	9
One arm broken.....	43
Back broken.....	2
Shoulder broken.....	13
One or more ribs broken.....	28
Ankle broken.....	13
Hip broken.....	7
Jawbone broken.....	1
Both legs crushed and lacerated.....	5

RESULTS OF ACCIDENTS.	Number Injured.
Both arms crushed and lacerated.....	6
One leg crushed.....	8
One arm crushed and lacerated.....	9
One foot crushed.....	24
Both hands crushed.....	2
One hand crushed.....	16
Head injured and scalp torn.....	17
Face lacerated and disfigured.....	4
Internally injured.....	67
Spinal and other injuries about the body.....	28
Burned by fire or acid.....	26
Scalded by boiling liquid or steam.....	19
Concussion of brain.....	11
Blood poisoning following injury.....	7
Paralysis following injury.....	4
Serious injuries of other kinds.....	14
Total number of major injuries.....	970
"    "    "    minor    "    .....	905
Total major and minor injuries.....	1,875

As shown by the above table, the total number of workmen injured seriously or slightly while in the performance of their duties during the twelve months was 1,875; of these 970, or 51.7 per cent. of the total number, are classed as "major," and 905, or 48.3 per cent. as "minor" injuries. Besides the three hundred and sixty, or 37.1 per cent. of the "major" injuries which resulted in death, four men suffered the loss of both legs; two of both feet; two of a leg and an arm; 20 of one leg; 9 of one arm; 6 of one foot; 11 of one hand; and 37 of one or more fingers.

Ten suffered total or partial destruction of eyesight; 41 from fracture of the skull; 12 had both legs broken; 2, both arms broken; and 71 one leg broken; 9 one leg and one arm broken; and 43 had one arm broken.

Reviewing the table in detail any further would be simply a repetition of the headings and figures thereon, without adding anything to their impressiveness. The strict care exercised in excluding from the compilation every mishap of a trifling nature, of which many hundreds were reported, is shown by the grim fact that 360, or 37.1 per cent. of the injuries classed as serious, resulted in death, and that these 360 fatalities are equal to 19.2 per cent. of all accidents—serious and non-serious, that appear in the compilation.

The number of fatalities for the year 1909 was 327; the increase in 1910 is therefore 33, or a fraction more than 10 per cent.

Of the accidents terminating fatally, 70 or 19.4 per cent.

occurred in factories and workshops; 45, or 12.5 per cent. in building and construction trades; 124, or 34.5 per cent. in transportation service; 9, or 2.5 per cent. among linemen, and other electrical workers; and 48, or 13.1 per cent. among workmen in unclassified occupations.

Considering the number of accidents, serious and minor, reported by each of the six classifications, the following division is shown: Factories and workshops, 644, or 34.3 per cent; building and construction, 323, or 17.2 per cent; transportation, 365, or 19.4 per cent; tunnelmen, miners and excavators, 170, or 9.1 per cent; linemen and other electrical workers, 59, or 3.1 per cent; and unclassified occupations, 317, or 16.9 per cent. As shown by these figures, by far the largest number of casualties—serious and minor, occurred among factories and workshop operatives, who in this State are almost, if not quite, equal in number to all other occupations combined; but this particular class of labor enjoys special protection from the State, which is not extended to more hazardous occupations, and its proportion of the total number of accidents that terminated fatally, is also shown to be second only to that reported for transportation employees.

For several years back tunnelmen, miners, and excavators paid the heaviest toll of accidental injury and death; three quarters of the total number of these casualties occurred in the railroad tunnels and open cuts through the Bergen hills, west of Jersey City. This work, at least the most dangerous part of it, blasting and cutting through the rock, was practically completed before the beginning of the twelve months covered by this year's record of accidents, and so the toll of workmen's lives and limbs paid by that industry is, happily much below that of previous years. The number of workmen killed while on duty last year was 327. The number reported for this year is already stated to be 360, an increase of 33, or practically 10 per cent.

The summaries of accidental injuries for each of the six industry classifications, follow in their regular order.

#### SUMMARY No. 1.—Factory and Workshop Operatives.

RESULTS OF ACCIDENTS.	Number Injured.
Fatal at time of injury or shortly after.....	70
Leg amputated.....	3
Arm amputated.....	4
Hand amputated.....	7
Foot amputated.....	4
From one to four fingers amputated.....	28
Both legs broken.....	2

RESULTS OF ACCIDENTS.	Number Injured.
One leg broken.....	15
Arm and leg broken.....	1
One arm broken.....	23
Collar bone broken.....	3
Hip broken.....	4
Ankle broken.....	4
Skull fractured.....	9
One or more ribs fractured.....	6
Eyesight totally or partly destroyed.....	5
Head and scalp lacerated.....	5
Leg crushed.....	3
Hand crushed.....	15
Foot crushed.....	10
Arms crushed and lacerated.....	11
Spinal and other injuries about body.....	9
Face lacerated and disfigured.....	2
Internal injuries.....	13
Burned by fire or acid.....	12
Scalded by hot water or steam.....	13
Blood poisoning following injury.....	6
Concussion of brain.....	3
Serious injuries of other kinds.....	4
Total number of major injuries.....	294
"    "    "    minor    "    .....	350
Total major and minor injuries.....	644

## SUMMARY No. 2.—Building and Construction Workmen.

RESULTS OF ACCIDENTS.	Number Injured.
Fatal at time of injury or shortly after.....	45
Leg amputated.....	1
One or more fingers amputated.....	1
Back broken.....	2
Both legs broken.....	5
One leg broken.....	18
Both arms broken.....	1
Arm and leg broken.....	4
One arm broken.....	9
One or more ribs broken.....	13
Collar bone broken.....	4
Hip broken.....	3
Ankle broken.....	6
Skull fractured.....	11
Spinal and other bodily injuries.....	2
Both legs crushed and lacerated.....	1
Foot crushed.....	2
Internal injuries.....	27
Scalded by hot liquid or steam.....	1
Paralysis following injury.....	4
Concussion of brain.....	5
Total number of major injuries.....	166
"    "    "    minor    "    .....	157
Total major and minor injuries.....	323

## SUMMARY No. 3.—Transportation Employees.

RESULTS OF ACCIDENTS.	Number Injured.
Fatal at time of injury or shortly after.....	124
Both legs amputated.....	4
One leg and one arm amputated.....	1
One arm amputated.....	5
Both feet amputated.....	2
One foot amputated.....	5
One or more fingers amputated.....	2
Both legs broken.....	1
One leg broken.....	12
One arm broken.....	4
Collar bone broken.....	3
Skull fractured.....	13
One or more ribs fractured.....	2
Head injured and scalp torn.....	5
Both legs crushed.....	2
One leg crushed.....	1
Foot crushed.....	6
Both arms lacerated.....	1
Internal injuries.....	12
Spinal and other bodily injuries.....	9
Burned by fire or acid.....	4
Scalded by hot liquid or steam.....	2
Concussion of brain.....	2
Serious injuries of other kinds.....	3
Total number of major injuries.....	241
"    "    "    minor    "    .....	124
Total major and minor injuries.....	365

## SUMMARY No. 4.—Tunnelmen, Miners and Excavators.

RESULTS OF ACCIDENTS.	Number Injured.
Fatal at time of injury or shortly after.....	64
Both legs and one arm amputated.....	1
One leg amputated.....	1
Hand amputated.....	1
Both legs broken.....	3
Arm and leg broken.....	1
One leg broken.....	8
Arm broken.....	1
Arm and hip broken.....	2
Shoulder and collar bone broken.....	2
One or more ribs broken.....	2
Skull fractured.....	4
Head and scalp lacerated.....	5
Both legs crushed.....	1
One leg crushed.....	3
Arm crushed.....	2
Foot crushed.....	3
Eyesight totally or partly destroyed.....	3
Internal injuries.....	8
Spinal and other bodily injuries.....	4
Burned by fire or acid.....	1
Serious injuries of other kinds.....	1
Total number of major injuries.....	120
"    "    "    minor    "    .....	50
Total major and minor injuries.....	170

## SUMMARY No. 5.—Linemen and Other Electrical Workers.

RESULTS OF ACCIDENTS.	Number Injured.
Fatal at time of injury or shortly after.....	9
Leg amputated.....	1
Leg broken.....	2
Arm broken.....	1
Collar bone broken.....	1
Skull fractured.....	2
Concussion of brain and injury to head.....	2
Body crushed.....	1
Burned by fire or acid.....	7
Scalded by hot liquid or steam.....	1
Internal injuries.....	1
Serious injuries of other kinds.....	1
<hr/>	
Total number of major injuries.....	29
“ “ “ minor “ .....	30
<hr/>	
Total number of major and minor injuries.....	59

## SUMMARY No. 6.—Workmen in Unclassified Occupations.

RESULTS OF ACCIDENTS.	Number Injured.
Fatal at time of accident or shortly after.....	48
Arm amputated.....	6
Hand amputated.....	2
One or more fingers amputated.....	6
Arm and leg broken.....	2
Leg broken.....	15
Arm broken.....	4
Collar bone broken.....	1
One or more ribs broken.....	4
Skull fractured.....	2
Jawbone broken.....	1
Head and scalp lacerated.....	2
Both legs crushed.....	1
Eyesight totally or partly destroyed.....	2
Internal injuries.....	6
Spinal and other bodily injuries.....	4
Hand crushed.....	3
Foot crushed.....	2
Leg and arm lacerated.....	2
Burned by either fire or acid.....	2
Scalded by hot liquid or steam.....	2
Blood poisoning following injury.....	1
Serious injuries of other kinds.....	5
<hr/>	
Total number of major injuries.....	123
“ “ “ minor “ .....	194
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Total major and minor injuries.....	317



## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employes.

Home addresses of injured workmen will be furnished on application to Bureau.

Name of Injured Workman.	Age Yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
Frederic Heaton	30	Machinist.	Newark.	Seeley Paper Tube and Box Co.
John McCabe	32	Laborer.	Camden.	Camden Coke Works.
Louis Riley		Boilermaker.	Dover	Dover Boiler Works.
Joseph Miller	19	Laborer.	Perth Amboy.	Raritan Copper Works.
Andrew Fredericks		Machinist.	Plainfield.	Scott Printing Press Works.
Alfred Walker		Silk weaver.	Paterson.	Bamford Silk Co.
John Kane		Potter.	Camden.	Camden Pottery Co.
Robert Watt		Weaver.	Whippany.	Caledonia Mills.
Robert Scott		Laborer.	New Village.	Edison Cement Co.
John North	25	Carpenter.	Camden.	New York Shipbuilding Co.
John Tobin		Machinist.	Plainfield.	Rushmore Dynamo Works.
Alfred McArthur		Laborer.	Kearny.	Clark Thread Co.
Annie Zurman		Weaver.	Trenton.	F. A. Strauss Co.
Archibald Mitchell		Laborer.	Paterson.	Dolphin Jute Mills.
John Gretz	22	Laborer.	Passaic.	Passaic Print Works.
Tony Franco		Laborer.	Trenton.	J. A. Roebling Sons' Co.
Tony Lusardio	32	Laborer.	Newark.	
John Lynski	30	Laborer.	Camden.	McAndrew & Forbes Co.
Rhinehart Fritz		Laborer.	Sayreville.	Sayre & Fisher Co.
Ernest Grief	34	Moulder.	Camden.	Camden Iron Works.
James McFarland	36	Moulder.	Camden.	Camden Iron Works.
Edward Emery		Machinist.	Bridgeton.	Ferracute Machine Co.
Herman Chew		Machinist.	High Bridge.	Taylor Iron & Steel Co.
Austin Seals		Machinist.	High Bridge.	Taylor Iron & Steel Co.
Joseph Croft	52	Paint mixer.	Jersey City.	Rockwell-Freman Furnace Co.
Daniel Moyle	21	Paint mixer.	Jersey City.	Rockwell-Freman Furnace Co.
Owen Wentzell	26	Machinist.	Camden.	Victor Talking Machine Co.
Alexander Rovensky	33	Laborer.	Jersey City.	Robinson Rodgers Co.
John McPhee	21	Machinist.	Bayonne.	Babcock & Wilcox Co.
Frank Deloco	30	Laborer.	Camden.	Farr & Bailey Co.
Munson W. Bellis		Wagonmaker.	Trenton.	Slack Wagon Co.
Nicholas Lakan	30	Metal worker.	Newark.	Newark Tube & Metal Works.
Helma Jaurn		High explosives worker.	Carneys Point.	E. I. Du Pont Powder Co.
Frank Bruski	31	Moulder.	Jersey City.	John Henry Foundry.
Edgar Jarvis	18	Papermaker.	Camden.	Camden Paper Box Co.
John Eckert		Watchman.	Camden.	Victor Talking Machine Co.
Edward Cunesty		Rubberworker.	Trenton.	United and Globe Rubber Co.
John Farnell		Laborer.	Trenton.	De Laval Steam Turbine Co.
William Davies		Laborer.	Trenton.	De Laval Steam Turbine Co.
Lewis Knowo		Laborer.	Jersey City.	American Sugar Refinery Co.
Marion Temaio		Metalworker.	Newark.	Tiffany & Co.
Patrick Mulcahy	50	Moulder.	Harrison.	H. R. Worthington Co.
John Korpinski		Ironworker.	Somerville.	Somerville Iron Works.
William Davis	21	Machinist.	Harrison.	Hyatt Roller Bearing Co.
Walter Gordon		Machinist.	Camden.	
John Sylvester		Ironworker.	Weehawken.	Weehawken Iron Works.
Arthur Friel		Rigger.	Camden.	Camden Pottery Works.
Wojeiech Koirois	32	Laborer.	Perth Amboy.	C. Pardee Works.
David Wilson	40	Engineer.	Camden.	Armstrong Cork Works.
Charles Perry		Structural ironworker.	High Bridge.	Taylor Iron & Steel Co.
Patrick Cassidy	34	Laborer.	Bayonne.	Tidewater Oil Co.
Mary Tamburre	18	Metalworker.	Newark.	Metal Works Co.
Francis Gadunsky	47	Oilcloth-worker.	Kearny.	Naern I.noleum Co.
Steven Ponnach		Oiler.	Phillipsburg.	Vulcanite Cement Co.
Tony Albano		Millworker.	Trenton.	
Jacob Stasset	50	Ironworker.	High Bridge.	Taylor Iron & Steel Co.
Benjamin Newman		Glassworker.	Millville.	Whitall, Tatum Glass Co.
Dominio Jearcello		Laborer.	Bordentown.	Independent Brick Co.
Joseph Sullivan	14	Laborer.	Harrison.	Stewart, Hartshorne Co.
James Alette	34	Paperworker.	Camden.	West Jersey Paper Mill.
Tony Labender	25	Laborer.	Boonton.	A. F. Norton Co.
John J. Fine		Machinist.	High Bridge.	Taylor Iron & Steel Co.
Allan Platt		Metal worker.	Chrome.	U. S. Metal Refining Co.
Samuel Pierson	19	Machinist.	Gloucester.	O. B. Coles.
Charles Davison		Rubber worker.	Bloomfield.	Combination Roll & Rubber Co.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employes.

Cause and Results of Injury.	Date.
Arm caught in machinery; severely crushed.	October 1
Ran nail in foot; blood poisoning set in.	October 1
Fell from scaffold; injured internally.	October 1
Hand caught in machinery; three fingers severed.	October 2
Body caught in machinery; severely crushed.	October 4
Arm caught in pulley; badly fractured.	October 5
Fell while carrying sagger; injured internally.	October 5
Stepped in unguarded belt hole; badly bruised and cut.	October 6
Piece of steel driven in leg; blood poisoning set in.	October 8
Heavy timbers fell on hand; two fingers severed.	October 8
Cylinder head blew out; body scalded badly.	October 9
Fell from ladder; skull fractured.	October 10
Arm caught in machinery; broken.	October 12
Fell from ladder; fractured hip and arm.	October 12
Body caught in machinery; died of injuries.	October 12
Reel of wire fell; body crushed.	October 12
Steam chest exploded; died of injuries.	October 12
Boiler exploded; face and hands scalded.	October 13
Arm caught in machinery; broken.	October 13
Iron door fell; pinned underneath; injured internally.	October 14
Piece of steel entered eye; may lose sight.	October 15
Hand caught in machinery had to be amputated.	October 16
Arm caught in machinery; badly mangled.	October 16
Misdirected blow of hammer crushed hand.	October 16
Fire originated in workroom; badly burned.	October 16
Fire originated in workroom; badly burned.	October 16
Hand caught in press; three fingers severed.	October 16
Fell from moving elevator; back broken; died.	October 16
Arm caught in machinery; severely mangled.	October 18
Heavy piece of iron fell; leg crushed.	October 18
Arm caught in machinery; severely crushed.	October 18
Fell into tank of vitriol; seriously burned.	October 19
Explosion of dynamite caused by pick striking it; killed.	October 19
Tripped while carrying ladle molten metal; badly burned.	October 20
Fell through elevator shaft; injured internally.	October 21
Fell from scaffold; injured internally.	October 21
Hand caught in machinery; three fingers severed.	October 22
Explosion of steam turbine; badly scalded.	October 22
Explosion of steam turbine; died of injuries.	October 22
Fell through elevator shaft; fractured skull.	October 23
Hand caught in press; two fingers mangled.	October 25
Spilled molten metal; leg badly burned.	October 25
Fell from scaffold; injured back.	October 25
Hand caught in machinery; badly lacerated.	October 26
Emery wheel exploded; may lose eyesight.	October 26
Heavy piece of iron fell; foot crushed.	October 26
Fell from scaffold; broke leg.	October 27
Fell from stack; killed instantly.	October 27
Hand caught in machinery; three fingers crushed.	October 27
Fell from stack; killed instantly.	October 27
Struck by heavy pipe on head; killed instantly.	October 27
Hand caught in press; two fingers severed.	October 28
Fell through elevator shaft; died of injuries.	October 28
Caught in machinery; died of injuries.	October 29
Iron bar fell on foot; two toes had to be amputated.	October 29
Heavy motor fell on body; injured internal.	November 2
Melting pot fell; leg crushed.	November 4
Body caught in machinery; killed instantly.	November 4
Explosion in japanning room; hands and face burned.	November 6
Boiler exploded; hands and face scalded.	November 6
Twenty tons of iron fell on body; killed instantly.	November 6
Hand caught in machinery; badly crushed.	November 8
Leg caught in machinery; had to be amputated.	November 9
Emery wheel exploded; hands and face badly cut.	November 9
Fell through elevator shaft; injured internally.	November 9

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employes.—Continued.

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
Howard Kniss.	25	Laborer.	Trenton.	J. A. Roebling's Sons' Co.
Allen Wood.		Laborer.	Chrome.	U. S. Metal Refining Co.
Peter Wedel.		Chemical worker.	Newark.	Martin Dennis Co.
David Balfour.		Laborer.	Kearny.	Naim Linoleum Co.
Leonard Cotton.		Laborer.	Yardville.	United Oilcloth Co.
Joseph Price.	18	Laborer.	East Orange.	Crocker-Wheeler Co.
Carl Dietrich.	48	Laborer.	East Orange.	Crocker-Wheeler Co.
Fritz Strubel.	30	Carrriage worker.	South Orange.	Whitney & Co.
Henry Geist.		Iron worker.	High Bridge.	Taylor Iron & Steel Co.
William Bennett.	27	Iron worker.	New Brunswick.	Nevership Mfg. Co.
James Mulligan.		Foreman.	New Brunswick.	Nevership Mfg. Co.
James McElarny.		Chemical worker.	New Brunswick.	Johnson & Johnson.
Jordan Flemming.		Chemical worker.	New Brunswick.	Johnson & Johnson.
Frank Murato.	46	Chemical worker.	Newark.	Amer. Agri. Chem. Works.
Tony Obigansy.	42	Chemical worker.	Newark.	Amer. Agri. Chem. Works.
Clyde Doll.		Machinist.	High Bridge.	Taylor Iron & Steel Co.
John Nonich.	40	Clay worker.	Perth Amboy.	Ostrandir Fire Brick Co.
John Drey.	28	Paperworker.	Whippany.	Diamond Paper Mills.
Joseph Merritt.		Iron worker.	Boonton.	Boonton Iron & Steel Co.
William Mack.	30	Ironworker.	High Bridge.	Taylor Iron & Steel Co.
Nicholas Walsh.		Laborer.	Trenton.	J. L. Mott Iron Co.
John Lynn.		Laborer.	Jersey City.	Lorillard Tobacco Co.
Michael Constantino.		Laborer.	Trenton.	J. A. Roebling's Sons' Co.
Francis Gadunski.	47	Laborer.	Kearny.	
William O'Neill.	48	Watchman.	Newark.	Eclipse Tanning Co.
John Bohler.	30	Moulder.	Newark.	Atha Steel Casting Co.
Tony Robroski.	27	Iron worker.	Harrison.	New Jersey Steel Tube Co.
James Purtell.		Laborer.	Boonton.	A. F. Norton
John Field.		Carpenter.	High Bridge.	Taylor Iron & Steel Co.
Albio W. King.		Laborer.	Landing.	Forcite Powder Co.
John Bialstoke.		Wood worker.	North Paterson.	Susquehanna Repair Shops.
James Van Cort.	40	Miner.	Franklin Furnace	New Jersey Zinc Co.
James Davis.		Laundry worker.	Burlington.	McNeil Iron Works.
Richardell.		Quarry worker.	Kingston.	Soft Stone Quarry Co.
Massey.		Quarry worker.	Kingston.	Soft Stone Quarry Co.
Frank Kroponasky.	29	Laborer.	Newark.	Newark Rivet Works.
James McIntire.	55	Truck driver.	Bridgeton.	Sanitary Can Co.
Jennie Parris.	22	Laborer.	Newark.	Robinson-Rodgers Co.
Stephen Olinac.		Laborer.	Perth Amboy.	Raritan Copper Co.
May Murphy.	16	Metal worker.	Bloomfield.	Nevins-Church Press Co.
John McGuirk.		Laborer.	Woodbridge.	American Smelting & Refin'g Co.
Albert Stevens.	35	Laborer.	Trenton.	Pennsylvania R. R. Carshops.
Charles Chapman.	16	Feeder.	Plainfield.	Crescent Embroidery Co.
Aloysius Alowenski.	43	Laborer.	Kearny.	Naim Linoleum Co.
John Beech.		Machinist.	Carteret.	Wheeler Conducs & Engr. Co.
Julius Markoski.		Ironworker.	Newark.	Atha Steel Casting Co.
Charles Lentz.		Machinist.	Elizabethport.	Central R. R. of N. J. Carshops.
Alexander Weeks.	40	Engineer.	Jersey City.	Barnes Mfg. Co.
George Oyefeliam.	45	Laborer.	Perth Amboy.	Standard Underground Cable Co.
Harry B. Jones.	16	Soap maker.	Camden.	J. Evanson & Son.
John Schaeffer.	25	Machinist.	Trenton.	Trenton Iron Co.
Ralph Newport.		Rubber worker.	Newark.	Combination Roll & Rubber Co.
Thomas W. Cain.		Ropemaker.	Beverly.	Wall Rope Works.
Leroy Smith.	23	Paper maker.	Hamburg.	Union Waxed & Parchment Co.
George J. Mendham.		Guager.	Roebling.	J. A. Roebling's Sons' Co.
Leon Wilkeson.		Fireman.	Beverly.	Wood Foundry Co.
James Gillie.	31	Wire worker.	Trenton.	J. A. Roebling's Sons' Co.
Michael Rigney.		Laborer.	West Orange.	Edison Storage Battery Co.
Gertrude Hamilton.	15	Silk thrower.	Paterson.	Ackerman Silk Co.
Thomas Hughes.	22	Chemical worker.	Camden.	General Chemical Works
Theodore Robinson.	35	Electrician.	High Bridge.	Taylor Iron & Steel Co.
Richard Vanderweil.	14	Chemical works	Jersey City.	Caisson Chemical o.
William Cromie.	26	Machinist.	Jersey City.	Cyclopean Iron Works.
George Toelsser.	45	Laborer.	Newark.	Detwiller & Street.
Paul Bismark.	30	Iron worker.	Newark.	Hay Foundry & Iron Co.
George Fasser.	45	Elevator operator.	Newark.	Columbia Steam Laundry.
John Mona.		Chemical worker.	Roosevelt.	Amer. Agri. Chem. Co.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employees.—Continued.

Cause and Results of Injury.	Date.
Wrench fell on head; badly cut.	November 9
Car ran over foot; had to be amputated.	November 9
Steam pipe exploded; face and hand scalded.	November 10
Hand caught in rollers; two fingers severed.	November 10
Hand caught in machinery; two fingers had to be amputated.	November 10
Gasoline tank exploded; body badly burned.	November 11
Gasoline tank exploded; face burned.	November 11
Heavy beam fell on head; concussion of brain.	November 11
Hand caught in machinery; thumb severed.	November 11
Body caught in driving belt; instantly killed.	November 12
Body caught in driving belt; skull fractured.	November 12
Vat of boiling chemicals overflowed; died of injuries.	November 13
Vat of boiling chemicals overflowed; died of injuries.	November 13
Several bags of fertilizer fell on body; injured internally.	November 14
Several bags of fertilizer fell on body; broke arm.	November 14
Hand caught in machinery; badly mangled.	November 15
Fell through barge hatchway; killed instantly.	November 16
Caught in machinery; died of injuries.	November 16
Fell from overhead trolley; shoulder broken.	November 17
Fell from traveling crane; killed instantly.	November 19
Heavy piece of metal fell on leg; badly crushed.	November 19
Fell through elevator shaft, injured internally.	November 19
Tripped and fell into pit; died of injuries.	November 20
Elevator descended on body; died of injuries.	November 20
Fell through elevator shaft; instantly killed.	November 24
Box of castings fell; foot badly crushed.	November 24
Caught in machinery; body injured.	November 27
Heavy weight fell; leg broken.	November 27
Fell from scaffold; broke both ankles.	November 29
Explosion of boiler; face and hands scalded.	November 29
Heavy piece of wood thrown from lathe; face lacerated.	November 30
Caught in machinery; injured internally.	November 30
Heavy casting fell on body; killed instantly.	November 30
Blast exploded prematurely; face lacerated.	December 2
Blast exploded prematurely; eyesight destroyed.	December 2
Fell through elevator shaft; instantly killed.	December 6
Horse ran away, thrown out; died of injuries.	December 6
Fire originated in workshop; died of injuries.	December 7
Heavy machinery fell on body; killed instantly.	December 7
Hand caught in machinery; three fingers had to be amputated.	December 8
Car ran over foot; three toes severed.	December 8
Roller ran over body; injured internally.	December 9
Hand caught in machinery; four fingers lost.	December 9
Body caught between wall and elevator; died of injuries.	December 10
Steam pump fly wheel fell; leg broken.	December 11
Moulding box fell; leg broken.	December 11
Hand caught in machinery; crushed.	December 11
Fell from ladder; fractured skull.	December 13
Fell into pit; compound fracture of skull.	December 15
Fell through elevator shaft; fractured leg.	December 15
Caught in machinery; severely crushed.	December 16
Hand caught in machinery; three fingers amputated.	December 16
Elevator descended on body; injured internally.	December 16
Caught in machinery; severely crushed.	December 17
Heavy truck ran over foot; badly crushed.	December 17
Fell under engine; foot severed.	December 22
Coil of wire fell; broke leg.	December 23
Caught in machinery; three ribs fractured.	December 24
Arm caught in machinery; badly mangled.	December 30
Fell into tank of boiling acid; badly scalded.	January 3
Caught in belting; injured internally.	January 4
Explosion of boiler; killed instantly.	January 5
Fell from scaffold; broke arm.	January 6
Fireworks exploded; eyesight destroyed.	January 6
Struck by electric crane; killed instantly.	January 7
Fell through elevator shaft; died of injuries.	January 8
Fell through trestle; died of injuries.	January 8

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employes.—Continued.

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
William Sindle.		Dyer.	Paterson.	Globe Silk Dyeing Co.
Charles Matthews.		Laborer.	Trenton.	
Ella Daubert.		Por. elain worker.	Trenton.	E. H. Freeman Elec. Co.
John Prushinsky.		Laborer.	Harrison.	International Steam Pump Co.
Samuel Dorfman.	24	Confectionery worker.	Camden.	Philadelphia Caramel Co.
William C. Thorn.		Laborer.	Roebling.	J. A. Roebling's Sons' Co.
Charles A. Wieschard.	34	Chemical worker.	Camden.	MacAndrews & Forbes Co.
Alfred Wentzell.	24	Wire worker.	Trenton.	J. A. Roebling's Sons' Co.
William Aspinwall.		Dyer.	Paterson.	Gautschoy Silk Dyeing Co.
August Hackinell.		Cotton goods worker.	Dover.	Paul Guenther Co.
William Spicer.	59	Machinist.	Wharton.	Singleton Silk Mill.
Robert Maceden.	20	Chemical worker.	Camden.	General Chemical Works.
Nicholas Lozier.		Laborer.	Roebling.	New Jersey Lime Co.
Bernard McLaughlin.	26	Laborer.	Roebling.	J. A. Roebling's Sons' Co.
Joseph Worzer.	26	Rubber worker.	Trenton.	
Edward McManus.	32	Leather worker.	Newark.	Ziegel-Eisman Co.
William Wack.		Iron worker.	High Bridge.	Taylor Iron & Steel Co.
Heinrich Poh.	51	Machinist.	Newark.	Hewes & Phillips Co.
Elias Drake.		Machinist.	High Bridge.	Taylor Iron & Steel Co.
Richard Hannigan.		Iron worker.	High Bridge.	Taylor Iron & Steel Co.
Joseph Bonnare.		Laborer.	Kensley.	National Fire Proofing Co.
John C. Rhoades.	69	Wire worker.	Camden.	Philadelphia Wire & Steel Co.
William Ginger.		Laborer.	Elizabeth.	Bowker Fertilizer Co.
Frank Grunhaigh.		Machinist.	Paterson.	Rogers Locomotive Co.
Thomas Kelly.		Moulder.	Paterson.	Rogers Locomotive Co.
James Smith.	36	Laborer.	Edgewater.	Warner Sugar Refining Co.
Louis Smith.		Machinist.	Milltown.	Mechlin Tire Co.
J. Ross Gilbert.		Paper worker.	Lambertville.	Perseverance Paper Mill Co.
Louis Lipper.		Iron worker.	Kensley.	Didier-March Co.
Thomas Powers.		Fireman.	Perth Amboy.	Chestbrough Mfg. Co.
George Passel.	42	Steel worker.	Newark.	Carnegie Steel Co.
Henry Schafer.	22	Leather worker.	Camden.	Ruby Kid Co.
William Hahn.	25	Laborer.	Trenton.	Trenton Spring Mattress Co.
Robert McKilkin.	22	Leather worker.	Camden.	Keystone Leather Co.
Frank Melrose.		Moulder.	Newark.	Louis Sacks.
William Stanway.	30	Moulders helper.	Jersey City.	Amer. Type Founders Co.
Mildred Oliver.	21	Weaver.	Camden.	Highland Worsted Mill.
George Doukas.		Machinist.	Trenton.	Pennsylvania R. R. Carshops.
Andrew Kastolino.	37	Laborer.	Newark.	Balbach Smelting & Refining Co.
Charles B. Payne.	20	Mill worker.	Jersey City.	M. Petres Allen Engineering Co.
Anna M. Farrel.		Shoe worker.	Newton.	H. W. Merriam Shoe Co.
William Karcker.	59	Leatherworker.	Newark.	Blanchard Bros. & Lane.
Charles Carr.	47	Fireman.	Camden.	General Electric Co.
Theodore Robinson.		Ironworker.	High Bridge.	Taylor Iron & Steel Co.
David Wood.	16	Machinist apprentice.	Camden.	Goff Drill Works.
Charles Weisner.	29	Machinist.	Camden.	Goff Drill Works.
John Vishil.		Laborer.	Trenton.	J. A. Roebling's Sons' Co.
John Mullen.	46	Brewery worker.	Camden.	Camden City Brewery Co.
Reuben Gillen.	41	Laborer.	Jersey City.	Swift & Co.
Charles Beck.	32	Moulder.	Camden.	Camden Iron Works.
Frank Augustine.	19	Machinist.	Kearny.	Nairn Linoleum Co.
Joseph Tompkins.	34	Laborer.	Camden.	Bateman Mfg. Co.
Albert Green.		Potter.	Trenton.	Maddock & Co.
Joseph Martinka.	41	Leather worker.	Newark.	F. A. Schaeffer.
Willard Hoffman.	16	Messenger.	Newark.	Whitehead & Hoag Co.
Frank Parkison.		Machinist.	Trenton.	Pennsylvania R. R. Carshops.
Alexander Sabroek.		Laborer.	Perth Amboy.	Amer. Smelting & Refining Co.
Bertram Jaboski.	37	Laborer.	Cliffside.	Warner Sugar Refinery Co.
John Gajain.		Foundry worker.	Newark.	Central Foundry Co.
Lawrence Maloney.	35	Moulder.	E. Newark.	Atha Steel Casting Co.
Vita Lemone.		Laborer.	Paterson.	American Locomotive Co.
George Horton.	28	Iron worker.	Belleville.	Eastwood Wire Mfg. Co.
Andrew Dennis.		Moulder.	Florence.	Florence Iron Works.
Mike Milocsnik.	30	Fireman.	Perth Amboy.	Perth Amboy Fire Brick Co.
Joseph Ryan.	48	Carriage builder.	Newark.	J. M. Quimby & Co.
Amos Horton.	60	Rubber worker.	Lambertville.	New Jersey Rubber Co.
Martin Damp.	65	Wood worker.	Trenton.	O. V. Hill Refrigerator Co.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employes.—Continued.

