Twenty-Fifth Annual Report

OF THE

Bureau of Statistics

OF

LABOR and INDUSTRIES

OF

New Jersey

For the Year Ending October 31st

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CONTENTS.

STATE OF NEW JERSEY,
BUREAU OF STATISTICS.
TRENTON, N. J., October 31, 1902.

To His Excellency Franklin Murphy, Governor of the State of New Jersey:

DEAR SIR:

In accordance with the provisions of Chapter 105, Laws of 1878, and the several amendments thereto, I have the honor of submitting to the Senate and General Assembly, through you, the Twenty-fifth Annual Report of the Bureau of Statistics.

WM. STAINSBY, Chief.

INTRODUCTION.

This volume, the twenty-fifth of the series of reports issued by the Bureau of Statistics since its organization in 1878, contains under its several parts, matter bearing upon the material interests of the State and the industrial advance of the times.

In laying out the subjects to be treated I have, as far as possible with the equipment and means at my disposal, covered the extensive field set apart for the work of the Bureau by the act which created it.

Part One gives the statistics of manufactures for 1901 in comparison with those for 1900, in a series of tables showing for both years the number of manufacturing establishments and the character of their management, whether corporate or private; the amount of capital invested; the articles, quantities, and cost value of the raw material used; the articles, quantities, and selling value of finished product; the number of persons employed by months and distinguished as to sex; the aggregate amounts paid in wages to labor; a classification showing the various wage rates paid and the number, male and female in each class; the number of days in operation during the year; the number of working hours per day; and the proportion of business done.

The figures relating to these items are given for one thousand six hundred and sixty manufacturing establishments divided into eighty-five groups each of which represents a distinct industry, and are for the years 1900 and 1901. The amount, or the number and percentage, of increase or decrease, showing the gain or loss in these several items during the year 1901 as compared with 1900 is given.

Following these tables are two others containing in detail and by standard units of measurement the various classes of material used, and the many articles, great and small, that constitute the total of finished products for all industries.

These statistics which are compiled and published annually, is

the only division of the Bureau's work specifically provided for by law. The purpose of the statute relating to this work is to provide a form of census limited to manufacturing establishments of a standard character in each industry, believing that the end in view which is to keep the public informed on the trend of business from year to year, will be as well or perhaps better served in that way than if the account were taken with the minuteness which characterizes the decennial census by the Federal Government.

New Jersey is credited with 15,481 manufacturing establishments by the census of 1900. The statistics of manufactures contained in this volume are based on returns from only one thousand six hundred and sixty establishments, a number so much below that reported by the census, as to appear totally inadequate as representative of the State's industries.

The explanation of this great difference lies in the fact that the Bureau's classification includes only such establishments as furnish employment to ten or more persons, while that of the United States Census counts as a manufacturing establishment absolutely every productive industry, no matter what the product, or how small the scale on which it is carried on. Under this system the bakeshops, painter, plumber, carpenter, blacksmith, and jobbing shoe shops, as well as milliners, dressmakers and the thousands of other non-factory employments from which individuals derive a living through their own labor supplemented by a small investment of capital, are all counted as manufacturing establishments equally with the great factories, mills, and workshops in which thousands of persons are employed and millions of capital invested.

These small industries are of a secondary kind and the number of them is important only as reflecting the prosperity of the greater ones in which practically all the wage workers of the State find employment. Probably the best evidence that the Bureau's canvas is thorough and covers all the real factory industries of the State, lies in the fact that although the number of establishments considered is only a fraction over ten per cent., the value of the product is seventy-two per cent. of the totals given in the census. Not the least important feature of the statistics of manufactures is the view afforded of the conditions sur-

rounding the investment of $300,000,000 of capital, and the employment of nearly 200,000 persons of both sexes.

The statistics of employment on the steam railroads of New Jersey for the fiscal year ending June 30, 1902, and the statistics of the vegetable and fruit canning industry carried on in the State, will also be found under Part One. The tables of railroad statistics show the classification of labor, wage rates, hours of work per day, casualties or accidents in which trainmen were involved, with other instructive and interesting particulars relating to the more than 35,000 men engaged on the great transportation lines within the State of New Jersey.

Part Two contains tables and explanatory text showing the results of an inquiry into the working time, wage rates, and actual yearly and weekly earnings of mechanics and laborers employed at the building trades in all the large cities of the State; a chapter on the unemployed containing an explanation of the plan recently adopted by the government of the British Colony of New South Wales for dealing with that problem; the cost of living in New Jersey, as shown by the retail prices prevailing during the month of June, 1902, in the principal cities and towns of all the counties of the State, for a selected bill of table supplies; comparisons are also made with the prices of each year, backward to 1898; tables relating to the population of New Jersey, six in number, taken from the census of 1900, which gives: (1) the population of the State with the number and per cent. of increase for each decade from 1790 to 1900; (2) the increase of population by counties from 1890 to 1900; (3) the population of incorporated cities, towns, villages, and boroughs for 1890 and 1900; (4) the population of the principal cities of New Jersey with the increase for each decade from 1820 to 1900.

Part Three contains a historical account of the oyster fisheries of New Jersey with the local and general laws enacted for their protection from the colonial period up to the present time. This paper includes statistics of the capital invested, number of persons employed, with the quantity and selling value of the oyster product of the Delaware Bay and Atlantic coast fisheries for the year 1901. An article on the diseases of occupation in which the conditions surrounding hatters, jewelers, operatives in shoe shops and woolen mills while at work are considered and analyzed, is also included in this part.

Part Four consists of a report on co-operative societies organized under the Act of 1884; and under the title "Labor Chronology," a record of occurrences related to or affecting industry and labor for the eight months ending September 30, 1902; labor legislation and the decisions of the courts on cases affecting the interests of labor concludes the list of subjects presented in the report.

I feel justified in saying that the view of industrial conditions afforded by reports of manufacturers to this office during the year shows a degree of prosperity shared in alike by employers and employes, not hitherto equalled in the history of our State. Almost without exception factories have been run to their full capacity and in many instances beyond the limit of ordinary working hours. Hundreds of old established plants have been enlarged, and a large number of new ones erected during the year.

Besides these, there has been a most extraordinary number of new firms and corporations formed for manufacturing, with the avowed purpose of erecting their factories and carrying on business in New Jersey.

The record for the eight months from February first to September thirtieth, shows that ninety-eight of these concerns with an aggregate capital of $19,132,000, were incorporated in the several counties of the State; of this number about two-thirds will locate their works in either of the four large counties of Hudson, Essex, Passaic, or Union. Most, if not all, of these factories will be in operation within a year; their products, expanding the already great volume of New Jersey industries, distribute wages to thousands of additional workmen, and in many other ways contributing to the prosperity of the State. Particulars regarding these incorporations will be found in the Industrial Chronology column.

The same chapter contains a record of the strikes that occurred during the eight months ending September 30th, with a brief account of the circumstances attending each of them. There were eighty-three of these trade disturbances, none of them, I am happy to say, with the possible exception of the strike of the dyers' helpers, being of more than local importance; their influence on the industries of the State was not perceptible and the greater number were settled with the loss of only a few days.

The strike of the silk dyers' helpers, which before its conclusion had involved a large part of the entire silk industry in Passaic and Hudson Counties, was the most serious that occurred during the year. About six thousand men were idle for a period of twelve weeks, and the estimated wage loss, including that sustained by those who were forced into idleness by the strike was $830,000. The loss to employers and to the trade in general through the practical suspension of production for one-quarter of the year, has also been very large; the Secretary of the Silk Association of America says that the output of skein dyed silk was one million pounds below the normal, and that this resulted in curtailing the production of finished goods to the extent of nine millions of dollars.

During the year 1901, thirty-eight manufacturing establishments were closed permanently for various reasons; the principal one being that satisfactory profits were not being realized. Nine establishments were moved out of the State, because of superior inducements offered elsewhere; of these, one, a brush manufactory, left because the help available in the small town in which it was located, was "insufficient and inefficient."

Eight establishments were destroyed by fire, and four were being operated by receivers. The names of these firms and the industries in which they were engaged is given in the Labor Chronology.

My sincere thanks are due and hereby extended to the manufacturers of the State, the managers of the great railway lines, the officers of the State Oyster Commission, the officers and members of trades unions, and other gentlemen connected with the official or business interests of the State who promptly and courteously responded to my request for information relating to the several interests under their control.

I take pleasure in again commending the fidelity, zeal, and intelligence with which my assistants in the office, and those employed on outside work, have performed every duty to which they were assigned.

While all are entitled to equal credit for cheerful performance of duty, my thanks are due in a special sense and hereby tendered to Mr. James T. Morgan, Deputy Chief, and Mr. Louis F. A. Herold, Chief Clerk, who have shared with me to a greater

extent than have the others, the labor of the constantly growing work of the Bureau.

WM. STAINSBY, Chief.

PART I.

The Statistics of Manufactures of New Jersey.

The Statistics of Steam Railroads in New Jersey.

The Vegetable and Fruit Canning Industry.

PART I.

Statistics of Manufactures of New Jersey.

Introduction.

This part contains the sixth report of the statistics of manufactures since the work was first undertaken by the Bureau, and the third issued under the mandate of Chapter 124, Laws of 1899.

The presentation comprises twenty tables prepared from returns made by 1,660 identical establishments, in which the same items of information are given for each of the years 1900 and 1901, as follows:

1. *The Management of Establishments.* Under this head are given the number of establishments of the total that are controlled by private firms, and by corporations with the number of partners and stockholders interested therein distinguished as to males, females, estates, trustees, banks, etc.

2. *Capital Invested, by Industries.* Under this head the amount of capital invested in the establishments considered for each industry is given with the amount, and equivalent percentage of increase or decrease.

3. *Cost Value of Stock or Material Used.* The total cost value of the various articles of raw material used in each industry is given in this table, with the amounts and percentages of increase or decrease.

4. *Selling Value of Goods Made or Work Done.* The selling value of the product of each industry with the amounts and percentages of increase or decrease is given in this table.

5. *Aggregate Average Number of Persons Employed, by Industries.* In this table is given the average number of persons

employed in each industry for both years, with the absolute numbers of increase or decrease.

6. *Aggregate Average Number of Persons Employed at Periods of Employment of the Smallest Number.* This table shows the smallest number of employees engaged in each industry at some time during both years. The purpose is to show the lowest mark to which the volume of employment had shrunk in the specified industries for each year. The number of increase or decrease exhibited by each industry is given.

7. *Aggregate Number of Persons Employed at Periods of Employment of the Greatest Number.* This table shows the largest number employed at any one time in each industry for both years, with the actual number of increase or decrease.

8. *Excess of Greatest Over Smallest Number of Persons Employed.* This table shows the excess of the greatest over the smallest number of persons employed for each year, and the increase or decrease of the excess for 1901 as compared with 1900.

9. *Average Number of Persons Employed, by Establishments.* In this table the aggregate number of persons employed in each industry is reduced to averages by establishments. The increase or decrease exhibited by each industry is shown.

10. *Smallest Average Number of Persons Employed, by Establishments.* The smallest average number of persons employed per establishment in each industry, with the increase or decrease is shown in this table for both years.

11. *Greatest Average Number of Persons Employed, by Establishments.* The greatest average number of persons employed per establishment in each industry, with the increase or decrease is given in this table for both years.

12. *Excess of Average Greatest Over Average Smallest Number of Persons Employed, by Establishments.* This table shows the difference by establishments in the average number of persons employed at the periods of highest and lowest employment for each year.

13. *Persons Employed, by Industries; Aggregates by Months.* In this table, the aggregate number of persons, male and female, and the total number of both sexes employed during each month of the years 1900 and 1901 are given. All the classified industries are included in this table. A glance down the column of totals of each industry will show the period of highest

and of lowest employment, these being the months in which the largest and the smallest number respectively were employed.