Cause and Results of Injury.	Date.
Tripped and fell into vat of boiling dye; badly scalded.	January 10
Body caught into machinery; collarbone broken.	January 12
Hand caught in machinery; three fingers severed.	January 12
Casting fell on foot; severed three toes.	January 13
Hand caught in machinery; had to be amputated.	January 19
Car crushed body; fractured four ribs.	January 22
Arm caught in machinery; severed; died of injuries.	January 25
Fell from ladder into machinery; killed instantly.	January 27
Fell into vat of boiling dye; badly scalded.	January 27
Arm caught in machinery; broken.	January 28
Ran splinter in hand; blood poisoning followed; died.	January 28
Caught in machinery; injured internally.	January 28
Caught in machinery; died of injuries.	January 28
Cut hand; blood poisoning set in; died.	January 31
Hand caught in colander; lost three fingers.	February 1
Cut thumb; blood poisoning caused death.	February 2
Fell from scaffold; both legs paralysed.	February 7
Casting fell on leg; died from shock and loss of blood.	February 7
Emery wheel exploded; wrist broken.	February 7
Caught in machinery; three ribs fracture d	February 8
Fell from ladder; hip broken.	February 9
Body caught in belting; died of injuries.	February 9
Fell through open hatchway; killed instantly.	February 10
Fell from ladder; broke four ribs.	February 14
Casting fell on leg; broken leg.	February 15
1,500 lbs. of sugar fell on body; injured internally.	February 15
Power press caught foot; severed four toes.	February 19
Fell into machinery; arm broken.	February 19
Fell from iron pier; head and shoulder injured.	February 20
Caught in under falling wall; instantly killed.	February 21
Saw burst while revolving; injuries caused death.	February 23
Fell from platform; fractured skull.	February 25
Hand caught in machinery; two fingers severed.	February 26
Arm caught in shafting; crushed badly.	February 26
Fell while carrying ladle of molten metal; badly burned.	March 2
Two bags cement fell on head; concussion of brain.	March 3
Hand caught in die; one finger severed.	March 4
Load of poles fell on leg; ankle broken.	March 8
Arm caught in machinery; hand mangled.	March 8
Fell from platform; leg broken.	March 9
Fell into tank of tannic acid; died of injuries.	March 9
Fell into tank of acid; died of injuries.	March 9
Large iron bar fell on hand; badly crushed.	March 9
Arm caught in machinery; broken.	March 9
Escape of gas from tempering furnace; conditions serious.	March 11
Escape of gas from tempering furnace; condition serious.	March 11
Hand caught in machinery; four fingers severed.	March 11
Fell from ladder; injured internally.	March 11
Tank fell while being hoisted to position; leg broken.	March 12
Hand caught in machinery; badly mangled.	March 15
Arm caught in rolling machinery; hand crushed.	March 16
Arm caught in machinery; hand lost.	March 16
Fell from ladder; arm broken.	March 22
Tripped and fell downstairs; hip broken.	March 26
Caught between elevator and guard bar; died of injuries.	March 26
Piece of steel entered eye; may lose sight.	March 27
Load of copper slabs fell; one leg severed.	March 31
Caught between descending elevator and wall; died of injuries.	April 4
Heavy casting fell; foot crushed.	April 8
Heavy casting fell; ankle broken.	April 10
Load of scrap iron fell; injured internally.	April 12
Fell from ladder; injured internally.	April 18
Fell into floor pit; leg broken.	April 18
Explosion in furnace; both hands mangled.	April 20
Caught in machinery; arm fractured.	April 20
Caught in machinery; died of injuries.	April 20
Hand caught in machinery; three fingers severed.	April 25

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employes.—Continued.

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
William F. Rentmeister.	15	Elevator operator.	Paterson.	Miesch Mfg. Co.
Harry Price.	26	Brakeman.	Trenton.	J. A. Roebling's Sons' Co.
Schuyler Schauack.	..	Wood worker.	Jamesburg.	..
Lewis Emginer.	..	Laborer.	Trenton.	Acme Rubber Co.
John Collins.	18	Hatter.	Newark.	Blanchard Bros. & Lane.
John Hendershot.	..	Machinist.	High Bridge.	Taylor Iron & Steel Co.
Patrick Olsanina.	32	Steel worker.	Newark.	Benjamin Atha Steel Works.
Peter Kalteissen.	40	Paper box maker.	New Brunswick.	Peter Kalteissen Box Co.
Dominic Burge.	..	Laborer.	New Village.	Edison Portland Cement Co.
L. Gregorio.	25	Laborer.	Hawthorne.	American Silk Dyeing & Fin. Co.
William Garrett.	18	Chemical worker.	Camden.	General Chemical Co.
Ambrose Harold.	17	Rubber worker.	Trenton.	Empire Rubber Mfg. Co.
Bartholomew Smullen.	42	Laborer.	Sayreville.	Sayre & Fisher Co.
George Clark.	19	Lithographer.	Camden.	Stephens Lithograph Co.
John Cheboniek.	..	Laborer.	Trenton.	J. A. Roebling's Sons' Co.
William Stimax.	..	Wood worker.	Long Branch.	Conness Mill.
Joseph Jesse.	23	Moulder.	Camden.	Camden Iron Works.
Myko Lastonyinka.	45	Laborer.	Camden.	McAndrews & Forbes Co.
Anna Kamboro.	20	Spinner.	Pluckemin.	Pluckemin Mfg. Co.
Aaron Baron.	..	Laborer.	Union Hill.	..
Antonio Zutuski.	19	Foundry worker.	Camden.	Camden Iron Works.
Joseph Lubrich.	21	Foundry laborer.	Camden.	Camden Iron Works.
Constantino.	18	Laborer.	Newark.	Atha Steel Casting Works.
John Claypool.	..	Potter.	Trenton.	Cook Pottery Co.
Joseph Ehrigt.	..	Machinist.	Paterson.	Cook Locomotive Co.
Ralph Stevens.	17	Foreman.	New Brunswick.	Janeway & Carpenter.
Joseph Jennings.	17	Machinist.	Camden.	Victor Talking Machine Co.
George Wagner.	53	Laborer.	Bayonne.	Tidewater Oil Co.
Patrick Shaughnessy.	65	Laborer.	Bayonne.	Tidewater Oil Co.
A. F. Hines.	25	Pressman.	Bayonne.	Miller Metal Co.
Frank Muroski.	23	Laborer.	Kearny.	Nairn Linoleum Co.
Joseph Wolf.	16	Helper.	Camden.	Armstrong Cork Co.
Michael Schultz.	..	Laborer.	Carteret.	Amer. Agri. Chem. Works.
James Gavan.	..	Boiler maker.	Newark.	Tea Tray Co.
Josephine Cody.	30	Laundry worker.	Bound Brook.	..
Michael Szytker.	24	Laborer.	Perth Amboy.	Barber Asphalt Co.
Joseph Zaviuski.	..	Laborer.	Perth Amboy.	Barber Asphalt Co.
Alexander Rokovitz.	..	Laborer.	Perth Amboy.	Barber Asphalt Co.
Paul Succo.	27	Laborer.	Roosevelt.	Liebig Fertilizer Co.
Michael Walsh.	..	Laborer.	Roosevelt.	Liebig Fertilizer Co.
Henry Parker.	45	Engineer.	Woodbridge.	Federal Terra Cotta Co.
Ernest Jackson.	21	Helper.	Camden.	McAndrew & Forbes Co.
Frederic Miller.	40	Wire worker.	Roebling.	J. A. Roebling's Sons' Co.
John Schaaf.	35	Laborer.	Newark.	Atha Steel Casting Co.
Salvatore Russo.	38	Laborer.	Newark.	Basch & Greenfield Co.
Michael Anato.	..	Machinist.	Newark.	..
Andrew Menga.	35	Laborer.	Newark.	Atha Steel Casting Co.
Robert W. Rosselle.	..	Rubber worker.	Trenton.	..
Joseph Smith.	..	Wallpaper worker.	New Brunswick.	Janeway & Carpender.
John Connors.	37	Pressman.	Hoboken.	R. Neuman Leather Co.
Dominic Downey.	25	Engineer.	Elizabeth.	Singer Mfg. Co.
Beach Schultz.	25	Oilcloth printer.	Camden.	Dunn Oilcloth Co.
Richard Schroeder.	32	Rigger.	Riverside.	..
Frank Christiano.	50	Fireworks maker.	Belleville.	..
Vlada Raepki.	32	Laborer.	East Newark.	New Jersey Adamant Co.
George Foley.	26	Oilcloth printer.	Trenton.	Trenton Oilcloth & Linoleum Co.
Michael Gibbons.	..	Fireman.	Bayonne.	Standard Oil Co.
Patrick Ward.	48	Tanner.	Newark.	Charles Smyth Leather Co.
Dennis Ward.	21	Laborer.	Elizabeth.	Bronze Powder Works.
Elmer Wright.	30	Lead worker.	Camden.	Camden White Lead works.
Lillian Ganders.	23	Spinner.	Camden.	Highland Worsted Mill.
Frank Sishlana.	50	Laborer.	Roebling.	J. A. Roebling's Sons' Co.
Nicholas Milfang.	40	Laborer.	Trenton.	John A. Roebling's Sons' Co.
Adolph Keneitz.	18	Cooper.	Jersey City.	Mattlage Co-opera Co.
Michael Zabedge.	32	Steel worker.	Harrison.	New Jersey Steel Tube Works.
Paul Cocera.	16	Oilcloth worker.	Camden.	Farr & Bailey Oilcloth Works.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employes.—Continued.

Cause and Results of Injury.	Date.	
Crushed between wall and elevator; died of injuries.	April	25
Foot caught under engine wheel; severed.	April	26
Hand caught in machinery; two fingers severed.	April	27
Crushed between trucks; leg broken.	April	30
Fell through open hatch; arm broken.	April	30
Hand caught in plainer; first finger severed.	May	2
Hoisting crane chain broke; leg broken.	May	4
Hand caught in cutting machine; two fingers severed.	May	4
Fell into machinery; died of injuries.	May	5
Caught in belting; killed instantly.	May	6
Drenched with vitriol from broken carboy; badly burned.	May	16
Arm caught in rollers; had to be amputated.	May	16
Crushed under mass of clay; killed instantly.	May	17
Drawn into press; two ribs and arm broken.	May	17
Gangrene developed from cut received at work; died.	May	20
Hand caught in machinery; four fingers severed.	May	20
Iron door fell; foot crushed.	May	21
Caught in belting; arm broken.	May	21
Hand caught in press; mangled and lost one finger.	May	21
Explosion of charged bottle; hand blown off.	May	23
800 lb. casting fell on body; killed instantly.	May	25
Fell into hot iron pipe; severely burned.	May	26
Struck by swinging crane; leg and arm broken.	May	26
Arm caught under car wheels; had to be amputated.	May	26
Struck by heavy chain; head crushed.	June	2
Arm caught in machinery; had to be amputated.	June	2
Caught in machinery; arm broken.	June	2
Fell from platform; died of injuries.	June	3
Crushed under a load of barrel staves; killed instantly.	June	12
Hand caught in press; three fingers severed.	June	14
Run over by heavily laden truck; leg broken.	June	16
Caught in machinery; hand severed.	June	17
Crushed between wall and elevator; leg broken.	June	24
Gasoline tank exploded; died of injuries.	June	25
Hand caught in mangle; had to be amputated.	June	25
Three tons asphalt dropped from overhead conveyor; skull fractured.	July	1
Three tons asphalt dropped from overhead conveyor; concussion of brain.	July	1
Three tons asphalt dropped from overhead conveyor; badly bruised.	July	1
Hook sustaining painter's ladder on which he was being hoisted broke; fell 25 feet; broke leg and fractured three ribs.	July	2
Drenched with acid while cleaning tank; back and arms burned.	July	2
Caught in fly-wheel of engine; instantly killed.	July	2
Heavy bundle of licorice fell; broke arm.	July	5
Fell from moving car; died of injuries.	July	7
Heavy casting fell; crushed hand.	July	7
Caught in belt, drawn around driving belt; skull fractured.	July	7
Hand caught in machine; thumb and finger severed.	July	8
Large casting fell; foot crushed.	July	8
Blood poisoning developed from nail scratch on arm; arm had to be amputated.	July	8
Fell from ladder; fractured three ribs.	July	12
Hand caught in press; had to be amputated.	July	21
Six inch iron pipe fell; crushed foot.	July	23
Caught under falling roll of oilcloth; arm broken.	July	23
Crushed under falling brick and castings; died of injuries.	July	26
Explosion of chemicals; died of injuries.	July	26
Caught in gearing while feeding machine; foot cut off.	August	1
Fell twenty feet to cement floor; hip broken; head cut.	August	5
Hot water brake bursted; severely scalded, may not recover.	August	6
Fell into unguarded vat of tannic acid; found dead three days later.	August	8
Scalded by steam pipe bursting; died of injuries.	August	8
Fell into pan of molten lead and nitric acid; died of injuries.	August	9
Struck by part of machine; gash six inches long on forehead.	August	9
Crushed between wall and traveling crane; died of injuries.	August	12
Crushed under reel containing heavy cable; died of injuries.	August	12
Fell against circular saw; hand cut off, arm lacerated.	August	15
Clothing fired by contact with red hot steel rod; died of injuries.	August	15
Hand caught in rollers; one finger cut off.	August	16

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employees.—Continued.

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
Paul Chervic	40	Laborer	Perth Amboy	Amer. Smelting & Refining Co.
George Foster	39	Machinist	Elizabeth	Diehl Mfg. Co.
Joseph Miller	56	Machinist	Newark	Central Foundry Co.
Frederic Feidner		Machinist	Harrison	Hyatt Roller Bearing Co.
Paul Kershon	21	Wire drawer	Trenton	Trenton Iron Co.
James Hart		Moulder	Burlington	U. S. Cast Iron Pipe & Foundry Co.
George Smith		Laborer	Franklin Furnace	New Jersey Zinc Co.
William H. Smith	20	Machinist	Camden	Victor Talking Machine Co.
Thomas Kenny	40	Chair maker	Jersey City	Derby Chair Co.
Nicholas Sabo		Laborer	Oxford	Empire Steel & Iron Co.
Glenville Darringo		Laborer	Oxford	Empire Steel & Iron Co.
Edward Blum	33	Engineer	Paulsboro	I. P. Thomas Phosphate Co.
James O'Brien		Miner	Rockaway	
Frederic Miller	35	Photographer	Bound Brook	Pathe' Freres Co., (mov. pic. films)
Louis Sheriffe	35	Photographer	Bound Brook	Pathe' Freres Co., (mov. pic. films)
Joseph Poysock	18	Laborer	Camden	Camden Coke Works
Louis Temati	24	Laborer	Rahway	Royal Mfg. Co.
Albert Furnell	42	Machinist	Camden	Warren Webster Co.
George Hoffman	49	Moulder	Camden	Camden Iron Works
John Cathaso	38	Laborer	Harrison	New Jersey Steel Works
Otto Kickes	56	Machinist	West Orange	Edison Phonograph Co.
Clarence Henshall	30	Machinist	Camden	Victor Talking Machine Co.
Joseph Hannihan		Mill worker	Trenton	
Daniel Sullivan	38	Engineer	Bayonne	H. F. Taintor Mfg. Co.
Darby O'Brien	18	Foundryman	Trenton	J. L. Mott Iron Co.
Bemto Benice	25	Spinner	Bordentown	Springfield Worsted Mill
Joseph Brodsky		Dyer	Groveville	Morris & Co.
Michael Spreit	58	Machinist	Elizabeth	Singer Mfg. Co.
James Haywood		Laborer	Camden	Atlas Cereal Works
Henry Taubel		Hosiery worker	Riverside	Taubel Hosiery Co.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Factory and Workshop Employees.—Continued.

Cause and Results of Injury.	Date.
Fell into hold of steamship; fractured skull. . . . .	August 17
Caught in machinery; hand badly mangled. . . . .	August 18
Crushed under descending elevator; died of injuries. . . . .	August 19
Hand caught in gearing; three fingers cut off. . . . .	August 20
Caught between hot wire coils and drawing block; leg cut off. . . . .	August 23
Struck by falling spindle weighing 300 lbs.; shoulder blade broken. . . . .	August 24
Elevator fell while riding in it; both legs broken. . . . .	August 25
Hand caught in machinery; four fingers cut off. . . . .	August 27
Crushed under structural iron from car; died of injuries. . . . .	August 31
Entering boiler to cleanse it; steam pipe exploded; scalded. . . . .	September 1
Entering boiler to cleanse it; steam pipe exploded; scalded. . . . .	September 1
Caught in fly-wheel; while oiling engine; killed instantly. . . . .	September 3
Fell from car ascending shaft; died of injuries. . . . .	September 3
Explosion and fire of celluloid material; burned to death. . . . .	September 6
Explosion and fire of celluloid material; burned to death. . . . .	September 6
Foot caught in coke crusher; ankle broken. . . . .	September 7
Crushed under descending elevator; died of injuries. . . . .	September 7
Contact with circular saw; hand lacerated. . . . .	September 12
Fell while carrying heavy weight; broke leg. . . . .	September 13
Caught between two trucks; hip broken. . . . .	September 13
Fell while at work; hip broken. . . . .	September 13
Caught in shafting; arm broken. . . . .	September 13
Caught in machinery; arm broken. . . . .	September 17
Caught in fly-wheel of engine; killed instantly. . . . .	September 17
Crushed between wall and elevator; arm broken. . . . .	September 15
Caught in machinery; arm cut off at elbow. . . . .	September 17
Tub of boiling dye boiled over; scalded legs and body. . . . .	September 22
Fell from ladder; broke one arm and leg. . . . .	September 22
Caught between belt and pulley; arm broken. . . . .	September 23
Caught in machinery; arm broken. . . . .	September 23
Caught in machinery; arm broken. . . . .	September 24

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Transportation Employees.

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
James Dougherty	35	Brakeman	Jersey City	Central R. R. of New Jersey
J. Hughes		Brakeman	Rahway	Pennsylvania Railroad Co.
William McKee	40	Brakeman	Harrison	Pennsylvania Railroad Co.
William Cooper		Engineer		Pennsylvania Railroad Co.
Theodore Shannon		Baggagemaster	Dunellen	Central R. R. of New Jersey
Frank Kosikowski	30	Laborer	Kearny	
Joseph Marinski	32	Laborer	Kearny	
Arthur Underhill	33	Brakeman	Jersey City	Erie Railroad Co.
Alexander Gerko	35	Section hand	Jersey City	Central R. R. of New Jersey
John Williams	50	Brakeman	Jersey City	Erie Railroad Co.
Victor Sands	33	Car inspector	Jersey City	Del. Lack. & Western R. R.
Avener Dendoli	35	Laborer	Kingsland	Del. Lack. & Western R. R.
Michael Kiesman	30	Track walker	Jersey City	Erie Railroad Co.
Steven Majesky		Yardman	Perth Amboy	Lehigh Valley Railroad
Howard C. Parker	24	Brakeman	Monmouth Junc.	Pennsylvania Railroad Co.
William E. Townley	48	Brakeman	Newark	Del. Lack. & Western R. R.
Leo White	25	Yardman	Bayonne	Pennsylvania Railroad Co.
Edward Maloney		Signalman	Woodbury	West Jersey & Seashore R. R. Co.
John Rockefeller		Brakeman	Somerville	Central R. R. of New Jersey
William Trench	19	Messenger	Bayonne	Central R. R. of New Jersey
Roseco Cramer	30	Fireman	Elizabeth	Central R. R. of New Jersey
Peter Sankovitch	45	Laborer	Camden	Atlantic City Railway
Garfield Ayres		Brakeman	Perth Amboy	Lehigh Valley Railroad
Tony Ross	20	Trackwalker	Hoboken	Del. Lack. & West. R. R.
Nicholas Roma	22	Trackwalker	Hoboken	Del. Lack. & West. R. R.
Henry Jobs		Engineer	Jamesburg	Pennsylvania R. R. Co.
Loro Martino	25	Laborer	Black Bridge	Erie Railroad Co.
Samuel W. Edwards	28	Brakeman	Eden Mill	Erie Railroad Co.
Frederic Davenport	27	Conductor	Oak Ridge	N. Y. Susq. & Western R. R.
James Cogal	40	Trackwalker	Woodbridge	Pennsylvania Railroad Co.
John C. Arner		Engineer	Perth Amboy	Lehigh Valley Railroad
John C. Bell	40	Conductor	Newark	Public Service Corp.
John Gengyok	39	Engine wiper	Jersey City	Central R. R. of New Jersey
John Monroe		Engineer	Jersey City	Pennsylvania Railroad Co.
John Spille		Engineer	Jersey City	Pennsylvania Railroad Co.
John McClure		Fireman	Jersey City	Pennsylvania Railroad Co.
Stephen Boroski		Fireman	Jersey City	Pennsylvania Railroad Co.
Frederic Colberg	35	Motorman	Newark	Public Service Corp.
Charles F. Brown	28	Motorman	Trenton	Trenton Street Railway Co.
John W. Sine	60	Flagman	Trenton	Pennsylvania Railroad Co.
Cecil Hunt	40	Brakeman	Jersey City	Pennsylvania Railroad Co.
Michael Young		Freight conductor	Hackensack	Pennsylvania Railroad Co.
Michael King		Conductor	Jersey City	Pennsylvania Railroad Co.
Roland Perkins		Motorman	Camden	
Edward Harney	24	Brakeman	Jersey City	Pennsylvania Railroad Co.
Charles Anderson		Engineer	Newark	Lehigh Valley Railroad Co.
Henry E. Smith		Brakeman	Harrison	Pennsylvania Railroad Co.
John Doyle		Car repairer	Hackensack	New York, Susq. & Western R. R.
August Santore		Trackwalker	Newark	Pennsylvania Railroad Co.
Michael McGuire	60	Car inspector	Elizabeth	Central R. R. of New Jersey
John E. Heater	23	Brakeman	Lincoln Park	Del. Lack. & Western R. R.
Henry B. McKeem	21	Brakeman	Bivalve	Central R. R. of N. J.
Victor Border	35	Trackman	Greensbridge	Central R. R. of New Jersey
John Byrnes		Towerman	Secaucus	Del. Lack. & Western R. R.
Joseph Miller		Brakeman	Trenton	Pennsylvania Railroad Co.
Clarence W. Letts		Engineer	Bridgeton	West Jersey & Seashore R. R.
James M. Conover		Motorman	Newark	Public Service Corp.
Patrick J. O'Brien	30	Brakeman	Jersey City	Lehigh Valley Railroad Co.
Lewis Philip		Roadman	New Brunswick	Pennsylvania Railroad Co.
Michael Connan		Engineer		Central Railroad of New Jersey
A. E. Smith		Brakeman	Blairstown	N. Y. Susq. & Western R. R. Co.
Cyrus F. Sproul		Superintendent	South Amboy	Pennsylvania Railroad Co.
Frank Van Pelt		Carpenter	Jersey City	Pennsylvania Railroad Co.
Alfred Winar	33	Laborer	Jersey City	Central Railroad of New Jersey
John McGeever	41	Brakeman	Jersey City	Lehigh Valley Railroad Co.
George Everett	25	Brakeman	Jersey City	Pennsylvania Railroad Co.
		Laborer	Little Ferry	N. Y. Susq. & Western R. R. Co.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Transportation Employees.

Cause and Results of Injury.	Date.
Run down by engine; leg severed.	October 1
Run down by train; killed instantly.	October 1
Fell from moving car; fractured skull.	October 2
Struck by stone from roadbed; head badly cut.	October 5
Body caught between cars; badly crushed.	October 5
Caught in collision; injured internally.	October 7
Caught in collision; severely bruised.	October 7
Fell from moving car; badly injured internally.	October 7
Stepped in path of oncoming train; killed instantly.	October 9
Caught between cars; body badly crushed.	October 11
Car ran over foot; badly crushing it.	October 12
Struck by bucket; head badly cut.	October 13
Run down by train; killed instantly.	October 13
Crushed between cars; died of injuries.	October 13
Fell under moving train; killed instantly.	October 14
Caught between cars while coupling; leg fractured.	October 15
Fell from signal bridge in front of train; killed instantly.	October 18
Thrown from moving train; injured internally.	October 18
Struck by engine; injured internally.	October 19
Fell under moving train; died of injuries.	October 22
Engine passed over foot caught in frog; severed it.	October 23
Caught between cars; died of injuries.	October 25
Run down by train; killed instantly.	October 28
Run down by train; killed instantly.	October 28
Caught between cars; arm severed.	October 28
Struck by train; arm broken.	October 28
Fell under moving train; both legs severed.	October 29
Run down by train; killed instantly.	October 29
Run down by train; killed instantly.	October 30
Caught in rear end collision; died of injuries.	November 2
Caught between cars while coupling; badly crushed.	November 3
Explosion of coal gas; face and hands burned.	November 5
Crushed in collision; died of injuries.	November 6
Run down by train; killed instantly.	November 6
Crushed in collision; died of injuries.	November 6
Crushed in collision; died of injuries.	November 6
Struck by train; killed instantly.	November 6
Collided with wagon; airbrakes refused to work; died of injuries.	November 8
Thrown from own car under wheels; leg had to be amputated.	November 8
Thrown from caboose; instantly killed.	November 9
Fell from moving car; died of injuries.	November 10
Fell from moving car under wheels; killed instantly.	November 11
Run down by train; killed instantly.	November 11
Collided with another car; killed instantly.	November 13
Crushed while coupling cars; injured internally.	November 16
Thrown from engine when flange on wheel broke; killed instantly.	November 17
Engine ran over foot; severed it.	November 19
Run down by train; fractured skull.	November 19
Foot caught in frog, engine ran over it; died of injuries.	November 19
Caught between cars while coupling; died of injuries.	November 20
Thrown from moving train; died of injuries.	November 23
Run down by train; killed instantly.	November 24
Run down by train; killed instantly.	November 25
Run down by train; died of injuries.	November 25
Fell under moving train; one leg severed.	November 27
Crossing gate descended; head badly cut.	November 27
Caught between cars; leg crushed; had to be amputated.	November 27
Jolted from car; under wheels, instantly killed.	November 27
Run down by train; killed instantly.	November 29
Fell from engine; fractured skull.	November 30
Fell between moving cars; broke arm and leg.	November 30
Run down by train while crossing tracks; killed.	December 1
Run down by drill engine; killed instantly.	December 2
Fell between car floats; leg badly crushed.	December 3
Inhaled coal gas fumes in engine; died.	December 7
Crushed while coupling cars; both legs severed.	December 7
Drawn in passing engine by loose clothing; killed instantly.	December 7

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Transportation Employes.—(Continued).

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occured.	Name of Employer.
Samuel G. Young.		Engineer.	Raven Rock . . .	Pennsylvania Railroad Co. . . . .
Edward Flemming.		Fireman.	New Brunswick.	Raritan River Railway Co. . . . .
Emil Kaufman.		Motorman.	Elizabeth.	Public Service Corp. . . . .
Andrew Flynn.	35	Fireman.	Jersey City.	Delaware, Lack. & West. R. R. . . . .
Charles Galvia.	30	Watchman.	Jersey City.	Erie Railroad Co. . . . .
William Hughes.	46	Engineer.		Erie Railroad Co. . . . .
James P. Feeny.		Brakeman.	Elizabethport.	Central Railroad of New Jersey. . . . .
James J. Murphy.	25	Brakeman.	Hackensack.	Lehigh Valley Railroad Co. . . . .
Albert G. Heald.	20	Brakeman.	Monmouth Junc.	Pennsylvania Railroad Co. . . . .
Joseph Steelman.	33	Brakeman.	Camden.	Pennsylvania Railroad Co. . . . .
Dennis Murphy.	45	Brakeman.	Jersey City.	Erie Railroad Co. . . . .
Anthony Ozozok.		Roadman.	Jersey City.	Pennsylvania Railroad Co. . . . .
Richard Newman.	45	Brakeman.	Jersey City.	Erie Railroad Co. . . . .
William J. Akers.	34	Brakeman.	Trenton.	Pennsylvania Railroad Co. . . . .
George Totel.		Roadman.		Central Railroad of New Jersey. . . . .
Chester Archer.	30	Engineer.	Florence.	Pennsylvania Railroad Co. . . . .
Joseph Avolio.	25	Section hand.	Elizabeth.	Pennsylvania Railroad Co. . . . .
Patrick Lacy.	65	Section foreman.	Perth Amboy.	Pennsylvania Railroad Co. . . . .
Charles D. Grady.	28	Brakeman.	Jersey City.	Erie Railroad Co. . . . .
Charles Snyder.	22	Checker.	Communipaw.	Central Railroad of New Jersey. . . . .
Lawrence Hurt.	24	Brakeman.	Plainfield.	Central Railroad of New Jersey. . . . .
Dennis O'Shea.	28	Telegraph operator.	High Bridge.	Central Railroad of New Jersey. . . . .
William C. Riker.		Brakeman.	Jersey City.	Erie Railroad Co. . . . .
James Morris.	30	Brakeman.	Winslow Junc.	Atlantic City Railway Co. . . . .
John Papitowski.	25	Laborer.	Jersey City.	Central Railroad of New Jersey. . . . .
Dayton Devore.		Brakeman.	Franklin Furn.	Del., Lack. & Western R. R. . . . .
Salvatore Prescio.		Roadman.	Trenton.	Pennsylvania Railroad Co. . . . .
		Roadman.	Somerville.	Central Railroad of New Jersey. . . . .
Dominic Schnell.	35	Trackwalker.	Jersey City.	Central Railroad of New Jersey. . . . .
Ira Decker.	33	Fireman.	Woodruff's Gap.	Lehigh & Hudson River R. R. . . . .
Grant Littell.		Dock foreman.	Hoboken.	Del., Lack. & Western R. R. . . . .
Walter E. Rau.	30	Brakeman.	Jersey City.	Central Railroad of New Jersey. . . . .
Miles Condren.	50	Bridgetender.	Elizabeth.	
Dominic Scramias.		Laborer.	Elizabethport.	Central Railroad of New Jersey. . . . .
James King.		Tie-inspector.	Jersey City.	Pennsylvania Railroad Co. . . . .
Michael Ellis.	37	Conductor.	Camden.	Atlantic City Railroad Co. . . . .
John Thorsen.	54	Carpenter.	Greenwood Lake.	Erie Railroad Co. . . . .
Charles J. Mara.		Brakeman.	Weehawken.	West Shore Railroad. . . . .
Patrick Hayes.		Bridgetender.	Hackensack.	Pennsylvania Railroad Co. . . . .
William Brown.	37	Brakeman.	Somerville.	Central Railroad of New Jersey. . . . .
George Pilger.		Brakeman.	Dover.	Del., Lack. & West. R. R. . . . .
W. F. Burkhardt.	32	Freight conductor.	Jersey City.	Erie Railroad Co. . . . .
James Corey.	28	Messenger.	Jersey City.	Central Railroad of New Jersey. . . . .
John F. Brady.	28	Brakeman.	Hackensack.	Pennsylvania Railroad Co. . . . .
Alexander Vass.		Trackwalker.	Menlo Park.	Pennsylvania Railroad Co. . . . .
James McCourt.	27	Conductor.	Jersey City.	Public Service Corp. . . . .
George Davis.	58	Yardmaster.	Communipaw.	Central Railroad of New Jersey. . . . .
Jacob Snedeker.		Freight conductor.	Asbury Park.	Central Railroad of New Jersey. . . . .
Alfred Wessel.	34	Freight conductor.	Whitmarst Junc.	Pennsylvania Railroad Co. . . . .
Alexander Willis.		Engineer.	Franklin Furn.	New Jersey Zinc Co. . . . .
Phillip Prettiman.		Section foreman.	Elmer.	West Jersey & Seashore Co. . . . .
Thomas Walsh.	53	Brakeman.	Elizabeth.	Central Railroad of New Jersey. . . . .
George W. Jenkins.	27	Brakeman.	Westville.	Del., Lack. & Western R. R. . . . .
Nathaniel Hill.	58	Bridgebuilder.	Sewaren.	Central Railroad of New Jersey. . . . .
George L. Tulloch.		Freight conductor.	Hoboken.	Del., Lack. & Western R. R. . . . .
Thomas F. Carney.	50	Freight conductor.	Port Reading.	Philadelphia & Reading Ry. Co. . . . .
August Miller.	70	Machinist.	Jersey City.	Erie Railroad Co. . . . .
Frederic Corey.	30	Fireman.	Jersey City.	Del., Lack. & Western R. R. . . . .
William G. Adams.		Brakeman.	Elmer.	West Jersey & Seashore R. R. Co. . . . .
Herbert Taylor.	30	Brakeman.	South Amboy.	Pennsylvania Railroad Co. . . . .
William P. Long.		Brakeman.	Little Ferry.	N. Y. Susq. & Western R. R. . . . .
Peter Visconti.	23	Car cleaner.	Hoboken.	Del., Lack. & Western R. R. . . . .
John F. Asmond.	53	Conductor.	Waverly.	Pennsylvania Railroad Co. . . . .
James Fitzpatrick.	35	Motorman.	Eagle Rock.	Public Service Corp. . . . .
Albert T. Flatt.	22	Fireman.	Orange.	Del., Lack. & Western R. R. . . . .
Imere Laboya.	40	Laborer.	Port Reading.	Pennsylvania Railroad Co. . . . .
James McIntee.	50	Section hand.	Marion.	Pennsylvania Railroad Co. . . . .

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Transportation Employes.—(Continued).

Cause and Results of Injury.	Date.
Crushed in rear end collision; leg broken.	December 12
Engine overturned on body; broke leg.	December 13
Collided with another car; leg broke.	December 13
Thrown from one train in front of another; killed instantly.	December 13
While in tunnel run down by train; instantly killed.	December 14
Engine moved while working in under; severed head.	December 16
Crushed while coupling cars; died of injuries.	December 17
Caught in rear end collision; died of injuries.	December 18
Run down by train; killed instantly.	December 20
Fell between moving cars; foot badly crushed.	December 22
Fell while coupling cars; died of injuries.	December 23
Run down by train; killed instantly.	December 25
Run down by train; died of injuries.	December 25
Crushed while coupling cars; died of injuries.	December 25
Run down by train; killed instantly.	December 25
Fell from engine while cleaning off snow; died of injuries.	December 26
Run down by train; instantly killed.	December 27
Fell under wheels while coupling cars; leg severed.	December 28
Jolted from top of moving car under wheels; both legs severed.	December 29
Crushed between cars; died of injuries.	December 30
Run down by train; died of injuries.	January 7
Run down while crossing tracks; instantly killed.	January 11
Stepped on icy rails while coupling cars; died of injuries.	January 11
Run down by train; killed instantly.	January 11
Heavy stone thrown from roadbed; three ribs fractured.	January 11
Run down by train; killed instantly.	January 14
Run down by express train; killed instantly.	January 14
Struck by train while avoiding another; killed instantly.	January 14
Run down by train; fractured skull.	January 14
Thrown from cab in head on collision; killed.	January 15
Run down by train; killed instantly.	January 15
Fell from moving train under wheels; killed instantly.	January 16
Slipped on icy steps; injured internally; died of injuries.	January 16
Arm caught while coupling cars; severed.	January 22
Fell from moving car on head; fractured skull.	January 25
Run down by train; died of injuries.	January 25
Run down by train; instantly killed.	January 28
Fell under wheels, while coupling; one leg severed.	January 30
Run down by train; killed instantly.	January 31
Fell from moving train under wheels; killed instantly.	February 3
Blown from top of ice-covered car; injured internally.	February 6
Run down by train; died of injuries.	February 6
Run down by train while crossing tracks; instantly killed.	February 8
Crushed while coupling cars; died of injuries.	February 8
Run down by train; killed instantly.	February 9
Fell from trolley while adjusting pole; concussion of brain.	February 10
Run down by train; killed instantly.	February 15
Crushed between cars; died of injuries.	February 16
Crushed in collision; instantly killed.	February 18
Struck by connecting rod of engine; broke both legs.	February 19
Run down by train; killed instantly.	February 23
Fell from top of moving car; injured internally.	March 1
Train moved while examining air brake; run over; killed.	March 2
Run down by train; instantly killed.	March 3
Crushed while coupling cars; leg and arm amputated.	March 7
Run down by train; killed instantly.	March 7
Run down by train while crossing tracks; killed.	March 9
Run down by train; killed instantly.	March 13
Fell under moving train; one leg severed.	March 16
Struck by overhead bridge; fractured skull.	March 17
Fell under moving car; one arm severed.	March 17
Struck by passing train; instantly killed.	March 27
Fell from moving car; died of injuries.	March 25
Fell under engine; died of injuries.	March 28
Fell from trestle; died of injuries.	March 29
Run down by train; injured internally.	March 31
Fell from trestle; leg broken.	March 31

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Transportation Employes.—(Continued).