14. *Aggregate Amounts Paid in Wages, by Industries.* The aggregate amounts paid in wages by each of the eighty-five industries, with the increase or decrease shown by the year 1901 as compared with 1900 is given in this table.

15. *Average Yearly Earnings, by Industries.* This table shows the average yearly earnings by industries for both years with the amount of increase or decrease of earnings paid in 1901 as compared with 1900.

16. *Classified Weekly Wages, by Industries.* In this table is shown a classification by sex of the weekly wages ranging from under $5.00 per week to $20.00 and over. The total number of both sexes receiving the various rates of wages is also given for both years. The returns were made by manufacturers to cover the week during which the largest number of persons were employed. The figures here given represent the wage earners only; officers, clerks, and other salaried persons engaged in the various industries are not included.

17. *Average Number of Days in Operation.* The average number of days in operation for each industry with the figures representing the increase or decrease is given for both years in this table. The average number of days is ascertained by adding together the number reported by each establishment and dividing the total product by the number of establishments included in the industry. The average for all industries is found by adding together the figures representing the averages of each separate industry, and dividing the sum thus obtained by the total number of industries included in the presentation.

18. *Average Number of Hours Worked Per Day, by Industries.* This table shows the average number of hours per day worked by each industry. The number is ascertained by adding together the hours of daily labor reported by the establishments in each industry, and dividing the sum so obtained by the number of establishments included in the industry.

19. *Average Proportion of Business Done.* This table shows how near to its full productive capacity each of the industries was conducted. The greatest capacity or maximum production is considered to be 100 per cent,, and the percentages given indi-

cate how nearly each industry approached its fullest capacity on that basis.

20. *Industry Presentation.* This table is a special presentation of nine leading industries, important because of the amounts of capital invested, and the number of persons employed in them. The data relating to these industries is taken from the general tables and arranged in this form for convenient review.

For the purposes of review and analysis, the tables are grouped into five sections, each dealing with a different phase of the industry presentation as follows:

I. Management. (Table No. 1).

II. Investment, Material Used, and Product. (Tables 2 to 4).

III. Persons Employed. (Tables 5 to 13).

IV. Wages and Earnings of Labor. (Tables 14 to 16).

V. Working Time and Proportion of Business Done. (Tables 17 to 19).

Each of these sections is followed by an analysis of the tabular presentations which they cover containing the points of interest shown by the returns.

Following the tables is a general review of the conditions of the industries of the State as indicated by the returns made from the establishments included in the presentation for the years 1900 and 1901.

TABLE No. 1.—Private Firms and Corporations, Partners and Stockholders, by Industries, 1900.

Office Number.	Industries.	Number of Establishments Considered	Number of Private Firms.	Partners.					Number of Corporations.	Stockholders.				Aggregates—Partners and Stockholders
				Males.	Females.	Special.	Estates.	Total.		Males.	Females.	Banks as Trustees.	Total.	
1	Agricultural implements,	7	4	4	1	..	..	5	3	73	.....	.....	73	78
2	Artisans' tools,	30	16	30	1	..	..	31	15	200	62	10	272	303
3	Bicycles and bicycle parts	4	....	....	..	..	..	....	4	28	1	.....	29	29
4	Boilers,	10	3	4	..	..	..	4	7	64	8	3	75	79
5	Boxes (wood and paper),	29	26	33	1	..	1	35	3	16	1	.....	17	52
6	Brewing (lager beer, ale and porter),	32	4	6	..	..	..	6	*24	*694	*85	*5	*784	790
7	Brick and terra cotta	58	36	48	7	..	1	56	24	366	136	18	520	576
8	Brushes,	11	11	14	1	..	..	15	....	.....	.....	.....	.....	15
9	Buttons (metal),	9	5	8	..	..	..	8	4	38	16	.....	54	62
10	Buttons (pearl),	17	16	28	..	..	..	28	1	3	.....	.....	3	31
11	Carpets and rugs,	7	3	4	..	..	..	4	4	35	8	.....	43	47
12	Carriages and wagons,	36	31	41	2	..	3	46	6	42	12	.....	54	100
13	Chemical products,	40	9	19	1	..	2	22	31	666	432	106	1,204	1,226
14	Cigars and tobacco,	24	17	25	..	..	..	25	5	88	37	1	126	151
15	Clothing,	16	16	21	1	..	1	23	....	.....	.....	.....	.....	23
16	Confectionery,	4	1	1	..	..	..	1	3	12	6	.....	18	19
17	Cornices (galv. iron and copper),	12	6	10	..	..	..	10	6	20	10	.....	30	40
18	Corsets and corset waists.	11	7	7	1	..	..	8	3	19	8	.....	27	35
19	Cutlery,	9	3	2	1	..	..	3	4	25	4	2	31	34
20	Cotton goods,	39	24	37	..	..	..	37	13	132	20	5	157	194
21	Cotton goods (finishing and dyeing),	20	8	13	..	..	..	13	12	77	9	5	91	104
22	Electrical appliances,	20	3	3	..	1	..	4	14	878	210	21	1,109	1,113
23	Fertilizers,	11	3	8	..	..	..	8	8	243	87	6	336	344
24	Food products,	18	7	14	1	..	..	15	11	2,565	1,008	1	3,574	3,589
25	Foundry (brass),	11	7	10	1	..	..	11	4	77	5	2	84	95
26	Foundry (iron),	30	15	23	1	..	1	25	15	765	259	44	1,068	1,093
27	Furnaces, ranges and heaters,	13	5	9	..	..	2	11	9	52	16	6	74	85
28	Glass (window and bottle),	19	7	11	1	..	1	13	14	139	33	4	176	189
29	Graphite products,	4	1	1	..	..	..	1	3	98	68	12	178	179
30	Hats (felt),	48	32	55	..	..	2	57	16	94	11	.....	105	162
31	Hats (straw),	3	3	5	..	..	..	5	....	.....	.....	.....	.....	5
32	High explosives,	8	....	....	..	..	..	....	8	64	6	2	72	72
33	Inks and mucilage,	5	1	2	..	..	..	2	4	18	5	.....	23	25
34	Jewelry,	66	51	111	3	..	..	114	15	59	14	.....	73	187
35	Knit goods,	12	11	14	..	..	..	14	2	82	66	34	182	196
36	Leather,	55	30	45	4	..	3	52	26	144	27	4	175	227
37	Leather goods,	12	10	18	..	..	..	18	3	11	6	.....	17	35
38	Lamps,	8	1	1	..	..	..	1	7	47	.....	3	50	51
39	Lime and cement,	6	1	1	..	..	..	1	5	125	43	8	176	177
40	Machinery,	92	39	50	3	..	1	54	53	515	195	42	752	806
41	Mattresses and bedding,	6	2	4	..	..	..	4	4	18	.....	.....	18	22
42	Metal goods,	56	19	31	1	..	..	32	34	349	95	14	458	490
43	Metal novelties,	12	7	11	..	1	..	12	5	37	7	1	45	57
44	Mining (iron ore),	7	2	2	..	..	..	2	6	458	245	115	818	820
45	Musical instruments,	18	8	14	..	..	..	14	11	124	10	1	135	149
46	Oil cloth (floor and table),	8	3	4	..	..	..	4	5	32	2	.....	34	38
47	Oils,	15	5	8	..	..	..	8	10	1,770	1,708	344	3,822	3,830
48	Paints,	10	4	4	..	..	..	4	6	158	43	7	208	212
49	Paper,	32	11	20	2	2	..	24	22	410	173	1	584	608
50	Pig iron,	4	1	1	..	..	..	1	4	250	71	28	349	350
51	Pottery,	31	12	27	..	..	..	27	19	404	142	38	584	611
52	Printing and book binding,	19	13	17	1	..	..	18	6	36	4	.....	40	58
53	Quarrying stone,	12	8	2	1	..	..	4	6	29	2	.....	31	35
54	Roofing (iron and stone),	5	....	....	..	..	..	....	6	123	7	3	133	133
55	Rubber goods (hard and soft),	30	....	....	..	..	..	....	31	4,255	92	14	4,361	4,361
56	Saddles and harness,	10	7	9	2	..	..	11	3	11	2	.....	13	24
57	Saddlery and harness hardware,	14	13	21	1	..	..	22	1	2	1	.....	3	25

TABLE No. 1.—Private Firms and Corporations, Partners and Stockholders, by Industries. 1900—(Continued).

Office Number.	Industries.	Number of Establishments Considered.	Number of Private Firms.	Partners.					Number of Corporations.	Stockholders.				Aggregates—Partners and Stockholders.
				Males.	Females.	Special.	Estates.	Total.		Males.	Females.	Banks as Trustees.	Total.	
58	Scientific instruments, ...	11	2	3	..	..	..	3	9	124	23	8	155	158
59	Sash, blinds and doors,....	22	16	28	2	..	..	30	6	32	5	.....	37	67
60	Shoes, ...	40	22	37	3	..	..	40	19	127	33	1	161	201
61	Shirts, ...	22	22	43	1	..	..	44	3	14	2	.....	16	60
62	Ship building, ...	12	8	11	..	..	..	11	4	15	4	.....	19	30
63	Silk (broad and ribbon),...	103	50	101	4	3	1	109	56	403	48	6	457	566
64	Silk dyeing, ...	20	8	8	..	..	..	8	14	51	6	.....	57	65
65	Silk throwing, ...	18	17	23	..	..	..	23	3	11	1	.....	12	35
66	Silk mill supplies,.....	14	13	19	1	..	1	21	1	2	3	.....	5	26
67	Silver goods, ...	12	6	16	1	..	..	17	6	42	23	2	67	84
68	Smelting and refining, gold, silver, copper, etc.	8	1	2	..	..	..	2	6	74	5	1	80	82
69	Soap and tallow, ...	14	8	15	5	..	..	20	6	23	1	.....	24	44
70	Steam pipe covering, ...	3	1	2	..	..	..	2	2	9	.....	.....	9	11
71	Steel and iron (bar),.....	4	1	.....	1	..	..	1	3	26	3	5	34	35
72	Steel and iron (structural),	16	7	10	..	..	..	10	9	51	6	5	62	72
73	Steel and iron (forging),..	11	3	3	..	..	..	3	8	163	60	11	234	237
74	Textile products, ...	6	2	5	..	..	..	5	5	53	6	1	60	65
75	Thread, ...	6	1	2	..	..	..	**2	**3	**15	**	**3	**18	20
76	Trunks and traveling bags,	10	8	13	..	..	..	13	2	12	6	1	19	32
77	Trunk and bag hardware	9	6	8	..	..	..	8	2	8	1	.....	9	17
78	Typewriters and supplies,	3	1	2	..	..	..	2	3	118	10	.....	128	130
79	Varnishes, ...	18	4	8	..	..	..	8	14	112	34	5	151	159
80	Watches, cases and material, ...	10	3	3	..	..	..	3	7	211	51	10	272	275
81	Window shades, ...	4	2	3	1	..	..	4	2	6	1	.....	7	11
82	Wire cloth, ...	4	....	.....	..	..	..	.....	4	32	4	.....	36	36
83	Wooden goods, ...	29	18	30	..	..	..	30	11	57	10	1	68	98
84	Woolen and worsted goods,	26	10	19	..	..	2	21	15	224	58	16	298	319
85	Unclassified, ...	50	25	47	1	..	1	49	32	11,373	189	165	11,727	11,776
	All industries, ...	1,660	837	1,372	60	7	23	1,462	823	30,428	6,111	1,151	37,690	39,152

*Two establishments have not reported these items.
**One establishment not reporting these items.

TABLE No. 1.—Private Firms and Corporations, Partners and Stockholders, by Industries, 1901.