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
Joseph Kametski	20	Laborer.	Jersey City.	Erie Railroad Co.
Constanion Garish	22	Engine cleaner.	Greenville.	Pennsylvania Railroad Co.
John Crowley		Engineer.	Communipaw.	Central Railroad Co.
William Stevens	37	Brakeman.	Camden.	Pennsylvania Railroad Co.
Valentine Mottenberg	60	Laborer.	Jersey City.	Erie Railroad Co.
Henry Danielson	32	Trackman.	Harrison.	Pennsylvania Railroad Co.
John McNally	35	Brakeman.	Jersey City.	Erie Railroad Co.
Henry Worthman		Conductor.	Eatontown.	Monmouth Co. Elec. R. R. Co.
James Payne	28	Brakeman.	Little Ferry.	New York, Susq. & West. R. R.
Henry Poman	25	Fireman.	Trenton Junction	Philadelphia & Reading Ry. Co.
Benjamin Hallett	33	Brakeman.	Jersey City.	Pennsylvania Railroad Co.
Oliver Malrenberg	35	Machinist.	Jersey City.	Pennsylvania Railroad Co.
John Barone	26	Trackwalker.	Plainfield.	Central Railroad of New Jersey
Charles Papo	25	Section hand.	Rahway.	Pennsylvania Railroad Co.
Charles Sylvester		Brakeman.	Harrison.	Pennsylvania Railroad Co.
William Schwyager	23	Engineer.	Harrison.	Pennsylvania Railroad Co.
John Henderson	31	Brakeman.	Trenton.	Pennsylvania Railroad Co.
Alex. Yonkawaski	35	Engine Cleaner.	Marion.	Pennsylvania Railroad Co.
Lewis Bowlby	56	Checker.	Communipaw.	Central Railroad of New Jersey
Clarence Christy	35	Bridge builder.	Hackensack.	Pennsylvania Railroad Co.
John Walsh		Brakeman.	Trenton.	Pennsylvania Railroad Co.
Henry Thiel	44	Freight conductor.	Rahway.	Pennsylvania Railroad Co.
Louis Ferris	31	Brakeman.	Jersey City.	Pennsylvania Railroad Co.
Elmer T. Bonasch	35	Conductor.	Elizabethport.	Central Railroad of New Jersey
Joseph Marsin	24	Laborer.	South Amboy.	Pennsylvania Railroad Co.
Lewis R. Daniel		Conductor.	Trenton.	Philadelphia & Reading Ry. Co.
James Litiza	19	Laborer.	Trenton.	Pennsylvania Railroad Co.
Alexa der Kelly	40	Boilermaker.	Kingsland.	Del., Lack. & Western R. R.
Thomas King	40	Clerk.	Trenton.	Philadelphia & Reading Ry. Co.
William Tyndal	28	Brakeman.	Analomink.	Del., Lack. & Western R. R.
Stanislaus Dymoski	32	Laborer.	Jersey City.	Erie Railroad Co.
W. J. Zengerly	30	Brakeman.	Deans.	Pennsylvania Railroad Co.
Michael Kelly	39	Brakeman.	Jersey City.	Central Railroad of New Jersey
Matthew K. Monks	26	Brakeman.	Jersey City.	Central Railroad of New Jersey
Frank Casserly	21	Brakeman.	Jersey City.	Erie Railroad Co.
Herbert Weaver	30	Freight brakeman.	Boonton.	Lackawanna Railroad.
Henry Ellis		Car inspector.	Hackensack.	Pennsylvania Railroad Co.
Michael Dunn	26	Fireman.	Waverly.	Pennsylvania Railroad Co.
Charles Johnson	30	Brakeman.	Granton.	Erie Railroad Co.
Daniel Haggerty	25	Assistant yardmaster.	Elizabethport.	Central Railroad of New Jersey
Joseph Haugh	50	Freight conductor.	Passaic.	Erie Railroad Co.
John Husted	65	Engineer.	Camden.	Pennsylvania Railroad Co.
Daniel Sullivan	22	Brakeman.	Trenton.	Pennsylvania Railroad Co.
Frank M. Dennis	30	Car inspector.	Newark.	Lehigh Valley Railroad.
Henry Brunkhardt	36	Section inspector.	Elizabeth.	Central Railroad of New Jersey
Frank Candy	25	Trackman.	Jersey City.	Erie Railroad Co.
Dominic Candy	30	Trackman.	Jersey City.	Erie Railroad Co.
Charles Spinella	20	Trackman.	Jersey City.	Erie Railroad Co.
Michael Helo	32	Trackman.	Bergen Hill.	Lackawanna Railroad Co.
Nicholas Gullyan	55	Car cleaner.	Montclair.	Public Service Corp.
Antonio Miglirino	22	Laborer.	Lincoln.	Lehigh Valley Railroad Co.
William Drake	46	Brakeman.	Elizabeth.	Central Railroad of New Jersey
Andrew C. Sayko	19	Telegraph operator.	Great Notch.	Erie Railroad Co.
Joseph Manatto	40	Track laborer.	Jersey City.	Erie Railroad Co.
Henry Yager	33	Fireman.	Jersey City.	Pennsylvania Railroad Co.
Charles Dorenberg		Brakeman.	Jamesburgh.	Pennsylvania Railroad Co.
Charles D. Vergan	30	Brakeman.	Jamesburgh.	Pennsylvania Railroad Co.
Charles Ulrich	22	Brakeman.	Jersey City.	Central Railroad of New Jersey
A. S. Galvin		Brakeman.	High Bridge.	Central Railroad of New Jersey
Martin Delaney		Brakeman.	Boonton.	Lackawanna Railroad.
Garrett J. Pitman	22	Brakeman.	Camden.	Pennsylvania Railroad Co.
Victor Segale	23	Brakeman.	Wechawken.	Erie Railroad Co.
Jacob Pettit		Flagman.	Manasquan.	Pennsylvania Railroad Co.
William Carney	18	Laborer.	Haddonfield.	Public Service Corp.
Max Piepski	45	Laborer.	Hackensack.	Pennsylvania Railroad Co.
S. H. Amerman		Painter.	Lawrence Station	Pennsylvania Railroad Co.
Dominic Deparieto	27	Road laborer.	Merchantville.	Pennsylvania Railroad Co.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Transportation Employees.—(Continued).

Cause and Results of Injury.	Date.
Steam tubes exploded; face and arms scalded.	April 2
Steam pipe burst; body badly scalded.	April 2
Struck by shifting engine; killed instantly.	April 4
Heavy beam fell; leg broken.	April 5
Run down by train; skull fractured, one leg cut off.	April 9
Crushed under car wheels; died of injuries.	April 10
Caught between cars while coupling; fractured three ribs.	April 11
Fell under moving train; arm and leg cut off.	April 12
Fell under moving train; died of injuries.	April 12
Fell under moving train; foot badly crushed.	April 13
Caught between cars; ribs and shoulder crushed.	April 17
Run down by drill engine; killed instantly.	April 20
Run down by train; killed instantly.	April 21
Run down by train; killed instantly.	April 21
Fell from top of freight car; injured internally.	April 24
Run down by train; both legs cut off.	April 26
Fell under moving train; foot severed.	April 26
Arm caught in machinery of engine; broken.	April 26
Crushed while coupling cars; died of injuries.	April 26
Run down by train; skull fractured, leg broken.	April 26
Fell between moving cars; leg had to be amputated.	May 2
Fell from moving cars; died of injuries.	May 3
Fell from cab of engine to ground; died of injuries.	May 4
Crushed between cars while coupling; both legs crushed.	May 10
Run down by train; killed instantly.	May 11
Drill engine ran over foot; badly mangled.	May 13
Run down by train; killed instantly.	May 14
Stomach pierced by part of drill; died of injuries.	May 20
Engine overturned; pinned underneath; badly burned.	May 20
Crushed while coupling cars; killed instantly.	May 22
Fell into river from dock; drowned.	May 28
Fell from moving train; skull fractured.	May 28
Caught between cars; both feet cut off.	May 29
Crushed while coupling cars; injured internally.	June 3
Fell down embankment; leg broken.	June 8
Side collision with another train; leg broken.	June 10
Crushed by lumber that fell from car; killed instantly.	June 11
Valve blew out; hands and face badly scalded.	June 16
Caught between cars while coupling; killed instantly.	June 18
Trying to adjust brake; run down; killed instantly.	June 18
Run down by train; died of injuries.	June 20
Arm caught between wall and cab; will have to be amputated.	July 2
Struck by overhead bridge; concussion of brain.	July 2
Caught between two cars, both legs crushed, one amputated.	July 4
Run down by train; died of injuries.	July 8
Fell with pile of railroad ties from track; injured internally.	July 12
Fell with pile of railroad ties from track; injured internally.	July 12
Fell with pile of railroad ties from track; badly cut.	July 12
Run down by train; killed instantly.	July 13
Tripped over fender of car, broke leg.	July 14
Fell from moving car; killed instantly.	July 14
Crushed while coupling cars; fractured skull.	July 16
Explosion of gasoline fumes; badly burned.	July 22
Struck by train, leg cut off; otherwise injured.	July 23
Caught between switch post and moving engine; badly crushed.	July 25
Run down by train; skull fractured.	July 26
Caught between cars; injured internally; ribs broken.	July 27
Fell from moving train; died of injuries.	August 1
Struck by overhead bridge; killed instantly.	August 1
Struck by overhead bridge; skull fractured.	August 2
Fell from moving train; both feet cut off.	August 3
Fell from moving train; skull fractured.	August 3
Run down by train; arm broken.	August 4
Fell from work train; died of injuries.	August 4
Struck by ash bucket while in ash pit; leg broken.	August 5
Run down by train; killed instantly.	August 5
Run down by hand car; died of injuries.	August 6

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Transportation Employes.—(Continued).

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
Charles Crowell.....	33	Laborer.....		Pennsylvania Railroad Co.....
Charles Anderson.....	35	Pullman porter.....	Jersey City.....	Pennsylvania Railroad Co.....
Walter Reuben.....	35	Brakeman.....	South Amboy.....	Pennsylvania Railroad Co.....
Patrick Ward.....	46	Lamp tender.....	Trenton.....	Pennsylvania Railroad Co.....
James Lastenan.....	27	Track walker.....	Granton.....	New York, Susq. & West. R. R.....
Frank J. Donnelly.....	52	Station master.....	Hoboken.....	Lackawanna Railroad Co.....
Thomas P. Kelly.....	27	Brakeman.....	Monmouth Junc.....	Lackawanna Railroad Co.....
John Glanne.....	45	Laborer.....	Kearny.....	Henry Steers Contracting Co.....
James McGrath.....	23	Foreman.....	Lake Hopatcong.....	Lackawanna Railroad Co.....
George L. Ellison.....	37	Brakeman.....	South Amboy.....	Pennsylvania Railroad Co.....
Hugh McFadden.....	36	Fireman.....	Jersey City.....	Central Railroad of New Jersey.....
Michael Carr.....	28	Brakeman.....	Jersey City.....	Erie Railroad Co.....
Anthony Engami.....	28	Track laborer.....	Hammonton.....	Atlantic City Railroad Co.....
Charles Taylor.....	30	Brakeman.....	Freehold.....	Pennsylvania Railroad Co.....
A. A. Green.....	35	Construction foreman.....	Haddon Heights.....	Atlantic City Railroad Co.....
Rocco Snyder.....	30	Brakeman.....		Central Railroad of New Jersey.....
Rocco Commodity.....	40	Laborer.....	Little Ferry.....	New York, Susq. & Western R. R.....
Herman Hueck.....	21	Switchman.....	Waverly.....	Pennsylvania Railroad Co.....
Richard Dawson.....	21	Brakeman.....	Lambertville.....	Pennsylvania Railroad Co.....
John Lonzo.....	39	Brakeman.....	Jersey City.....	Pennsylvania Railroad Co.....
Patrick J. Farrel.....	36	Brakeman.....	Camden.....	Pennsylvania Railroad Co.....
Daniel Atwood.....	22	Brakeman.....	Winslow Junc.....	Atlantic City Railroad.....
John Dwyer.....	28	Yardmaster.....	Perth Amboy.....	Lehigh Valley Railroad.....
Abraham Thomas.....	35	Conductor.....	Atlantic City.....	Philadelphia & Reading Ry. Co.....
Frederic Paulmenn.....	24	Brakeman.....	Elizabeth.....	Central Railroad of New Jersey.....
James Gravatt, Jr.....	28	Brakeman.....	Long Branch.....	Pennsylvania Railroad Co.....
Nicholas Di Giacomo.....	60	Road laborer.....	Weehawken.....	Ontario & Western R. R.....
Augustus Hanson.....	33	Engineer.....	Camden.....	Pennsylvania Railroad Co.....
Andrew Spinelli.....	33	Trackwalker.....	Huntsville.....	Lackawanna Railroad Co.....
John McDonald.....	23	Brakeman.....	New Market.....	Lehigh Valley Railroad Co.....
Samuel Allis.....	28	Engineer.....	Jersey City.....	Pennsylvania Railroad Co.....
Smith Moore.....	24	Brakeman.....	Bayonne.....	Central Railroad of New Jersey.....
Charles Fauly.....	24	Brakeman.....	Camden.....	Pennsylvania Railroad Co.....
Edwin Straugh.....	57	Fireman.....	Monmouth Junc.....	Pennsylvania Railroad Co.....
Walter Lilly.....	48	Brakeman.....	Elizabeth.....	Central Railroad of New Jersey.....
Bernard Carey.....	57	Engineer.....	Jersey City.....	Lehigh Valley Railroad.....
Frederic Beck.....	48	Brakeman.....	Jersey City.....	Central Railroad of New Jersey.....
Lawrence Snuda.....	22	Laborer.....	Plainfield.....	Public Service Corp.....
Bernard Farrington.....	22	Engineer.....	Jersey City.....	Lehigh Valley Railroad.....

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Transportation Employees.—(Continued).

Cause and Results of Injury.	Date.
Caught between car and platform; leg broken.	August 6
Run down by locomotive; killed instantly.	August 8
Fell from train; collarbone broken, body bruised.	August 10
Run down by train; killed instantly.	August 12
Run down by train; killed instantly.	August 12
Crushed by runaway team at ferry gate; killed instantly.	August 15
Fell from top of freight car; collar bone broken.	August 16
Run down by train; instantly killed.	August 16
Run down by train; one foot cut off.	August 17
Struck by passing train; instantly killed.	August 17
Struck by pole while leaning out of cab; skull fractured.	August 17
Fell from train; injured spine.	August 17
Struck on head by iron bar protruding from passing train; died of injuries.	August 19
Struck by train while turning switch; feet crushed.	August 19
Run down by train; died of injuries.	August 31
Fell from top of freight car to tender; ankle broken.	September 1
Run down by hand car; foot crushed, ankle broken.	September 3
Foot caught in switch, run down by engine; leg cut off.	September 5
Struck on head by passing coal car; died of injuries.	September 6
Fell under wheels while making a switch; died of injuries.	September 8
Thrown from top of car underneath; killed instantly.	September 9
Thrown from top of car; toes of one foot cut off.	September 9
Fell from pilot of drill engine; instantly killed.	September 13
Crushed between engine and platform; died of injuries.	September 14
Run down by train; instantly killed.	September 15
Fell from top of car; died of injuries.	September 15
Struck by train; killed instantly.	September 15
Run down by drill engine; leg cut off.	September 17
Hand crushed under driving wheel; two fingers cut off.	September 17
Run down by train; killed instantly.	September 17
Crushed between cars; died of injuries.	September 20
Struck on head by signal post; fractured skull.	September 22
Caught between cars while coupling; body crushed.	September 22
Run down by train; killed instantly.	September 27
Caboose and engine collided; killed instantly.	September 29
Caboose and engine collided; one arm cut off.	September 29
Fell from cab of engine; killed instantly.	September 29
Hand crushed while coupling cars; two fingers cut off.	September 30
Run over by car; leg cut off at knee.	September 30
Fell from engine; killed instantly.	September 30

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Building and Construction Employes.

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occured.	Name of Employer.
James Keenan.	25	Mason's helper.	South Orange.	John P. Kernan.
Samuel Finkle.	26	Carpenter.	Newark.	
Oswald Reinhardt.	32	Rigger.	Dover.	Dover Boiler Works.
Frederic Pratt.		Bricklayer.	Roosevelt.	William Clifford
Joseph Sheehan.		Bricklayer.	Roosevelt.	William Clifford
Benjamin Hyman.		Painter.	Newark.	
Charles Contino.		Painter.	Newark.	
Dominic Dantino.	42	Mason's helper.	Newark.	David Henry.
Michael Deskin.	50	Bricklayer.	Newark.	Heddon Construction.
Morris Baricichsky.	40	Painter.	Jersey City.	
August Carlson.	45	Painter.	Jersey City.	
Albert Aslaben.	45	Mason.	Rutherford.	
Thomas Maloney.	21	Iron worker.	Newark.	Heddon Construction Co.
Alsio Lupshy.		Painter.	Irvington.	
John Hupp.	32	Painter.	Newark.	
George Bentz.	49	Roofer.	Hoboken.	
Henry Schmidt.		Carpenter.	Chatham.	J. E. Beerbower.
Michael Koldra.	33	Painter.	Newark.	
John Holihan.		Bricklayer.	Trenton.	
George Perry.	26	Bricklayer.	Phillipsburg.	Kellogg & Co.
George H. Mabce.	71	Carpenter.	Jersey City.	
John Everett, Jr.	16	Mason apprentice.	Newark.	
Thomas Haley.	30	Carpenter.	Newark.	
Frank Long.		Iron worker.	Red Bank.	
George Cowell.	38	Carpenter.	Jersey City.	
Charles Meyers.	40	Iron worker.	Jersey City.	
James Lowery.	51	Painter.	Jersey City.	
Archibald A. Kaffer.		Plumber.	Bordentown.	
William Scott.	60	Carpenter.	Delawanna.	
Charles Cox.	45	Painter.	Newark.	
Joseph Dumpi.	25	Mason's helper.	Montclair.	
Louis Dagoumano.	34	Laborer.	West Hoboken.	
John Linn.	20	Bricklayer.	Jersey City.	
Henry Maus.		Carpenter.	Trenton.	J. A. Roebling's Sons' Co.
William Specht.	40	Painter.	Hoboken.	
Michael Noonan.		Laborer.	Newark.	Heddon Construction Co.
David T. Jenkins.	26	Carpenter.	Trenton.	
Taylor Sherman.		Carpenter.	Manasquan.	
Patrick Bensonage.	36	Structural ironworker.	Newark.	
George Van Buskirk.		Carpenter.	Westfield.	Ira N. West.
John Girdis.		Mason's helper.	Roosevelt.	
Joseph Larno.		Mason's helper.	Newark.	
B. L. Smith.	28	Structural ironworker.	Camden.	Des Moines Bridge Co.
John Christenson.		Painter.	Perth Amboy.	Raritan Copper Works.
Jeremiah G. Coles.	22	Iron worker.	Harrison.	
Jeremiah Basset.	24	Iron worker.	Harrison.	
Arthur Antich.	23	Iron worker.	Harrison.	
Michael Cohen.		Carpenter.	Newark.	
Israel Bane.		Mason.	Newark.	
Algeron Danby.	34	Painter.	Newark.	
Charles Peze.	50	Tin roofer.	Trenton.	
John Oden.		Roofer.	Florence.	
Frank Thistle.		Structural ironworker.	Newark.	
Thomas Brown.		Carpenter.	Paterson.	
Samuel Marshall.		Plumber.	Red Bank.	
James O'Leary.		Mason.	Paterson.	
Thomas Barnes.		Painter.	Ocean Grove.	
George Littell.		Carpenter.	Bloomfield.	
Simon Aronowitz.		Painter.	Newark.	
George Langeor.	60	Painter.	Newark.	
Clarence Hunt.	17	Apprentice-Carp.	Newark.	
Frederic Kledke.	54	Mason.	Newark.	
Nathan Hill.	65	Bridge carpenter.	Sewaren.	Vulcan Detinning Co.
Raymond Nans.		Carpenter.	North Bergen.	
Charles Larken.	26	Bridge carpenter.	Pleasantville.	
James McCullough.	40	Carpenter.	Newark.	

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Building and Construction Employes.

Cause and Results of Injury.	Date.
Caught under falling chimney; instantly killed.	October 1
Fell 30 feet from roof to ground floor; internal injuries.	October 2
Fell 75 feet from collapsed scaffold; injured internally.	October 2
Fell from scaffold; died of injuries.	October 6
Fell from scaffold; not expected to recover.	October 6
Fell from scaffold; contusions of spine.	October 8
Fell 40 feet from scaffold; injured internally.	October 8
Fell from scaffold; dislocated shoulder.	October 13
Fell from roof to ground floor; instantly killed.	October 13
Defective scaffold broke; suffered broken leg.	October 14
Fell from roof to ground; broke kneecap.	October 15
Fell 25 feet to ground; broke leg and bruised body.	October 15
Heavy derrick fell; collarbone broken.	October 16
Fell from scaffold; both legs and back broken.	October 16
Fell 35 feet from ladder to ground; injured internally.	October 20
Fell from ladder to ground; killed instantly.	October 20
Fell from roof of barn to ground; killed instantly.	October 21
Fell from fourth story to ground; hip broken.	October 23
Fell from scaffold to ground; injured internally.	October 25
Fell 70 feet when stack collapsed; instantly killed.	October 26
Fell 70 feet when stack collapsed; instantly killed.	October 26
Fell from roof of two story house to ground; concussion of brain.	October 30
Heavy beam fell on head; fractured base of skull.	November 2
Iron bar fell on leg; ankle bones crushed.	November 3
Gasoline blower exploded igniting clothing; badly burned.	November 9
Fell from girder to ground; broke leg.	November 10
Fell from scaffold; broke both arms and fractured ribs.	November 12
Bank caved in while repairing water pipe; fractured three ribs.	November 12
While shoring up a 17-foot well, wall caved in; killed instantly.	November 12
Fell 16 feet from ladder; fractured base of skull.	November 16
Fell from ladder; injured internally.	November 17
Fell from second story of building to ground; broke arm and ankle.	November 18
Fell from third story of house to ground; killed instantly.	November 20
Fell down elevator shaft; broke arm and leg; had to be amputated.	November 20
Fell from scaffold to ground; head and body badly injured.	November 22
Brick fell from upper story on head; died two days later.	November 27
Fell from roof of building to ground; died of injuries.	December 1
Fell from roof of porch to ground; broke three ribs.	December 1
Hand caught in gear wheel of machine; four fingers cut off.	December 2
Fell from building; bruised about body.	December 6
Fell from building; neck broken; instantly killed.	December 6
Fell from building; broke leg.	December 8
Standing on beam being placed in position; rope broke; thrown 80 feet to ground; instantly killed.	December 10
Fell forty feet to ground from scaffold; concussion of brain; fractured leg.	December 11
Scaffold collapsed, fell forty feet to ground; instantly killed.	December 13
Scaffold collapsed, fell forty feet to ground; both legs broken.	December 13
Scaffold collapsed, fell forty feet; injured internally; not expected to recover.	December 13
Elevator fell on body; died two hours after accident.	December 16
Elevator fell on body; broke leg and injured internally.	December 16
Fell 35 feet from ladder; died from injuries.	December 16
Fell forty feet from roof of building; internal injuries.	December 17
Fell from roof of building to ground; broke three ribs and died later.	December 20
Fell from scaffold; broke three ribs.	January 17
Fell from scaffold; broke two ribs.	January 18
Fell from second story to cellar; fractured three ribs.	February 1
Load of bricks fell; body bruised and leg broken.	February 2
Scaffold collapsed thrown to ground; ankle broken.	February 8
Fell from roof of house; broke leg and body bruised.	February 16
Fell 30 feet from building to ground; broke leg and hip.	February 16
Fell 30 feet from scaffold; broke leg and arm.	February 18
Fell twenty feet from scaffold; fractured three ribs.	February 19
Chimney collapsed on body; died of injuries.	March 3
Run down by train on trestle; instantly killed.	March 5
Fell from scaffold; broke leg.	March 7
Heavy timber fell from place on head; died of injuries.	March 8
Fell from scaffold; died of injuries.	March 8

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Building and Construction  
Employes.—(Continued).

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
John Ashman	50	Carpenter.	Trenton.	Roebing Construction Co.
Philip Artier	37	Plasterer.	Newark.	
Samuel Abarduim	23	Carpenter.	Roosevelt.	Amer. Agri. Chem. Works.
William Ballantine.	25	Carpenter.	Summit.	
Antonio Lobertello.	51	Laborer.	Newark.	
John Schotola.	30	Carpenter.	Passaic.	
Arthur Wilkinson.		Carpenter.	Hackensack.	Oscar D. Banta.
Patrick Connolly.	31	Carpenter.	Jersey City.	
Joseph Gallagher.	27	Tinsmith.	Hoboken.	
Andrew Knick.	64	Mason.	Newark.	
Gerard Johnson.	25	Structural ironworker.	Bayonne.	Babcock & Wilcox Co.
Thomas McNamara.	40	Bricklayer.	Hoboken.	
Frank Salla.	40	Bricklayer.	Hoboken.	
Morris Rurecorana.	21		Hoboken.	
John McInerny.	33	Iron constructor.	Newark.	
Oliver Gutheil.	63	Carpenter.	Camden.	Barklow & Fulton.
Eli Jackson.	53	Carpenter.	Camden.	Barklow & Fulton.
Joseph R. Haley.		Mason.	Burlington.	
Bernard Finneran.	65	Carpenter.	Orange.	
Ernest Lingfield.		Machinist.	Plainfield.	Hall Printing Press Works.
William Barlow.	35	Marble setter.	New Brunswick.	Vermont Marble Co.
John Van Meddeworth.		Carpenter.	Middlebush.	
Michael Spado.	23	Laborer.	Hoboken.	
Rudolph Berkman.	25	Carpenter.	Jersey City.	
George W. Farley.		Carpenter.	Whitehouse.	
Henry Breslaw.	48	Carpenter.	Woodbine.	
August Cole.	40	Lather.	Jersey City.	
Thomas McKeon.	42	Plumber.	Paterson.	
Matthew Parks.	35	Carpenter.	Leona.	
Giovanna Garrabit.	35	Mason's helper.	Harrison.	
John Raltman.	44	Painter.	Jersey City.	Milton Pier.
Milton Pier.	40	Painter.	Jersey City.	Milton Pier.
George Harneger.	57	Carpenter.	W. Hoboken.	
Joseph Masuri.	25	Iron worker.	South Amboy.	
Frank Griffon.		Painter.	Paterson.	
James Weiss.	34	Painter.	Boonton.	
Adolph Masten.		Carpenter.	Jersey City.	Pennsylvania Railroad Co.
Morris Stahlman.		Tinsmith.	Jersey City.	
Charles Renschmidt.	43	Carpenter.	Newark.	
Edward Coghlen.	60	Roof.	Camden.	
Augustus Cornbs.		Mason.	Trenton.	Lewis Lawton & Son.
George Wamer.	30	Iron worker.	Bayonne.	Tidewater Oil Co.
Joseph Patterson.	27	Painter.	Newark.	
Thomas Furey.	40	Painter.	Weehawken.	
John Howard.	33	Iron worker.	Jersey City.	
Hyman Mandeline.		Structural ironworker.	Newark.	
Patrick White.	56	Carpenter.	Newark.	
Joseph Fialk.		Painter.	West Hoboken.	
John Kobin.	21	Carpenter.	Newark.	
Henry Veix.	24	Painter.	Newark.	
Israel Probinsky.	38	Carpenter.	Newark.	
Wesley Kerns.	21	Painter.	Trenton.	James G. Doak & Son.
Edward Hughes.	22	Painter.	Trenton.	James G. Doak & Son.
Otto Krueger.	29	Painter.	Jersey City.	Hudson Tunnels Co.
Nelson Erickson.	30	Structural ironworker.	Bloomfield.	Jenkins Mfg. Co.
George Johnson.		Carpenter.	Brevent Park.	Herbert R. Leonard.
Dominic Castanio.	27	Mason's laborer.	East Orange.	
Isadore Rosen.	30	Carpenter.	East Orange.	
William Parkinson.		Carpenter.	South River.	Henry Grobert.
Angelo Demato.	27	Mason's helper.	Jersey City.	
Oscar Schwartz.	43	Painter.	North Bergen.	
Albert Mitchell.	20	Steamfitter.	Jersey City.	
George Krumml.	40	Awning hanger.	Hoboken.	
Albert Roamer.	42	Carpenter.	Riverside.	
George McGowan.	20	Steam fitter.	Atlantic City.	
Anton Pinton.	20	Carpenter.	Camden.	
John Elliott.	34	Plumber.	Montclair.	

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Building and Construction  
Employes.—(Continued).

Cause and Results of Injury.	Date.
Fell from third story of building to ground; died of injuries.	March 9
Fell from scaffold; concussion of brain; broken collar bone.	March 9
Fell from scaffold; died of injuries.	March 16
Fell from scaffold; back broken; lower part of body paralyzed.	March 18
Fell from scaffold; died of injuries.	March 26
Fell through elevator shaft; died of injuries.	March 30
Fell from scaffold; broke arm and dislocated shoulder.	April 4
Fell from scaffold; broke arm.	April 5
Contact with live wire while repairing gutter of roof; instantly killed by shock.	April 6
Collapse of scaffold; ankle broken.	April 8
Crushed under falling chimney; died of injuries.	April 8
Collapse of scaffold; leg and arm broken.	April 8
Collapse of scaffold; both arms broken.	April 8
Collapse of scaffold; arm broken, injured internally.	April 8
Fall of iron beams; foot crushed.	April 12
Fell from scaffold; injured spine.	April 13
Fell from scaffold; injured internally.	April 18
Fell from scaffold; leg broken.	April 19
Fell down elevator shaft; fractured skull, broke arm.	April 23
Large machine fell on body; died of injuries.	April 25
Fell from scaffold; skull fractured.	April 27
Fell from ladder; instantly killed.	April 30
Fell from top of building to cellar; instantly killed.	April 30
Fell from roof of porch; fractured skull at base.	April 30
Fell from roof of house; three ribs broken.	April 30
Struck by heavy timber; died of injuries.	May 2
Fell from twelve-foot ladder; right leg broken.	May 2
Fell from third story of building; leg broken and injured internally.	May 2
Fell through breaking of scaffold; skull fractured.	May 2
Fell from scaffold; broke arm and bruised body.	May 7
Fell from scaffold on building; broke left arm.	May 10
Fell from scaffold on building; injured internally.	May 10
Fell from roof of house; two ribs broken.	May 11
Struck by engine; died of injuries two hours later.	May 12
Collapse of scaffold; broke arm and leg.	May 13
Collapse of scaffold; spine injured.	May 19
Fell from roof; right arm broken.	May 20
Fell from roof of building; fractured skull.	May 21
Fell from coping of house; injured internally.	May 23
Fell from roof; killed instantly.	May 25
Crushed under falling beam; both legs broken.	May 25
Fell from scaffold at top of tank; spine fractured.	May 28
Fell from ladder; rib and collar bone broken.	June 9
Fell from scaffold; fractured hip.	June 15
Fell from scaffold; injured severely internally.	June 15
Iron girder fell; leg broken.	June 15
Fell from scaffold; leg broken, knee dislocated.	June 16
Fell from roof of house; bruised body, leg broken.	June 17
Fell three stories from scaffold; back broken.	June 17
Fell from scaffold at third story; died of injuries.	June 20
Fell from scaffold; back broken; body paralyzed from waist.	June 29
Fell sixty feet to ground when scaffold collapsed; broke several ribs.	July 2
Fell sixty feet to ground when scaffold collapsed; arm fractured.	July 2
Fell from scaffold while painting power house; killed instantly.	July 6
Thirty foot section of chimney fell; both legs fractured.	July 6
Fell from scaffold; arm broken.	July 7
Fell from scaffold; broke several ribs; injured internally.	July 11
Fell from scaffold; died of injuries.	July 14
Fell from scaffold; broke three ribs.	July 15
Fell from second floor to basement; injured internally.	July 18
Fell from scaffold; arm broken; injured internally.	July 19
Struck by iron pipe; leg broken.	July 20
Fell from fifth floor to ground; killed instantly.	July 21
Fell from ladder; broke both legs.	July 22
Fell from third floor to ground; died of injuries.	July 22
Fell from scaffold; broke three ribs, head lacerated.	July 23
Fell from top of edge of roof; arm broken.	July 23

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Building and Construction  
Employes.—(Continued).