Office Number.	Industries.	Number of Establishments Considered.	Number of Private Firms.	Partners.					Number of Corporations.	Stockholders.				Aggregates—Partners and Stockholders.
				Males.	Females.	Special.	Estates.	Total.		Males.	Females.	Banks as Trustees.	Total.	
1	Agricultural implements,	7	3	3	1	..	..	4	4	67	6	.....	73	77
2	Artisans' tools,	30	15	29	1	..	..	30	15	153	39	17	209	239
3	Bicycle and bicycle parts,	4	....	.....	..	..	..	.....	4	28	1	.....	29	29
4	Boilers,	10	3	4	..	..	..	4	7	70	10	5	85	89
5	Boxes (wood and paper),	29	26	33	1	..	1	35	3	16	1	.....	17	52
6	Brewing (lager beer, ale and porter),	32	4	5	..	..	..	5	28	560	58	4	622	627
7	Brick and terra cotta,	58	33	45	8	..	1	54	25	481	197	49	727	781
8	Brushes,	11	11	15	..	..	1	16	....	.....	.....	.....	.....	16
9	Buttons (metal),	9	4	7	..	..	..	7	5	46	15	1	62	69
10	Buttons (pearl),	17	15	27	..	..	..	27	2	6	.....	.....	6	33
11	Carpets and rugs,	7	2	3	..	..	..	3	5	57	6	.....	63	66
12	Carriages and wagons	36	30	40	4	1	2	47	6	42	12	.....	54	101
13	Chemical products,	40	7	18	..	..	..	18	33	738	535	80	1,353	1,371
14	Cigars and tobacco,	24	17	24	..	..	..	24	7	156	42	9	207	231
15	Clothing,	16	16	23	2	..	..	25	....	.....	.....	.....	.....	25
16	Confectionery,	4	1	1	..	..	..	1	3	12	6	.....	18	19
17	Cornices (galv. iron and copper),	12	6	9	..	..	..	9	6	20	10	.....	30	39
18	Corsets and corset waists,	11	6	14	1	1	..	16	5	41	15	.....	56	72
19	Cutlery,	9	3	3	1	..	..	4	6	32	8	3	43	47
20	Cotton goods,	39	24	36	2	..	..	38	15	166	30	7	203	241
21	Cotton goods (finishing and dyeing),	20	7	11	..	..	..	11	13	328	12	9	349	360
22	Electrical appliances,	20	7	4	..	1	..	5	16	2,602	192	21	2,815	2,820
23	Fertilizers	11	2	7	..	..	..	7	9	2,653	92	7	2,752	2,759
24	Food products,	18	6	9	1	..	..	10	12	2,568	1,007	.....	3,575	3,585
25	Foundry (brass),	11	6	7	..	..	..	7	5	98	4	.....	102	109
26	Foundry (iron),	30	14	25	1	..	..	26	16	788	250	42	1,080	1,106
27	Furnaces, ranges and heaters,	13	4	6	1	..	1	8	9	59	15	6	80	88
28	Glass (window and bottle)	19	6	10	1	..	1	12	13	138	36	4	178	190
29	Graphite products,	4	1	1	..	..	..	1	3	104	59	9	172	173
30	Hats (felt),	48	32	59	..	..	3	60	16	87	14	.....	101	161
31	Hats (straw),	3	3	3	2	..	..	5	....	.....	.....	.....	.....	5
32	High explosives,	8	....	.....	..	..	..	.....	8	64	6	2	72	72
33	Inks and mucilage,	5	1	2	..	..	..	2	4	18	5	.....	23	25
34	Jewelry,	66	49	105	3	..	1	109	17	65	14	.....	79	188
35	Knit goods,	12	10	12	..	..	..	12	2	86	63	38	187	199
36	Leather,	55	28	48	4	..	1	53	27	158	25	5	188	241
37	Leather goods,	12	9	19	..	..	..	19	3	11	6	.....	17	36
38	Lamps,	8	1	1	..	..	..	1	7	46	.....	3	49	50
39	Lime and cement,	6	1	1	..	..	..	1	5	131	42	16	189	190
40	Machinery,	92	34	41	3	..	1	45	58	588	216	52	856	901
41	Mattresses and bedding,	6	2	4	..	..	..	4	4	20	.....	.....	20	24
42	Metal goods,	56	17	26	..	..	..	26	39	408	96	16	520	546
43	Metal novelties,	12	7	11	..	1	..	12	5	45	10	.....	55	67
44	Mining (iron ore),	7	2	2	..	..	..	2	5	404	241	119	764	766
45	Musical instruments,	18	8	14	..	..	..	14	10	108	11	2	121	135
46	Oil cloth (floor and table),	8	3	4	..	..	..	4	5	33	10	.....	43	47
47	Oils,	15	4	6	..	..	..	6	11	2,007	1,878	321	4,206	4,212
48	Paints,	10	3	5	..	..	..	5	7	149	46	7	202	207
49	Paper,	32	9	18	2	2	..	22	23	451	195	5	651	673
50	Pig iron,	4	1	1	..	..	..	1	3	132	17	10	159	160
51	Pottery,	31	12	24	..	2	..	26	19	410	131	63	604	630
52	Printing and book binding,	19	13	17	1	..	1	19	6	37	4	.....	41	60
53	Quarrying stone,	12	7	10	2	..	1	13	5	26	2	.....	28	41
54	Roofing (iron and stone),	5	....	.....	..	..	..	.....	5	127	9	.....	136	136
55	Rubber goods (hard and soft),	30	....	....	..	..	..	.....	30	3,951	76	12	4,039	4,039
56	Saddles and harness,	10	5	7	..	..	..	7	5	18	3	.....	21	28

TABLE No. 1.—Private Firms and Corporations, Partners and Stockholders, by Industries, 1901—(Continued).

Office Number.	Industries.	Number of Establishments Considered	Number of Private Firms.	Partners					Number of Corporations.	Stockholders.				Aggregates—Partners and Stockholders.
				Males.	Females.	Special	Estates	Total.		Males.	Females.	Banks as Trustees.	Total.	
57	Saddlery and harness hardware,	14	13	18	1	..	..	19	1	2	1	.....	3	22
58	Scientific instruments,	11	2	3	..	..	..	3	9	125	24	7	156	159
59	Sash, blinds and doors,	22	16	28	2	..	..	30	6	33	2	.....	35	65
60	Shoes,	40	20	36	2	..	..	38	20	111	33	2	146	184
61	Shirts,	22	18	32	1	..	..	33	4	19	3	.....	22	55
62	Ship building,	12	7	9	..	..	..	9	5	72	11	4	87	96
63	Silk (broad and ribbon),	103	44	91	2	..	1	94	59	331	44	6	381	475
64	Silk dyeing,	20	6	6	..	..	..	6	14	55	3	.....	58	64
65	Silk throwing,	18	14	20	..	..	..	20	4	11	1	.....	12	32
66	Silk mill supplies,	14	13	18	1	..	1	20	1	2	3	.....	5	25
67	Silver goods,	12	6	14	1	..	1	16	6	43	23	2	68	84
68	Smelting and refining gold, silver, copper, etc.,	8	.....	.....	..	..	..	.....	8	113	14	.....	127	127
69	Soap and tallow,	14	8	15	5	..	..	20	6	23	1	.....	24	44
70	Steam pipe covering,	3	1	2	..	..	..	2	2	9	.....	.....	9	11
71	Steel and iron (bar),	4	1	1	..	..	..	1	3	25	3	5	33	34
72	Steel and iron (structural),	16	6	10	..	..	..	10	10	60	8	5	73	83
73	Steel and iron (forging),	11	3	3	..	..	..	3	8	173	69	19	261	264
74	Textile products,	6	2	5	..	..	..	5	4	48	9	1	58	63
75	Thread,	6	1	2	..	..	..	2	*5	*15	*.....	*3	*18	20
76	Trunks and traveling bags,	10	7	12	..	..	..	12	3	15	9	1	25	37
77	Trunk and bag hardware,	9	5	7	..	..	..	7	4	20	1	.....	21	28
78	Typewriters and supplies,	3	1	2	..	..	..	2	2	35	8	.....	43	45
79	Varnishes,	18	4	9	..	..	..	9	14	109	32	5	146	155
80	Watches, cases and material,	10	3	3	..	..	..	3	7	181	53	11	245	248
81	Window shades,	4	3	4	2	..	..	6	1	5	.....	.....	5	11
82	Wire cloth,	4	.....	.....	..	..	..	.....	4	30	4	.....	34	34
83	Wooden goods,	29	17	29	..	..	..	29	12	83	13	1	97	126
84	Woolen and worsted goods,	26	10	19	..	..	1	20	16	234	61	20	315	335
85	Unclassified,	50	18	34	1	..	..	35	32	11,195	220	45	11,460	11,495
	All industries,	1,660	786	1,289	60	8	19	1,376	874	34,786	6,431	1,081	42,298	43,674

*Three establishments have not reported these items.

ANALYSIS, TABLE NO. 1.

The foregoing table contains the presentation of private firms and corporations, the partners and stockholders who manage the industries dealt with in the table.

The partners in private firms are divided into four classes—males, females, special, and estates. The stockholders in corporations are under three classifications—males, females, and banks as trustees.

In 1900, 853 private firms owned and managed 853 establishments, and in 1901, the number of establishments owned by private firms was 786. The decrease in 1901 of establishments owned by private firms is 67.

In 1900, the number of establishments owned and controlled by corporations was 823, and in 1901, the number had risen to 874, an increase in 1901 of 51 establishments owned by corporations. These figures clearly indicate the prevailing tendency toward the corporate form of management and toward concentration, to which reference was made in a previous report.

The number of partners included in private firms in 1900 was 1,462; in 1901, the number was 1,367, or 95 less than in 1900. The number of stockholders in corporations in 1900 was 37,690; in 1901, the number of stockholders had risen to 42,298, an increase of 4,608 as compared with the number in 1900.

The following table shows the changes that have taken place in the management of all industries, the aggregates for both years being used. The increase or decrease in 1901 is shown as compared with 1900.

Partners and Stockholders.	Numbes.		Increase (x) or decrease (—) in 1901.	
	1900.	1901.	Number.	Percentage.
Partners,	1,462	1,376	— 86	— 5.88
Males,	1,372	1,289	— 83	— 6.05
Females,	60	60		
Special and Estates,	30	27	— 3	— 10
Stockholders,	37,690	42,298	+ 4.608	+ 12.22
Males,	30,428	34,786	+ 4.350	+ 14.29
Females,	6,111	6,431	+ 320	+ 5.23
Banks, trustees, etc.,	1,151	1,081	— 70	— 6.08
Aggregates,				
Partners and stockholders,	39,152	43,674	+ 4.518	+ 11.54
Males,	31,800	36,075	+ 4.275	+ 13.44
Females,	6,170	6,491	+ 321	+ 5.20
Special, Estates, Banks, etc.,	1,181	1,108	— 73	— 6.18

The foregoing table shows a decrease in the total number of partners of 5.88 per cent. in 1901 as compared with 1900. The males show a decrease of 6.05 per cent., the females are the same for both years, and the special partners and estates decreased 10 per cent.

The total number of stockholders is 12.22 per cent. greater in 1901 than in 1900. The males increased 14.29 per cent., females 5.23 per cent., and banks, trustees, etc., 6.08 per cent. The aggregate number of partners and stockholders combined shows an increase in 1901 over 1900 of 11.54 per cent.

Again taking the partners and stockholders together, the tables show that in 1900, the partners constituted 3.73 per cent. and the stockholders 96.27 per cent. of the total number. In 1901, the partners were 3.15 per cent., and the stockholders 96.85 per cent. of the total number.

The average number of partners in private firms was 1.71 in 1900 and 1.76 in 1901. The average number of stockholders to a corporation was 44.44 in 1900, and in 1901, it is 48.39.

These figures show that practically no change has taken place in the average number of partners to a private firm in 1900, and 1901; with the corporations, however, it is different, the average number of stockholders has increased from 44.44 in 1900, to 48.39 in 1901.

Reviewing the facts brought out in Table No. 1, the returns represent 1,660 manufacturing establishments grouped under 85

industry classifications. Of these establishments 853, or 50.89 per cent., were managed by private firms, and 807, or 49.11 per cent., by corporations, in 1900. In 1901, the number of establishments managed by private firms was 786, or 47.35 per cent., and by corporations, 874, or 52.65 per cent.

In 1900, the private firms were managed by 1,462 persons, of whom 93.84 per cent. were males, 4.09 per cent. females, and 2.07 per cent. were special partners or estates. During the same year, the corporations were owned or managed by 37,690 stockholders, of whom 80.73 per cent. were males, 16.21 per cent. females, and 3.06 were banks, trustees, etc.

In 1901, the private establishments were managed by 1,376 persons, of whom 93.67 per cent. are males, 4.44 per cent females, and 1.09 per cent. are special partners or estates. The corporations are managed by 42,298 stockholders, of whom 82.24 per cent. are males, 15.24 per cent. are females and 2.52 per cent. are banks or trustees.

INVESTMENT, MATERIAL USED AND PRODUCT.

Tables No. 2, 3 and 4.

Of the three tables that follow, Number 2 shows the amount of capital invested in production in each of the eighty-five industries comprised in the presentation for the years 1900 and 1901. The increase or decrease is given by amounts and also by percentages.

The term Capital Invested, as used here, is understood to include cash on hand and in bank, the value of land and buildings when owned and used for the purposes of the business in any form, the value of all machinery and tools, and the value of stock on hand, whether in a raw state or in process of manufacture at the date of making the return.

Number 3 shows the material used, with the amounts and percentages of increase or decrease. The term "Material Used" is to be understood as including all materials used, whether they enter into the finished article or are consumed in the processes necessary to its production. Thus oil for machinery or lubricating purposes, coal for fuel, and timber for packing, are regarded as material used, equally with the stock that enters directly into the finished product. In making their returns manufacturers are

asked to give by name and quantity, only two or three of the principal articles of material used, these being of course the primary ones which form part of the finished goods. The secondary material of all kinds, or that which is used up in the processes, are accounted for without specifying names, as "Other Material," the cost value only being given. It should be remembered that increase or decrease in value of either materials used or of finished product does not always indicate a corresponding increase or decrease of quantity. It may, and frequently does mean, simply a rise or fall in values with no effect whatever on quantity.

Number 3, shows the selling value of the product for each of the specified industries in both years, with the amounts and percentages of increase or decrease. The term "Goods Made or Work Done," is so explicit as to need no explanation. The figures show the total selling value of the product of all the establishments, making returns for the years 1900 and 1901.

The total number of establishments considered is 1,660, and the number included in each industry is shown in the first column of each table.

TABLE No. 2.—Capital Invested, by Industries, Increase or Decrease, 1900-1901.

Office Number.	Industry.	Number of Establishments Considered.	Amount of Capital Invested.		Increase (x) or decrease (—) in 1901.	
			1900.	1901.	Amounts.	Percentage.
1	Agricultural implements,	7	$1,519,515	$1,470,320	— $49,195	— 3.2
2	Artisans' tools,	30	2,705,053	2,614,840	— 90,213	— 3.3
3	Bicycle and bicycle parts,	4	150,000	140,000	— 10,000	— 6.6
4	Boilers,	10	1,592,768	2,058,090	+ 465,322	+ 29.2
5	Boxes (wood and paper),	29	490,082	559,044	+ 68,962	+ 14.0
6	Brewing ((lager beer, ale and porter),	32	18,003,384	18,352,534	+ 349,150	+ 1.9
7	Brick and terra cotta,	58	7,263,307	7,849,376	+ 586,069	+ 8.0
8	Brushes,	11	124,500	140,550	+ 16,050	+ 12.9
9	Buttons (metal),	9	1,158,000	1,163,000	+ 5,000	+ 0.4
10	Buttons (pearl),	17	314,450	334,700	+ 19,250	+ 6.1
11	Carpets and rugs,	7	852,000	941,000	+ 89,000	+ 10.4
12	Carriages and wagons,	36	1,264,197	1,285,533	+ 21,336	+ 1.6
13	Chemical products,	40	15,397,109	16,426,026	+ 1,028,917	+ 6.6
14	Cigars and tobacco,	24	6,475,287	6,936,519	+ 461,232	+ 7.1
15	Clothing,	16	168,500	180,500	+ 12,000	+ 7.2
16	Confectionery,	4	89,500	91,000	+ 1,500	+ 1.7
17	Cornices (galv. iron and copper),	12	310,010	313,800	+ 3,790	+ 1.2
18	Corsets and corset waists,	11	678,000	807,500	+ 129,500	+ 1.9
19	Cutlery,	9	442,358	596,887	+ 154,529	+ 34.9
20	Cotton goods,	39	4,259,539	4,693,398	+ 433,859	+ 10.1
21	Cotton goods (finishing and dyeing),	20	4,309,826	4,434,127	+ 124,301	+ 2.9
22	Electrical appliances,	20	11,113,068	12,622,385	+ 1,509,317	+ 13.5
23	Fertilizers,	11	3,484,500	3,285,825	— 198,675	— 5.6
24	Food products,	18	3,243,222	3,314,225	+ 71,003	+ 2.2
25	Foundry (brass),	11	942,693	991,693	+ 49,000	+ 5.1
26	Foundry (iron),	30	2,873,660	2,862,159	— 11,501	— 0.4
27	Furnaces, ranges and heaters,	13	1,723,163	1,653,274	— 69,889	— 4.0
28	Glass (window and bottle),	19	4,219,943	4,054,865	— 165,078	— 3.9
29	Graphite products,	4	1,497,500	1,498,000	+ 500	+ —
30	Hats (felt),	48	2,610,045	2,933,706	+ 323,661	+ 1.2
31	Hats (straw),	3	288,857	275,706	— 13,151	— 4.5
32	High explosives,	8	2,608,500	3,290,000	+ 681,500	+ 26.1
33	Inks and mucilage,	5	464,746	468,944	+ 4,198	+ 0.9
34	Jewelry,	66	3,166,712	3,332,986	+ 166,274	+ 5.2
35	Knit goods,	12	1,530,222	1,323,642	— 206,580	— 13.5
36	Leather,	55	6,584,296	6,741,540	+ 157,244	+ 2.3
37	Leather goods,	12	649,870	625,500	+ 24,370	— 3.6
38	Lamps,	8	2,177,416	2,205,410	+ 27,994	+ 1.3
39	Lime and cement,	6	1,071,947	1,384,000	+ 312,053	+ 29.1
40	Machinery,	92	14,458,336	19,646,380	+ 5,188,044	+ 36.7
41	Mattresses and bedding,	6	173,000	177,000	+ 4,000	+ 2.3
42	Metal goods,	56	5,023,622	6,514,857	+ 1,491,235	+ 29.6
43	Metal novelties,	12	491,000	606,364	+ 115,364	+ 23.5
44	Mining (iron ore),	7	4,676,283	1,737,907	— 2,938,376	— 62.8
45	Musical instruments,	18	2,209,683	2,166,657	— 43,026	— 1.9
46	Oil cloth (floor and table),	8	2,201,000	2,361,000	+ 160,000	+ 7.2
47	Oils,	15	17,470,892	16,726,110	— 744,782	— 4.2
48	Paints,	10	1,397,400	1,481,689	+ 84,289	+ 6.0
49	Paper,	32	3,826,703	4,168,085	+ 341,382	+ 8.9
50	Pig iron,	4	1,501,500	1,537,957	+ 36,457	+ 2.4
51	Pottery,	31	5,748,298	5,776,236	+ 27,938	+ 0.4
52	Printing and book binding,	19	555,413	536,298	— 19,115	— 3.4
53	Quarrying stone,	12	307,062	303,242	— 3,820	— 1.2
54	Roofing (iron and stone),	5	438,000	435,000	— 3,000	— 0.6
55	Rubber goods (hard and soft),	30	7,129,582	7,144,745	+ 15,163	+ 0.2
56	Saddles and harness,	10	168,000	191,126	+ 23,126	+ 13.7
57	Saddlery and harness hardware,	14	387,157	431,000	+ 43,843	+ 11.3
58	Scientific instruments,	11	1,646,110	1,741,000	+ 94,890	+ 5.7
59	Sash, blinds and doors,	22	909,313	976,101	+ 66,788	+ 7.3
60	Shoes,	40	2,152,079	2,189,457	+ 37,378	+ 1.7
61	Shirts,	22	789,400	600,800	— 188,600	— 23.9
62	Ship building,	12	604,183	*5,349,904	+ 4,745,721	+ 785.4
63	Silk (broad and ribbon),	103	20,752,319	20,741,771	— 10,548	— .....

TABLE No. 2.—Capital Invested, by Industries, Increase or Decrease, 1900-1901—(Continued).

Office Number.	Industry.	Number of Establishments Considered.	Amount of Capital Invested.		Increase (x) or Decrease (—) in 1901.	
			1900.	1901.	Amounts.	Percentage
64	Silk dyeing,	20	2,594,188	2,698,560	+ 104,372	+ 4.0
65	Silk throwing,	18	783,848	724,270	— 59,578	— 7.6
66	Silk mill slpplies,	14	517,000	519,500	+ 2,500	+ 0.4
67	Silver goods,	12	1,149,824	1,150,221	+ 397	+ .....
68	Smelting and refining gold, silver, copper, etc.	8	4,880,000	5,310,000	+ 430,000	+ 8.8
69	Soap and tallow,	14	1,651,200	1,777,200	+ 126,000	+ 7.6
70	Steam pipe covering,	3	89,000	104,000	+ 15,000	+ 16.8
71	Steel and iron (bar),	4	469,541	470,333	+ 792	+ 0.1
72	Steel and iron (structural),	16	4,132,964	4,208,656	+ 75,692	+ 1.8
73	Steel and iron (forging),	11	3,495,621	4,620,194	+ 1,124,573	+ 32.1
74	Textile products,	6	516,000	437,000	— 79,000	— 15.3
75	Thread,	6	*1,466,216	*2,981,216	+ 1,515,000	+ 103.3
76	Trunks and traveling bags,	10	472,000	638,000	+ 166,000	+ 37.3
77	Trunk and bag hardware,	9	696,100	745,100	+ 49,000	+ 7.0
78	Typewriters and supplies,	3	1,475,000	1,175,000	— 300,000	— 20.3
79	Varnishes,	18	4,133,100	4,096,850	— 36,250	— 0.8
80	Watches, cases and material,	10	2,212,600	2,168,922	— 43,678	— 1.9
81	Window shades,	4	98,000	98,000	.....	.....
82	Wire cloth,	4	465,273	470,673	+ 5,400	+ 1.1
83	Wooden goods,	29	867,971	1,272,254	+ 404,283	+ 46.5
84	Woolen and worsted goods,	26	7,508,640	7,852,316	+ 343,676	+ 4.5
85	Unclassified,	50	11,965,865	13,020,937	+ 1,055,072	+ 8.8
	All industries,	1,660	$264,474,031	$284,332,492	+$19,858,461	+ 7.5

+One establishment has not reported this item.

*One establishment with a capital of $4,000,000 while in operation in 1900, did not have its capial employed until 1901.

TABLE No. 3—Cost Value of Stock or Material Used, by Industries, Increase or Decrease, 1900-1901.