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
Elisha L. Harris.		Painter.	Elizabeth.	Joseph Allen.
Charles Stranger.	28	Carpenter.	Cranford.	
Joseph Smith.		Painter.	Elizabeth.	
John Larkins.	20	Carpenter.	West New York.	
John F. Judge.	27	Mason's helper.	West New York.	
John Bammann.	53	Painter.	Newark.	
Edward Bash.	43	Carpenter.	West New York.	
Patrick Connolly.	45	Carpenter.	Jersey City.	
John Philhower.		Foreman-bricklayer.	Jersey City.	
Jeremiah Sullivan.	29	Structural iron worker.	Trenton.	
Jeremiah Manning.	40	Roofer.	Harrison.	International Steam Pump Co.
Joel H. Smith.	30	Carpenter.	Plainfield.	
Morris Balnaud.	45	Painter.	Kearny.	
Robert Gerhart.	52	Painter.	Jersey City.	
Morris Seger.	32	Roofer.	Newark.	
Michael Sweeney.		Tinsmith.	Trenton.	
Thomas Nevind.	17	Painter.	Trenton.	
Joseph Bayliss.	38	Painter.	Elizabeth.	
John Smith.	35	Mason's helper.	New Providence.	
Henry Geiger.	23	Structural iron worker.	Jersey City.	Barrett-Haywood Co.
Patrick Galvin.	30	Structural iron worker.	Jersey City.	Barrett-Haywood Co.
Alexander Keith.	45	Structural iron worker.	Jersey City.	Barrett-Haywood Co.
Charles Tenure.	53	Carpenter.	Deal.	
Charles Eckert.	58	Roofer.	Camden.	
Julius Pfinger.	23	Carpenter.	Newark.	
William Pope.		Carpenter.	Newark.	
William Dillingham.	26	Painter.	Little Silver.	
Thomas J. O'Brien.		Carpenter.	Newark.	Russell-Robinson Co.
Benjamin Paterson.	19	Plumber.	Bayonne.	
John Lergen.	20	Painter.	Shadyside.	
Robert McClury.	38	Rigger.	Jersey City.	
Christopher Risner.		Roofer.	Newark.	
		Carpenter.	Granton.	

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Building and Construction  
Employees.—(Continued).

Cause and Results of Injury	Date.
Caught between moving engine and girder of bridge; killed instantly.	July 27
Fell from scaffold; arm broken.	July 27
Fell from scaffold; fractured skull.	July 28
Fell from scaffold; injured internally.	August 2
Fell from scaffold with hod of bricks; leg broken.	August 11
Contact with live wire; died of injuries.	August 12
Fell from scaffold; injured spine; cannot recover.	August 12
Fell from scaffold; arm and nose broken.	August 13
Fell from second story to ground; broke three ribs; died of injuries.	August 13
Crushed under collapsed walls; five ribs broken.	August 14
Fell from roof of building; one leg and one arm broken.	August 17
Arm gashed by glancing blow of ax; permanently injured.	August 20
Fell from scaffold; compound fracture of leg.	August 22
Fell from scaffold; injured internally.	August 22
Fell from scaffold; died of injuries.	August 23
Fell from roof; injured internally.	August 23
Collapse of scaffold; thrown from steeple to roof; leg broken.	August 30
Struck by train while painting bridge; killed instantly.	August 31
Fell forty feet with collapsed scaffold; part of scalp torn off.	September 2
Scaffold collapsed; died of injuries.	September 2
Scaffold collapsed; both ankles broken.	September 2
Scaffold collapsed; injured internally.	September 2
Fell forty feet to ground; when scaffold tilted; injured internally.	September 5
Fell from roof; fractured skull and injured internally.	September 9
Fell from ladder; fractured skull; died of injuries.	September 12
Fell from scaffold; both wrists and one foot broken.	September 12
Fell from ladder; broke two ribs.	September 13
Struck by falling beam; skull fractured.	September 16
Fell from scaffold; broke shoulder blade and nose.	September 16
Fell from mast into vat of hot tar in hold; broke leg; badly burned.	September 22
Fell from scaffold; died instantly.	September 22
Fell from roof; concussion of brain.	September 28
Fell from scaffold; broke both legs.	September 29

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Linemen and Other Electrical Workmen.

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
Richard Stalker.		Lineman.	Elizabeth.	Public Service Corp.
Alfred H. McArthur.	29	Electrician.	East Newark.	Clark Thread Co.
John M. Forker.		Lineman.	Trenton.	Trenton Street Railway Co.
John Coats.		Lineman.	Cherryville.	Public Service Corp.
Patrick McGurty.	27	Electrician.	Newark.	
William J. Wirtz.	30	Electrician.	Newark.	N. Y. & N. J. Telephone Co.
W. B. Sheppard.		Electrical engineer.	Red Bank.	
Anthony Deperio.		Laborer.	Newark.	Public Service Corp.
Oscar Thompson.		Lineman.	Camden.	Delaware & Atlantic Tele. Co.
William Hogan.	28	Lineman.	Union Hill.	N. Y. & N. J. Telephone Co.
Ralph Waldon.	22	Electrician.	Newark.	Public Service Corp.
Frank Madden.	32	Electrician.	Jersey City.	Erie Railroad Powerhouse.
William Shannon.		Lineman.	Trenton.	Bell Telephone Co.
Henry Shord.		Lineman.	Nutley.	Public Service Corp.
Raymond Wright.	35	Electrician.	Camden.	Pennsylvania R. R. Powerhouse.
Leon A. Keath.		Lineman.	Boonton.	Boonton Electric Co.
John Kiley.	45	Lineman.	Harrison.	N. Y. & N. J. Telephone Co.
August Brandt.	35	Lineman.	Secaucus.	Public Service Corp.
Augustus Justice.	72	Lineman.	Trenton.	Delaware & Atlantic Tele. Co.
David Peterson.		Electrician.	Woodstown.	Woodstown Electric Co.
Edward Harris.		Lineman.	Westfield.	Public Service Corp.
C. R. Grant.	34	Electrician.	Camden.	
James Noonan.	30	Lineman.	Asbury Park.	
William Ladue.		Assistant Supt.	Jersey City.	Public Service Corp.
Gustave Grossi.	53	Electrician.	Hoboken.	
Joseph Malleis.	28	Lineman.	Morristown.	N. Y. & N. J. Telephone Co.
George W. Ford.		Electrician.	Deal Beach.	
Frank McDonighe.		Lineman.	Metuchen.	
Louis Van Sickel.	33	Lineman.	Trenton.	Inter State Phone Co.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Linemen and Other Electrical Workmen.

Cause and Results of Injury.	Date.
Contact with live wire while repairing; severely burned.	October 11
Fell from ladder; fractured skull.	October 11
Fell from repair car; injured internally.	October 15
Fell from pole; broke leg.	October 19
Fuse blew out; face and hands burned.	October 22
Temporary elevator fell on head; badly crushed.	October 23
Explosion of boiler; face and arms scalded.	October 28
Crushed between coal cars; instantly killed.	November 2
Fell from pole; concussion of spine.	November 12
Defective insulation wires in conduit blew out; face and hands burned.	November 29
Shocked by transformer; killed instantly.	December 12
Crushed between driving belt and pulley; instantly killed.	December 12
Shocked at top of forty-five foot pole, fell to street; died of injuries.	December 28
Struck on head by ax that fell fifty feet from belt of fellow workman; died of injuries.	January 10
Explosion of dynamite; died of injuries.	February 7
Caught live wire with both hands to prevent fall; severely burned about hands and shocked.	February 25
Contact with end of live cable; killed by shock.	March 7
Accidentally grasped live wire; flesh burned from hands.	March 24
Caught under pole that fell; died of injuries.	March 25
Fall of casting; leg broken.	April 28
Fell from pole; broke arm, injured internally.	May 21
Fell from scaffold; collarbone broken.	June 7
Contact with live wire; both arms and one leg burned.	July 9
Explosion of gas and electric flame; face and hands burned.	July 11
Touched bare wire tip; 1200 volt shock; condition critical.	July 24
Fell from pole; injured spine; bruised body.	August 4
Stunned by electric shock while in manhole; one leg amputated.	August 4
Fell from pole; killed instantly.	August 24
Fell with decayed pole; died of injuries.	September 8

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Tunnelmen, Bank Diggers  
and Other Laborers.

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
Joseph Kaiser.	35	Bankdigger	Jersey City.	Millard Construction Co.
Angelo Domensky		Bankdigger	Jersey City.	Millard Construction Co.
Luca Bartelle.	24	Bankdigger	Jersey City.	Millard Construction Co.
Tony Fudiaro.	24	Bankdigger	Jersey City.	Millard Construction Co.
Joseph Braekner.	50	Bankdigger	Jersey City.	Millard Construction Co.
Edward Kline.	45	Bankdigger	Jersey City.	Millard Construction Co.
John Grossfuss.		Bankdigger	Jersey City.	Millard Construction Co.
Daniel Hannagan.	54	Bankdigger	Jersey City.	Millard Construction Co.
Tuberto Braache.	19	Bankdigger	Jersey City.	Millard Construction Co.
Andrew Jackson.		Laborer	Stanton.	
Joseph Donsky.		Bankdigger	Jersey City.	Millard Construction Co.
Adam Longasky.	48	Bankdigger	Jersey City.	Millard Construction Co.
Joseph Katboskey.	26	Bankdigger	Jersey City.	Millard Construction Co.
Anthony Kasinski.	26	Bankdigger	Jersey City.	Millard Construction Co.
Michael Koparc.		Laborer	Jersey City.	Millard Construction Co.
John Simons.	43	Laborer.	Weehawken.	A. Eyforth
John Moselle.		Laborer.	Jersey City.	Millard Construction Co.
William Convoice.		Trenchdigger.	Tranley.	
John Reynolds.		Bankdigger.	South River.	D. Aliers Brick Co.
Antonio Jacobs.	40	Laborer.	Weehawken.	Hudson & Manhattan Ry. Co.
Vittorio Mellillo.	30	Excavator.	Newark.	Newark Board of Works.
Roxe Zennriba.		Excavator.	Newark.	Newark Board of Works.
Michael Saverdius.		Trenchdigger.	Gloucester.	
John Wallace.		Trenchdigger.	Gloucester.	
Joseph Cutler.		Laborer.	Gloucester.	
Horace Kircher.		Laborer.	Woodbury.	
Michael Basnoch.		Laborer.	Woodbury.	
Andrew Betner.		Miner.	Mount Hope.	
Frank Cranin.		Miner.	Mount Hope.	
Tony Millasco.	30	Miner.	Mount Hope.	
Frank Wallenski.	25	Bankdigger.	Jersey City.	Millard Construction Co.
		Bankdigger.	Jersey City.	Millard Construction Co.
		Bankdigger.	Jersey City.	Millard Construction Co.
		Bankdigger.	Jersey City.	Millard Construction Co.
Andrew Craemor.		Miner.	Franklin Furn.	New Jersey Zinc Co.
		Quarry worker.	Ogdensburg.	Bigelow & Swain.
		Quarry worker.	Ogdensburg.	Bigelow & Swain.
Frank Phillips.	40	Quarry worker.	Ogdensburg.	Bigelow & Swain.
John Lischise.		Bankdigger.	Jersey City.	Millard Construction Co.
John Kunkman.		Miner.	Franklin Furn.	New Jersey Zinc Co.
Joseph Mihloot.		Miner.	Wharton.	Wharton Steel Co.
John Lingora.		Miner.	Wharton.	Wharton Steel Co.
Peter Phillips.	46	Miner.	Franklin Furn.	New Jersey Zinc Co.
Tony Zevredo.	30	Quarry worker.	Rocky Hill.	Del. River Quarry & Cons. Co.
Paul Shemo.		Laborer.	Newark.	
John Kucera.	43	Laborer.	Oxford Furnace.	Empire Steel & Iron Co.
Antonio Cerni.	45	Claydigger.	Perth Amboy.	L. H. McHose.
Antonio Dvsetto.	31	Bankdigger.	Perth Amboy.	L. H. McHose.
Frederic Muchler.		Ceillardigger.	Newark.	
		Foreman.	Rocky Hill.	Del. River Quarry & Cons. Co.
John Pauli.		Quarry worker.	Port Monmouth.	
		Laborer.	Trenton.	James Ross.
		Laborer.	Andover.	David Flickwir.
John Rodin.	27	Laborer.	Andover.	David Flickwir.
Pospaino Costus.	30	Laborer.	Weehawken.	
		Laborer.	West Hoboken.	
Edward Grimm.	16	Laborer.	Huntsville.	W. H. Gahegan.
Louis Zanelsky.	50	Laborer.	Newark.	W. L. Blanchard.
Paul Sesewizse.	25	Laborer.	Newark.	W. L. Blanchard.
Richard Dillon.	38	Laborer.	Hamburg.	Atlas Cement Co.
Samuel Kupfer.		Laborer.	Jersey City.	Millard Construction Co.
Stephen Rudh.		Laborer.	Roseville.	Waltz & Reece.
Samuel Dulra.		Laborer.	Roseville.	Waltz & Reece.
Michael Hudley.		Laborer.	Roseville.	Waltz & Reece.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Tunnelmen, Bank Diggers  
and Other Laborers.

Cause and Results of Injury.	Date.
Fell into open hole; fractured arm and leg.	October 2
Stone fell from scale box on head; fractured skull.	October 2
Stone fell from scale box on head; fractured skull.	October 11
Fell 75 feet from bank into pit; killed instantly.	October 12
Struck by flying stones from blast; died of injuries.	October 15
Stones fell from scale box; injured internally.	October 15
Heavy stone rolled from embankment; foot crushed.	October 15
Struck by flying stones from blast; back injured.	October 15
Caught in pit that caved in; legs and arms crushed.	October 18
Struck on head by shovel of fellow-workman; skull fractured.	October 18
Heavy stone rolled from embankment; foot crushed.	October 21
Car overturned, pinned underneath; leg crushed.	October 21
Stones fell from scale box; injured internally.	October 21
Stones fell from scale box; injured internally.	October 21
Embankment caved in on body; killed instantly.	October 22
Heavy stone fell from wagon; fractured foot.	October 28
Tripped and fell into hole; died of injuries.	October 29
Large pipe fell, struck body; injured internally.	October 29
Blast exploded prematurely; injured internally.	October 31
Bank of clay caved in on body; instantly killed.	November 5
Large beam fell on head; severe scalp wounds.	November 8
Sewer gas exploded; killed instantly.	November 13
Sewer gas exploded; killed instantly.	November 13
Embankment caved in on body; killed instantly.	November 15
Embankment caved in on body; killed instantly.	November 15
Embankment caved in on body; killed instantly.	November 15
Gravel pit caved in; died of injuries.	November 15
Gravel pit caved in; died of injuries.	November 15
Mine walls collapsed; instantly killed.	November 15
Mine walls collapsed; instantly killed.	November 18
Mine walls collapsed; instantly killed.	November 18
Mine walls collapsed; instantly killed.	November 18
Rocks fell from top of shaft; broke both legs.	December 1
Wall of rock fell on body; killed instantly.	December 11
Wall of rock fell on body; killed instantly.	December 11
Wall of rock fell on body; killed instantly.	December 11
Embankment caved in; died of injuries.	December 11
Blast exploded prematurely; severely burned.	December 30
Blast exploded prematurely; severely burned.	December 30
Blast exploded prematurely; severely burned.	December 30
Derrick fell on body; killed instantly.	January 26
Mine prop fell; broke both legs.	January 27
Derrick fell on body; died of injuries.	February 10
Struck by falling derrick; arm and hip broken.	February 10
Fell from car ascending shaft; killed instantly.	February 17
Explosion of dynamite caused by pick striking it; killed.	February 23
Fell into cellar excavation; leg broken.	February 25
Fell from elevator when cable broke; killed instantly.	February 28
Embankment caved in; killed instantly.	March 2
Embankment caved in on body; died of injuries.	March 2
Embankment caved in on body; instantly killed.	March 4
Bottom of lifting car struck head; died of injuries.	March 4
Blast exploded prematurely; hand blown off.	March 9
Struck by derrick; broken collarbone.	March 10
Run down by train; died of injuries.	March 15
Struck by train; one leg severed.	March 18
Blast exploded prematurely; eyesight destroyed.	March 22
Fell into stone crusher; both legs and one arm had to be amputated.	March 25
Caught under load of rock dumped by car; instantly killed.	April 4
Crushed by falling wall; instantly killed.	April 5
Crushed by falling wall; instantly killed.	April 5
Blast exploded prematurely; eyesight destroyed.	April 11
Rock fell from embankment; broke leg.	April 13
Blast exploded prematurely; instantly killed.	April 14
Blast exploded prematurely; instantly killed.	April 14
Blast exploded prematurely; instantly killed.	April 14
Blast exploded prematurely; instantly killed.	April 14

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Tunnelmen, Bank Diggers and  
Other Laborers.—(Continued).

Name of Injured Workman.	Age yrs.	Occupation.	Name of Place Accident Occurred.	Name of Employer.
		Laborer.	Roseville.	Waltz & Reece.
Joseph Nixon.		Laborer.	Ocean Grove.	
Bartholomew Smullen.	60	Laborer.	Sayreville.	Sayre & Fisher.
William Layton.	50	Laborer.	Sea Girt.	
George Senniff.		Laborer.	Masonville.	Charles Horner.
Joseph I. Henry.	34	Laborer.	North Bergen.	
Peter George.	26	Laborer.	Ogdensburg.	Bigelow & Swain.
George Dorman.		Miner.	Wharton.	Thomas Iron Co.
Joseph Sauls.		Miner.	Wharton.	Thomas Iron Co.
Paul Dejenko.		Miner.	Wharton.	Thomas Iron Co.
John Johanko.		Miner.	Wharton.	Thomas Iron Co.
Charles Caprino.		Miner.	Wharton.	Thomas Iron Co.
		Miner.	Wharton.	Thomas Iron Co.
Edwin Finnegan.		Engineer.	Franklin Furn.	New Jersey Zinc Co.
Frank South.	25	Miner.	Franklin Furn.	New Jersey Zinc Co.
Mason Bausen.	50	Laborer.	Wharton.	
Michael Folas.	26	Miner.	Mount Hope.	Empire Steel & Iron Co.
Michael Biniak.	52	Miner.	Mount Hope.	Empire Steel & Iron Co.
Joseph Matuscek.	43	Miner.	Mount Hope.	Empire Steel & Iron Co.
Tony Raphael.	14	Driver.	Newark.	
Charles Carbone.		Quarryman.	Lambertville.	Del. River Quarry & Cons. Co.
Nordo Oliveri.	18	Laborer.	Newark.	
Nicholas Bassolo.	24	Laborer.	West New York.	
Joseph W. Walsh.	28	Miner.	Mount Hope.	Empire Steel & Iron Co.
John Ballis.	40	Tunnel laborer.	Jersey City.	
George Williams.	38	Laborer.	Chesilhurst.	
Giacomo Riepsio.	19	Laborer.	Tabor Lake.	Morris County Traction Co.
Joseph Sorino.	26	Laborer.	Bordentown.	
Dominic Sabino.	25	Laborer.	Short Hills.	
Henry Larsen.	60	Well-digger.	Perth Amboy.	
Pasquale Silverio.	40	Laborer.	Trenton.	
Clementa Marca.	34	Laborer.	Trenton.	
Joseph Bauman.	19	Laborer.	Bergen Hill.	Erie Railroad Co.
John Blass.	35	Laborer.	Bergen Hill.	Erie Railroad Co.
James Feeney.	50	Laborer.	Bergen Hill.	Erie Railroad Co.
Louis Martini.	45	Laborer.	Bergen Hill.	Erie Railroad Co.
Frederic Schurer.	20	Laborer.	Bergen Hill.	Erie Railroad Co.
William Hallesey.	28	Laborer.	Bergen Hill.	Erie Railroad Co.
Angelo Parecano.	23	Laborer.	Bergen Hill.	Erie Railroad Co.
Vincenzo Colonzono.	54	Laborer.	Bergen Hill.	Erie Railroad Co.
Edward Coleman.	35	Laborer.	Bergen Hill.	Erie Railroad Co.
		Laborer.	Bergen Hill.	Erie Railroad Co.
George Blass.	26	Laborer.	Bergen Hill.	Erie Railroad Co.
John Lewis.	40	Laborer.	Bergen Hill.	Erie Railroad Co.
Charles Reu.	19	Laborer.	Bergen Hill.	Erie Railroad Co.
Fantaleone Cortello.	35	Laborer.	Bergen Hill.	Erie Railroad Co.
W. J. Johnson.	37	Laborer.	Bergen Hill.	Erie Railroad Co.
Angelo Delalano.	50	Laborer.	Bergen Hill.	Erie Railroad Co.
Pero Benenatto.	55	Laborer.	Bergen Hill.	Erie Railroad Co.
Leo Fortelli.	30	Laborer.	Bergen Hill.	Erie Railroad Co.
Joseph Cutoni.	25	Laborer.	Bergen Hill.	Erie Railroad Co.
John Kotlase.	26	Laborer.	Perth Amboy.	Atlantic Terra Cotta Co.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Tunnelmen, Bank Diggers and  
Other Laborers.—(Continued).

Cause and Results of Injury.	Date.
Blast exploded prematurely; instantly killed.	April 14
Fell into trench; broke leg.	April 27
Embankment caved in on body; died of injuries.	May 14
Crushed between cars; died of injuries.	May 19
Embankment caved in on body; died of injuries.	May 20
Crushed under dump-car being unloaded; killed.	May 21
Dynamite exploded prematurely; face injured; destroyed eyesight of one eye.	June 2
Ore car in which he was being hoisted up shaft, upset; fell 700 feet to bottom of mine; killed instantly.	June 7
Ore car in which he was being hoisted up shaft, upset; fell 700 feet to bottom of mine; killed instantly.	June 7
Ore car in which he was being hoisted up shaft, upset; fell 700 feet to bottom of shaft; killed instantly.	June 7
Ore car in which he was being hoisted up shaft, upset; fell 700 feet to bottom of shaft; killed instantly.	June 7
Ore car in which he was being hoisted up shaft, upset; fell 700 feet to bottom of shaft; killed instantly.	June 7
Ore car in which he was being hoisted up shaft, upset; fell 700 feet to bottom of shaft; killed instantly.	June 7
Fell eighty feet from trestle; compound fracture of leg.	June 8
Cave-in of rock and earth; killed instantly.	June 14
Fell from high trestle, killed instantly.	June 18
Shaft caved in; leg amputated; not expected to recover.	June 25
Shaft caved in; fractured skull.	June 25
Shaft caved in; shoulder broken.	June 25
Struck by tilted end of car; ear and scalp badly cut.	June 28
Explosion of dynamite; leg broken.	July 2
Fall of rock while digging trench; fractured skull.	July 8
Large stone rolled from embankment; broke leg.	July 12
Thrown from ore car to bottom of shaft; killed instantly.	July 14
Struck by falling timber; leg broken.	July 26
Buried under cave-in of sand pit; died of injuries.	July 26
Carried down incline by runaway car; dropped forty feet; killed.	August 2
Bank not braced, caved in; injured internally.	August 12
Buried under cave-in of bank; died of injuries.	August 17
Buried under cave-in of well; died of suffocation.	August 22
Buried under cave-in of trench; injured internally.	August 31
Buried under cave-in of trench; ribs broken.	August 31
Tunnel roof caved in; killed instantly.	September 10
Tunnel roof caved in; killed instantly.	September 10
Tunnel roof caved in; killed instantly.	September 10
Tunnel roof caved in; killed instantly.	September 10
Tunnel roof caved in; killed instantly.	September 10
Tunnel roof caved in; killed instantly.	September 10
Tunnel roof caved in; died of injuries.	September 10
Tunnel roof caved in; died of injuries.	September 10
Tunnel roof caved in; died of injuries.	September 10
Tunnel roof caved in; died of injuries.	September 10
Tunnel roof caved in; body severely crushed.	September 10
Tunnel roof caved in; injured internally.	September 10
Tunnel roof caved in; leg broken.	September 10
Tunnel roof caved in; leg badly crushed.	September 10
Tunnel roof caved in; legs badly crushed.	September 10
Tunnel roof caved in; head and body crushed.	September 10
Tunnel roof caved in; injured internally.	September 10
Tunnel roof caved in; head crushed.	September 10
Tunnel roof caved in; both legs crushed.	September 10
Struck on head by coupling pin; skull fractured.	September 29

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Unclassified.

Name of Injured Workman.	Age yrs.	Occupation	Place Where Accident Occurred.	Name of Employer.
William White.	35	Stableman.	Newark.	
Frank Ruao.		Forester.	Belleville.	
Jacob Wiely.	38	Deckhand.	New Brunswick.	Pennsylvania Railroad Co.
Charles Remsberg.	40	Stableman.	Montclair.	A. F. Kannan & Son.
Edward Dorsey.		Laborer.	Trenton.	Public Service Corp.
Samuel Smith.		Grocery clerk.	Burlington.	Moses Gardner.
Eugene Coster.		Driver.	Newark.	Peoples Express Co.
Ennis Bawn.		Grocery clerk.	Trenton.	J. H. Blackwell & Sons.
John Walsh.		Teamster.	Newark.	
George Malgde.		Lumbercutter	Jersey City.	Steers Lumber Co.
William H. Wilson.	27	Shipbuilder.	Camden.	New York Shipbuilding Co.
Thomas Giffons.		Teamster.	Camden.	H. A. McClement.
Joseph Morris.		Laborer.	Oceanport.	Rumson Country Club.
Charles Olsen.		Dock laborer.	Newark.	
George Morgan.	35	Rigger.	Camden.	Public Service Corp.
John Totty.	38	Laborer.	Kearny.	New York & New Jersey Water Co.
Ralph Otavio.		Laborer.		Public Service Corp.
Henry Schroeder.		Street cleaner.	Trenton.	City of Trenton.
Michael Lewis.	60	Shipbuilder.	Camden.	Dialogues Shipbuilding Co.
George Wilhelm.	40	Driver.	Newark.	Trefz Brewing Co.
Charles Schultz.	24	Teamster.	Newark.	Linderman & Co.
William Quirk.		Grocery Clerk.		
Frank G. Crowder.		Pipeline worker.	Egg Harbor City.	
George Washington.		Gas maker.	Newton.	Newton Gas & Electric Co.
William Palmer.	19	Driver.	Asbury Park.	
Jacob Benzing.		Driver.	Elizabeth.	
Charles Carberry.	22	Laborer.	Camden.	New York Shipbuilding Co.
Jacob Doll.	60	Watchman.	Newark.	Wilkinson, Gaddis Co.
George Clark.	50	Driver.	Belleville.	N. Y. & N. J. Water Co.
George Lanning.	22	Laborer.	Hampton.	
James McIntire.	55	Driver.	Bridgeton.	Sanitary Can Co.
James Donahue.		Driver.	Hoboken.	
Thomas Gallagher.	33	Laborer.	Kearny.	Pennsylvania Railroad Co.
Alexander Harkins.	18	Shipbuilder.	Camden.	New York Shipbuilding Co.
Michael Eliano.		Laborer.	Communipaw.	N. Y. Cent. & Hudson River R. R.
Thomas Buckley.	25	Woodturner.	Marion.	Barnes Lumber Co.
Carl Doll.		Laborer.	Waterloo.	
George Van Allen.	26	Driver.	Hasbrouck Hghts.	
Elsworth Coleman.	23	Steeplejack.	Paterson.	
John Carey.	21	Elevator operator.	Newark.	Goerke & Co.
Charles Ford.		Pressman.	Trenton.	MacCrellich & Quigley.
John Clark.		Laborer.	South Amboy.	
Walter Jessup.		Engineer.	Paterson.	
Charles Von Audle.		Fireman.	Paterson.	Public Service Corp.
Ralph H. Reeder.		Laborer.	Bordentown.	American Dredging Co.
John Hadfield.	47	Laborer.	Camden.	New York Shipbuilding Co.
David Miller.	45	Teamster.	Camden.	R. F. Smith & Son.
Edward Guety.	27	Teamster.	Jersey City.	
John Keeley.		Laundry-worker.	Hoboken.	
P. F. Errickson.		Drydock worker.	Perth Amboy.	Perth Amboy Dry Dock Co.
Henry Janke.		Teamster.	Cliffside.	
Daniel Everman.		Woodworker.	Sussex.	Decker & Simpson.
James Henderson.		Grocery clerk.	Bernardsville.	
John Decker.		Teamster.	Paterson.	
Joseph Babick.		Wireman.	Camden.	New York Shipbuilding Co.
Jeremiah McCarty.		Janitor.	Elizabeth.	
Peter Franklin.	21	Shipbuilder.	Camden.	New York Shipbuilding Co.
John Beagle.	50	Laborer.	Hampton.	Central R. R. of New Jersey.
George Muller.	30	Baker.	Union Hill.	Frantz Brandt.
Heinrich Winkelman.	45	Longshoreman.	Hoboken.	North German Lloyd Co.
Ernest Laurence.	41	Laborer.	Cranford.	
Frederic Morehouse.	40	Boatman.		
Helm H. Sparks.	66	Ship-joiner	Camden.	Dialogues Shipbuilding Co.
William Ferguson.	34	Shipbuilder.	Camden.	New York Shipbuilding Co.
Thomas Bowe.	52	Shipbuilder.	Camden.	Dialogues Shipbuilding Co.
William Ayres.	23	Pressman.	Ato.	
L. Dunham.		Woodworker.	Metuchen.	East Jersey Lumber Co.

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Unclassified.

Cause and Results of Injury.	Date.
Fell from ladder; arm broken.	October 2
Fell from tree; injured internally.	October 4
Caught between tug and float; badly crushed.	October 5
Fell from hayloft; killed instantly.	October 5
Arm caught in belt; severed.	October 8
Gasoline tank exploded; face and hands burned.	October 11
Run down by trolley car; head badly cut.	October 13
Ran splinter in hand; blood poison developed.	October 13
Load of stone fell on body; died of injuries.	October 14
Adze slipped from lumber; ankle badly cut.	October 16
Maul fell on hand; badly crushed.	October 19
Truck ran over body; killed instantly.	October 25
Hand caught in machinery of grasscutter; two fingers severed.	October 26
Pile of lumber fell on body; injured internally.	October 27
Chain block fell on body; spine injured.	October 29
Derrick descended on body; fractured skull.	October 29
Heavy stone fell; foot crushed.	October 30
Run down by automobile; died of injuries.	October 30
Hand caught in machinery; three fingers severed.	November 5
Thrown from wagon on head; died of injuries.	November 13
Fell from hayloft; fractured skull.	November 15
Fell down cellar carrying sack of potatoes, died of injuries.	November 16
Fell from pipe into river; drowned.	November 17
Caught in machinery; arm severed.	November 29
Run down by train; instantly killed.	November 29
Thrown from wagon on head; instantly killed.	December 2
Fell from platform; fractured arm and shoulder.	December 2
Fell through elevator shaft; broke collarbone.	December 7
Run down by train; instantly killed.	December 10
Caught in coal crusher; mangled; died of injuries.	December 12
Run down by trolley-car; killed instantly.	December 18
Truck ran over body; died of injuries.	December 18
Pile driver struck head; instantly killed.	December 20
Struck by steel plate that slipped from crane; died of injuries.	December 29
Hoisting bucket struck head; died of injuries.	December 30
Hand caught in circular saw; severed.	January 3
Caught in machinery; leg broken.	January 4
Wagon overturned on body; died of injuries.	January 6
Fell from scaffold; died of injuries.	January 17
Caught between wall and ascending elevator; arm severed.	January 19
Hand caught in press; thumb severed.	January 20
Handle of chute struck face; jaw broken.	January 21
Blood poisoning from injury to hand; died.	January 22
Struck by pieces of boiler that exploded; died of injuries.	January 22
Arm caught in machinery; broke.	January 24
Hand caught in machinery; two fingers severed.	February 4
Run down by train; instantly killed.	February 7
Truck fell on body; broke arm and leg.	February 8
Caught in machinery; leg fractured.	February 8
Slipped and fell from platform; leg broken.	February 8
Fell from wagon, horse ran away; leg broken.	February 8
Fell against circular saw; hand badly mangled.	February 10
Caught in ice-plant machinery; body crushed.	February 15
Fell from wagon on head; died of injuries.	February 15
Fell from scaffold; injured internally.	February 20
Fell from ladder; leg broken.	February 27
Struck in eye by steel splinter; sight of one eye destroyed.	March 1
Fell from trestle; died of injuries.	March 2
Ladle of boiling lard overturned; face and hands burned.	March 3
Fell from deck to hold of ship at dock; died of injuries.	March 18
Bricks fell from wall on hand; four fingers severed.	March 19
Fell into hold of boat; instantly killed.	March 26
Fell into hold of vessel; died of injuries.	March 29
Fell from platform; broke three ribs.	April 9
Heavy iron plate fell; foot crushed.	April 10
Hand caught in press; two fingers severed.	April 20
Hand caught in circular saw; badly mangled.	April 20

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Unclassified.—(Continued).

Name of Injured Workman.	Age yrs.	Occupation.	Place Where Accident Occurred.	Name of Employer.
Henry Gretchen		Blacksmith.	Montvale.	
Robert Max		Laborer.	Plainfield.	Union Beef Co.
John W. Wonderland	21	Woodworker.	Marlton.	
Charles Mathison	50	Laborer.	Newark.	Newark Meadow Impr. Co.
John McDermott	64	Laborer.	Cinnanninson.	
Walter Steiwald		Fireman (Public).	Newark.	Newark Fire Department.
Joel McDade		Fireman.	Camden.	Tug at Dialogues Shipbuilding Co.
William White		Fireman.	Camden.	Tug at Dialogues Shipbuilding Co.
John Clark		Deckhand.	Camden.	Tug at Dialogues Shipbuilding Co.
George Dunlop		Deckhand.	Camden.	Tug at Dialogues Shipbuilding Co.
Marvin Evans		Deckhand.	Camden.	Tug at Dialogues Shipbuilding Co.
George Hargis		Chief Engineer.	Camden.	Tug at Dialogues Shipbuilding Co.
John Roeder	33	Laborer.	Hoboken.	Public Service Corp.
Columba Scaria	24	Laborer.	Jersey City.	Collins & Laverty.
Henry Vaughn	44	Shipbuilder.	Camden.	New York Shipbuilding Co.
Thomas Mullen		Mule-driver.		Woodward Co.
Frank Erickson	49	Rigger.	Harrison.	
Peter Tolt	36	Deckhand.	Jersey City.	
		Laborer.	Haddonfield.	Public Service Corp.
		Laborer.	South Amboy.	Cantwell Construction Co.
David Katz	33	Store clerk.	Asbury Park.	
Charles Eisle		Foreman.	Edgewater.	Patterson, Eisle & Co.
James Foodhouse	56	Teamster.	Newark.	
William Kanath		Blacksmith.	Bayonne.	
Ernest Matzert	30	Baker.	Riverside.	
Nickola Carrino	36	Laborer.	Newark.	Public Service Corp.
Michael Lanna	30	Steeplejack.	Jersey City.	
Andrew Olsen	36	Bargeman.	Raritan Bay.	
Joseph Olsen	35	Deckhand.	Newark.	
Richard Schroeder	32	Laborer.	Riverside.	
Otto Johnson	30	Freight handler.	Hoboken.	
George Taylor	28	Freight handler.	Hoboken.	
Louis Mordaf	31	Lumberworker.	Kearny.	Trexler Lumber Co.
Manuello Secela	50	Laborer.	Jersey City.	Millard Construction Co.
George Landgrof	39	Garage employe	Newark.	
Spencer Babcock	48	Fireman.	Jersey City.	Jersey City Fire Department.
Brehm		Fireman.	Jersey City.	Jersey City Fire Department.
Frank Baldwin	48	Expressman.	New Brunswick.	
Harvey Roberts	45	Teamster.	Gloucester.	J. R. Quigley Co.
Antonio Basso	27	Laborer.	Hoboken.	
		Driver.	Union Hill.	Nagle Construction Co.
William Fisher	27	Teamster.	Camden.	Camden White Lead Works.
Patrick Hughes	70	Watchman.	Jersey City.	Millard Construction Co.
Nicholas Demarco		Laborer.	Chatham.	Public Service Corp.
Carmino Blanco		Laborer.	Chatham.	Public Service Corp.
Charles Chamberlain	35	Rigger.	Harrison.	
Samuel Cohen		Fireman.	East Orange.	East Orange Fire Department.
Frank Thompson		Laborer.	Newark.	Cook & Genning Co.
Joseph Smith	34	Longshoreman	Hoboken.	
Simon Brodsky		Laborer.	Trenton.	
Maurice Corello	38	Sausage-maker.	Paterson.	
George Obett		Millworker.	Trenton.	Wilson & Stokes Lumber Co.
Archibald Pollard	31	Laborer.	Camden.	David Baird Co.
John Stroebel	40	Teamster.	Union Hill.	

## INDUSTRIAL CHRONOLOGY.

Accidents to Workmen, While on Duty, for the Twelve Months Ending  
September 30, 1910.—Unclassified.—(Continued).

Cause and Results of Injury.	Date.
Struck in eye by edge of flying chisel; sight destroyed.	April 20
Barrel of pork fell on body; broke leg.	April 22
Fell against circular saw; both legs mangled.	April 27
Explosion of steam boiler; killed instantly.	May 2
Crushed by falling earth; lung pierced by broken rib.	May 4
Caught under falling building; injured internally.	May 4
Boiler exploded; killed instantly.	May 7
Boiler exploded; killed instantly.	May 7
Boiler exploded; scalded; died of injuries.	May 7
Boiler exploded; scalded; died of injuries.	May 7
Boiler exploded; scalded; died of injuries.	May 7
Boiler exploded; scalded; died of injuries.	May 7
Entered boiler to clean flues, and gas became ignited from torch; died of injuries.	May 10
Fell against circular saw; arm mangled; had to be amputated.	May 16
Crushed by falling timber; three ribs broken.	May 17
Kicked by mule; leg broken.	May 18
Fell from top of pole; leg broken.	May 21
Struck by steel clamp at rope end on head; died of injuries.	May 21
Run down by automobile; fractured skull.	June 4
Crushed by bank that caved in; killed instantly.	June 6
Soda water tank exploded; instantly killed.	June 8
Crushed between engine and freight car; injured spine.	June 9
Caught in whipple tree as truck started; both legs crushed.	June 9
Fell from top of wagon he was repairing; three ribs broken.	June 20
Arm caught in bread mixer; limb had to be amputated.	June 23
Steel rail fell on leg; bones badly shattered.	June 30
Fell from top of sixty foot pole; leg broken and injured internally.	June 30
Steampipe burst; legs badly scalded.	July 6
Fell from boat; drowned.	July 26
Crushed under brick wall that collapsed; died of injuries.	July 26
Crushed under heavy packing case; injured internally.	July 27
Crushed under heavy packing case; leg broken.	July 27
Crushed under falling timber; leg broken.	August 4
Struck by falling arm of derrick; leg broken.	August 8
Fell from ladder; leg broken.	August 16
Contact with live wire; died of shock and burns.	August 17
Contact with live wire; fell; leg broken.	August 17
Fell from ladder; arm broken.	August 22
Fell from wagon seat under wheels; died of injuries.	August 23
Fell from pier while handling freight; drowned.	August 23
Run down by train; killed instantly.	August 30
Fell under wheels of truck while loading; thigh broken.	September 1
Struck by train; killed instantly.	September 2
Tapping machine slipped; almost suffocated.	September 8
Tapping machine slipped; almost suffocated.	September 8
Crank of derrick broke, boiler being raised fell; injured internally.	September 10
Fell while cleaning sliding pole; leg broken.	September 17
Fell into river while unloading barge; drowned.	September 19
Large fly-wheel being moved along pier fell on body; killed instantly.	September 22
Fell into vat of boiling dye; badly scalded.	September 23
Hand caught in machine knives; will have to be amputated.	September 26
Arm caught by circular saw; badly mangled.	September 28
Struck by spar that slipping from crane; died of injuries.	September 30
Run down at railroad crossing; instantly killed.	September 30

TABLE No. 2.

## CLOSING UP OR SUSPENSION OF WORK IN MANUFACTURING ESTABLISHMENTS.

This table gives the names of manufacturing plants that were closed permanently or temporarily during the twelve months ending September 30, 1910. The character of the industry followed, location of factory, and a brief statement of the reasons for closing, are also shown. Where the suspensions are temporary, the number of weeks or days the establishments were closed is reported.

The total number of establishments reported as having experienced an interruption of work is 30; of these five were closed permanently, and twenty-five for periods ranging from two days to four weeks. One plant was moved out of the State; one iron ore mine was closed and abandoned because it was found impossible to keep it clear of water; one manufactory of confectionery ceased doing business because of the owners' desire to discontinue and retire. The two other firms that closed permanently, did so because of lack of orders. The temporary suspensions were mostly for the purpose of making essential repairs to machinery, or otherwise improving the facilities of the plants; one among them assigns labor troubles as the cause for shutting down, and several state that falling off in orders was responsible for their difficulties.

Of the permanently closed plants, one each were located in Rahway, Perth Amboy, Dover, Burlington and Wharton. The temporary suspensions were divided over all parts of the State, the city of Trenton having the greatest number. The industries that experienced the largest number of temporary suspensions were pottery ware, silk goods and soft rubber.

# INDUSTRIAL CHRONOLOGY.

## TABLE No. 2.

Closing Up, or Suspension of Work in Manufacturing Plants, from October 1, 1909, to September 30, 1910:

Closed Temporarily (T.)		Closed Permanently (P.)		Time Closed.		NAME OF FIRM.	Industry.	Location of Works.	Reasons for Closing.
Date of Closing.	T.	P.	Weeks.	Days.					
October 12	T.		4		Delaware River Quarry & Cons. Co.	Quarrying.	Lambertville.	Lack of orders.	
October 22		P.			Urban Confectionery Co.	Confectionery.	Rahway.	Owner retired from business.	
November 1	T.		2		Hackettstown Hat Works.	Hats.	Hackensack.	Break down of machinery.	
November 16	T.		3		Edison Portland Cement Co.	Cement.	New Village.	Lack of orders.	
December 4	T.		3		Kenyons Machine Shop.	Machinery.	Raritan.	Break down of machinery.	
December 7		P.			C. Pardee Tile Works.	Tile.	Perth Amboy.	Discontinued tile-making.	
December 24	T.		2		J. A. Roebblings Sons' Co.	Wire rope.	Roebbling.	Break down of machinery.	
January 12	T.		4		Loyal T. Ives Needle Co.	Needles.	New Brunswick.	Break down of machinery.	
February 14	T.		1		T. C. Wheaton Co.	Glass.	Millville.	Lack of orders.	
March 18	T.		5		Givernand Silk Co.	Silk.	Hackensack.	Labor troubles; lack of orders.	
March 21	T.		4		Bachman Braid Co.	Braid.	Burlington.	Inability to procure material.	
April 15		P.			Dover Wood Heel Co.	Wooden heels.	Dover.	Left state.	
May 20	T.		2		Hopatcong Worsted Co.	Worsted goods.	Changewater.	Lack of orders.	
May 22	T.		1		Wharton Steel Co. Furnace No. 1	Castings.	Wharton.	Lack of orders.	
June 6	T.		6		Manhattan Silk Co.	Silk.	Paterson.	Lack of orders.	
July 2	T.		1		Trenton Potteries Co.	Sanitary ware.	Trenton.	Overhauling machinery.	
July 2	T.		1		Mercer Pottery Co.	Porcelain ware.	Trenton.	Installation new machinery.	
July 2	T.		3		Bellmark Pottery Co.	Sanitary ware.	Trenton.	Overhauling machinery.	
July 2	T.		3		John Maddock & Sons.	China ware.	Trenton.	Overhauling machinery.	
July 2	T.		3		Maddock Pottery Co.	Earthenware.	Trenton.	Overhauling machinery.	
July 23	T.		3		J. A. Roebblings Sons' Co. Wire Dept.	Wire rope.	Roebbling.	Repairing machinery.	
August 6		P.			H. L. Holbrook & Co.	Shoe tongues.	Burlington.	No demand for goods.	
August 16	T.		1		Mercer Rubber Co.	Rubber.	Trenton.	Break down of machinery.	
August 19	T.		1		Bloomingtondale Soft Rubber Co.	Soft rubber.	Bloomingtondale.	Repairing machinery.	
August 29	T.		1		Bamford Silk Mill	Silk.	Belvidere.	Lack of orders.	
August 29	T.		1		Ajax-Grieb Rubber Co.	Rubber.	Trenton.	Overhauling machinery.	
August 31	T.		2		C. E. Conover Co.	Waterproof fabrics.	Red Bank.	Repairing machinery.	
September 2		P.			Wharton Steel Co. Orchard Miae.	Mining iron ore.	Wharton.	Impossible to keep water out.	
September 16	T.		2		United Oilcloth Co.	Oilcloth.	Yardville.	Repairing machinery.	
September 22	T.		1		J. T. Budd Shoe Co.	Shoes.	Burlington.	Lack of orders.	

TABLE NO. 3.

## INCREASES AND DECREASES IN WAGES AND WORKING HOURS.

The purpose of this table is to show in the most concrete form possible, the general trend of working time and wages during the twelve months covered by the Industrial Chronology.

Only 54 establishments report changes in either of the above respects, and ten of these were reductions, all in working time only; in four instances the week's work was reduced from six to three days; in three establishments the reduction was from six to five days; in two others night work was discontinued and a return made to the ordinary standard of a day's work; and in one the regular working time was reduced from twelve to ten hours per day.

There are 44 increases recorded on the table, 16 of which have reference to wages, and 28 to working time. The range in wage increases secured, is, on a percentage basis, from 5 to 20 per cent; two establishments report increases of 15 cents and 25 cents per day respectively in their wage rates.

The increases of working time are with a few exceptions, a return to full time after having been on short hours in many instances since the panic of 1907-08. Several establishments report the employment of a separate force for night work, and others, for part of the night only. Although resumption of work after having been shut down for a more or less extended period are not strictly speaking, cases of "increase in working time," there are still several instances of that character which will be noticed on the table. These establishments, like those that were compelled to resort to half-time, succumbed to the pressure of the money panic, and did not reopen until the date given on the table.

# INDUSTRIAL CHRONOLOGY.

## TABLE No. 3.

Increase or Decrease in Wages and Working Hours, from October 1, 1909, to September 30, 1910.

NAME OF FIRM OR TRADE.	Character of Business or Goods Made.	Location of Works.	Increase { Decrease	Date of Increase or Decrease.		Amount of Increase or Decrease.
				Month.	Date.	
Empire Steel and Iron Co.	Mining iron ore.	Oxford.	+	Oct.	3.	Ten (10%) per cent. increase in wages.
Harry A. Scheurman.	Piano stools.	Washington.	+	Oct.	5.	Reopened on full time. Had been closed.
Acme Underwear Co.	Underwear.	South Amboy.	+	Oct.	6.	Employment of a night shift, three evenings per week.
C. Pardee Steel Works.	Steel ingots.	Perth Amboy.	+	Oct.	9.	To full time; had been working half time.
International Pump Co.	Pumps.	Harrison.	+	Oct.	9.	To full time; had been working three quarter time.
Marshall Thread Works.	Thread.	Kearny.	+	Oct.	13.	Five (5%) and ten (10%) per cent. increase; according to wages received.
Agasote Millboard Co.	Millboards.	Trenton.	+	Oct.	31.	Reopened on full time. Had been closed.
New Jersey China Co.	Chinaware.	Trenton.	+	Nov.	2.	Reopened on full time. Had been closed.
Miesch Mfg. Co.	Silk goods.	Paterson.	+	Nov.	23.	Reopened on full time. Had been closed.
Rogers Locomotive Co.	Locomotives.	Paterson.	+	Dec.	11.	Employment of a night shift, five evenings per week.
Lambertville Spoke Works.	Spokes.	Lambertville.	+	Dec.	29.	To full time; had been working five days a week.
Princeton Worsted Co.	Worsted goods.	Trenton.	+	Dec.	29.	Discontinued working nights.
Structural Ironworkers.	Structural ironwork.	Boonton.	+	Jan.	1.	Ten (10%) per cent. increase in wages.
Coal trimmers.	Trimming coal.	Perth Amboy.	+	Jan.	2.	Twenty (20c.) cents increase in daily wages.
Coal handlers.	Handling coal.	Perth Amboy.	+	Jan.	2.	Five (5%) per cent. increase in wages.
Trolley employes.	Operating trolleys.	Red Bank.	+	Jan.	8.	Ten (10%) per cent. increase in wages.
Lincoln Structural Iron Co.	Iron and steel.	Rockaway.	+	Jan.	12.	Employment of a night shift, three evenings per week.
United & Globe Rubber Mfg. Co.	Rubber goods.	Trenton.	+	Jan.	14.	Employment of a night force, four evenings per week until 10 o'clock.
Switchtenders.	Tending switches.	Newark.	+	Jan.	21.	Twenty-five (25c.) cents increase in daily wages.
Morris County Machine Co.	Machinery.	Dover.	+	Jan.	29.	Reopened on full time. Had been closed.
Pennsylvania R. R. Carshops.	Car repairing.	Trenton.	+	Feb.	6.	Employment of night shift.
E. J. Ross Mfg. Co.	Silk goods.	Dover.	+	Feb.	14.	To half time. Had been working full time.
Edison Portland Cement Co.	Cement.	New Village.	+	Feb.	27.	Reopened on full time. Had been closed.
Whitall, Tatum Co.	Glass goods.	Millville.	+	Mar.	1.	To full time. Had been working half time.
Rendrock Powder Co.	High explosives.	Keyport.	+	Mar.	2.	Reopened on full time. Had been closed.
J. A. Roebling's Sons & Co.	Wire screens.	Roebling.	+	Mar.	4.	Employment of a night shift, five evenings per week until 10 o'clock.

## INDUSTRIAL CHRONOLOGY.

TABLE No. 3.—Continued.

Increase or Decrease in Wages and Working Hours, from October 1, 1909, to September 30, 1910.

NAME OF FIRM OR TRADE.	Character of Business or Goods Made.	Location of Works.	Increase (+) or Decrease (-)	Date of Increase or Decrease.		Amount of Increase or Decrease.
				Month.	Date.	
Central R. R. of N. J.	Firemen.	Elizabeth.	-	Mar.	15	To ten hours per day. Had been working twelve.
Clayworkers.	Clay handling.	Perth Amboy.	+	April	1	Ten (10%) per cent. increase in wages.
Alpha Portland Cement Co.	Cement.	Alpha.	+	April	7	Seven (7%) per cent. increase in wages.
Union Mill Paper Co.	Paper.	Lambertville.	-	April	17	To five days per week. Had been working six.
Central R. R. of N. J.	Gatetending.	Elizabeth.	+	April	27	Fifteen (15c.) cents increase in daily wages.
Machinists.	Machinery.	Dover.	+	May	2	Ten (10%) per cent. increase in wages.
Central R. R. of N. J.	Station employes.	Elizabeth.	+	May	2	Six (6%) per cent. increase in wages.
Standard Oil Co.	Oil refining.	Bayonne.	+	May	17	Six (6%) per cent. increase in wages.
Vulcanite Portland Cement Co.	Cement.	Phillipsburg.	+	May	25	Reopened on full time. Had been closed.
Hackettstown Hat Works.	Hats.	Hackettstown.	+	June	6	Reopened on full time. Had been closed.
Singleton Silk Co.	Silk goods.	Dover.	+	June	6	To five days per week. Had been working five and one-half.
Pennsylvania R. R. Co.	Trainmen.	W. of Jersey City	+	June	7	Three (3c.) cents increase an hour in wages.
Hall Printing Press Co.	Printing presses.	Dunellen.	+	June	10	Ten (10%) per cent. increase in wages.
Manhattan Silk Co.	Silk goods.	Paterson.	-	June	14	To three days per week. Had been working six.
Washington Casket Co.	Caskets.	Washington.	+	June	13	Reopened on full time. Had been closed.
Molders.	Molding.	Newark.	+	June	18	Increase in wages of 25c. per day.
Otis Elevator Co.	Elevators.	Newark.	+	June	19	Increase in wages of 25c. per day.
Painters.	Painting.	Perth Amboy.	+	June	30	Wages increased three (3c.) cents per hour.
Ironworkers.	Structural ironwork.	Newark.	+	July	9	Fifty (50c.) cents per day increase in wages.
United States Rubber Co.	Rubber novelties.	New Brunswick.	+	July	12	Reopened on full time. Had been closed.
American Brake Shoe Co.	Brake Shoes.	Mahwah.	+	July	14	To five days per week. Had been working six.
Moulders.	Moulding.	Elizabeth.	+	July	18	Wages increased twenty-five (25c.) cents per day.
Hall Signal Co.	Railroad equipment.	Garwood.	-	Aug.	27	Discontinued night work.
Philadelphia Watch Case Co.	Watch cases.	Riverside.	-	Aug.	30	To three days per week; had been working six.
Bound Brook Woolen Co.	Woolen goods.	Bound Brook.	-	Aug.	30	To three days per week. Had been working six.
American Rice Food Co.	Breakfast foods.	Matawan.	+	Sept.	14	Reopened on full time. Had been closed.
Argo Mills Co.	Cotton yarns & hosiery.	Gloucester.	+	Sept.	26	Reopened on full time. Had been closed.
Stockton Rubber Co.	Rubber goods.	Stockton.	+	Sept.	27	Reopened on full time. Had been closed.

TABLE NO. 4.  
NEW MANUFACTURING PLANTS ESTABLISHED AND OLD  
ONES ENLARGED.

This table shows for the year the number of new manufacturing establishments started, and the number of old plants that were, to a greater or less extent, enlarged during the year. The names of firms concerned, character of the industry carried on, cost of the improvement or new construction, and location of the works, are given in each instance.

The total amount invested in factory construction and improvements during the twelve months, is \$5,495,755, of which \$3,230,000 was for entirely new plants, and \$2,265,755 for enlarging the capacity of those already in existence.

The industries showing the largest number of new plants are "sheet metal goods," "brass goods—castings and sheet," "leather," "machinery," "car building," "fur hats," and "printing."

Thirty-three other distinct industries are represented in the year's record of factory construction by one new plant each.

The number of new plants erected in various cities and towns, with the total cost of construction and equipment, is as follows:

	New	Cost
Newark .....	33	\$1,290,450.00
Jersey City.....	15	773,500.00
Paterson .....	2	152,000.00
Trenton .....	3	35,000.00
Plainfield .....	2	19,000.00
Belleville .....	2	95,000.00
Camden .....	1	13,000.00
Waverly .....	1	80,000.00
Hackensack .....	1	150,000.00
Perth Amboy.....	1	350,000.00
Hoboken .....	1	25,000.00
Bayonne .....	1	75,000.00
Keyport .....	1	60,000.00
Clifton .....	1	13,000.00
Garfield .....	1	3,850.00
Arlington .....	1	3,500.00
Lyndhurst .....	1	60,000.00
Bloomfield .....	1	19,700.00
East Orange.....	1	12,000.00
Total .....	70	\$3,230,000.00

The above table shows Newark away in the lead of all other municipalities, with a total of thirty-three new factory buildings at an aggregate cost of \$1,290,450. Next in importance is Jersey City, with fifteen new plants representing an investment of \$773,500.

Practically all the industrial expansion of the year represented by new factory buildings, is found in the middle counties of the State. With the exception of Trenton and Camden, but little industrial progress is shown in cities and towns of the southern counties, and none at all in the extreme northern counties.

The outlay for manufacturing expansion—new buildings and improvements to old ones, shown by months as follows:

October .....	\$606,000.00
November .....	399,053.00
December .....	604,400.00
January .....	415,963.00
February .....	326,750.00
March .....	850,327.00
April .....	434,703.00
May .....	179,160.00
June .....	561,750.00
July .....	165,300.00
August .....	185,300.00
September .....	767,049.00

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\$5,495,755.00

INDUSTRIAL CHRONOLOGY.

TABLE No. 4.

New Manufacturing Plants Erected and Old Ones Enlarged, from October 1, 1909, to September 30, 1910.

Character of Improvements.		When Made.		Cost.	NAME OF FIRM.	Kind of Goods Made.	Location of Works.
New.	Old.	Month.	Date.				
New.		October	2	\$150,000	The Bell Paper Co.	Paper.	Hackensack.
	Old.	October	2	4,000	Otto Bernz.	Plumbers' tools.	Newark.
	Old.	October	3	3,500	Atha Steel Casting Co.	Steel castings.	Newark.
	Old.	October	5	25,000	Cawley, Clark & Co., Inc.	Paints.	Newark.
	Old.	October	5	4,000	Donner & Co.	Hatters furs.	Newark.
	Old.	October	9	20,000	I. Lewis & Co.	Cigars.	Newark.
	Old.	October	10	75,000	Acme Rubber Mfg. Co.	Rubber.	Trenton.
	Old.	October	13	11,000	Eastwood Wire Mfg. Co.	Wire.	Belleville.
	Old.	October	18	1,500	Newark Brush Co.	Brushes.	Newark.
New.		October	18	25,000	August Gaertz Co.	Metal goods.	Newark.
New.		October	18	6,000	Kaufherr & Co.	Leather.	Newark.
New.		October	19	14,000	Louis Sacks.	Iron Castings.	Newark.
	Old.	October	19	2,000	R. Neuman Hardware Co.	Hardware.	Newark.
	Old.	October	23	3,000	Newark Rivet Works.	Umbrella hardware.	Newark.
New.		October	23	10,000	Breeze Carbureter Co.	Brass goods.	Newark.
New.		October	25	10,000	M. Gould's Son & Co.	Trunk hardware.	Newark.
New.		October	26	100,000	Holbrook Mfg. Co.	Soaps.	Jersey City.
New.		October	26	50,000	Wayne Company.	Paper boxes.	Newark.
	Old.	October	27	1,000	H. W. Johns Co.	Paints.	Newark.
	Old.	October	29	11,000	Kraeuter Co.	Tools.	Newark.
New.		October	29	80,000	Carnegie Steel Co.	Steel.	Waverly.
	Old.	November	6	7,500	Radel Leather Mfg. Co.	Leather.	Newark.
New.		November	13	60,000	Seton Leather Co.	Leather.	Belleville.
	Old.	November	13	16,000	Max Hertz.	Leather.	Newark.
	Old.	November	15	6,000	William J. Lynch Co.	Leather.	Newark.
	Old.	November	16	800	Lambert Hoisting Engine Co.	Hoisting engines.	Newark.
	Old.	November	16	20,000	Felter Bros. Co.	Shoes.	Hightstown.
New.		November	16	100,000	Isaac A. Hall.	Silk goods.	Paterson.
New.		November	17	150,000	Gillette Safety Razor Co.	Safety razors.	Newark.

# INDUSTRIAL CHRONOLOGY.

## TABLE No. 4.—Continued.

New Manufacturing Plants Erected and Old Ones Enlarged, from October 1, 1909, to September 30, 1910.

Character of Improvements.		When Made.		Cost.	NAME OF FIRM.	Kind of Goods Made.	Location of Works.
		Month.	Date.				
New.	Old.						
	Old.	November	18	\$ 530	Ferry-Weber Co.	Hats.	Newark.
	Old.	November	18	500	Calumet Iron Works.	Structural steel.	Newark.
New.		November	22	22,000	The Eagle Brewing Co.	Beer.	Newark.
	Old.	November	27	4,373	McFarland Foundry and Machine Co.	Castings.	Trenton.
	Old.	November	27	2,350	The Celluloid Co.	Celluloid goods.	Newark.
	Old.	November	29	5,000	The Sherwin-Williams Co.	Paints and varnishes.	Newark.
New.		November	29	4,000	Plainfield Hardware Mfg. Co.	Kitchen utensils.	Plainfield.
	Old.	December	3	50,000	American Platinum Works.	Refining metals.	Newark.
	Old.	December	4	11,300	Dolphin Jute Mills.	Jute.	Paterson.
New.		December	9	350,000	Federal Terra Cotta Co.	Tile.	Perth Amboy.
New.		December	10	10,000	Universal Caster Foundry Co.	Foundry iron.	Newark.
	Old.	December	10	40,000	W. H. Compton Shear Co.	Cutlery.	Newark.
	Old.	December	11	2,000	H. R. Isenberg.	Filing cabinets.	Newark.
	Old.	December	11	7,500	Essex Foundry.	Pipe fittings.	Newark.
	Old.	December	20	18,000	Trenton Potteries Co., Equitable Plant.	Sanitary ware.	Trenton.
	Old.	December	21	60,000	Swift & Co.	Fertilizers.	Kearny.
New.		December	24	40,000	Lovell-McConnell Mfg. Co.	Machinery.	Newark.
	Old.	December	28	15,000	West Newark Saw and Planing Mill Works.	Millwork.	Newark.
	Old.	December	29	600	Verona Chemical Co.	Chemicals.	Newark.
	Old.	January	10	30,000	H. R. Worthington Co.	Pumps (hydraulic).	Harrison.
	Old.	January	12	70,000	Agasote Millboard Co.	Millboards.	Trenton.
New.		January	19	2,500	W. K. Hamilton Co.	Skylights.	Jersey City.
	Old.	January	20	15,000	Trenton Spring Mattress Co.	Mattresses.	Trenton.
New.		January	24	200,000	J. H. Ladew Co.	Tanning.	Newark.
	Old.	January	26	5,250	Trimble Hat Co.	Hats.	Newark.
	Old.	January	27	25,000	Pennsylvania R. R. Carshops.	Car repairing.	Trenton.
	Old.	January	28	10,000	Newark Rivet Works.	Rivets.	Newark.
	Old.	January	28	213	Rex-Imperial Leather Co.	Leather.	Newark.
	Old.	January	31	58,000	J. R. Hensler Brewing Co.	Beer and ales.	Newark.

Old.	February	3	\$ 4,500	Luzerne Rubber Co.	Rubber goods	Trenton.
New.	February	11	22,000	N. Y. Veneer and Seating Co.	Chairs and tables.	Jersey City.
New.	February	12	50,000	The American Leather Co.	Leather.	Newark.
New.	February	12	10,000	A. Strauss & Co.	Hats.	Newark.
New.	February	14	20,000	Newark Purse Frame Co.	Metal goods.	Newark.
Old.	February	16	14,000	Jancovius & Son.	Carpets.	Newark.
Old.	February	17	3,000	Gottfried Krueger Brewing Co.	Beer.	Newark.
Old.	February	18	2,000	J. M. Quimby & Co.	Carriage makers.	Newark.
New.	February	19	52,000	F. C. Reinhardt.	Silk goods.	Paterson.
Old.	February	21	250	Jos. Stokes Rubber Co.	Rubber goods.	Trenton.
Old.	February	21	2,200	Campbell Art Co.	Art novelties.	Elizabeth.
New.	February	22	30,000	J. A. Roebling's Sons' Co.	Wire cloth.	Roebling.
New.	February	23	30,000	F. A. Ringle Co.		Jersey City.
Old.	February	25	1,800	Paas Dye Co.	Chemicals.	Newark.
Old.	February	26	45,000	Ingersoll-Trenton Watch Co.	Watches.	Trenton.
Old.	February	28	40,000	J. A. Roebblings Sons' Co.	Wire rope.	Trenton.
Old.	March	1	46,000	Hudson County Consumers Brewing Co.	Beer.	Jersey City.
New.	March	4	150,000	William M. Crane Co.	Gas stoves.	Jersey City.
New.	March	4	25,000	American Lead Pencil Co.	Lead pencils.	Hoboken.
Old.	March	7	4,800	Arlington Stamping Co.	Sheet metal stamping.	Newark.
New.	March	11	1,500	T. Scheuler & Co.	Brass goods.	Newark.
Old.	March	11	12,000	M. Strauss & Sons.	Leather.	Newark.
Old.	March	13	91,000	General Electric Co.	Electrical supplies.	Newark.
Old.	March	14	18,000	C. Schmidt Furniture Co.	Furniture.	Newark.
Old.	March	14	75,000	C. Trefz Brewing Co.	Beer.	Newark.
New.	March	14	75,000	Nucoa Butter Co.	Nucoa butter.	Bayonne.
Old.	March	17	5,277	Peter Breidt Brewing Co.	Beer.	Elizabeth.
Old.	March	21	550	The Valley Forge Cutlery Co.	Cutlery.	Newark.
New.	March	21	150,000	Hudson & Manhattan Railway Co.	Car building.	Jersey City.
Old.	March	22	35,000	J. E. Mergott Co.	Metal goods.	Newark.
Old.	March	22	10,000	Kelly & McLaughlin Co.	Leather.	Newark.
New.	March	22	24,000	Pearce Bros. Leather Co.	Leather.	Newark.
Old.	March	23	3,600	The Poidebard Mfg. Co.	Silk goods.	Paterson.
New.	March	23	60,000	The Whitall-Tatum Co.	Rubber goods.	Keypoint.
New.	March	25	40,000	Samuel Jones & Co.	Gummed paper.	Newark.
Old.	March	26	6,000	C. M. Hedden Co.	Fur hats.	Newark.
New.	March	28	3,000	Silberstein, Flexner & Gottlieb	Fur hats.	Newark.
Old.	March	28	1,600	Spratts Patent (Amer.) Ltd.	Dog Food.	Newark.
New.	March	28	13,000	Rotary Photogravure Co.	Printing.	Clifton.
New.	April	1	12,000	Castanea Dairy Co.	Dairy supplies.	Trenton.
Old.	April	2	80,000	New Jersey Terra Cotta Co.	Terra Cotta.	Perth Amboy.
Old.	April	6	36,000	Cheschbrough Mfg. Co.	Vaseline.	Perth Amboy.
Old.	April	7	32,000	Monument Pottery Co.	Sanitary ware.	Trenton.
Old.	April	9	1,100	Otis Elevator Co.	Elevators.	Newark.
New.	April	9	40,000	George M. Dodd.	Cement blocks.	Newark.
New.	April	11	2,000	A. Straus & Co.	Hats.	Newark.
Old.	April	12	11,000	Consolidated Color & Chemical Co.	Chemicals.	Newark.
Old.	April	12	1,250	Edmund F. Heath & Son.	Oil cloth.	Newark.

## INDUSTRIAL CHRONOLOGY.

TABLE No. 4.—Continued.

New Manufacturing Plants Erected, and Old Ones Enlarged, from October 1, 1909 to September 30, 1910.

Character of Improvements.		When Made.		Cost.	NAME OF FIRM.	Kind of Goods Made.	Location of Works.
New.	Old.	Month.	Date.				
	Old.	April	13	\$23,153	Maas & Waldstein	Chemicals	Newark.
New.	Old.	April	13	20,000	Seidenberg & Co.	Cigars	Trenton.
	Old.	April	14	3,600	Whitehead Bros. Rubber Co.	Rubber	Trenton.
	Old.	April	15	60,000	Simplex Auto Co.	Automobiles	New Brunswick.
New.		April	18	70,000	Hill Bread Co.	Bread	Newark.
New.		April	19	20,000	Baker & Co., Inc.	Refining metals	Newark.
New.		April	20	36,950	Edward Maher's Sons	Castings	Newark.
	Old.	April	21	40,000	Hooton Cocoa Co.	Cocoa and chocolate	Newark.
New.		April	22	3,850	Passaic Knitting Works	Knit goods	Garfield.
	Old.	April	24	10,500	Waclark Wire Co.	Wire	Elizabeth.
	Old.	April	27	3,500	Schuatt Chocolate Mfg. Co.	Confectionery	Trenton.
New.		April	28	3,000	J. F. Hancock Sons	Ice cream	Trenton.
	Old.	April	30	4,000	Reckitts (U. S. A.) Ltd.	Washing blue	New Brunswick.
	Old.	May	7	35,000	Rubber and Celluloid Harness & Trim'g Co.	Harness trimmings	Newark.
	Old.	May	8	30,000	N. J. Dry Dock & Trans. Co.	Shipbuilding	Jersey City.
	Old.	May	9	460	Lidgerwood Mfg. Co.	Engines Hoisting	Newark.
New.		May	9	30,000	A. Cyphers & Co.	Poultry foods	Newark.
	Old.	May	11	800	Essex Foundry	Castings	Newark.
New.		May	12	15,000	James Craig	Machinery	Jersey City.
	Old.	May	13	45,000	Victor Talking Machine Co.	Talking machines	Camden.
	Old.	May	16	2,000	Ston-age Plaster Co.	Plaster	Newark.
	Old.	May	17	8,000	Klein & Co.	Hats	Newark.
	Old.	May	17	3,800	Lambert Hoisting Engine Co.	Hoisting engines	Newark.
	Old.	May	25	600	Conover & Young	Millwork	Keyport.
	Old.	May	27	5,000	James H. Birch	Carriages	Burlington.
	Old.	May	27	3,000	E. S. Ward & Co.	Patent leather	Newark.
	Old.	May	28	500	Steffens-Amberg Co.	Saddlery hardware	Newark.
	Old.	June	3	19,000	Florence Thread Co.	Thread	Florence.
	Old.	June	4	3,500	Ferry-Weber Co.	Hats	Newark.