Office Number.	Industries.	Number of Establishments Considered.	Cost Value of Stock or Material Used.		Increase (x) or Decrease (—) in 1901.			
			1900.	1901.		Amounts.		Percentage.
1	Agricultural implements,	7	$185,234	$183,959	—	$1,275	—	0.7
2	Artisans' tools,	30	762,562	811,387	+	48,825	+	6.6
3	Bicycle and bicycle parts,	4	47,304	26,716	—	20,588	—	43.5
4	Boilers,	10	1,875,057	1,629,833	—	245,224	—	12.9
5	Boxes (wood and paper),	29	601,719	639,589	+	37,870	+	6.3
6	Brewing (lager beer, ale and porter),	32	3,122,580	3,709,761	+	587,181	+	18.8
7	Brick and terra cotta,	58	1,439,882	2,025,748	+	585,866	+	40.6
8	Brushes,	11	117,381	126,735	+	9,354	+	7.9
9	Buttons (metal),	9	383,775	406,136	+	22,361	+	5.8
10	Buttons (pearl),	17	384,986	501,365	+	126,379	+	32.8
11	Carpets and rugs,	7	812,692	1,000,810	+	188,118	+	23.1
12	Carriages and wagons,	36	868,544	842,592	—	25,952	—	3.0
13	Chemical products,	40	8,054,463	8,500,956	+	446,493	+	3.3
14	Cigars and tobacco,	24	3,484,234	4,677,401	+	1,193,167	+	31.4
15	Clothing,	16	320,035	442,222	+	122,187	+	38.2
16	Confectionery,	4	232,543	268,735	+	36,192	+	15.6
17	Cornices (galv. iron and copper),	12	169,561	384,181	+	214,620	+	126.5
18	Corsets and corset waists,	11	826,968	882,900	+	55,932	+	6.7
19	Cutlery,	9	154,864	258,410	+	103,546	+	66.8
20	Cotton goods,	39	2,993,285	4,114,182	+	1,120,897	+	37.4
21	Cotton goods (finishing and dyeing),	20	5,661,531	5,815,324	+	153,793	+	2.7
22	Electrical appliances,	20	3,101,515	3,114,794	+	13,279	+	0.4
23	Fertilizers,	11	2,931,481	3,299,838	+	368,357	+	12.5
24	Food products,	18	9,268,486	10,766,685	+	1,498,199	+	16.1
25	Foundry (brass),	11	754,259	786,813	+	32,554	+	4.3
26	Foundry (iron),	30	3,956,898	4,165,458	+	208,560	+	5.9
27	Furnaces, ranges, and heaters,	13	1,139,226	1,208,218	+	68,992	+	6.0
28	Glass (window and bottle),	19	1,426,334	1,780,661	+	354,327	+	24.8
29	Graphite products,	4	545,655	643,697	+	98,042	+	17.9
30	Hats (felt),	48	4,124,136	4,,218,157	+	94,021	+	2.2
31	Hats (straw),	3	365,465	282,155	—	83,310	—	22.9
32	High explosives,	8	1,925,306	2,414,057	+	488,751	+	25.4
33	Inks and mucilage,	5	132,701	135,470	+	2,769	+	2.1
34	Jewelry,	66	2,908,897	3,265,680	+	356,783	+	12.3
35	Knit goods,	12	1,101,539	895,858	—	205,681	—	18.6
36	Leather,	55	8,817,679	11,032,067	+	2,214,388	+	25.1
37	Leather goods,	12	736,002	750,335	+	14,333	+	1.9
38	Lamps,	8	2,181,629	2,077,494	—	104,135	—	4.8
39	Lime and cement,	6	480,134	609,419	+	129,285	+	26.9
40	Machinery,	92	7,186,839	7,840,404	+	653,565	+	9.1
41	Mattresses and bedding,	6	218,109	233,793	+	15,684	+	7.2
42	Metal goods,	56	6,486,769	8,136,180	+	1,649,411	+	25.4
43	Metal novelties,	12	446,740	470,734	+	23,994	+	5.4
44	Mining (iron ore),	7	326,007	184,487	—	141,520	—	43.1
45	Musical instruments,	18	1,119,152	1,111,967	—	7,185	—	0.6
46	Oil cloth (floor and table),	8	2,292,460	2,325,302	+	32,842	+	1.4
47	Oils,	15	35,228,579	32,062,086	—	3,166,493	—	8.9
48	Paints,	10	1,843,420	2,198,604	+	355,184	+	19.3
49	Paper,	32	3,112,912	3,403,682	+	290,770	+	9.3
50	Pig iron,	4	1,724,186	1,445,657	—	278,529	—	16.1
51	Pottery,	31	1,133,017	1,278,847	+	145,830	+	12.9
52	Printing and book binding,	19	408,393	375,025	—	33,368	—	8.1
53	Quarrying stone,	12	233,829	220,878	—	12,951	—	5.6
54	Roofing (iron and stone),	5	782,799	771,990	—	10,809	—	1.4
55	Rubber goods (hard and soft),	30	8,548,497	9,522,713	+	974,216	+	11.4
56	Saddles and harness,	10	204,922	219,868	+	14,946	+	7.3
57	Saddlery and harness hardware,	14	268,160	274,637	+	6,477	+	2.4
58	Scientific instruments,	11	793,119	840,351	+	47,232	+	5.9
59	Sash, blinds and doors,	22	781,172	758,103	—	23,069	—	2.9
60	Shoes,	40	3,533,931	3,755,617	+	221,686	+	6.3
61	Shirts,	22	1,220,623	1,061,107	—	159,516	—	13.0
62	Ship building,	12	311,515	1,682,789	+	1,371,274	+	434.6
63	Silk (broad and ribbon),	103	21,041,606	21,967,646	+	926,040	+	4.4

TABLE No. 3—Cost Value of Stock or Material Used, by Industries, Increase or Decrease, 1900-1901—(Continued).

Office Number.	Industries.	Number of Establishments Considered.	Cost Value of Stock or Material Used. 1900.	Cost Value of Stock or Material Used. 1901.	Increase (x) or Decrease (—) in 1901. Amounts.	Increase (x) or Decrease (—) in 1901. Percentage.
64	Silk dyeing,	20	1,996,834	2,569,097	+ 572,263	+ 28.6
65	Silk throwing,	18	322,294	377,056	+ 54,762	+ 16.9
66	Silk mill supplies,	14	189,209	205,564	+ 16,355	+ 8.7
67	Silver goods,	12	894,374	869,027	— 25,347	— 2.8
68	Smelting and refining (gold, silver, copper, etc.),	8	*35,407,682	*34,933,699	— 473,983	— 1.3
69	Soap and tallow,	14	1,598,446	1,937,517	+ 339,071	+ 21.2
70	Steam pipe covering,	3	34,542	51,306	+ 16,764	+ 48.5
71	Steel and iron (bar),	4	534,275	559,767	+ 25,492	+ 4.7
72	Steel and iron (structural),	16	3,380,044	3,743,257	+ 363,213	+ 10.7
73	Steel and iron (forging),	11	3,509,398	2,238,400	— 1,270,998	— 36.2
74	Textile products,	6	518,241	465,665	— 52,576	— 10.1
75	Thread,	6	**720,107	**1,818,677	+ 1,098,570	+ 15.2
76	Trunks and traveling bags,	10	588,834	599,967	+ 11,133	+ 1.9
77	Trunks and bag hardware,	9	342,831	422,092	+ 79,261	+ 23.1
78	Typewriters and supplies,	3	274,165	108,676	— 165,489	— 60.3
79	Varnishes,	18	1,699,146	1,858,410	+ 159,264	+ 9.4
80	Watches, cases and material,	10	1,225,862	1,234,221	+ 8,359	+ 0.6
81	Window shades,	4	245,170	258,542	+ 13,372	+ 5.1
82	Wire cloth,	4	335,412	347,735	+ 12,323	+ 3.6
83	Wooden goods,	29	635,676	775,849	+ 140,173	+ 22.1
84	Woolen and worsted goods,	26	7,185,629	6,927,322	— 258,307	— 3.6
85	Unclassified,	50	***4,057,916	**4,118,659	+ 60,743	+ 1.5
	All industries,	1,660	$243,339,385	$257,258,761	+ $13,919,376	+ 5.7

*Two establishments have not reported this item.
**Two establishments have not reported this item.
***One establishment has not reported this item.

TABLE No. 4—Value of Goods Made or Work Done, by Industries, Increase or Decrease, 1900-1901.

Office Number.	Industries.	Number of Establishments Considered.	Selling Value of Goods Made or Work Done.		Increase (x) or Decrease (—) in 1901.	
			1900.	1901.	Amounts.	Percentage.
1	Agricultural implements,	7	$451,212	$621,787	+ $170,575	+ 37.8
2	Artisans' tools,	30	1,933,662	2,067,512	+ 133,850	+ 6.9
3	Bicycle and bicycle parts,	4	98,500	54,792	— 43,708	— 44.4
4	Boilers,	10	3,145,313	3,093,341	— 51,972	— 1.6
5	Boxes (wood and paper),	29	1,184,019	1,256,605	+ 72,586	+ 6.1
6	Brewing (lager beer, ale and porter),	32	12,650,889	13,341,081	+ 690,192	+ 5.5
7	Brick and terra cotta,	58	4,359,258	5,376,035	+ 1,016,777	+ 23.3
8	Brushes,	11	328,289	334,493	+ 6,204	+ 1.9
9	Buttons (metal),	9	1,219,653	1,210,267	— 9,386	— 0.7
10	Buttons (pearl),	17	875,114	1,080,510	+ 205,396	+ 23.4
11	Carpets and rugs,	7	1,522,731	1,742,732	+ 220,001	+ 14.4
12	Carriages and wagons,	36	1,905,596	1,868,441	— 37,155	— 1.9
13	Chemical products,	40	13,447,508	14,587,774	+ 1,140,266	+ 8.4
14	Cigars and tobacco,	24	8,380,648	10,894,243	+ 2,513,595	+ 2.9
15	Clothing,	16	686,450	985,731	+ 299,281	+ 43.6
16	Confectionery,	4	312,821	356,245	+ 43,424	+ 13.8
17	Cornices (galv. iron and copper),	12	396,679	537,604	+ 140,925	+ 35.5
18	Corsets and corset waists,	11	1,968,431	2,098,218	+ 129,787	+ 6.6
19	Cutlery,	9	548,432	783,941	+ 235,509	+ 42.9
20	Cotton goods,	39	5,302,983	6,827,435	+ 1,524,452	+ 28.7
21	Cotton goods (finishing and dyeing),	20	8,807,392	8,798,085	— 9,307	— 0.1
22	Electrical appliances,	20	5,743,064	6,502,810	+ 759,746	+ 13.2
23	Fertilizers,	11	4,166,238	4,904,088	+ 737,850	+ 17.7
24	Food products,	18	11,067,932	12,483,070	+ 1,415,138	+ 12.7
25	Foundry (brass),	11	1,366,742	1,465,003	+ 98,261	+ 7.1
26	Foundry (iron),	30	7,067,164	7,806,752	+ 739,588	+ 10.4
27	Furnaces, ranges and heaters,	13	2,864,028	3,113,127	+ 249,099	+ 8.7
28	Glass (window and bottle),	19	5,098,301	5,282,845	+ 184,544	+ 3.6
29	Graphite products,	4	1,203,200	1,365,500	+ 162,300	+ 13.4
30	Hats (felt),	48	8,138,333	8,729,172	+ 590,839	+ 7.2
31	Hats (straw),	3	650,738	626,023	— 24,715	— 3.7
32	High explosives,	8	3,057,676	4,158,153	+ 1,100,477	+ 35.9
33	Inks and mucilage,	5	298,737	301,395	+ 2,658	+ 0.9
34	Jewelry,	66	6,278,008	6,855,600	+ 577,592	+ 9.2
35	Knit goods,	12	2,023,730	1,863,109	— 160,621	— 7.8
36	Leather,	55	13,346,763	16,193,884	+ 2,847,121	+ 21.3
37	Leather goods,	12	1,451,581	1,413,754	— 37,827	— 2.6
38	Lamps,	8	4,235,095	4,096,349	— 138,746	— 3.2
39	Lime and cement,	6	900,930	1,383,965	+ 483,035	+ 53.6
40	Machinery,	92	17,826,334	19,124,703	+ 1,298,369	+ 7.2
41	Mattresses and bedding,	6	351,252	384,904	+ 33,652	+ 9.5
42	Metal goods,	56	9,815,480	11,055,062	+ 1,239,582	+ 12.6
43	Metal novelties,	12	965,728	1,118,449	+ 152,721	+ 15.8
44	Mining (iron ore),	7	1,060,640	818,071	— 242,569	— 22.8
45	Musical instruments,	18	2,625,466	2,937,018	+ 311,552	+ 11.8
46	Oil cloth (floor and table),	8	3,417,826	3,451,861	+ 34,035	+ 0.9
47	Oils,	15	41,656,449	37,232,486	— 4,423,963	— 10.6
48	Paints,	10	2,879,616	3,243,607	+ 363,991	+ 12.6
49	Paper,	32	5,357,269	5,980,226	+ 622,957	+ 11.6
50	Pig iron,	4	2,282,955	1,753,912	— 529,043	— 23.1
51	Pottery,	31	4,062,357	4,502,447	+ 440,090	+ 10.8
52	Printing and book binding,	19	997,033	1,150,195	+ 153,162	+ 14.9
53	Quarrying stone,	12	656,212	608,549	— 47,663	— 7.2
54	Roofing (iron and stone),	5	1,357,231	1,347,253	— 9,978	— 0.7
55	Rubber goods (hard and soft),	30	13,239,328	14,421,245	+ 1,181,917	+ 8.9
56	Saddles and harness,	10	461,871	477,367	+ 15,496	+ 3.3
57	Saddles and harness hardware,	14	782,303	796,054	+ 13,751	+ 1.7
58	Scientific instruments,	11	1,303,461	1,402,391	+ 98,930	+ 7.5
59	Sash, blinds and doors,	22	1,375,457	1,442,119	+ 66,662	+ 4.8
60	Shoes,	40	6,468,574	6,636,894	+ 168,320	+ 2.5
61	Shirts,	22	2,638,744	2,359,078	— 279,666	— 10.5
62	Ship building,	12	937,329	3,668,961	+ 2,731,632	+ *291.4

TABLE No. 4—Value of Goods Made or Work Done, by Industries, Increase or Decrease, 1900-1901—(Continued).

Office Number.	Industries.	Number of Establishments Considered.	Selling Value of Goods Made or Work Done.		Increase (x) or Decrease (—) in 1901.	
			1900.	1901.	Amounts.	Percentage.
63	Silk (broad and ribbon),	103	35,685,310	36,874,392	+ 1,189,082	+ 3.3
64	Silk dyeing,	20	4,400,788	5,434,513	+ 1,033,725	+ 23.4
65	Silk throwing,	18	774,655	829,892	+ 55,237	+ 7.1
66	Silk mill supplies,	14	579,656	633,086	+ 53,430	+ 9.2
67	Silver goods,	12	2,170,817	2,286,240	+ 115,423	+ 5.3
68	Smelting and refining (gold, silver, copper, etc.),	8	*45,129,329	*46,779,106	+ 1,649,777	+ 3.6
69	Soap and tallow,	14	2,503,482	3,140,561	+ 637,079	+ 25.4
70	Steam pipe covering,	3	110,209	143,975	+ 33,766	+ 30.6
71	Steel and iron (bar),	4	958,420	953,268	— 5,152	— 0.5
72	Steel and iron (structural),	16	5,946,985	5,908,401	— 38,584	— 0.6
73	Steel and iron (forging),	11	6,190,309	5,452,187	— 738,122	— 11.9
74	Textile products,	6	768,442	645,635	— 122,807	— 15.9
75	Thread,	6	**1,212,467	**4,279,746	+ 3,067,279	+ *252.9
76	Trunks and traveling bags,	10	1,043,848	1,115,665	+ 71,817	+ 6.8
77	Trunk and bag hardware,	9	657,419	958,354	+ 300,935	+ 45.7
78	Typewriters and supplies,	3	835,240	307,352	— 527,888	— 63.2
79	Varnishes,	18	3,560,229	3,717,939	+ 157,710	+ 4.4
80	Watches, cases and material,	10	2,579,672	2,674,876	+ 95,204	+ 3.6
81	Window shades,	4	390,000	425,000	+ 35,000	+ 8.9
82	Wire cloth,	4	628,813	679,025	+ 50,212	+ 7.9
83	Wooden goods,	29	1,647,869	1,809,533	+ 161,664	+ 9.8
84	Woolen and worsted goods,	26	10,766,102	11,042,908	+ 276,806	+ 2.5
85	Unclassified,	50	8,864,018	8,956,911	+ 92,893	+ 1.0
	All industries,	1,660	$408,406,834	$437,422,888	+$29,016,054	+ 7.1

*Two establishments have not reported this item.
**Two establishments have not reported this item.
*Product was not reported by one large plant in 1900.
**Product was not reported by one large plant in 1900.

ANALYSIS, TABLES NO. 2, 3 AND 4.

On Table No. 2 is given the amount of capital devoted to production in the 1,660 establishments in the years 1900 and 1901. The total amount of capital invested in all industries in 1900 was $264,474,031, and in 1901, $284,332,492, an increase in the latter year of $19,858,461, or 7.5 per cent.

Of the eighty-five industries, sixty-two exhibit increases in capital invested, one is the same for both years, and twenty-two show decreases.

The industries showing the highest percentages of increase are as follows: Wooden goods, 46.5 per cent.; trunks and bags, 37.3 per cent.; machinery, 36.7 per cent.; cutlery, 34.9 per cent.; metal goods, 29.6 per cent.; boilers, 29.2 per cent.; lime and cement, 29.1 per cent.; high explosives, 26.1 per cent.; metal novelties, 23.5 per cent.; shirts, 23.9 per cent.; typewriting machines, 20.3 per cent.; paper boxes, 14 per cent.; saddlery and harness, 13.7 per cent.; knit goods, 13.5 per cent.; electrical appliances, 13.5 per cent.; brushes, 12.9 per cent.; carpets and rugs, 10.4 per cent.; and, cotton goods, 10.1 per cent.

The percentages of increase shown by the remaining forty-three industries that have advanced their capital, ranges from 8.9, downward to 0.4 per cent.

The decreases shown by the twenty-two industries reporting a reduction of capital are all small, with the exception of iron mining, which is 62.8 per cent., the largest percentage 6.6 is shown by the establishments engaged in the manufacture of bicycles and bicycle parts. Most of the others are between one and two per cent.

Number 3 Table presents a comparison of the value of the stock and materials used in the eighty-five industries during each of the years 1900 and 1901. Sixty four of the industries show increases for the year 1901 over 1900, ranging from 126.5, downward to 0.4 per cent.

The industries displaying the largest percentages of increase in the cost value of stock or materials used in 1901 as compared with 1900, are as follows: Cutlery, 66.8 per cent.; steam pipe covering, 48.5 per cent.; brick and terra cotta, 40.6 per cent.; clothing, 38.2 per cent.; cotton goods, 37.4 per cent.; buttons

(pearl), 32.8 per cent.; cigars and tobacco, 31.4 per cent.; silk dyeing, 28.6 per cent.; lime and cement, 26.9 per cent.; high explosives, 25.4 per cent.; metal goods, 25.4 per cent.; leather, 25.1 per cent.; glass, (window and bottle), 24.8 per cent.; trunk hardware, 23.1 per cent.; carpets and rugs, 23.1 per cent.; wooden goods, 22.1 per cent.; soap and tallow, 21.2 per cent.; paints, 19.3 per cent.; brewery products, 18.8 per cent.; graphite products, 17.9 per cent.; silk throwing, 16.9 per cent.; food products, 16.1 per cent.; thread, 15.2 per cent.; pottery, 12.9 per cent; jewelry, 12.3 per cent.; and structural steel and iron, 10.7 per cent.

The precentages shown by the other industries in which increases in the value of stock and materials used has taken place, ranges from 10. downward to 0.4 per cent.

Twenty-one of the classified industries show decreases in the value of stock and materials used in 1901 as compared with 1900; of these, the leading ones, or those in which the largest percentages of decrease has taken place, are as follows: Bicycle and bicycle parts, 43.5 per cent.; mining iron ore, 43.1 per cent.; steel and iron forging, 36.2 per cent.; straw hats, 22.9 per cent.; and knit goods, 18.6 per cent. In the remaining industries showing decreases the precentages are small.

Table Number Four presents a comparison of the selling value of the goods made and work done, in the eighty-five classified industries in 1901, as compared with 1900.

Sixty-nine of the industries show increases ranging from 53.6 in lime and cement, downward to 0.9 per cent in inks and mucilage.

The industries showing the highest percentages of increase are as follows: Lime and cement, 53.6 per cent.; trunk hardware, 45.7 per cent.; clothing, 43.6 per cent.; cutlery, 42.9 per cent.; agricultural implements, 37.8 per cent; high explosives, 35.9 per cent.; cornices, 35.5 per cent.; cotton goods, 28.7 per cent.; soap and tallow, 25.4 per cent.; buttons (pearl), 23.4 per cent.; silk dyeing, 23.4 per cent.; and brick and terra cotta, 23.3 per cent.

Sixteen of the eighty-five classified industries show decreases in the value of product in 1901 as compared with 1900, the percentages of decrease ranging from 63.2 per cent. in typewriters

and typewriter supplies downward to 0.1 per cent in the finishing and dyeing of cotton goods.

The largest percentages of decrease are shown in the following industries: Typewriters and typewriter supplies, 63.2 per cent.; bicycles and bicycle parts, 44.4 per cent.; mining iron ore, 22.8 per cent.; textile products, 15.9 per cent.; steel and iron forgings, 11.9 per cent.; oils, 10.6 per cent.; and shirts, 10.5 per cent.

PERSONS EMPLOYED.

TABLES NOS. 5 TO 13.

The series of tables under this subject head cover the persons employed in the 1,660 establishments for each of the years 1900 and 1901, with comparisons showing in actual numbers the increase or decrease in the working force that has taken place in 1901, as compared with 1900.

It should be borne in mind that the persons enumerated are wage earners only; that is to say, those who are directly employed in the various processes of production; officers, clerks, and others engaged in the management of the works, or the sale of the products are excluded from the presentation. The data relating to employment are arranged to show this important element of the presentation in its various aspects.

Tables No. 5, 6, 7, 8, 9, 10, 11 and 12 gives the aggregates and averages with the actual increase or decrease of the number employed, by industries and by establishments; the highest and lowest number of wage workers on the pay rolls at periods of the greatest and smallest number of persons employed, and the difference between the greatest and smallest number in 1901 as compared with 1900.

Table No. 13, the last of the series dealing with the subject of employment, gives the total number of persons, male and female, employed in each of the eighty-five classified industries by months, during the years ending December 31, 1900, and 1901.