New.	June	4	\$ 35,000	The Long & Koch Co.	Jewelry.	Newark.
New.	June	4	153,000	Universal Caster & Foundry Co.	Ball bearings.	Newark.
New.	June	4		J. E. Barbour.	Linen thread.	Lakeview.
New.	June	5	60,000	United Cork Co.	Cork products.	Lyndhurst.
New.	June	8	15,000	Spicer Univ. Joint Mfg. Co.	Machinery.	Plainfield.
New.	June	9	35,000	R. B. Davis Co.	Chemicals.	Jersey City.
New.	June	10	19,700	Langdon Mfg. Co.		Bloomfield.
	Old.	11	7,500	The Celluloid Co.	Celluloid.	Newark.
New.	June	11	40,000	The Baker Printing Co.	Printing.	Newark.
New.	June	13	23,000	Diffany & Co.	Metal goods.	Newark.
	Old.	14	6,000	Balbach Smelting & Refining Co.	Smelting.	Newark.
	Old.	14	350	C. Trefz Brewing Co.	Beer.	Newark.
	Old.	14	10,000	R. C. Kolb.	Bakery.	Trenton.
	Old.	14	7,000	Whitehead Bros. Co.	Rubber goods.	Trenton.
	Old.	15	41,500	Michelin Tire Co.	Rubber tires.	Milltown.
	Old.	16	50,000	Thermod Rubber Co.	Rubber goods.	Trenton.
	Old.	23	5,000	Stockton Rubber Co.	Rubber goods.	Stockton.
	Old.	27	18,700	Swift & Co.	Lard refining.	Jersey City.
	Old.	27	12,500	Flood & Conklin Co.	Varnish.	Newark.
	Old.	5	500	Alexander Trand Co.	Machinery.	Newark.
New.	July	9	5,000	Frederic L. Miller.		Newark.
New.	July	13	75,000	The Riegel Sack Co.	Sacks and bags.	Jersey City.
	Old.	17	8,500	Trenton Iron Co.	Wire rope.	Trenton.
	Old.	19	1,000	Walsh Sons' Co.	Refining metals.	Newark.
	Old.	24	30,000	Harmer Rubber Reclaiming Co.	Reclaiming rubber.	Milltown.
New.	July	26	3,500	Uhlig-Gunz Co.	Typewriter parts.	Arlington.
	Old.	29	2,800	H. F. Sommer & Co.	Leather.	Newark.
New.	July	30	35,000	Aristo Co.	Piano hardware.	Belleville.
	Old.	30	4,000	Stengel & Rothschild Co.	Leather.	Newark.
	Old.	6	27,000	Bowker Fertilizer & Chemical Co.	Fertilizers.	Elizabeth.
New.	August	6	20,000	The Weber Baking Co.	Bread.	Newark.
New.	August	9	60,000	Pathe-Freres.	Moving picture films.	Jersey City.
	Old.	13	4,000	Empire Rubber Mfg. Co.	Rubber goods.	Trenton.
	Old.	16	300	Meadow Box Board Co.	Box boards.	Newark.
	Old.	20	1,000	Diffany & Co.	Metal goods.	Newark.
New.	August	20	15,000	Marcus W. Adams.		Newark.
New.	August	23	25,000	Otis Elevator Co.	Elevators.	Newark.
New.	August	25	33,000	Enterprise Embroidery Co.	Embroideries.	Jersey City.
	Old.	2	17,917	McNab & Harlin Mfg. Co.	Brass and iron goods.	Paterson.
	Old.	6	105,000	Orford Copper Co.	Copper refining.	Bayonne.
New.	September	6	30,000	Crandall Pettee Co.		Jersey City.
New.	September	7	11,000	Mulhens & Kropff.		Jersey City.
New.	September	7	30,000	New York Central Railroad Co.	Soap.	Jersey City.
New.	September	7		Phoenix Ceramic Works.	Car building.	Jersey City.
	Old.	9	20,000	Goldschmidt Detinning Co.	Porcelain specialties.	Metuchen.
	Old.	12	25,000	L. O. Koven & Bros.	Chemicals.	Chrome.
	Old.	12	175,000	American Colortype Co.	Ranges and boilers.	Jersey City.
	Old.	15	1,000	Lambertville Pottery Co.	Color printing: calendars.	Jersey City.
	Old.	15			Sanitary ware.	Lambertville.

## INDUSTRIAL CHRONOLOGY.

TABLE No. 4.—Continued.

New Manufacturing Plants Erected, and Old Ones Enlarged, from October 1, 1909 to September 30, 1910.

Character of Improvements.		When Made.		Cost.	NAME OF FIRM.	Kind of Goods Made.	Location of Works.
New	Old	Month	Date				
New.	Old.	September	16.	\$ 13,000	Corrugated Bar Co.	Corrugated bars.	Camden.
.....	Old.	September	16.	100,000	The Celluloid Co.	Celluloid goods.	Newark.
.....	Old.	September	16.	20,000	Lister Agricultural Chem. Works.	Fertilizers.	Newark.
.....	Old.	September	16.	50,000	American Type Founders Co.	Type.	Jersey City.
New.	.....	September	16.	12,000	Charles Oppel's Sons.	Cigar boxes.	Newark.
New.	.....	September	16.	90,000	Simms Magneto Co.	Sparkers.	East Orange.
.....	Old.	September	17.	3,800	Elizabeth Smelting Co.	Smelting.	Elizabeth.
.....	Old.	September	17.	10,000	Scott & Bowne.	Chemicals.	Watssessing.
.....	Old.	September	18.	2,000	Simmons Pipe Bending Works.	Forgings, coils, etc.	Newark.
.....	Old.	September	19.	25,000	De Laval Steam Turbine Co.	Steam turbines.	Trenton.
.....	Old.	September	19.	10,000	McFarland Foundry & Machine Co.	Castings.	Trenton.
.....	Old.	September	23.	2,600	Bronze Powder Works Co.	Bronze powder.	Elizabeth.
.....	Old.	September	26.	3,000	The Preston Leather Co.	Leather.	Newark.
.....	Old.	September	27.	2,732	Louis Fisch, Jr.	Machinery.	Newark.
.....	Old.	September	27.	.....	Keystone Leather Co.	Leather.	Camden.
.....	Old.	September	27.	8,000	South Amboy Terra Cotta Co.	Terra Cotta.	South Amboy.
				\$5,495,755			

TABLE NO. 5.

## DAMAGE TO MANUFACTURING PLANTS BY FIRE OR FLOOD.

On this table will be found a record of the destruction by fire of property in use for manufacturing purposes during the year. The date of fire, names of firms concerned, location of factory, character of industry and value of property destroyed, are given separately for each establishment involved.

The total number of fires in industrial plants was 117, or eleven more than were reported for the previous year, and the losses per establishment range from the trifling sum of \$10, upward to \$223,206.

The grand total of all factory and workshop losses by fire, is \$2,853,041. For the twelve months ending September 30th, 1909, the total loss recorded was \$2,541,256. The increase for the twelve months ending September 30, 1910, is therefore \$311,785, or 12.2 per cent.

Table No. 4 shows that \$5,534,755 was added to the total value of property used for manufacturing purposes in the State; deducting therefore the value of property similarly employed that was destroyed by fire during the same period, and we have a net gain for the year in the value of property devoted to industrial purposes, of \$2,681,714.

As a matter of course, the greater number of fires occurred in the larger industrial centers, although practically all parts of the State where there is any manufacturing industry, suffered one or more visitations of that kind. The record for Newark is thirty-eight fires, total loss, \$712,019. Trenton, thirteen, total loss \$43,521. Jersey City, ten; total loss \$664,123. Paterson, nine, total loss \$186,556, and Camden, six, total loss \$111,075. Thirty-five other cities and towns report from one to three factory fires each, all but a few of them small, so far as the value of property destroyed is concerned.

## INDUSTRIAL CHRONOLOGY.

TABLE No. 5.

Manufacturing Plants Damaged by Fire or Flood, from October 1, 1909, to September 30, 1910.

NAME OF FIRM.	When Fire Occurred.		Kind of Goods Made.	Location of Works.	Amount of Loss.
	Month	Day			
Foxhall Brick Co.	October	5	Bricks.	Passaic.	\$20,000
Trenton Potteries Co., Empire Plant.	October	7	Sanitary ware.	Trenton	2,193
Kraeuter & Co.	October	9	Tools and hardware.	Newark.	25,000
Southern Kindling Wood Co.	October	12	Kindling Wood.	Camden	2,075
Zeh, Hohnemann & Co.	October	20	Presses (Printing).	Newark.	9,510
Patrick Rielly & Son.	October	24	Leather goods.	Newark.	9,453
Kroenbergs & Son.	October	25	Millwork.	Newark.	25
Formacone Disinfecting Co.	November	5	Chemicals.	Newark.	465
Henry Tries.	November	5	Castings.	Paterson.	6,000
Textile Rubber Co.	November	6	Rubber goods.	Trenton.	5,000
American Ice Co.	November	7	Ice (artificial).	Atlantic City.	30,500
Gilles & Gardner.	November	7	Bricks.	Little Ferry.	50
Pennsylvania Planing Mills.	November	11	Millwork.	Jersey City.	49,488
William Mellen Co.	November	13	Metal goods.	Camden	1,500
L. Sonneborn Sons.	November	15	Oil refiners.	Newark.	13,500
E. I. du Pont de Nemours Powder Co.	November	16	High explosives.	Pompton Lakes.	1,862
United Oilcloth Co.	November	18	Oilcloth.	Yardville.	55,000
Crocker-Wheeler Co.	November	20	Electrical supplies.	Ampere.	414
Basch & Greenfield Co.	November	26	Wool stocks.	Newark.	11,800
Seabury & Johnson.	December	4	Pharmaceutical goods.	East Orange.	3,324
Fishman & Co.	December	4	Hats.	Newark.	2,096
Riley-Klotz Mfg. Co.	December	4	Metal goods.	Newark.	42,014
A. B. Norton Co.	December	6	Structural iron.	Boonton.	23,516
Wonham Magor Co.	December	9	Mine cars.	Athenia.	87,006
W. H. Ames & Co.	December	11	Spikes.	Jersey City.	725
Lindholm Metal Stamping Co.	December	13	Metal stamping.	Camden.	2,000
W. E. Blanchard.	December	13	Wood turning.	Bloomington.	2,000
Turner Machine Co.	December	15	Machinery.	Newark.	500
The Alphans Co.	December	23	Fertilizers.	Hackettstown.	9,300

Jos. Reinhold Bronze Co.	December	27	Metal goods.	Newark.	\$ 3,800
Hanson & Van Winkle Co.	January	10	Electrical appliances.	Newark.	31,900
Oriental Metal Bed Co.	January	10	Metal beds.	Hoboken.	210,000
Trenton Oilcloth & Linoleum Co.	January	11	Oilcloth and linoleum.	Trenton.	10,000
Reliance Silk Co.	January	12	Silk goods.	Paterson.	40,000
Anton Markert	January	14	Carriages and wagons.	Jersey City.	10,000
Hall Printing Press Co.	January	15	Printing presses.	Dunellen.	44,000
Edison Mfg. Co.	January	19	Storage batteries.	Belleville.	20,000
The Wasserstrom Leather Co.	January	22	Leather goods.	Newark.	3,500
Greenwood Pottery Co.	January	22	Sanitary ware.	Trenton.	206
Riordan Leather Co.	January	25	Leather goods.	Newark.	15,000
Pathe Freres.	January	26	Moving picture films.	East Bound Brook.	7,063
New Jersey Adamant Mfg. Co.	January	26	Plaster blocks.	Newark.	337
Robinson-Rodgers Co.	February	5	Pillows and mattresses.	Newark.	5,660
Steeber & Kraus Co.	February	6	Jewelry.	Newark.	2,880
Silberstein, Flexner & Gottlieb	February	7	Hats.	Newark.	4,478
General Storage Battery Co.	February	8	Storage batteries.	Boonton.	250,000
The Barnet Silk Co.	February	8	Silk goods.	Paterson.	153
National Mill Supply Co.	February	9	Mill supplies.	Paterson.	25,000
H. W. Johns-Manville Co.	February	15	Cork specialties.	Newark.	62,000
Tynan & Reynolds.	February	24	Automobile parts.	Paterson.	7,600
Standard Electric Lamp Co.	February	25	Electric lamps.	Newark.	10,560
Young Mfg. Co.	February	25		Newark.	17,250
New York Veneer Seating Co.	February	28	Furniture.	Jersey City.	200,000
George Pappas.	February	28	Confectionery	Newark.	12,000
Cramer & King Co.	February	28	Silk dyeing.	Paterson.	104,000
Empire Rubber Mfg. Co.	March	5	Rubber goods.	Trenton.	2,079
Benfield & Milne Mfg. Co.	March	17	Metal goods.	Newark.	30
Carter, Bell Co.	March	18	Chemicals.	Millburn.	10,000
John Eisle.	March	20	Cooperage.	Union Hill.	225
C. Pardee Works.	March	27	Steel ingots.	Perth Amboy.	800
F. G. Lieber.	April	2	Medicine chests.	Newark.	100
J. A. Roebing's Son's Co.	April	2	Wire.	Trenton.	10
Swift & Co.	April	5	Artificial ice.	Trenton.	1,900
Paterson Packing Case Co.	April	8	Packing cases.	Paterson.	1,050
New York Shipbuilding Co.	April	12	Shipbuilders.	Camden.	100,000
Worthington & Raymond.	April	15	Jewelers blocks.	Newark.	900
William Thomas.	April	18	Cooperage.	Trenton.	2,000
Hamilton Carriage & Wagon Works.	April	20	Carriages and wagons.	Trenton.	900
Daggers Bobbins Factory.	April	20	Mill supplies.	Paterson.	1,000
Imperial Cutlery Works.	April	22	Cutlery.	Nutley.	96
John T. Lyman.	April	24	Woodworking.	Montclair.	27,600
Reliable Furniture Co.	April	24	Furniture.	Newark.	5,000
Edison Portland Cement Co.	April	26	Cement.	New Village.	3,742
Art Metal Works.	May	4	Metal goods.	Newark.	100,000
Excelsior Pottery Co.	May	8	Pottery ware.	Newark.	11,500
Imperial Cutlery Co.	May	11	Cutlery.	Nutley.	100
Lenox, Incorporated.	May	13	Belleek ware.	Trenton.	3,000

## INDUSTRIAL CHRONOLOGY.

TABLE No. 5.—Continued.

Manufacturing Plants Damaged by Fire or Flood, from October 1, 1909, to September 30, 1910.

NAME OF FIRM.	When Fire Occurred.		Kind of Goods Made.	Location of Works.	Amount of Loss.
	Month.	Date.			
John R. Handy.....	May	13	Harness.	Jersey City.....	\$ 2,500
Essex Specialty Co.....	May	14	Fireworks.	Nutley.....	5,000
Fred Marx.....	May	26	Machinery.	Newark.....	150
New Jersey Oil and Meal Co.....	May	26	Flax and linseed oil.	Jersey City.....	150,000
Voorhees Rubber Co.....	June	22	Rubber goods.	Jersey City.....	10
C. E. Green & Son.....	June	23	Ferrules.	Newark.....	10,000
Trenton Oilcloth & Linoleum Co.....	June	25	Oilcloth and linoleum.	Trenton.....	2,000
New Jersey Briquette Co.....	June	25	Fuel briquettes.	Perth Amboy.....	10,000
New Jersey Blind & Screen Co.....	June	30	Blinds and screens.	Paterson.....	1,753
Moore Bros. Co.....	July	6	Machinery.	Elizabeth.....	800
James C. Malone & Co.....	July	7	Wool cleaning.	Jersey City.....	75,000
Irvington Varnish & Ins. Co.....	July	12	Varnish.	Irvington.....	8,000
McFarland Foundry & Mach. Co.....	July	14	Machinery.	Trenton.....	8,233
Farr & Bailey Mfg. Co.....	July	16	Oilcloth and linoleum.	Camden.....	5,400
Old Bridge Enamel, Brick & Tile Co.....	July	18	Brick and tile.	Old Bridge.....	2,200
Florence Foundry Co.....	July	20	Castings.	Florence.....	300
E. J. du Pont de Nemours Powder Co.....	July	23	High explosives.	Carneys Point.....	6,050
W. Ames & Co.....	July	23	Spikes and bolts.	Jersey City.....	5,400
George Stengel Leather Co.....	July	26	Leather goods.	Newark.....	9,850
E. J. du Pont de Nemours Powder Co.....	July	28	High explosives.	Pompton Plains.....	30,500
Buchanan & Smock.....	July	29	Millwork.	Asbury Park.....	130,000
Scheller Bros.....	August	4	Clothing.	Plainfield.....	500
The Texas Co.....	August	6	Oil refining.	Bayonne.....	50,000
Shipman Bros.....	August	10	Cotton goods.	Newark.....	8,100
Independent Baking Powder Co.....	August	17	Baking powder.	Jersey City.....	33,000
Trislow & Fule.....	August	17	Cork specialties.	Jersey City.....	138,000
Robinson, Rodgers Co.....	August	20	Mattresses.	Newark.....	25
Robert Sterns.....	August	27	Fat rendering.	Secaucus.....	65,000
Phillipsburg Brewing Co.....	August	30	Beer.	Phillipsburg.....	4,000

Rubber & Celluloid Harness Trimming Co.	September 11	Rubber brushes	Newark	\$223,206
Eckfeldt & Aekley Co.	September 12	Jewelry	Newark	2,500
The Shiman-Miller Co.	September 12	Jewelry	Newark	47,000
The Anchor Pottery Co.	September 14	Pottery ware	Trenton	6,000
The Irvington Varnish Co.	September 16	Paints and varnishes	Irvington	10,000
Johns-Manville Co.	September 20	Asbestos material	Newark	*10,000
Michelin Tire Co.	September 21	Automobile tires	Milltown	2,701
George Bauers	September 22	Bread	Orange	958
Wardell Harker	September 23	Millwork	New Egypt	3,000
Sovereign Foundry Co.	September 24	Castings	Lebanon	50
Corona Chemical Co.	September 28	Chemicals	Camden	100
Total				\$2,853,041

\*Estimated.

TABLE NO. 6.

## TRADE AND LABOR UNIONS ORGANIZED.

For Twelve Months Ending September 30, 1910.

This table presents a list of occupations, in connection with which, trade or labor unions were organized during the twelve months covered by the record. The total number of these organizations, as will be seen by the table, is eight; four are located in the city of Trenton, and one each in East Orange, Elizabeth, Freehold and Jersey City. Of the four Trenton unions, one was formed by "trolley motormen and conductors," another by "hod-carriers," another by "bakers," and still another by "moulders' helpers."

The East Orange Union was formed by "washerwomen," and that of Jersey City, "laundry workers." The Elizabeth organization was formed by machinists, and that at Freehold, of carpenters.

Next to the year 1908, when only five unions were started, this is the lowest record of any twelve months in twenty years. In 1908, industry of all kinds throughout the State was suffering from the depression and confusion of the money stringency panic of 1907-08, the average activity being fully 33 per cent below normal; under such circumstances little or no thought is given to organization by workmen, either skilled or unskilled, their chief interest and purpose being to hold on to such employment as they may have. The year 1909 witnessed an improvement in general industrial conditions, which was reflected in the number of new unions organized, which was thirteen. This year the number has fallen to eight, and the natural inference is that the demand for labor is still very much below what it was three years ago, when during the year 1907 thirty-four new unions of workmen were formed.

## INDUSTRIAL CHRONOLOGY.

TABLE No. 6.—Trade and Labor Unions Organized from October 1, 1909 to September 30, 1910.

NAME OF UNION ORGANIZED.	Where Union was Organized.	When Organized.	
		Month.	Date.
Hodcarriers .....	Trenton .....	January	21.
Trolleyemen .....	Trenton .....	March	9.
Bakers .....	Trenton .....	April	20.
Moulders' Helpers .....	Trenton .....	May	9.
Washerwomen .....	East Orange .....	May	24.
Machinists .....	Elizabeth .....	May	25.
Carpenters .....	Freehold .....	June	14.
Laundryworkers .....	Jersey City .....	July	21.

## Strikes and Lockouts in New Jersey

For the Twelve Months Ending September 30th, 1910.

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OCTOBER 15—Ninety girls and ten boys employed in the bottling department of the Chesebrough Mfg. Co. at Perth Amboy objected to a reduction of one and one-half cents per gross in the price allowed for packing a certain class of bottles and quit work accordingly. The manager of the department took the ground that certain improvements in the process of packing fully justified the cut in price. The matter was finally adjusted satisfactorily, and all resumed work on the 19th, having lost\* three working days, with wages amounting to \$300.

OCTOBER 23—Thirty Polish laborers employed on the Central Railroad wharf at Elizabeth struck for an increase in wages, which was refused; within a few hours an entirely new gang was secured to take their places.

OCTOBER 27—TEN union carpenters employed on the new post office building at Dover, quit work because three non-union men on the job had refused to take out union cards. The strikers returned next day when the non-union men were discharged. The wage loss was \$35.

### The Hatters Strike.

In last year's report of the Bureau a full account was given of the general strike in the hat factories of the Orange Valley and Newark, from its commencement on January 15, 1909, until October 31st, of the same year. In closing the statistical record of the twelve months ending on the above date, the fact that the long continued strike was rapidly drawing to a close, and that a promising beginning had been made in the direction of a general settlement on lines which, while not a positive victory for either side, would in all probability be finally agreed to by both, was duly set forth with a copy of the compromise agreement under which the strike was ended and work resumed in several of the largest shops. Ten factories in Newark and seven in the Orange Valley district, employing an aggregate of four thousand five hundred men and women were involved in the strike from first to last, and of this number, as indicated by last year's report of the Bureau, about twenty-eight hundred were still idle on October 31st, although practically all the conditions on which the entire body returned to work during the following month were at that time agreed upon.

On November 1, the firm of Austin, Drew & Co., reopened its shop; two days later the No Name Hat Company resumed work, followed by F. Berg & Co., and C. B. Rutan & Co., on November 8. One by one the other shops

closed in consequence of the strike were reopened and before the end of November all were again running under modified union rules, excepting only the factory of Crow, Quinlan & Moore. In the settlement of the strike important concessions were made by the union in the matter of shop and working rules, and as a result the manufacturers claim to be in a position to operate their shops more satisfactorily, and with greater assurance that a shut down will not necessarily follow every trivial difference that may arise between them and their employees. The union on its part has succeeded in retaining the privilege of having its label placed in all hats as heretofore.

As an evidence of the pleasant relations now existing between the employers and union workmen in the Orange hatting district, the following letter from one of the largest firms in the trade, addressed to the Journeymen's Local is given as a proper ending to the narrative of this determinedly conducted but remarkably orderly strike, which extended over a period covering two annual reports of this Bureau.

"To the officers and members of Local No. 4, United Hatters of North America:

"We wish to express to you our sincere thanks and congratulations for the masterful manner in which the return of our old employees has been arranged, there being not the slightest trace of animosity or ill feeling displayed. This, considering the large number involved and the length of time they were idle, speaks well for the magnanimous spirit of the officers and members of Local No. 4.

"We, for our part, can assure you that the same spirit and good feeling exists toward the officers and members of your association, and we hope that in the future our relations shall be of the pleasantest, and the harmonious feeling which now exists will never be broken. Hoping that an era of prosperity awaits the hatting industry which will prove to our mutual advantage, we remain,

"Sincerely yours,

"F. BERG & CO."

OCTOBER 23—Five hundred of the approximately 1,000 girls employed in the Hirschhorn, Mack & Co. cigar factory on Somerset street, New Brunswick, without, the firm says, giving any notice of their intention or assigning any reason for their action, quit work. Later, on a statement purporting to set forth their case, was issued on behalf of the strikers, from which it appeared that the girls objected to the stock they worked with, and also wanted an increase of from twenty-five to thirty-five cents per hundred for small cigars. Replying to the accusation of unfair dealing with its employees implied in these demands, the company on the third day of the strike made public the following statement:

"We wish to emphatically deny the numerous stories being circulated and alleged to be the demands of the striking cigarmakers. In the first place no Pennsylvania or Connecticut wrappers are used in any of our factories, as all of our cigars are covered by the choicest grades of Sumatra, as is well known by the trade.

"We fail to understand how our cigarmakers can judge the quality of leaves which we use, or the localities where they are grown, as our foremen

do not know what tobaccos we use, and only experts can detect the peculiarities by which the various kinds are known. We do not hesitate to say that we pay the largest wages paid to female help in the State, and any girl in our employ can easily earn \$10 per week.

"The statement that on pay day the girls frequently discover that they had been fined from \$2 to \$3 per week for work that had been rejected is ridiculous, as the cigars are inspected whenever a girl has made 150, and the imperfect ones thrown out; this is done to protect our reputation, the trade and the public—a man who pays five cents for a cigar expects it to smoke.

"Every cigar factory in existence does this and has to do it. We are not anxious to throw away cigars, as it means a great loss to us, but we must have them made right. This practice does not appear on the pay envelope at all, as the girl immediately replaces cigars that have been rejected with good ones, and when a girl is credited with 150 cigars she is paid for that number.

"We regret that a majority of our employees must suffer on account of a few that are dissatisfied, as many have already petitioned to return to work, but the factory has been closed and will not be reopened until our whole force signify their intention to return to work for the old wages and under the same conditions.

#### NEW BRUNSWICK CIGAR CO.,

(Hirschhorn, Mack & Co.).

The firm's action in closing the factory was decided upon when the strikers had, by repeated demonstrations of violence, prevented all but a very small number of the non-striking employees from entering the works. The strikers were practically all Hungarians, and those who took no voluntary part in the movement were Poles, Germans and Americans. Rioting about the factory and its immediate vicinity was quite frequent, and the strikers indulged in daily parades through the principal streets. Several arrests were made for disorderly conduct, but the prisoners were released on giving bonds for future good conduct.

The factory was reopened on November 2, the firm having received satisfactory assurance that a large majority of their idle employees wished to resume work, and when the doors were opened on the morning of that date, all but about 200 of the entire working force were back in their places; these kept up the agitation for a few days longer, but on November 10, the strike was completely abandoned. On Monday, November 15, after all the agitation and excitement incidental to the strike had subsided, the firm announced an increase of prices in the various departments of the factory ranging from 7 to 15 per cent. It was explained that this advance had been determined upon just before the outbreak of the strike for the purpose of rewarding the employees and encouraging others to enter the service of the firm.

The strike lasted three weeks, and the wage loss computed on the minimum earnings of \$10 per week, as set forth in the company's statement quoted above, was not less than \$30,000.

NOVEMBER 2—Seventy-five employees in the moulding department of the Thomas Devlin Mfg. Co., at Burlington, went on strike to enforce a demand

for an advance in wages of 11 per cent., that being the reduction made in their wages one year before; when the cut took place, it appears that a promise was made to the workmen that the old rate would be restored when business conditions became more favorable. The strike terminated successfully in two days, but the shop, which had been closed when it began, was not reopened until one week had elapsed. The wage loss, as reported by the firm, was \$1,000.

NOVEMBER 18—A strike of all the union workmen of various trades employed on the annex to Public School No. 1, Weehawken, was ordered by the Hudson County Trades Council, because the painting contractors, Bergman Bros., employed non-union men. The accused firm claimed to have been incorporated recently, and that all the workmen in its employment were stockholders, and therefore under union rules, should be regarded as bosses. The Trades Council demurred to this plea, and at the same time pointed out the fact that even admitting its validity, the union rules provided that only one boss could be employed on a job at any one time.

NOVEMBER 18—Owing, as reported, to a belief among the iron workers employed on the new Prudential Building, Newark, that the contracting firm—Post & McCord, had manifested leanings toward the "open shop," twenty-five of these workmen went on strike after a conference between the business agent of the local union, and the representatives of the New York organization; the following day about ten men returned to work, and as no definite statement of grievances could be obtained from the others, non-union workmen were employed in their places. Unsuccessful efforts were made to induce workmen of other trades employed upon the building to join the ironworkers, and the strike practically ended two days after it began, although the men concerned did not return to work. Wage loss for the two days, \$210.

NOVEMBER 24—Sixteen employees of the Hudson County Window and House Cleaning Co., at Jersey City, struck for an increase in wages and recognition of a union to which they had attached themselves. Some of their demands having been conceded, the men returned to work one week later. During the strike an effort made by the company to have the work done by women was not successful. Wage loss could not be ascertained.

NOVEMBER 27—Thirteen of the 100 girls employed by the shirtwaist firm of Beerman and Frank, Lawrence street, Newark, quit work in sympathy with the shirtwaist operatives then on strike in New York city, and complained to the police that others desired to leave the factory with them, but were forcibly detained by a member of the firm and some of his assistants. This statement was investigated by a police official and found not to be true. The girls who quit work did so without advancing any reason for the step, and no response was made to a request by the forewoman for a statement of grievances which, she assured them, would receive full and fair consideration. Apparently the girls were influenced by representatives of the shirtwaist makers union of New York city, the members of which were then on strike; the purpose being to establish a branch of their organization

among the Beerman & Frank operatives and so prevent the making of goods in Newark for New York manufacturers affected by the strike in that city.

In justification of their course, some of the strikers claimed that prices paid were very low, and that an experienced operator could earn no more than \$5 or \$6 per week; it was also asserted that earnings were much diminished by fines for violation of petty and annoying rules for regulating the conduct of the girls while in the factory. These statements were denied on behalf of the firm, and the claim was made that operators earned from \$9 to \$16 per week, that the comfort of the girls was studied in every possible way consistent with maintaining production; coffee was served to them whenever desired, and supper money was furnished whenever the factory was run overtime. A union of the striking operators was formed, but its membership from first to last, so far as this firm was concerned, was limited to fifteen members—the thirteen that inaugurated the strike and two others that joined them subsequently. Within a week after the walk out, some of the strikers requested permission to return to work but were refused, the firm taking the ground that all vacancies being filled, the matter was closed.

NOVEMBER 27—Fifty-six painters residing and working in and about Passaic, demanded the union wage scale of \$3.28 per day of eight hours, and quit work on being notified of the employers' refusal to pay the same. Painters wages in this district up to the time the demand was made, had ranged from \$2.25 to \$2.75 per day. Eighteen employers were affected by the strike, and after a delay of one day, three of these had agreed to the demand of their men. Inside of one week, all had made the same concession and the strike was ended. Estimated wage loss, \$140.

NOVEMBER 29—Twenty peach basket "nailers," employed in the Hoffman factory at Califon, quit work because of a new regulation requiring that nine additional nails be driven in each basket without allowing any addition to price therefor. The strikers demanded an increase of five cents per hundred baskets for this extra work, claiming that as makers "put up" from 350 to 450 baskets per day, they will, under the new regulations, have to drive about 4,000 nails in addition to what they were required to do before. The strikers returned to work on December 2 at the old rates. Wage loss about \$120.

DECEMBER 2—Thirty teamsters employed by the Great Atlantic and Pacific Tea Company, at Jersey City, went on strike because the superintendent had discharged three of their number. Drivers from New York were employed to take their places, and these, on their first appearance next day, were attacked by the strikers and a large number of their sympathizers. The disturbance was promptly quelled by the police, and arbitration of the matter in dispute following, the discharged men were re-employed and the strikers returned to work. Wage loss, \$65.

DECEMBER 2—Eighty-nine operatives of the Duplin Silk Co.'s mill at West New York, demanded an increase of 10 per cent. in piece prices and went out on strike because the same was refused. The strike, which lasted thirteen days, ended on December 15th, with the return of all who went out, under the old conditions. The wage loss was, as reported, \$1,825.

DECEMBER 9—One hundred and fifty Italian laborers employed on the new sewer system of Bordentown, went on strike to enforce a demand they had made on the contractors for an increase of twenty cents per day in wages. They had been receiving \$1.40, and asked for \$1.60 per day. There was some incidental disorder which threatened to develop into a riot, and the leader of the strikers, who attacked the foreman with a razor, was arrested and held for the Grand Jury. A few hours later the strike was abandoned, and work resumed on the old terms.

DECEMBER 13—Two hundred operatives employed in the Givernaud Bros. silk mill at Hackensack, refused to submit to a reduction of 10 per cent., in the wage of weavers and quit work in a body on being assured of the firm's intention to enforce the same. The strikers, headed by a brass band, left the mill and marched to a local hall, where an agreement was reached not to return until the old wage scale was restored. The weavers had been earning from \$11 to \$12 per week, which, under the new scale would be reduced to \$9.90 and \$10.80. About thirty-five men were directly affected by the reduction, the others having gone out in sympathy with them. The strike from start to finish was without one incident of disorder on the part of the men or their sympathizers, and for that reason, together with a firm belief in the justice of their cause, the strikers from first to last enjoyed the cordial good will of the people of Hackensack. Through the efforts of the Men's Club of the Unitarian Church, supported by many influential residents of the city, an agreement was reached to submit all questions involved in the struggle between the firm and its employees, to a board of arbitration consisting of five disinterested persons—two selected by the firm, two by the strikers, and the fifth chosen by these four. Both sides had agreed to abide strictly by the decision of the board, which when rendered, was found to be a compromise under the terms of which neither side could claim a victory. One of the conditions of settlement insisted upon by the firm, and to which the strikers were at last forced to submit, was that the leader of the movement, Salvatore Gerafino, should not be re-employed. The decision of the arbitration board was, apparently, acquiesced in by both sides, and on February 1st the mill was re-opened, only however, to be closed down again by order of the firm, because, it was claimed, of a misunderstanding of that part of the terms of settlement relating to the re-employment of all the men who had gone out. The general opinion in the town of Hackensack was that the company, because of unfavorable conditions in the silk trade at that time, did not wish to re-open the mill, but would prefer continuing the strike, to having to declare a shutdown, as in the former case, operatives would be more likely to remain in the vicinity of the mill hopeful of a speedy settlement and return to work, while a shutdown for an indefinite time would almost certainly bring about an exodus from the place in search of employment elsewhere. This, however, was an assumption susceptible of neither proof nor disproof; the actual facts were that the mill was re-opened and that the firm had modified its attitude toward the demands of the strikers, in order to bring about a resumption of work. On their return many were informed by the superintendent that there was no work for them just then, and because all were not taken back at once the men again walked out in a body, claiming that the terms of settlement had been violated.

During the long winter months covered by the strike, much good work was done by the charitable people of Hackensack for the strikers and their families, but after the second walk out, many who had secured employment elsewhere left the town. A gradual resumption of work took place at the mill, and about March 1st the strike had died out. The wage loss—as nearly as could be ascertained, was approximately \$25,000.

DECEMBER 21—About one hundred carpenters residing and working in the Shark River district, comprising Belmar, Spring Lake and Sea Girt, quit work because a demand they had made for an increase of fifty cents per day in wages had been refused. The rate previously paid was \$3, which would be raised to \$3.50 by the increase demanded. Five days later several employers yielded, and within ten days all had agreed to the new wage scale. Wage loss estimated on the basis of \$3 per day, \$1,400.

DECEMBER 27—Four hundred union bricklayers, masons, plasterers and helpers, quit work on the Prudential Company's new building, Newark, because the general contractors—Hedden Construction Company, had sub-let the plastering under contract to the Klee-Thompson Company, of New York; this practice being unqualifiedly condemned by a rule of the union, the strike followed as a matter of course. After many conferences between a committee representing the three local unions whose members were involved in the strike, the Hedden Construction Company cancelled the contract under which the plastering of the new building had been sub-let to the New York firm. The strike was, however, further prolonged by a demand for "waiting time" wages, or in other words, pay for the time lost in the strike. The construction company would not agree to this when first proposed, but on January 13th, an arrangement was made under which all the strikers returned to work, and the question of allowance for "waiting time" was referred to a disinterested board of arbitration composed of three men selected by the company, three by the unions, and one by agreement of these six. The wage loss involved unaffected by any award on account of "waiting time" that may have been made by the arbitrators, was approximately \$20,000.