TABLE No. 5--Aggregate Average Number of Persons Employed, by Industries, Increase or Decrease, 1900-1901.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Aggregate Average Number of Persons Employed. 1900.	1901.	Number—Increase (x) or Decrease (—) in 1901.
1	Agricultural implements,	7	255	294	+ 39
2	Artisans' tools,	30	1,453	1,475	+ 22
3	Bicycle and bicycle parts,	4	116	64	— 52
4	Boilers,	10	954	1,021	+ 67
5	Boxes (wood and paper),	29	1,261	1,312	+ 51
6	Brewing (lager beer, ale and porter),	32	1,769	1,855	+ 86
7	Brick and terra cotta,	58	4,671	5,172	+ 501
8	Brushes,	11	280	302	+ 22
9	Buttons (metal),	9	929	891	— 38
10	Buttons (pearl),	17	910	933	+ 23
11	Carpets and rugs,	7	1,169	1,339	+ 170
12	Carriages and wagons,	36	1,037	1,054	+ 17
13	Chemical products,	40	3,825	4,340	+ 515
14	Cigars and tobacco,	24	2,963	3,764	+ 801
15	Clothing,	16	729	1,030	+ 301
16	Confectionery,	4	79	90	+ 11
17	Cornices (galv. iron and copper),	12	480	430	— 50
18	Corsets and corset waists,	11	1,907	1,990	+ 83
19	Cutlery,	9	592	872	+ 280
20	Cotton goods,	39	4,951	5,730	+ 779
21	Cotton goods (finishing and dyeing),	20	4,017	4,122	+ 105
22	Electrical appliances,	20	2,429	2,966	+ 537
23	Fertilizers,	11	1,024	1,060	+ 36
24	Food products,	18	1,492	1,610	+ 118
25	Foundry (brass),	11	806	795	— 11
26	Foundry (iron),	30	3,958	4,253	+ 295
27	Furnaces, ranges and heaters,	13	1,342	1,491	+ 149
28	Glass (window and bottle)*	19	5,433	5,596	+ 163
29	Graphite products,	4	1,257	1,237	— 20
30	Hats (felt),	48	5,294	5,656	+ 362
31	Hats (straw),	3	447	433	— 14
32	High explosives,	8	752	1,109	+ 357
33	Inks and mucilage,	5	81	84	+ 3
34	Jewelry,	66	2,292	2,496	+ 204
35	Knit goods,	12	1,828	1,747	— 81
36	Leather,	55	4,140	4,851	+ 711
37	Leather goods,	12	1,120	1,090	— 30
38	Lamps,	8	2,743	2,732	— 11
39	Lime and cement,	6	438	770	+ 332
40	Machinery,	92	11,825	13,176	+ 1,351
41	Mattresses and bedding,	6	176	190	+ 14
42	Metal goods,	56	4,280	4,711	+ 431
43	Metal novelties,	12	680	718	+ 38
44	Mining (iron ore),	7	1,410	1,271	— 139
45	Musical instruments,	18	1,578	1,776	+ 193
46	Oil cloth (floor and table),	8	838	927	+ 89
47	Oils,	15	2,621	2,625	+ 4
48	Paints,	10	569	642	+ 73
49	Paper,	32	1,807	1,862	+ 55
50	Pig iron,	4	598	678	+ 80
51	Pottery,	31	3,476	3,610	+ 134
52	Printing and book binding,	19	686	718	+ 32
53	Quarrying stone,	12	660	609	— 51
54	Roofing (iron and stone),	5	294	303	+ 9
55	Rubber goods (hard and soft),	30	4,015	4,322	+ 307
56	Saddles and harness,	10	282	277	— 5
57	Saddlery and harness hardware,	14	578	543	— 35
58	Scientific instruments,	11	1,415	1,392	— 23
59	Sash, blinds and doors,	22	642	703	+ 61
60	Shoes,	40	4,495	4,570	+ 75
61	Shirts,	22	3,567	3,065	— 502

TABLE No. 5--Aggregate Average Number of Persons Employed, by Industries, Increase or Decrease, 1900-1901—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Aggregate Average Number of Persons Employed. 1900.	1901.		Number—Increase (x) or Decrease (—) in 1901.
62	Ship building,	12	526	2,347	+	1,821
63	Silk (broad and ribbon),	103	20,240	20,792	+	552
64	Silk dyeing,	20	3,322	3,565	+	243
65	Silk throwing,	18	1,448	1,425	—	23
66	Silk mill supplies,	14	554	588	+	34
67	Silver goods,	12	1,190	1,182	—	8
68	Smelting and refining (gold, silver, copper, etc.,	8	2,975	3,182	+	185
69	Soap and tallow,	14	552	578	+	26
70	Steam pipe covering,	3	61	47	—	14
71	Steel and iron (bar),	4	549	574	+	25
72	Steel and iron (structural),	16	2,964	3,009	+	552
73	Steel and iron (forging),	11	2,760	2,698	—	62
74	Textile products,	6	298	311	+	13
75	Thread,	6	1,789	5,563	+	*3,774
76	Trunks and traveling bags,	10	603	630	+	27
77	Trunk and bag hardware,	9	645	844	+	199
78	Typewriters and supplies,	3	591	161	—	430
79	Varnishes,	18	259	270	+	11
80	Watches,cases and material,	10	1,872	1,899	+	27
81	Window shades,,	4	86	87	+	1
82	Wire cloth,	4	361	357	—	4
83	Wooden goods,	29	963	1,152	+	189
84	Woolen and worsted goods,	26	7,260	7,547	+	287
85	Unclassified,	50	5,251	5,752	+	501
	All industries,	1,660	174,883	191,307	+	16,424

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

*Number of persons employed in one of the establishments was not reported in 1900.

TABLE No. 6--Aggregate Average Number of Persons Employed, at Periods of Employment of the Smallest Number, by Industries, Increase or Decrease, 1900-1901.

Office Number.	Industries.	Number of Establishments Considered.	Aggregate Number of Persons Employed at Periods of Employment of the Smallest Number.		Number—Increase (x) or Decrease (—) in 1901.	
			1900.	1901.		
1	Agricultural implements,	7	212	238	+	26
2	Artisans' tools,	30	1,332	1,409	+	77
3	Bicycle and bicycle parts,	4	62	48	—	14
4	Boilers,	10	855	795	—	60
5	Boxes (wood and paper),	29	1,217	1,280	+	63
6	Brewing (lager beer, ale and porter),	32	1,732	1,821	+	89
7	Brick and terra cotta,	58	3,052	3,346	+	294
8	Brushes,	11	258	276	+	18
9	Buttons (metal),	9	819	819		.....
10	Buttons (pearl),	17	881	882	+	1
11	Carpets and rugs,	7	1,092	1,294	+	202
12	Carriages and wagons,	36	965	1,001	+	36
13	Chemical products,	40	3,479	4,097	+	618
14	Cigars and tobacco,	24	2,650	3,552	+	902
15	Clothing,	16	694	785	+	91
16	Confectionery,	4	69	79	+	10
17	Cornices (galv. iron and copper),	12	282	350	+	68
18	Corsets and corset waists,	11	1,764	1,912	+	148
19	Cutlery,	9	571	832	+	261
20	Cotton goods,	39	4,116	5,479	+	1,363
21	Cotton goods (finishing and dyeing),	20	3,751	3,837	+	86
22	Electrical appliances,	20	2,437	2,694	+	257
23	Fertilizers,	11	817	891	+	74
24	Food products,	18	1,307	1,436	+	129
25	Foundry (brass),	11	768	778	+	10
26	Foundry (iron),	30	3,799	3,888	+	89
27	Furnaces, ranges and heaters,	13	1,081	1,372	+	291
28	Glass (window and bottle),*	19	1,166	1,388	+	222
29	Graphite products,	4	1,144	1,119	—	25
30	Hats (felt),	48	5,025	5,498	+	473
31	Hats (straw),	3	43	110	+	67
32	High explosives,	8	671	1,017	+	346
33	Inks and mucilage,	5	75	77	+	2
34	Jewelry,	66	2,163	2,363	+	200
35	Knit goods,	12	1,777	1,720	—	57
36	Leather,	55	3,831	4,603	+	772
37	Leather goods,	12	1,048	1,071	+	23
38	Lamps,	8	2,436	2,503	+	67
39	Lime and cement,	6	411	588	+	177
40	Machinery,	92	11,476	12,331	+	855
41	Mattresses and bedding,	6	172	174	+	2
42	Metal goods,	56	4,166	4,267	+	101
43	Metal novelties,	12	599	595	—	4
44	Mining (iron ore),	7	1,070	1,137	+	67
45	Musical instruments,	18	1,445	1,692	+	247
46	Oil cloth (floor and table),	8	779	823	+	44
47	Oils,	15	2,537	2,582	+	45
48	Paints,	10	523	602	+	79
49	Paper,	32	1,640	1,570	—	70
50	Pig iron,	4	484	601	+	117
51	Pottery,	31	3,365	3,479	+	114
52	Printing and book binding,	19	560	636	+	76
53	Quarrying stone,	12	319	272	—	47
54	Roofing (iron and stone),	5	277	255	—	22
55	Rubber goods (hard and soft),	30	3,628	4,151	+	523
56	Saddles and harness,	10	257	217	—	40
57	Saddlery and harness hardware,	14	561	530	—	31
58	Scientific instruments,	11	1,260	1,218	—	42
59	Sash, blinds and doors,	22	578	647	+	69

TABLE No. 6--Aggregate Average Number of Persons Employed, at Periods of Employment of the Smallest Number, by Industries, Increase or Decrease, 1900-1901—(Continued).

Office Number.	Industries.	Number of Establishments Considered.	Aggregate Number of Persons Employed at Peroids of Employment of the Smallest Number.		Number—Increase (x) or Decrease (—) in 1901.
			1900.	1901.	
60	Shoes,	40	4,364	4,437	+ 73
61	Shirts,	22	3,076	2,811	— 265
62	Ship building,	12	487	1,443	+ 956
63	Silk (broad and ribbon),	103	18,612	19,560	+ 948
64	Silk dyeing,	20	2,980	3,305	+ 325
65	Silk throwing,	18	1,275	1,195	— 80
66	Silk mill supplies,	14	540	553	+ 13
67	Silver goods,	12	1,096	1,085	— 11
68	Smelting and refining (gold, silver, copper, etc.),	8	2,771	2,954	+ 183
69	Soap and tallow,,	14	503	516	+ 13
70	Steam pipe covering,	3	58	44	— 14
71	Steel and iron (bar),	4	512	499	— 13
72	Steel and iron (structural),,	16	2,877	2,849	— 28
73	Steel and iron (forging),	11	2,666	2,607	— 59
74	Textile products,	6	271	281	+ 10
75	Thread,	6	1,737	5,473	+ 3,736
76	Trunks and traveling bags,	10	560	570	+ 10
77	Trunk and bag hardware,	9	557	774	+ 217
78	Typewriters and supplies,	3	570	94	— 476
79	Varnishes,	18	251	263	+ 12
80	Watches, cases and material,	10	1,743	1,763	+ 20
81	Window shades,	4	76	77	+ 1
82	Wire cloth,	4	353	340	— 13
83	Wooden goods,	29	916	1,046	+ 130
84	Woolen and worsted goods,,	26	6,921	7,076	+ 155
85	Unclassified,	50	5,017	5,506	+ 489
	All indsutries,	1,660	169,460	181,679	+ 12,219

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

TABLE No. 7—Aggregate Number of Persons Employed, at Periods of Employment of the Greatest Number, by Industries. Increase or Decrease, 1900-1901.