DECEMBER 30—Seventy broad silk weavers employed by the Stehli Silk Company, of Paterson, went on strike to force a change in mill regulations under which they were frequently fined for faulty work, caused, as they claimed, not by carelessness on their part, but by defective material supplied to them by the firm. The strikers also demanded recognition by the firm of a union which they had just formed.

In the course of the strike, one man was arrested and sentenced to fifty days imprisonment for assaulting a mill employee who had refused to quit work when the weavers went out. The strike continued to nearly the end of March, and was finally settled by a compromise which provided for an allowance for imperfect material and a slight increase in prices per yard. The strike was formally declared off on March 25, although most of the operatives had returned at an earlier date. Wage loss, approximately \$9,000.

JANUARY 3—Two hundred weavers and other employees of the Paragon Silk Works at Paterson, quit work because of dissatisfaction with prices

paid for their work; a demand made for an increase of five and one-half cents per yard for weaving was refused by the firm, whereupon a strike was declared that practically closed the mill for one week. Work was resumed under a compromise agreement which, on the part of the company, conceded the largest part of the increase demanded. The wage loss is estimated to have been \$2,000.

JANUARY 14—Fourteen kilnmen employed in the Jones Bros. pottery, Trenton, went on strike because of a change in the process of dipping and placing glass ware, claiming that the same was not sanctioned by the laws of the union. On January 19, all returned to work on advice of the first vice-president of the National Brotherhood of Operative Potters, having been idle five days. The wage loss is reported at \$100. No change was made in the process to which the kilnmen took exception, but working time was reduced five minutes per day.

JANUARY 15—One hundred male and ten female operatives employed in the clothing factory of Sigmund Eisner at Red Bank, quit work without assigning any reason for their action. Several men had been laid off temporarily, on account of work being slack in the departments in which they were employed; these induced others to join them and efforts were made to close the factory by forcibly preventing the employees from going to work. The striking operatives were practically Italians, and fearing an attempt by them to forcibly enter the works for the purpose of interfering with employees, twenty special watchmen were employed by the proprietor for duty about the factory, and the protection of female employees to and from their homes. Men brought from New York city had to be guarded in transit from the Red Bank station to the factory, and from time to time police protection was required to prevent assaults on the new operatives by strikers, several of whom were arrested and held in bonds.

The strike failed, as those who went out were replaced by non-union operatives brought from outside places. The wage loss for the time between the discontinuance and the full resumption of work in the factory toward the end of April, was \$16,800.

JANUARY 19—As a result of an agreement for the equalization of wages between three large shoe manufacturing firms in Newark, viz.: The James A. Bannister Co.; Boyden Shoe Co., and the Johnson & Murphy Co., the lasters employed by the first named concern quit work because of a reduction of two cents on each of a certain grade of shoe. The Bannister Company had been paying two and one-half cents per pair more for these goods than was allowed in the other factories, an inequality which, for business reasons, it seemed desirable to remove. Nine lasters of the Bannister Company refused to accept the reduction, and the lasting department in that and the other establishments named above, were closed down pending a satisfactory adjustment of the question of lasters' prices. The suspension of work in the three plants—for it was not a strike in the general acceptation of the term, continued four days, and besides the nine men directly concerned, nearly 300 employees of other departments were necessarily idle because of the cessation of work in the lasting departments of the three establishments.

At a conference between the men and the head of the Bannister Company, an agreement was reached under which the cut was reduced to one and one-half cents per pair, and made to apply to only two grades of shoes instead of four as at first contemplated. The lasters of the Boyden Shoe Company and the Johnson & Murphy Company received an increase of one-half cent per pair. The wage loss was approximately \$2,600.

JANUARY 19—About one hundred and fifty union workmen—masons, carpenters, plumbers and men of other organized trades, quit work on the new Seton Hall College building in South Orange, because the Lape Construction Company, of New York, plumbing contractors, had brought workmen from that city who were members of the International Association of Steamfitters, and refused to discharge them in order to make place for members of the United Association of Steamfitters which had a local branch in East Orange. Both these organizations are regarded as "regular" by the American Federation of Labor, but an agreement exists between them under which members of one shall not work in the territory of the other without first becoming a member of the union in that territory. South Orange being the exclusive territory of the United Association, the presence of the New York workmen on the local job was regarded as a violation of the agreement between the unions.

The strike ended two weeks later in the withdrawal of several New York workmen, who declined to join the local organization as the others had done. The wage loss occasioned by the strike was \$5,400.

JANUARY 21—Eight polishers and buffers—members of the union of that occupation, employed in the Empire City Metallic Bed Company's works at Jersey City, went on strike to force the re-instatement of their foreman, who had been discharged by the factory superintendent. After an investigation of the reasons for discharging the foreman, the strikers returned to work by order of their walking delegate. The strike lasted three days, and the wage loss, as reported, was \$75.

JANUARY 24—Five hundred and fifty employees of the Great Eastern Clay Company, at South River, went on strike against the employment of any but union labor at the works, or in other words to force a recognition of the union and make the plant a "closed shop." The company refused to yield, and the strikers abandoning their position with regard to the union, returned to work on January 25, after having been idle twenty-one days. The strike was peaceful throughout its course, and the wage loss was, as reported, \$18,000.

JANUARY 24—Fourteen drivers employed by the Jersey City Fertilizing Transportation Company, of Jersey City, went on strike, for an increase in their wages of \$2 per week. They had been receiving \$12 per week, which they demanded should be increased to \$14. After one day's idleness, the strikers returned to work under a compromise which gave them \$13, an increase of \$1 per week. The wage loss, as reported, was \$28.

JANUARY 24—Two hundred trousers makers, of Garment Workers Union, Local No. 24, quit work in six Newark shops, charging against their employ-

ers bad faith in the matter of carrying out existing agreements. They were not, it was claimed, allowed to keep "wage books," in which to enter an account of their work, and frequently found themselves credited with less than was due according to memorandum kept by themselves. Another grievance was that wages were paid by check instead of cash, by which practice much trouble was caused to themselves and families. An increase in prices was also demanded.

On the second day of the strike, three firms, employing about one-half of the total number on strike, agreed to the terms submitted—that is to say, a rise in the price scale, payment in cash instead of by check, and the right to keep individual work books. These men returned to work after three day's idleness, and in the course of one week a similar agreement having been signed by the other manufacturers concerned, all were back in their places. One of the incidents of the strike was the drawing into the local union of all the workmen in two shops producing the same kind of garments, who were not members before. The wage loss as reported, was \$2,200.

JANUARY 28—Eighteen steamfitters employed in the new High School building at Bayonne, quit work when all the radiators had been installed, refusing to connect them or continue at work unless paid \$6 per day for five days a week, with no work on Saturday. The contractors declined to consider such a proposal and work on the structure was consequently very much delayed. A force of several non-union steamfitters was secured from outside places, but their presence irritated the other union mechanics, and on February 5th, the iron workers on the building went out in sympathy with the steamfitters, after the Board of Education had refused to interfere for their discharge. The overcrowded condition of the High School rendered the strikers' action in delaying the completion of the new building particularly ill-timed; the number of pupils in attendance was so far beyond the accommodations that many pupils studied in the hallways. The steamfitters were finally placated with a compromise which continued their wages at the old figure—\$5.50 per day, but gave them a full holiday on Saturday. The wage loss is estimated at \$2,000. The steamfitters strike lasted two weeks, and the ironworkers were out one week.

FEBRUARY 1—One hundred and twenty-five hat sizers of the firm of Napier and Mitchell, Belleville, quit work because they had been refused an increase in pay of five cents per dozen. The firm claimed that the action of the men was a violation of their own laws, and also of the agreement existing between the firm and the national union, which provides that no cessation of work shall take place until the matter in dispute had been reviewed and decided by the board of arbitration. An appeal was therefore taken to the president of the national organization, who ordered the men back to work on February 7th, after six day's idleness. The wage loss was approximately \$1,500.

FEBRUARY 3—The "beam hands" in the employ of the leather manufacturing firm, John Reilly, Inc., at Newark, asked for an increase in wages, which was promptly given; the ease with which compliance with that demand was secured made them—as explained by the firm, "unruly;" all were discharged and other men employed in their places. The discharged men, who

were members of Local Union No. 1 of Newark, proclaimed themselves on strike, and were joined by a number of beam hands from other tanneries, whose places were also taken by new men.

FEBRUARY 4—All the union workmen of various trades employed on the New York & New Jersey Telephone Company's new building on Washington street, Newark, quit work because of disagreements between themselves and members of Cement Workers and Helpers Union of the United States, who were working on the same structure. The trouble seemed to be over the desire of the cement workers to secure for themselves certain lines of work over which the masons claim exclusive jurisdiction. Work on the building was resumed on February 14, after the rival unions had satisfactorily adjusted their conflicting claims. In all about forty-seven men were idle eight working days, at an estimated wage loss of \$1,400.

FEBRUARY 8—Forty-five male, and nineteen female weavers of the Victory Silk Company, Paterson, quit work because prices were not marked on tickets, which the company explained, had been unintentionally overlooked. Two days after the strike began a demand was made by the weavers for an increase in prices of two cents per yard. On February 14th, the weavers returned to work under an agreement which provided for the restoration of price tickets, and an increase of from one-half to two cents per yard, according to the grade of goods. The weavers were idle forty-five working hours, and the wage loss was \$700.

FEBRUARY 14—Seven furnace men of the Trenton Smelting & Refining Company quit work because their foreman had been discharged, and demanded his re-instatement as a condition precedent to their return. Other men were promptly secured to take the vacated places and none of the strikers were re-employed. The firm gave as a reason for discharging the foreman, that he had utterly refused to recognize the authority of a newly appointed general superintendent of the works.

FEBRUARY 22—Seven men employed by the Mendle-Lunappe Company, manufacturers of embroidery, South River, quit work because the firm refused to advance their wages from \$20 per week to \$25. Four days after the strike was begun, three of the workmen were reinstated on their own application. The places of the other four were filled by new men. Wage loss as reported, \$84.

FEBRUARY 22—Eighty men employed in the Alba Lime Rock Quarry at Sparta Junction, quit work because no wages had been paid to them for six weeks work already performed. The men were employed by a contractor who it appears had abandoned the work without making any provision for payment of overdue wages. With the exception of a few Americans, all the quarrymen were foreigners, principally Hungarians, with some Slavs; these latter were principally responsible for the men's action in stopping work. The strikers remained about the quarry, occupying their old quarters, but made no demonstration against property. On March 5, the company paid the wages due from the contractor and work was resumed. The strike lasted thirteen working days, and the wage loss was approximately \$1,200.

FEBRUARY 25—Twenty boiler makers of the William Graver Boiler Company, East Chicago, Ind., who were employed on the construction and erection of tanks at Constable Hook for the American Creosote Company. In stopping work the Graver employees were largely influenced by sympathy with union boiler makers of New York and vicinity who were then on strike; a further reason was that the job on which they were employed had been transferred to their firm by a concern at that time antagonistic to the union. The strike lasted three weeks, and, so far as its avowed purpose was concerned, no results were accomplished. The wage loss as reported by the Graver Company, was \$3,800.

MARCH 1—Forty employees of the Columbia Silk Company, Paterson, went out on strike because the management refused to recognize the union shop committee. The idea of forcing recognition was abandoned and all returned to work the same day. Wage loss as reported by the firm, \$50.

MARCH 4—One hundred laborers employed in laying sewers at Bordentown, quit work because the contractor wanted to change the pay periods from semi-monthly to monthly. The contractor yielded and the strikers returned to work after one day's idleness. Wage loss, \$150.

MARCH 7—A short lived strike—important only as showing the friction between unions over the question of jurisdiction and the consequent gradual development of a tendency to limit a man's right to work where he can find employment, even though he has a union membership card, occurred on the new building of the Union County Trust Company at Elizabeth. A gang of plasterers from New York, were ordered by a walking delegate of the local union to stop work on the ground that they were working outside the jurisdiction of the New York Plasterers Union. Local plasterers denounced the New York workmen as non-union, because they were not working within the territory covered by the New York charter. The Elizabeth workmen on the building refused to work, until the men from New York joined the local union. The New York men were willing to do this but were forbidden by a New York walking delegate, who decided that they could not be members of two unions. The local manager for the contractors swore out a warrant for the arrest of the local walking delegate, and that official on being arraigned before a magistrate agreed to withdraw his strike order, which, on his release, was done, and work on the building was continued thereafter without interruption.

MARCH 9—One hundred and seventy silk weavers of the Dougherty & Wadsworth Co., Paterson, quit work because the mill superintendent declined to discharge four non-union men, or to put any pressure on them for the purpose of inducing them to join the union. After the weavers had left the firm caused notices to be posted in all workrooms of the mills, stating that no discrimination would be made in favor of one class of employees as against the other, and that their standing in the mill would in no wise depend upon their affiliation with or independence of unions. The shop committee in its turn declared that the strike would be continued until the firm agreed to employ local union labor only. The strike was not extended to other departments of the mill in which work continued as usual; new

men were employed to replace those who had gone out. The strikers, however, soon began the practice of "picketing" the mill, interfering with new employees, and otherwise hampering the company's freedom of action.

On April 14, a bill was filed in the Court of Chancery by the firms, praying for an injunction restraining the Silk Weavers Union No. 607, the Silk Loomfixers and Twisters Benevolent Association of Paterson, together with one hundred or more former employees from interfering in any way with the business of the company, either by intimidating employees engaged since the strike took place, or doing damage of any kind to the buildings occupied by the firm. The matter was argued before a Vice-Chancellor by counsel representing the firm, the unions, and the striking weavers, and on April 28, the Vice-Chancellor granted an injunction against fifteen of the strikers named in the order, who were shown to have, from time to time, been concerned in the interferences with its employees complained of by the firm. The Vice-Chancellor stated that if later it should be found that the unions or either of them were responsible for any act of violence, the injunction would be made to embrace that body.

At the date of this writing (August 10), the strike was still unsettled, and only a comparatively small part of the plant was being operated with new help. The wage loss as reported by the firm from the commencement of the strike—March 9, to date of writing, was \$70,000.

MARCH 9—Two hundred of the 250 motormen and conductors employed by the Trenton Street Railway Company, quit work because a request they had made for a change in the running schedule which would allow them regular hours for rest and meals had been denied by the officials of the road. Three days before the strike, the claims and propositions of the car-men were submitted in the form of a written communication to the superintendent of the road. These were in effect as follows: Ten hours to be completed in twelve consecutive hours to constitute a day's work; twenty-three cents per hour to be the wages of conductors and motormen; all future grievances to be adjusted by an arbitration committee of three men, one representing the car-men, another the company, and an impartial third person to be chosen by these two; all employees discharged for joining the recently formed union of car-men to be reinstated in their old positions.

Some manifestations of disorder marked the progress of the strike which lasted three days; cars run at long intervals by old employees of the road and by some new men brought from outside places to replace the strikers, were stoned at points on the line where crowds of strike sympathizers had congregated; but the situation was kept well in hand by the police, and with the exception of these few attacks on empty cars, there was no rioting or destruction of property. On March 12, an agreement was ratified by both sides under which practically everything demanded by the car-men was conceded by the company. The wage loss was estimated at \$750.

MARCH 11—Five employees of the Antique Mosaic Glass Company, Perth Amboy, quit work because a fellow workman had been discharged for cause. Next day these men returned but were not allowed to resume work, the reason for the refusal as given by the firm being that they desire to gradually close down the works at Perth Amboy with a view to moving the plant to another city. The wage loss as reported, was \$15.

MARCH 19—The union masons, carpenters and plasterers employed on the new Town Hall of Kearny, quit work because the contractors—a New York firm, refused to discharge a number of plasterers from New York who were members of a union in that city not recognized as having a right to work in New Jersey. After ten days cessation of work, the New York men were discharged and their places taken by local workmen. In all, twenty men were involved in the strike, which was declared off on March 29th. The wage loss was approximately \$800.

MARCH 22—Three drivers employed in the Bayonne plant of Swift & Co.—meat packers and dealers, quit work because the superintendent having discharged the stableman, wanted the drivers to do his work in addition to their own regular duties. After a conference between the superintendent and the president of the company, which took place the same day, the stableman was re-employed and the drivers resumed work under the old conditions. There was practically no wage loss.

MARCH 24—Twenty employees of the Atlantic Terra Cotta Works at Perth Amboy refused to work because extra pay amounting to 50 per cent. of their regular wages, was refused them for working on Good Friday—a legal holiday. No attention was paid to the demand, and all returned to work the next day. Wage loss, approximately \$25.

MARCH 25—Twenty laborers employed on an addition to the public school building at Westwood, quit work because the contractor refused them an increase in wages of twenty-five cents per day. The strikers were replaced by new men in the course of a few days. Wage loss until work was resumed, \$80.

MARCH 27—Twenty-five union stone masons, bricklayers, and other mechanics employed on the new municipal building at Trenton, quit work because the workmen brought from New York by the contractors, McNulty Bros., refused to join the local unions of their respective trades, which they did on the ground that being already members of a union they should not be required to join another, and that insisting on their doing so was simply an indirect method of charging a fee for the privilege of working. The strike ended on May 5th, through an agreement between the Masons International Union, and the Operative Plasterers Union, under which interchangeable working cards, good for permission to work anywhere, are to be issued hereafter to members of both organizations. Wage loss, approximately \$3,400.

MARCH 28—Ten of the fifteen laborers employed in the nursery of Hiram T. Jones, Salem avenue, Elizabeth, quit work because their request for an increase of wages had been refused. The employer had advanced the wages of some of his employees, which caused dissatisfaction among the others and led to the strike. Three days later the men resumed work on the old terms. Wage loss, \$40.

MARCH 28—Six laborers employed by the Barrett Mfg. Co., paper mill, at Elizabeth, quit work after having made a demand for an increase of

two and one-half cents per hour in wages, which had been and were at that time, thirteen and one-half cents. Other men were promptly employed in their places.

MARCH 29—Thirty-five weavers of the Watchung Silk Company, Plainfield, quit work because of the firm's refusal to give them an increase of one cent per yard in piece prices. A couple of days later the mill was necessarily closed because of the absence of the weavers. On April 20th the firm conceded the advance demanded, and the mill was re-opened with all the strikers in their places. The wage loss as reported by the firm, was \$3,500.

MARCH 31—Seven hundred and sixty laborers employed in the Roosevelt plant of the American Agricultural Chemical Company, quit work to enforce a demand made by them for \$1.80 per day. Wage rates had ranged from \$1.50 to \$1.65 per day. At the same time 300 men employed in another plant situated in the nearby town of Carteret, because a similar demand of theirs had been refused, went out on strike. The strike at both places was ended by a compromise on April 2d. Wage loss at both plants, \$3,585.

APRIL 4—Forty moulders employed in the Henry R. Worthington plant of the International Steam Pump Company, Harrison, quit work because non-union men had been employed to operate some iron moulding machines, and also because of the employment of girls as coremakers. The action of the moulders being contrary to the rules of their union, all were ordered by their International officers to resume work, which they did on April 7th. The estimated wage loss was \$350.

APRIL 5—Fourteen laborers employed by the New Jersey Cement Company, of Newark, quit work on the foundations of an extension to the Public Service Power House at Cranford, because their demand for an increase of twenty-five cents per day, with a reduction of working time from ten to eight hours per day, was refused. The places of all were filled by new men.

### **Strike in the Roebing Mills.**

APRIL 6—On this date about fifty laborers employed in the cleaning house and annealing shops of the John A. Roebing's Sons Company's large wire mills at Trenton went on strike for an increase of wages, amounting to one and one-half cents per hour, and were joined when their action became known throughout the works, by several hundred men from other departments who were similarly dissatisfied, not only as regards wages, but with many of the rules and regulations under which their labor was performed. The number on strike at the end of the first day was between fourteen and fifteen hundred, all of whom, with the exception of a few Americans and Germans, were Italians, Slavs, Hungarians or Polacks.

Appearances indicating the probability of a general strike of all employees, and also because of the difficulty of continuing operations without the laborers, the company ordered a complete shutdown of the entire plant, which took effect on April 11th, when the 4,500 workmen, skilled and un-

skilled, a large proportion of whom had been in the company's employ for many years, were thrown into complete idleness. Of this number about 1,000 had quit work of their own accord, and 3,500 became unwilling participants in the movement, through the company's action in closing the mills.

Previous to the strike the laborers were paid at the rate of thirteen and one-half cents per hour, or \$1.35 per day of ten hours; the increase demanded was one and one-half cents per hour, which would bring wages up to \$1.50 per day, or \$9 per week of sixty hour's work.

A compromise proposition was submitted to the laborers before they quit work, under which the company agreed to concede immediately an advance of seven and one-half cents a day, or \$8.55 per week, with a promise that the claim for the full amount demanded would receive careful consideration and would be allowed just as soon as trade conditions warranted such action. A considerable number of the laborers were disposed to accept this offer; the majority, however, not only rejected the proposal, but insisted on other concessions, such as time and a half for overtime, and the abolition of the practice of "docking," whereby men who are late starting to work in the morning or after the lunch hour, are fined twenty cents, which means in effect, that for a minute or two's absence from their places at either of these times, one and one-half hour's labor must be performed, for which no pay is allowed. This rule, which is said to have been rigidly enforced, caused much discontent because of its manifest unfairness.

The company then proposed to arrange a system of piece work under which the laborers were to be paid in proportion to the quantity or weight of the material handled, the prices to be fixed so as to permit the earning of not less than \$1.50 per day; this plan, although at first rejected by the laborers, was accepted after several days delay, and became the basis of an agreement under which the strike was finally settled and the plant reopened for work on April 18th.

While the combination strike and lockout was still on, a committee appointed to place the case of the laborers before the official head of the company was refused a hearing because one man among them was not an employee. Another was substituted for the one to whom objection was made, and the reconstructed committee succeeded the next day in seeing the president of the corporation, who declined to receive or consider their demands or requests and again offered the piece work plan as the only concession that would be made. This occurred on April 14th, one week after the strike was inaugurated, and four days later, on April 18th, the laborers gave up the struggle and returned to work on the terms offered, having each of them lost nine day's wages, without gaining anything whatever except the change from day work to piece work, a concession which many regarded as of doubtful value.

During the first days of the strike there were a few riotous demonstrations in which some of the laborers and many of their sympathizers took part; a couple of detached buildings of the plant, which in its entirety covers an extensive area, were stoned and some windows broken; interference with the running of cars and other manifestations of disorder incident to gatherings of large crowds of idle men, were promptly suppressed by the police. During the progress of the strike, meetings of the laborers were held almost continuously. Addresses were made at these gatherings

by agents of two national labor organizations—the "American Federation of Labor," and the "Industrial Workers of the World," but as very few among the strikers understood the English language, the advice offered by speakers lost much of what force and coherency it might contain, in the rather free and off-hand translations which their addresses had to undergo, to be at all comprehensible by those for whom they were intended.

From the beginning of the strike until its close the rival organizations contended for control of the situation, each with a view to forming the laborers into a union under its own jurisdiction, but neither of them succeeded. Some few of the Italians and practically all the Hungarians favored the American Federation, while the Slavs and Polacks inclined to the Industrial Workers of the World. A certain well defined racial antagonism between these groups was largely instrumental in defeating a movement for the formation of a shop union, composed exclusively of Roebing Company employees, which as planned, was not to be affiliated with any other local or national organization. The Italian laborers generally were favorable to the plan of an independent shop union, while the other races inclined toward the Federation or the Industrial Workers, without, however, appearing to have sufficient confidence in the promises held out by either to produce any result.

About 50 per cent. of the total number of employees in the plant are of the non-English speaking races, and among these were practically all the common laborers concerned in the strike which brought about the closing of the works. Although the skilled workmen and foremen are, with comparatively few exceptions, Americans or Germans, there are a number of wire drawers and other mechanics of foreign birth, and most of the positions in the intermediate grades of work between common laborers and the branches requiring a high degree of skill, are filled by these men. The American expert workman does not as a rule look on the advancement of foreigners with favor, but so far as the company is concerned, the way seems open for the ambitious and capable regardless of race, to rise above the rank of common laborers and secure wages proportioned to the value of services rendered, according to the standards which prevail in the plant.

The poorer class of laborers—those who inaugurated the strike, work very hard and are, from the character of their employment and ignorance of the English language, particularly liable to more or less serious bodily injury through accidents for which these drawbacks are largely responsible. That they are, generally speaking, temperate and thrifty and capable of making the most out of their circumstances, is shown by the fact that a large proportion of their number own their homes. The Italians are much in advance of the other races in this respect, as it is said that fully 30 per cent. of those employed in the Roebing plant are house-owners. As a rule the single men among them live with their married associates and pay for lodging, washing and cooking—themselves supplying the food—the sum of \$2 or \$2.50 per week. In this way they are enabled to live in a manner satisfactory to themselves, and also save money or send assistance to families or relatives in their old home. This manner of living often results in overcrowding, and large families with as many as six boarders are frequently found in small houses containing four or five rooms; but it seems to be

almost the only plan of living open to them by which expenses can be met and something saved out of their earnings.

A case in point, which illustrates the pitifully close kind of domestic economy which these poor people are obliged to practice, came to light during the progress of the strike. One man, with his wife and two children, lived in a five room house and also entertained six boarders; three of these men working in the day and three in the night shift. An alternation in the use of sleeping accommodations which kept the beds in constant use day and night, made it possible to carry out the arrangement, but with the plant closed in consequence of the strike, the routine was completely upset and the house owner was obliged to secure temporary sleeping accommodations elsewhere for three of his lodgers.

Some of these people appear to be lacking in ambition, or to have settled into a chronic condition of discouragement, because of the disadvantages under which they labor, the most serious being their ignorance of the English language, which many of them, although years in this country, have failed to learn. This is a formidable obstacle to their industrial and social advancement, in that opportunities for desirable employment and the improving influence of free intercourse with fellow workmen and people of other races among whom they reside, is thereby rendered practically impossible. Generally speaking, however, they appear to be making the most of circumstances; they work steadily, and as a rule do not spend much of their earnings on self indulgence; the children are sent regularly to school and are regarded by their teachers as being, in the matter of natural aptitude and brightness, quite equal to those of native birth. With the opportunities thus opened to them, these children are qualifying themselves for far less laborious and more remunerative employment than that with which their fathers are now, by the logic of circumstances, forced to be content. The wage loss resulting from the strike was, as reported by the company, \$60,000.

APRIL 6—Seventy-five boys and girls, ranging in ages from fifteen to eighteen years, employed in the Dolphin Jute Mills, Paterson, as "doffers" and "piecers," quit work because of the firm's refusal to allow them an increase of pay. The "doffers" who are all boys, were receiving \$4 per week, and wanted \$4.82; the "piecers"—all girls, were being paid \$5.25 a week, and demanded \$5.85. The mill was closed as it was impossible to operate it without the "doffers" and "piecers," but was reopened next day when the strikers returned in a body, having agreed to continue at the old rate of wages. Wage loss, \$57.

APRIL 7—Twenty-five laborers employed in the erection of the new storage warehouse of the Wells-Fargo Express Company at Jersey City, who were receiving seventeen and one-half cents per hour, struck for an increase to twenty cents. The matter was settled by a compromise, which gave the laborers twenty cents per hour. The strike lasted two days, and the wage loss was approximately \$88.

APRIL 7—Twenty Italian laborers employed on the New York & Long Branch Railroad near Long Branch, struck for an increase in wages of fifteen cents per day, or from \$1.50 to \$1.65. The strikers marched along

the railroad tracks, forcing all laborers whom they met on the line to join in their demonstration. In this way the number of strikers had grown to fifty by the time they reached Asbury Park. Next day a compromise was effected under which an increase of nine cents per day was secured by the strikers. The wage loss was estimated at \$50.

APRIL 7—One hundred and twenty-three men and women employed in the C. Pardee Works, at Perth Amboy, struck for an increase of wages, and returned to work on April 14th without having succeeded. The strike lasted six working days, and the wage loss was \$1,030.

APRIL 7—Practically all the union carpenters of Elizabeth, about one hundred and fifty in number, quit work under order of the Building Trades Council, because the master builders were employing non-union workmen. Immediately following this action on the men's part, a meeting of the Master Builders Association passed resolutions declaring its readiness to take up all matters in dispute with the various trades through the medium of a joint arbitration board, composed of representatives of the employers and the unions, provided that in the meantime the strikers were ordered back to work by the Building Trades Council. After some delay on the part of the unions, this course was decided upon, and accordingly, the men were directed to report to their employers, which they did, although places could not be found for them all, which caused much dissatisfaction, which, for a few days, threatened to bring about a renewal of the strike. The employers refused to discharge the non-union men, and after much discussion, extending over a period of six weeks, the board of arbitration, which in the meantime had been formed, agreed to allow such of the non-union workmen as desired to join the union, to become members on payment of a specially low initiation fee; it was further understood that those who did not wish to avail themselves of that privilege should be discharged, and that thereafter none but union men in good standing should be employed in shops controlled by the Master Builders Association. This settlement went into effect on May 9th. The wage loss incidental to these troubles was inconsiderable, because such union men as were unable to find employment in Elizabeth, found no difficulty in securing it in nearby places.

APRIL 7—The laboring men employed in the structural iron works of the A. E. Norton Company, at Boonton, about ninety in number, struck for an increase in wages of twenty-five cents per day, or from \$1.50 to \$1.75. The firm conceded \$1.60 per day and the laborers returned to work after being idle only a few hours. On April 20th, a strike took place of the entire working force of the plant—about two hundred men, because the management of the concern discharged two men that had been more or less prominent in the previous strike. As a result of the employees' action, the mill was closed down.

APRIL 8—Two hundred employees of the Waclark Wire Works in the Bayway section of Elizabeth, mostly Polish laborers, quit work after the expiration of the noon lunch hour without offering any explanation of their reasons for so doing; later it was learned that they wanted an increase of twenty-five cents per day in wages, which was refused by the firm. The

strike, which lasted twelve days, was marked by several outbreaks of violence on the part of some of the idle men, which required the almost constant attention of a force of policemen. The plant was closed a couple of days after the strike began, but was reopened on the 20th, when practically all the laborers returned without increase of wages. The wage loss was approximately \$3,500.

APRIL 9—Sixty-two employees of the Caldwell Lead Company, Elizabeth, struck for an increase of wages, which was refused by the firm. The action of the strikers necessitated the closing of the works, which threw eighty more men into involuntary idleness. Work was resumed on the 19th under a compromise, which gave the strikers an advance in wages, but less than the amount demanded. Wage loss of strikers, \$339. Wage loss of those who had to stop work because of strike, \$785. Total wage loss, \$1,124.

APRIL 9—A strike of all the union workmen employed on the new Prudential Insurance Company Building, at Newark, except the bricklayers, took place on this date, under orders of the board of walking delegates of the Essex Building Trades Council. The trouble was due to hostility on the part of the various trades represented in the council toward the bricklayers, who had withdrawn their representative from that body, and to the further circumstance that the bricklayers are independent of the American Federation of Labor, with which all the other trades were affiliated. The plasterers also demanded that only members of their local union should be employed in that department of work on the building. All so employed were connected with unions elsewhere, but the local workmen insisted on the exclusive rights of their organization to the work. The outside workmen refusing to join the local union, and the contractors declining to discharge them for not doing so, resulting in a sympathetic strike by representatives of all trades on the building who were members of local unions, except the carpenters, who refused to go out unless ordered to do so by their own national officers. The strife between the unions greatly impeded the progress of work on the building, and efforts made by the national officers to establish harmonious relations seemed to have been productive of very slight results. One after another of the trades were drawn more or less actively into the struggle, but the contention between the plasterers and bricklayers seemed to underlie all the trouble. On May 9th the sympathetic strike was declared off by the Essex Building Trades Council, because the plasterers had, in a communication to that body, formally withdrawn its bill of grievances against the bricklayers, and work on the building was fully resumed. The strike lasted five weeks, during which time 300 mechanics and laborers of the various trades were idle. The wage loss was approximately \$30,000.

APRIL 9—Three hundred and nine employees of the Warner Sugar Refining Company, at Edgewater, quit work because the firm refused their request for an increase in compensation, which would make eighteen cents the minimum wage rate per hour, and double time for Sunday work. The strikers, who were nearly all Pollocks, returned to work on April 13th, on

the old terms. The strike lasted four working days, with a wage loss, as reported by the firm, of \$2,051.

APRIL 9—Thirty-eight laborers—all non-English speaking foreigners—employed by the Vulcanite Portland Cement Company, at Vulcanite, near Phillipsburg, struck for an increase in pay, which would bring their wages up from fifteen cents to seventeen cents per hour. The strikers were only 8 per cent. of the total working force of the plant, and when the demand for increase in wages was made, the management offered an advance of one-half cent per hour, which, after three days' idleness, was accepted, and all returned to work. It appears that only a comparatively small number took part in the strike voluntarily, the others having been driven into it by threats of violence made by the leaders. The wage loss, as reported, was \$212.

APRIL 11—The union painters and paperhangers of Newark and West Hudson, who had been receiving \$3.28 and \$4 per day, respectively, demanded an increase for the painters to \$3.64 per day, and for the paperhangers, \$4.50 per day of eight hours. A demand was also made for a written agreement embodying a guarantee of not less than these amounts, and that each employer signing the contract be required to deposit with the local union a sum of money to be forfeited in case the agreement shall be broken in any particular by him. Some of the employers acceded to the wage demand while others offered a compromise, \$3.50 per day to the painters and the same proportionate advance to the paperhangers. All the employers, however, united in refusing to furnish a cash bond. The number of men involved in the strike at the commencement was about 800, and the number of employers in the territory affected, about 120. An employers' association was formed, and some attempt was made to restore the "open shop" system. Gradually, however, one employer after another abandoned the association and succumbed to the union, but the strike continued on a diminishing scale until about the middle of May, by which time practically all the strikers were back at work on terms that were in the nature of a compromise, and a decisive victory for neither side. The wage loss was estimated at \$43,400.

APRIL 12—Eight men employed by the Trenton Water Power Company in the work of removing refuse from the bed and banks of the stream, quit work because an increase of twenty-five cents a day in wages, which they demanded, was refused to them by the superintendent. The strikers had been receiving \$1.50 per day of nine hours, and wanted \$1.75 for the same time. Other laborers were employed in their places.

APRIL 12—The kilnmen employed in the Electric Porcelain Works, Trenton, quit work because their demand for an increase of wages had been refused. An attempt was made by the strikers to force some of the employees to quit who had refused to join them, and the superintendent of the firm called for police protection. The men returned to work next day without the increase.

APRIL 13—Twenty employees of the Beattie Carpet Mills, at Little Falls, requested an increase in the piece price of 10 per cent. on certain lines of

work, and were informed that a decision would be rendered two days later; without waiting to hear what the firm was disposed to do, the men went on strike, and remained out for one week, during three days of which time the mills were entirely closed down. Work was resumed under a compromise which gave the men concerned a part of the increase demanded. The wage loss was estimated at \$1,200.

APRIL 18—Twelve bakers employed in Kolbs Bakery, Trenton, went on strike because their employer refused them an increase of \$2 each per week in wages. Immediately after the strikers quit work other men were employed and all lost their places.

APRIL 23—About one hundred drivers and helpers employed by produce dealers of Center Market and Commerce street, Newark, quit work because the following wage schedule, which they had submitted, was rejected by the dealers: Three horse drivers, \$20 per week; team drivers, \$18 per week; single horse drivers, \$15 per week, and floor men, \$15 per week. About May 7th the strike died out, although it was not formally called off. The commission merchants made no concession to the men. The defeat of the strike was brought about by the action of the New York Brotherhood of Teamsters in permitting its members to cart produce to the Newark dealers. Before the complete extinction of the strike about twenty of those who went out returned to work, and it was understood that all, with the exception of those who had been guilty of violence, would finally be taken back. The wage loss was \$2,800.

APRIL 25—The Erie Railroad freight handlers employed on the docks of Jersey City and Weehawken, went on strike for a uniform wage rate of twenty cents per hour. Complaint was made to the company that while some men are paid the rate demanded, there are others who do as much or more who receive only eighteen cents, and still others were receiving only fifteen cents per hour. The men who were receiving twenty cents per hour had been for years in the employ of the company; they were mostly Irish-Americans and took no part in the strike. Those who went out were foreigners—mostly Polocks, Italians and Hungarians. About one hundred and fifty men in all were concerned in the strike, which extended well into the month of May, and died out through the gradual return of some of the men concerned and the replacing of others by new laborers. While the strike of the freight handlers was under way, about one hundred women car cleaners employed by the Erie Company started a strike of their own in sympathy with their fellow employees. This took place on April 29th, but the women gradually returned to work and their strike died out before the final collapse of the one to aid which it was undertaken. Only the most general estimates of the wage loss could be obtained, and the most reasonable of these placed the amount at \$4,200.

APRIL 27—One thousand three hundred employees of the American Smelting and Refining Company's works at Perth Amboy, quit work in sympathy with the firemen and ash wheelers employed by the same concern, who were on strike for an increase of wages. The strike, which lasted eight days, was ended by a compromise; the men were given about one

quarter of the amount demanded and work was resumed on May 3. Wage loss, as reported by the company, \$16,000.

APRIL 30—Two hundred laborers of Harrison, employed by a contracting corporation—the Steers Company—demanded that they be paid \$1.75 per day, and not \$1.50, as had been the wage scale before. The strike which followed a refusal to comply with this demand, lasted one day. The men accepted \$1.65 as a satisfactory settlement, and returned to work. The wage loss was \$200.

MAY 2—Approximately two hundred bakers, employed in several large establishments at Jersey City, Hoboken and Weehawken, quit work in sympathy with the strike then going on in New York city, of all the union bakers. After quitting work, demands, based on grievances of which they complained, were formulated and presented to their employers. The strike soon extended to the city of Newark, and practically all the Hebrew journeymen employed in the small shops of the "hill" section had quit work on May 7th. The Newark bakeshops of this character were the centers of petty rioting during the progress of the strike, because of the efforts of the journeymen, assisted in many instances by the members of their families, to prevent the public from buying bread at the so-called "scab" shops. The proprietors of the large shops in Hoboken and Jersey City secured new workmen who, to prevent their being molested by the strikers, were lodged in the bakeries. Against continuing this practice, the managing committee entered a protest on behalf of the strikers in the form of a letter to the Mayor of Hoboken, charging the boss bakers with violating the State law for the maintenance of sanitary conditions in bakeshops, by lodging journeymen on the premises. This complaint was referred to the Corporation Attorney's office by the Board of Health, and that officer informed the board that on investigation he had failed to find anything illegal in what the boss bakers had done. New workmen were gradually filling up the places vacated by the strikers, and an attempt to start a co-operative bakery on a large scale having failed, such of the idle workmen as could still do so, returned to work. Many of the proprietors of small shops had induced their men to return during the continuance of the strike by making some concessions which still, however, fell far short of the demands made prior to the beginning of the struggle. These were: Nine and a half hour work day, six days per week; a wage scale with a minimum of \$11 for helpers, and \$20 for journeymen; extra pay for overtime, which shall not be more than two hours in one week; no work on legal holidays unless given a day off before or after the holidays.

The strike was most determinedly maintained by employees of the large Hoboken bakery, the products of which are marketed in all parts of Hudson county, but here, as in Newark and Jersey City, it gradually died out as the result of a compromise, which conceded a slight increase of wages, and practically all the strikers had returned to work during the last week in May. The most reliable information obtainable places the total number on strike at 250, and the wage loss at approximately \$9,000.

MAY 2—Thirty toolmakers employed by the Sprague Electric Company, at Bloomfield, quit work because a request they had made for an increase

of five cents per hour in wages was refused. On May 9th seven of them returned to work on the old terms and the others had in the meantime secured employment elsewhere. Wage loss estimated at \$400.

MAY 2—Sixteen union painters employed in two shops at Morristown, went out on strike to force from their employers a recognition of the union, and an agreement providing that in future none but union men would be employed. A demand was also made for the discharge of all non-union men in the shops, and the establishment of a Saturday half-holiday, all of which was agreed to by the employers concerned on the second day of the strike. Wage loss, \$52.

MAY 2—Five hundred employees of the Barber Asphalt Paving Company, at Maurer, struck work to enforce a demand made by them for an increase of twenty-five cents per day in wages. After two and one-half day's idleness, all returned to their places under a compromise which gave them an increase of ten cents per day. Wage loss, \$2,500.

MAY 3—Eight girls employed in the works of the Levett Manufacturing Company, at Matawan, quit work because of a reduction in piece prices which the firm insisted on making. The girls returned two days later, when the order to reduce wages was withdrawn. Wage loss, \$24.

MAY 4—Fifty laborers employed in the works of the J. L. Mott Company, at Trenton, quit work because an advance in wages was refused to them by the company. Their places were taken by new men, and all lost their employment.

MAY 17—Ten men employed in a quarry of the Califon Lime Stone Company, at Califon, struck for a nine-hour work day with the same wages they were receiving for ten hours. The strike, which was not successful, lasted one day, and the wage loss was \$14.

MAY 18—Eighty-eight employees of the Imperial Cutlery Works, at Avondale, went out on strike for the purpose of forcing their employers to unionize the plant. The strike, which lasted six days, was a failure. Wage loss, \$754.

MAY 24—A strike of forty-five men and eighty-two women occurred in the plant of the United States Rubber Company, at New Brunswick, because an increase in piece prices for making shoes, which they requested, had been refused by the firm. The strike, which lasted five days, was a failure, and the wage loss, as reported, was \$933.

MAY 31—Twelve laborers, employed in road repairs at Nutley, struck for an increase of wages, and their places were filled by new men.

JUNE 7—The union hodcarriers of Chatham, Madison and Morristown, about thirty in number, went out on strike for an increase of seven cents per hour in wages. They had been receiving twenty-five cents and wanted thirty-two cents per hour. A few of the contractors agreed to the increase when the demand was made, because of urgency in the matter of buildings under construction; others yielded later on, but a compromise was not

effected with a majority of the strikers until about July 15th, when the strike had been in operation for six weeks. Wage loss approximately \$3,000.

JUNE 7—Sixty clay mining laborers employed in the clay banks of J. R. Such, at South Amboy, went on strike for an increase in wages; all returned to work at the old rate after being idle five working days. The wage loss was \$525. A leader of the strikers who had from the beginning shown a disposition toward violence, was arrested on complaint of several of the laborers whose lives he had threatened because of their having returned to work, and refusing to furnish a bond for peaceable behavior, was imprisoned in the county jail.

JUNE 16—Twenty-four laborers employed by the New Brunswick Trolley Company, quit work on the Albany street line, where they were employed, because, as claimed by them, the weekly pay which they had just received was less than the amount expected. All the laborers did not quit work, and some of those who did go returned in the course of the afternoon. Next day all the strikers except a few who had been replaced by new men, were back at work. The wage loss was about \$30.

JUNE 16—A strike of about two hundred machinists employed in the Walter Scott Press Works; the Potter Press Works, and the Hall Printing Press Works—all three plants situated in Plainfield—took place on this date to enforce a demand made by the men, who were members of the Machinist's International Union, for a uniform minimum wage of thirty-three and one-third cents per hour, and a working scale of fifty-four hours per week. A compromise was effected after the strike had continued six days, and work was resumed on terms satisfactory to both sides. The wage loss was approximately \$4,000.

JUNE 18—Thirty-five firemen employed in the Corn Products Refining Company's plant at Edgewater, went on strike to enforce a demand they had made for a reduction of working time or an increase of wages. The men were being paid \$2.50 for twelve hours per day, and their demand was for either an eight-hour day at the same wages, or \$3 for a twelve-hour day. The strike lasted three days and was settled by a compromise. Wage loss estimated at \$250.

JUNE 21.—Forty laborers employed by the Seton Leather Co. of Belleville, went out on strike because of some disagreement over a foreman. Of these, thirty returned to work after one week's idleness, and the places of the others were filled by new men. The wage loss was estimated at \$300.

JUNE 27.—One hundred and fifty-seven employes of the Standard Motor Construction Co. at Jersey City, went out on strike for an increase in wages and the establishment of a minimum wage scale. The men returned to work on July 7th, having lost nine working days. The only concessions made by the company were certain changes in working hours, overtime pay, and individual increase of wages. Wage loss, \$4,000.

JULY 3.—The union plumbers of Trenton laid a demand before their employers for an increase of wages from 50 to 60 cents per hour. The hours of labor are forty-four per week, and under the old scale wages were \$22.50

per week, which would be increased to \$26.40 under the rate which they sought to establish. An agreement was reached on July 7th, under which the strikers returned to work accepting 50 cents per hour until contracts then existing should be finished, after which they were to receive 55 cents per hour. The union steamfitters also took part in the strike which lasted three days. The number of men involved was about 50, and the wage loss \$600.

JULY 5.—Fifty-six girls and 4 men employed in the winding department of the Paul Gunther mill at Dover, quit work because an assistant foreman had been appointed whom they suspected was to displace the man formerly in full charge of the department, who however, resigned of his own accord. After having been idle six days, all returned to work. Wage loss, \$350.

JULY 7.—Thirty foreign laborers employed on street paving at Trenton, struck to secure an increase from \$1.50 to \$1.75 per day in their wages. The demand was granted by the contractors and the men returned to work, but struck again within an hour for a reduction of working time from 9 to 8 hours per day, whereupon the entire gang was discharged.

JULY 19.—One hundred women and girls employed in the R. H. Steel laundry at Jersey City, quit work because their foreman had been discharged and a new man appointed to his place. An offer of an increase of 50 cents per week in wages as an inducement to return to work was rejected by the women unless the foreman was also reinstated, which the management would not agree to. New help was employed so far as it could be obtained, and seeing their places being gradually filled, the strikers began returning to their places in numbers that increased from day to day until on July 26 all for whom vacancies could be found had resumed work, leaving seventeen of the original number without employment. Seven drivers employed by the laundry firm were discharged for alleged intimidation of the girls who took the strikers' places, but these were reinstated next day on promising to abstain from all interference of like character in the future. The strike lasted seven days, but not all the original participants were idle during that time. The net results were a loss of wages amounting to approximately \$300, and loss of employment by seventeen girls.

JULY 20.—Twenty-five stokers employed at the Marion plant and 33 at the Coles Street, Newark, power house of the Public Service Corporation, quit work because they had been refused an increase of wages. Their pay had been \$2.45 per day of eight hours, and they asked for \$2.70. Three days later a committee representing the strikers waited on the president of the corporation for the purpose of obtaining his consent to the return of the firemen at the old rate of wages, and the discharge of several new men who had been employed to take their places. This was agreed to, and all resumed work. Wage loss, \$425.

JULY 22.—Sixty-five employes of the East Jersey Pipe Co. at Paterson, went on strike for an increase of wages, and returned to work on July 27 under a compromise agreement which was satisfactory to both sides. Wage loss as reported, \$700.

JULY 22.—Twenty-four operatives employed in the garment factory of Joseph Dauria, Trenton, quit work in sympathy with the organized garment workers of the East Side district of New York, who had been on strike for the past three months. The sympathetic strike lasted six days, and the wage loss was \$150.

JULY 25.—Two hundred and eighty-three men employed in the Jersey City plant of the American Sugar Refining Co. quit work in sympathy with the employes of the Havemeyer & Elder refining company of Brooklyn, N. Y., who were on strike for an increase in wages. The men returned to work on August 15th, after three weeks idleness. No demand for wages' increase or any other change in working conditions. The strike was the direct result of coercion by the Brooklyn men who, after closing their own place of employment, swarmed around the Jersey City refinery in clamorous crowds. The wage loss as reported by the firm, was \$11,531.

JULY 26.—Ten men and twenty-five girls employed by the Milbury Atlantic Co., manufacturers of bathing suits, at Rahway, went on strike because their forewoman had been displaced by the wife of the proprietor, by whom her duties were assumed. On July 29 all the strikers returned to work except the forewoman and one operative, under a guarantee of an increase in wages ranging from 50 cents to \$1.50 per week, and a Saturday half holiday during the months of June, July and August. Wage loss, \$160.

JULY 29.—One hundred and twenty Italian laborers employed on the Bloomfield Avenue, Newark, sewer, went on strike and brought all work on the improvement to a standstill, because the pay day had been changed from Saturday to Wednesday. About half the number of men who went out were disinclined to do so, and preferred remaining at work, but were coerced by threats of physical violence into following the others. Some acts of violence were perpetrated by the strikers and two of them threatened the life of the Superintendent in charge. A number of them returned on the second day after the cessation of work, and new men were employed in place of the others. The wage loss was estimated at \$180.

AUGUST 4.—The members of Iron Moulders Local Union No. 267 of Trenton, notified their employers that after August 15th, they would expect an increase of 25 cents per day in wages which would make their pay \$17.50 per week. The union has 300 members, but practically all the foundries in which they are employed, were operated on the "open shop" plan. No notice was taken of the demand by employers, and the moulders concerned referred the matter to their international union for a decision as to whether or not a strike should be resorted to if the attitude of employers remained unfavorable. The matter was still unsettled at the time of this writing.

AUGUST 6.—The annual wage conference between the Glass, Vial and Bottle Manufacturers Association, and representatives of the Glass Bottle Blowers Association which has a membership of 11,000, terminated at Atlantic City in an agreement to continue the price list of last year. This was agreed to by the representative of the union because of the progress made at the glass houses in the introduction of machines for making bottles.

As a concession to the union, the manufacturers association agreed to put on three shifts hereafter instead of two, so that men displaced by the machines may secure employment. The manufacturers also agreed to a modification of the rule relating to apprentices, under which only one will be allowed for every twenty blowers, instead of one as formerly, for every fifteen.

AUGUST 11.—Eleven linemen of the Public Service Corporation at Jersey City, quit work because the superintendent refused to discharge a foreman who it was claimed, was unduly domineering and harsh in his official intercourse with them. The strikers were paid off, and other men employed to take their places. The linemen's union refused to sanction the strike, because the grievance complained of had no relation to wages or hours of labor, but was instead a purely personal one.

AUGUST 15.—The coach drivers of New Brunswick have decided that hereafter they will not drive for funerals on Sundays.

AUGUST 18.—Fifteen laborers employed on street improvement at Gloucester City, demanded an increase in wages of 40 cents per day, and quit work when the same was refused by the contractor. The men had been receiving \$1.60 per day, and wanted \$2.00. Other laborers were employed next day to take their places.

AUGUST 25.—Eighty-nine employes of the Alfred E. Norton Co., fabricators of structural iron work, at Boonton, went out on strike because a new foreman had been appointed in place of one, a favorite with the workmen, who had been discharged. The strikers returned after three day's idleness, having given up the effort to secure the reemployment of the discharged foreman. Wage loss as reported, \$535.00.

AUGUST 28.—Seventy-five moulders employed by the Trenton Malleable Iron Co., at Trenton, made a demand for an increase of wages which was refused, the company having a short time before advanced their wages voluntarily. The establishment was practically closed down for five weeks, and about 50 other employes having no relation to the strikers, were forced into idleness. A compromise was effected under which the plant was reopened on September 26th, when the strikers returned to work, having an increase in wages, but less than the amount originally demanded. The wage loss to strikers and laborers who were rendered idle through their action, was approximately \$6,000.

AUGUST 30.—Twenty-five employes of the Lambertville Pottery Co., at Lambertville, quit work under orders of the local branch of the National Brotherhood of Operative Potters, because the company had discharged a number of sanitary pressers who had recently joined the union, and were endeavoring to form a new shop organization of the trade. The pottery was closed up; the strike, which was to compel the company to take back the discharged men, had not been settled at this writing.

SEPTEMBER 2.—Forty laborers employed by the firm of Warren Brothers Co., on the construction of a large building in the Greenville section of Jersey City, went out on strike for an increase of wages. Several small

disturbances occurred between the strikers and others who had taken their places and a number of arrests were made by the police. The strike was unsuccessful, the laborers who took part in it having been replaced by others within a few days. Wage loss estimated at \$240.

SEPTEMBER 7.—Four hundred men's garment workers, members of Garment Workers Local Union No. 24, of Newark, demanded a 10 per cent increase in prices of certain kinds of work, and went on strike to enforce the same. A new price list providing for the 10 per cent advance was submitted to the employing firms, and the same was agreed to by six of the leading concerns. One hundred and fifty of the operatives thereupon returned to work, having been idle only one half day. Other manufacturers and contractors agreed to pay the advance demanded and about six days after the commencement of the strike, the operatives all had returned to work. The strike was completely successful; wage loss estimated at \$800.

SEPTEMBER 15.—Thirty-five men employed by Oscar Schmidt, manufacturer of musical instruments at Jersey City, struck to enforce a demand they had made for the payment of higher piece prices in one department of the works. The strike lasted three weeks, and resulted in the men receiving the increase demanded. Wage loss, \$1,280.

SEPTEMBER 21.—Twenty-five glaziers employed by Louis Max at Jersey City, quit work on orders from a committee of New York glaziers who were on strike. The Jersey City men had no grievances of their own to complain of, but feared to lose their standing with the union by disobeying the order to strike. The police reserve had to be called on to protect truckmen while unloading a consignment of glass at the Jersey City establishment. About one week later the New York strike having been settled, the Jersey City men returned to work. Wage loss estimated at \$300.

TABLE NO. 7.

## STRIKES.

The table that follows is a summary of the essential facts relating to the strikes as set forth in the preceding notes. The date of occurrence, character of business, location of works, with purpose for which the strike was undertaken, are all shown, with the results so far as these could be ascertained, or where a definite conclusion was reached. The causes of strikes, or the various interests sought to be advanced by the workmen who were engaged in them, together with the number chargeable to each cause or purpose, are shown in the following table:

CAUSE OF STRIKES.	Number of Strikes.
Increase of wages.....	53
Sympathy for other workmen on strike.....	8
Against working with non-union men.....	6
Against other union workmen.....	6
For reinstatement of discharged foreman.....	6
Against discharge of fellow workmen.....	6

CAUSE OF STRIKES.	Number of Strikes.
Against reduction in wages.....	4
Against "open shop".....	4
For recognition of union.....	2
Increase of wages and reduction of working time.....	2
For uniform wage rate.....	2
To force discharge of foreman.....	2
Increase of wages and recognition of union.....	1
For union wage scale.....	1
To enforce union rules.....	2
For change in shop rules and recognition of union.....	1
Increase of wages and full Saturday holiday.....	1
Because of delay in payment of wages.....	1
Against change from semi-monthly to monthly pay day.....	1
Increase in working time and wages.....	1
To secure pay for overtime.....	1
For reduction in working hours.....	1
Against change of pay day.....	1
Total number of strikes.....	112

The total number of strikes that took place during the twelve months covered by the record is, as shown by the above figures, 112; for the preceding twelve months the number recorded was 93; the increase in the number of strikes for the present year is therefore 19, or a little more than 20 per cent. Almost one half of the total number were for wage increases, and the causes next in numerical importance were—sympathy with other strikers; against working with non-union men; against members of other unions; for the reinstatement of favored foremen who had been discharged; and to prevent the discharge of fellow workmen.

Making a broad classification of the strikes of the year by character of occupation, the record shows 67, or 59.8 per cent of the total number occurred among men and women employed in factories and workshops; 16, or 14.3 per cent in the building trades; 11, or 9.9 per cent in tunnel and sewer construction, street improvement, etc.; 6, or 5.3 per cent in transportation; 3, or 2.6 per cent in electric power houses or among linemen, and 9, or 8.0 per cent in a number of unclassified occupations.

The total number of wage earners involved in the strikes was 14,044; of these 12,088 were men, and 1,956 women. The total amount of wage loss involved in the strikes was \$439,088.

By localities the strikes were divided over the State as shown in the following table:

Jersey City.....	15	Dover .....	2
Trenton .....	14	Califon .....	2
Newark .....	13	Bordentown .....	2
Paterson .....	7	South River .....	2
Elizabeth .....	7	Bayonne .....	2
Perth Amboy .....	5	Belleville .....	2
New Brunswick .....	3	Harrison .....	2
Weehawken .....	3	Boonton .....	2

Edgewater .....	2	Cranford .....	1
Morristown .....	2	Long Branch .....	1
Orange Valley .....	1	Little Falls .....	1
Burlington .....	1	Hoboken .....	1
Passaic .....	1	Maurer .....	1
Hackensack .....	1	Mtawana .....	1
Belmar .....	1	Avondale .....	1
Red Bank .....	1	Nutley .....	1
South Orange .....	1	Chatham .....	1
Sparta Junction .....	1	Madison .....	1
Constable Hook .....	1	South Amboy .....	1
Kearny .....	1	Rahway .....	1
Westwood .....	2	Gloucester City .....	2
Plainfield .....	1	Lambertville .....	1
Roosevelt .....	1		

The chronological record of strikes for the twelve months ending September 30, 1910, is as follows:

October .....	4	April .....	22
November .....	7	May .....	10
December .....	7	June .....	7
January .....	10	July .....	10
February .....	8	August .....	6
March .....	15	September .....	4

The large number of strikes reported for April is accounted for by the fact that working agreements, in the building trades particularly, whether these extend over one or more years, usually have April 1st, as their date of commencement, and such strikes as may follow disagreement over the terms advanced by either side as the basis of renewal, are almost certain to be commenced during that month. Another reason is that outdoor laborers who eagerly accept employment at any remuneration offered during the winter months, often find that fairer wages cannot be obtained without a strike when these have passed over.

## Strikes and Lockouts, from October 1, 1909, to September 30, 1910.

When Strike or Lockout Occurred.	Business or Occupation in Which Strike or Lockout Occurred.	Location in Which Strike or Lockout Occurred.	Cause or Object of Strike or Lockout.	Result of Strike— Successful, Unsuccessful, Partly successful.
October 15.	Manufactory of chemicals.....	Perth Amboy.....	Against a reduction in piece prices.....	Successful.
October 23.	Laborers (railroad).....	Elizabeth.....	For increase in wages.....	Unsuccessful.
October 27.	Carpenters.....	Dover.....	Against working with non-union men.....	Successful.
January 15.	Hatters.....	Orange Valley and Newark.....	Employers declared "open shop," and refused to use union labels on their goods.....	Partly successful.
October 23.	Cigar factory.....	New Brunswick.....	For increase in piece prices, and because of objection to stock furnished for work.....	Partly successful.
November 2.	Foundry.....	Burlington.....	For increase in wages.....	Successful.
November 18.	Building trades employes.....	Weehawken.....	Against working with non-union men.....	Successful.
November 18.	Iron workers.....	Newark.....	Against "open shop".....	Unsuccessful.
November 24.	Window and house cleaning.....	Jersey City.....	For increase in wages and recognition of the union.....	Partly successful.
November 27.	Shirtwaist making.....	Newark.....	In sympathy with strike in New York city.....	Unsuccessful.
November 27.	Painters.....	Passaic.....	For union wage scale.....	Successful.
November 29.	Peach basket making.....	Califon.....	For increase in wages.....	Unsuccessful.
December 2.	Teamsters employed by tea company.....	Jersey City.....	Against the discharge of three of their fellow workmen.....	Successful.
December 2.	Silk manufactory.....	West New York.....	For increase in piece prices.....	Unsuccessful.
December 9.	Laborers (sewer).....	Bordentown.....	For increase in wages.....	Unsuccessful.
December 13.	Silk manufactory.....	Hackensack.....	Against decrease in wages.....	Unsuccessful.
December 21.	Carpenters.....	Belmar, Spring Lake and Sea Girl.....	For increase in wages.....	Successful.
December 27.	Bricklayers, masons, plasterers & helpers.....	Newark.....	To force contractor to abide by rules of union.....	Successful.
December 30.	Silk manufactory.....	Paterson.....	For change in mill regulations, and recognition of union.....	Partly successful.
January * 3.	Silk manufactory.....	Paterson.....	For increase in wages.....	Successful.
January 14.	Pottery.....	Trenton.....	To enforce union rules.....	Unsuccessful.
January 15.	Clothing factory.....	Red Bank.....	In sympathy with fellow employes who had been dis- charged.....	Unsuccessful.
January 19.	Shoe manufactory.....	Newark.....	Against reduction in wages.....	Successful.
January 19.	Building trades employes.....	South Orange.....	For discharge of workmen from New York, and recog- nition of local union.....	Successful.
January 21.	Metal bed factory.....	Jersey City.....	For reinstatement of discharged foreman.....	Unsuccessful.
January 24.	Clay working.....	South River.....	To make the plant a "closed shop," and for recognition of union.....	Unsuccessful.

January	24.	Drivers for fertilizing company.	Jersey City.	For increase in wages.	Partly successful.
January	24.	Garment makers.	Newark.	For increase in wages, and payment of same in cash, instead of check.	Successful.
January	28.	Steam fitters.	Bayonne.	For increase in wages, and no work on Saturday.	Partly successful.
February	1.	Hat manufactory.	Belleville.	For increase in wages.	Unsuccessful.
February	3.	Leather manufactory.	Newark.	For increase in wages.	Unsuccessful.
February	4.	Building trades employes.	Newark.	Because of trouble between rival unions.	Successful.
February	8.	Silk manufactory.	Paterson.	For increase in piece prices, and for having prices marked on tickets.	Successful.
February	14.	Foundry.	Trenton.	For reinstatement of discharged foreman.	Unsuccessful.
February	22.	Embroidery manufactory.	South River.	For increase in wages.	Unsuccessful.
February	22.	Quarry.	Sparta Junction.	Because wages had not been paid for six weeks.	Successful.
February	25.	Boiler making.	Constable Hook.	In sympathy with New York boiler makers on strike.	Unsuccessful.
March	1.	Silk manufactory.	Paterson.	For recognition of union.	Unsuccessful.
March	4.	Sewer Diggers.	Bordentown.	Against changing pay periods from semi-monthly to monthly.	Successful.
March	7.	Plasterers.	Elizabeth.	Disagreement between unions.	Unsuccessful.
March	9.	Silk Manufactory.	Paterson.	For the discharge of non-union workmen, and recognition of union.	Unsuccessful.
March	9.	Street railway.	Trenton.	For ten hour work day, and increase in wages.	Successful.
March	11.	Glass making.	Perth Amboy.	Against discharge of an employe.	Unsuccessful.
March	19.	Building trades employes.	Kearny.	Against working with members of a New York union.	Successful.
March	22.	Drivers for meat packing company.	Bayonne.	Against the discharge of a stableman.	Successful.
March	24.	Terra Cotta works.	Perth Amboy.	For pay for overtime work.	Unsuccessful.
March	25.	Laborers.	Westwood.	For increase in wages.	Unsuccessful.
March	27.	Building trades employes.	Trenton.	Because workmen from New York refused to join local union.	Partly successful.
March	28.	Nursery plants.	Elizabeth.	For increase in wages.	Unsuccessful.
March	28.	Paper Mill.	Elizabeth.	For increase in wages.	Unsuccessful.
March	29.	Silk manufactory.	Plainfield.	For increase in wages.	Successful.
March	31.	Chemical manufactory.	Roosevelt.	For increase in wages.	Partly successful.
April	4.	Pump works.	Harrison.	Against working with non-union men.	Unsuccessful.
April	5.	Cement works.	Cranford.	For increase in wages, and reduction in working time.	Unsuccessful.
April	6.	Wire mills.	Trenton.	For increase in wages.	Partly successful.
April	6.	Jute manufacture.	Paterson.	For increase in wages.	Unsuccessful.
April	7.	Laborers (construction).	Jersey City.	For increase in wages.	Partly successful.
April	7.	Laborers (railroad).	Long Branch.	For increase in wages.	Partly successful.
April	7.	Rolling mill.	Perth Amboy.	For increase in wages.	Unsuccessful.
April	7.	Carpenters.	Elizabeth.	Against the employment of non-union men.	Partly successful.
April	7.	Structural iron works.	Boonton.	For increase in wages.	Partly successful.
April	8.	Wire mill.	Elizabeth.	For increase in wages.	Unsuccessful.
April	9.	Lead manufactory.	Elizabeth.	For increase in wages.	Partly successful.
April	9.	Building trades.	Newark.	Disagreement between unions.	Unsuccessful.
April	9.	Sugar refinery.	Edgewater.	For increase in wages.	Unsuccessful.
April	11.	Painters and paperhangers.	Newark.	For increase in wages.	Partly successful.
April	12.	Water power company.	Trenton.	For increase in wages.	Unsuccessful.
April	12.	Porcelain works.	Trenton.	For increase in wages.	Unsuccessful.
April	13.	Carpet mills.	Little Falls.	For increase in piece prices.	Partly successful.

## Strikes and Lockouts, from October 1, 1909, to September 30, 1910.

When Strike or Lockout Occurred.	Business or Occupation in Which Strike or Lockout Occurred.	Location in Which Strike or Lockout Occurred.	Cause or Object of Strike or Lockout.	Results of Strike— Successful, Unsuccessful, Partly successful.
April	18. Bakery.	Trenton.	For increase in wages.	Unsuccessful.
April	23. Drivers for produce dealers.	Newark.	For increase in wages.	Unsuccessful.
April	25. Freight handlers (railroad).	Jersey City and Weehawken.	For uniform wage rate.	Unsuccessful.
April	27. Smelting and refining company.	Perth Amboy.	In sympathy with fellow workmen on strike for increase in wages.	Partly successful.
April	30. Contracting business.	Harrison.	Increase in wages.	Partly successful.
May	2. Bakery.	Jersey City, Hoboken and Weehawken.	In sympathy with strike of union in New York.	Partly successful.
May	2. Electric works.	Bloomfield.	Increase in wages.	Unsuccessful.
May	2. Painters.	Morristown.	To force a recognition of the union.	Successful.
May	2. Asphalt manufactory.	Maurer.	For increase in wages.	Partly successful.
May	3. Nickel platers' supplies.	Matawan.	Against reduction in piece prices.	Successful.
May	4. Iron works.	Trenton.	For increase in wages.	Unsuccessful.
May	17. Quarrying (lime stone).	Califon.	For nine hour workday, instead of ten.	Unsuccessful.
May	18. Cutlery works.	Avondale.	To force employers to unionize the plant.	Unsuccessful.
May	24. Rubber manufactory.	New Brunswick.	For increase in piece prices.	Unsuccessful.
May	31. Laborers (road repair).	Nutley.	For increase in wages.	Unsuccessful.
June	7. Hodecarriers.	Chatham, Madison and Morristown.	For increase in wages.	Successful.
June	7. Clay banks.	South Amboy.	For increase in wages.	Unsuccessful.
June	16. Laborers (trolley).	New Brunswick.	For increase in wages.	Unsuccessful.
June	16. Printing press works.	Plainfield.	For uniform wage rate.	Partly successful.
June	18. Corn products manufactory.	Edgewater.	For reduction in working time, or an increase in wages.	Partly successful.
June	21. Leather manufactory.	Belleville.	Disagreement over a foreman.	Unsuccessful.
June	27. Marine engine manufactory.	Jersey City.	For increase in wages, and minimum wage scale.	Partly successful.
July	3. Plumbers.	Trenton.	For increase in wages.	Partly successful.
July	5. Knitting mill.	Dover.	In sympathy with foreman.	Unsuccessful.
July	7. Street paving laborers.	Trenton.	For increase in wages.	Unsuccessful.
July	19. Laundry.	Jersey City.	In sympathy with discharged foreman.	Unsuccessful.
July	20. Power house of P. S. C.	Newark.	For increase in wages.	Unsuccessful.

July	22.	Pipe manufactory.....	Paterson.....	For increase in wages.....	Partly successful.
July	22.	Garment making.....	Trenton.....	In sympathy with striking garment makers in New York.....	
July	25.	Sugar refinery.....	Jersey City.....	In sympathy with striking sugar refiners in Brooklyn for increase in wages.....	
July	26.	Bathing suits manufactory.....	Rahway.....	Against discharge of forewoman, and for increase in wages.....	Partly successful.
July	29.	Laborers (sewer).....	Newark.....	Against change in pay day from Saturday to Wednesday..	Unsuccessful.
August	4.	Foundries.....	Trenton.....	For increase in wages.....	
August	11.	P. S. C. Linemen.....	Jersey City.....	For the discharge of a foreman.....	Unsuccessful.
August	18.	Street improvement laborers.....	Gloucester City.....	For increase in wages.....	Unsuccessful.
August	25.	Structural ironmaking.....	Boonton.....	Against the discharge of a foreman.....	Unsuccessful.
August	28.	Iron moulding.....	Trenton.....	For increase in wages.....	Partly successful.
August	30.	Pottery.....	Lambertville.....	Against the discharge of union men.....	
September	2.	Building construction.....	Jersey City.....	For increase in wages.....	Unsuccessful.
September	7.	Garment making.....	Newark.....	For ten per cent. increase.....	Successful.
September	15.	Musical instrument manufacture.....	Jersey City.....	For increase in wages.....	Successful.
September	21.	Glaziers.....	Jersey City.....	In sympathy with New York workmen on strike.....	