Office Number.	Industries.	Number of Establishments Considered.	Aggregate Number of Persons Employed at Periods of Employment of the Greatest Number.		Number—Increase (x) or Decrease (—) in 1901.	
			1900.	1901.		
1	Agricultural implements,,	7	322	366	+	44
2	Artisans' tools,	30	1,505	1,597	+	92
3	Bicycle and bicycle parts,	4	195	79	—	16
4	Boilers,	10	1,024	1,164	+	140
5	Boxes (wood and paper),	29	1,307	1,350	+	43
6	Brewing (lager beer, ale and porter),	32	1,813	1,896	+	83
7	Brick and terra cotta,	58	5,822	6,384	+	562
8	Brushes,	11	292	335	+	43
9	Buttons (metal),	9	1,174	1,006	—	168
10	Buttons (pearl),	17	954	1,000	+	46
11	Carpets and rugs,	7	1,233	1,395	+	163
12	Carriages and wagons,	36	1,068	1,117	+	49
13	Chemical products,	40	4,029	4,549	+	520
14	Cigars and tobacco,	24	3,456	3,858	+	402
15	Clothing,	16	770	1,118	+	348
16	Confectionery,	4	95	112	+	17
17	Cornices (galv. iron and copper),	12	537	490	—	47
18	Corsets and corset waists,	11	2,078	2,092	+	14
19	Cutlery,	9	607	888	+	281
20	Cotton goods,	39	5,268	5,886	+	618
21	Cotton goods (finishing and dyeing),	20	4,197	4,298	+	101
22	Electrical appliances,	20	2,503	3,180	+	677
23	Fertilizers,	11	1,286	1,422	+	136
24	Food products,	18	1,745	1,786	+	41
25	Foundry (brass),	11	845	808	—	37
26	Foundry (iron),	30	4,057	4,463	+	406
27	Furnaces, ranges and heaters,	13	1,511	1,645	+	134
28	Glass (window and bottle),*	19	6,636	6,857	+	221
29	Graphite products,	4	1,311	1,308	—	3
30	Hats (felt),	48	5,510	5,994	+	484
31	Hats (straw),	3	683	637	—	46
32	High explosives,	8	841	1,189	+	348
33	Inks and mucilage,	5	87	96	+	9
34	Jewelry,	66	2,434	2,735	+	301
35	Knit goods,	12	1,881	1,777	—	104
36	Leather,	55	4,630	5,329	+	699
37	Leather goods,	12	1,179	1,119	—	60
38	Lamps,	8	3,093	3,029	—	64
39	Lime and cement,	6	463	838	+	375
40	Machinery,	92	12,083	14,269	+	2,186
41	Mattresses and bedding,	6	181	215	+	34
42	Metal goods,	56	4,431	4,948	+	517
43	Metal novelties,	12	788	918	+	130
44	Mining (iron ore),,	7	1,553	1,352	—	201
45	Musical instruments,	18	1,652	1,829	+	177
46	Oil cloth (floor and table),	8	887	991	+	104
47	Oils,	15	2,678	2,710	+	32
48	Paints,	10	601	674	+	73
49	Paper,	32	1,921	2,004	+	83
50	Pig iron,	4	665	729	+	64
51	Pottery,	31	3,549	3,740	+	191
52	Printing and book binding,	19	835	912	+	77
53	Quarrying stone,	12	914	789	—	125
54	Roofing (iron and stone),	5	309	380	+	71
55	Rubber goods (hard and soft),	30	4,310	4,550	+	240
56	Saddles and harness,	10	313	312	—	1
57	Saddlery and harness hardware,,	14	593	552	—	41
58	Scientific instruments,	11	1,515	1,543	+	28
59	Sash, blinds and doors,	22	696	761	+	65

TABLE No. 7—Aggregate Number of Persons Employed, at Periods of Employment of the Greatest Number, by Industries, Increase or decrease, 1900-1901—(Continued),

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Aggregate Number of Persons Employed at Periods of Employment of the Greatest Number.		Number—Increase (x) or Decrease (—) in 1901.	
			1900.	1901.		
60	Shoes,	40	4,627	4,683	+	56
61	Shirts,	22	3,798	3,348	—	450
62	Ship building,	12	562	3,086	+	2,524
63	Silk (broad and ribbon),	103	21,595	21,711	+	116
64	Silk dyeing,	20	3,644	3,935	+	291
65	Silk throwing,	18	1,578	1,504	—	74
66	Silk mill supplies,	14	571	623	+	52
67	Silver goods,	12	1,310	1,360	+	50
68	Smelting and refining (gold, silver, copper, etc.),	8	3,192	3,331	+	139
69	Soap and tallow,,	14	604	619	+	15
70	Steam pipe covering,	3	65	51	—	14
71	Steel and iron (bar),	4	570	602	+	32
72	Steel and iron (structural),	16	3,025	3,165	+	140
73	Steel and iron (forging),	11	2,860	2,808	—	52
74	Textile products,	6	333	334	+	1
75	Thread,	6	1,867	5,605	+	3,738
76	Trunks and traveling bags,	10	632	666	+	34
77	Trunk and bag hardware,	9	696	883	+	187
78	Typewriters and supplies,	3	610	204	—	406
79	Varnishes,	18	271	276	+	5
80	Watches, cases and material,	10	1,942	2,004	+	62
81	Window shades,	4	92	94	+	2
82	Wire cloth,	4	370	375	+	5
83	Wooden goods,	29	1,052	1,251	+	199
84	Woolen and worsted goods,	26	7,648	7,869	+	221
85	Unclassified,	50	5,463	6,101	+	638
	All industries,,	1,660	178,885	198,993	+	20,108

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

TABLE No. 8—Excess of Greatest Over Smallest Number of Persons Employed, by Industries, Increase or Decrease, 1900-1901.

Office Number.	Industries.	Number of Establishments Considered.	Excess of Greatest Over Smallest Number Persons Employed. 1900.	Excess of Greatest Over Smallest Number Persons Employed. 1901.	Number—Increase (x) or decrease (—) in 1901.	
1	Agricultural implements,	7	110	128	+	18
2	Artisans' tools,	30	173	188	+	15
3	Bicycle and bicycle parts,	4	133	31	—	102
4	Boilers,	10	169	369	+	200
5	Boxes (wood and paper),	29	90	70	—	20
6	Brewing (lager beer, ale and porter),	32	81	75	—	6
7	Brick and terra cotta,	58	2,770	3,038	+	268
8	Brushes,	11	34	59	+	25
9	Buttons (metal),	9	355	187	—	168
10	Buttons (pearl),	17	73	118	+	45
11	Carpets and rugs,	7	141	101	—	40
12	Carriages and wagons,	36	103	116	+	13
13	Chemical products,	40	550	452	—	98
14	Cigars and tobacco,	24	806	306	—	500
15	Clothing,	16	76	333	+	257
16	Confectionery,	4	26	33	+	7
17	Cornices (galv. iron and copper),	12	255	140	—	115
18	Corsets and corset waists,	11	314	180	—	134
19	Cutlery,	9	36	56	+	20
20	Cotton goods,	39	1,152	407	—	745
21	Cotton goods (finishing and dyeing),	20	446	461	+	15
22	Electrical appliances,	20	156	486	+	330
23	Fertilizers,	11	469	531	+	62
24	Food products,	18	438	350	—	88
25	Foundry (brass),,	11	77	30	—	47
26	Foundry (iron),	30	258	575	+	317
27	Furnaces, ranges and heaters,	13	430	273	—	157
28	Glass (window and bottle),	19	5,470	5,469	—	1
29	Graphite products,	4	167	189	+	22
30	Hats (felt),	48	485	496	+	11
31	Hats (straw),	3	640	527	—	113
32	High explosives,	8	170	172	+	2
33	Inks and mucilage,	5	12	19	+	7
34	Jewelry,	66	271	372	+	101
35	Knit goods,	12	104	57	—	47
36	Leather,	55	799	726	—	73
37	Leather goods,	12	131	48	—	83
38	Lamps,	8	657	526	—	131
39	Lime and cement,	6	52	250	+	198
40	Machinery,	92	607	1,938	+	1,313
41	Mattresses and bedding,	6	9	41	+	32
42	Metal goods,	56	265	681	+	416
43	Metal novelties,	12	189	323	+	134
44	Mining (iron ore),	7	483	215	—	268
45	Musical instruments,	18	207	137	—	70
46	Oil cloths (floor and table),	8	108	168	+	60
47	Oils,	15	141	128	—	13
48	Paints,	10	78	72	—	6
49	Paper,	32	281	434	+	153
50	Pig iron,	4	181	128	—	53
51	Pottery,	31	184	261	+	77
52	Printing and book binding,	19	275	276	+	1
53	Quarrying stone,	12	595	517	—	78
54	Roofing (iron and stone),	5	32	125	+	93
55	Rubber goods (hard and soft),	30	682	399	—	283
56	Saddles and harness,	10	56	95	+	39
57	Saddlery and harness hardware,	14	32	22	—	10
58	Scientific instruments,	11	255	325	+	70
59	Sash, blinds and doors,	22	118	114	—	4

TABLE No. 8—Excess of Greatest Over Smallest Number of Persons Employed, by Industries, Increase or Decrease, 1900-1901—(Continued).

Office Number.	Industries.	Number of Establishments Considered.	Excess of Greatest Over Smallest Number Persons Employed. 1900.	1902.	Number—Increase (x) or Decrease (—) in 1901.
60	Shoes,	40	263	246	— 17
61	Shirts,	22	722	537	— 185
62	Ship building,	12	75	1,643	+ 1,568
63	Silk (broad and ribbon),	103	2,983	2,151	— 832
64	Silk dyeing,	20	664	630	— 34
65	Silk throwing,	18	303	309	+ 6
66	Silk mill supplies,	14	31	70	+ 39
67	Silver goods,	12	214	275	+ 61
68	Smelting and refining (gold, silver, copper, etc.),	8	421	377	— 44
69	Soap and tallow,	14	101	103	+ 2
70	Steam pipe covering,	3	7	7	.....
71	Steel and iron (bar),	4	58	103	+ 45
72	Steel and iron (structural),	16	148	316	+ 168
73	Steel and iron (forging),	11	194	201	+ 7
74	Textile products,	6	62	53	— 9
75	Thread,	6	130	132	+ 2
76	Trunks and traveling bags,	10	72	96	+ 24
77	Trunk and bag hardware,	9	139	109	— 30
78	Typewriters and supplies,	3	40	110	+ 70
79	Varnishes,	18	20	13	— 7
80	Watches, cases, and material,	10	199	241	+ 42
81	Window shades,	4	16	17	+ 1
82	Wire cloth,	4	17	35	+ 18
83	Wooden goods,	29	136	205	+ 69
84	Woolen and worsted goods,	26	727	793	+ 66
85	Unclassified,	50	446	595	+ 149
	All industries,	1,660	9,425	17,314	+ 7,889

TABLE No. 9—Average Number of Persons Employed, by Establishments, Increase or Decrease, 1900-1901.

Office Number.	Industries.	Number of Establishments Considered.	Average Number of Persons Employed in Each Establishment. 1900.	1901.	Number—Increase (x) or Decrease (—) in 1901.
1	Agricultural implements,	7	36	42	+ 6
2	Artisans' tools,	30	47	49	+ 2
3	Bicycle and bicycle parts,	4	29	16	— 13
4	Boilers,	10	95	102	+ 7
5	Boxes (wood and paper),	29	43	45	+ 2
6	Brewing (lager beer, ale and porter),	32	63	58	— 5
7	Brick and terra cotta,	58	78	89	+ 11
8	Brushes,	11	25	27	+ 2
9	Buttons (metal),,	9	104	99	— 5
10	Buttons (pearl),	17	53	55	+ 2
11	Carpets and rugs,	7	167	191	+ 24
12	Carriages and wagons,	36	28	29	+ 1
13	Chemical products,	40	96	108	+ 12
14	Cigars and tobacco,	24	135	157	+ 22
15	Clothing,	16	45	64	+ 19
16	Confectionery,	4	20	22	+ 2
17	Cornices (galv. iron and copper),	12	40	36	— 4
18	Corsets and corset waists,	11	190	181	— 9
19	Cutlery,	9	85	97	+ 12
20	Cotton goods,	39	134	147	+ 13
21	Cotton goods (finishing and dyeing),	20	201	206	+ 5
22	Electrical appliances,	20	143	148	+ 5
23	Fertilizers,	11	93	96	+ 3
24	Food products,	18	83	89	+ 6
25	Foundry (brass),	11	73	72	— 1
26	Foundry (iron),	30	132	142	+ 10
27	Furnaces, ranges and heaters,	13	96	115	+ 19
28	Glass (window and bottle),	19	259	295	+ 36
29	Graphite products,	4	314	309	— 5
30	Hats (felt),	48	110	112	+ 2
31	Hats (straw),	3	149	144	— 5
32	High explosives,	8	94	139	+ 45
33	Inks and mucilage,	5	16	17	+ 1
34	Jewelry,	66	35	38	+ 3
35	Knit goods,	12	140	146	+ 6
36	Leather,	55	74	88	+ 14
37	Leather goods,	12	86	91	+ 5
38	Lamps,	8	343	341	— 2
39	Lime and cement,	6	73	128	+ 55
40	Machinery,	92	129	143	+ 14
41	Mattresses and bedding,	6	29	32	+ 3
42	Metal goods,	56	81	84	+ 3
43	Metal novelties,	12	57	60	+ 3
44	Mining (iron ore),	7	176	182	+ 6
45	Musical instruments,	18	83	99	+ 16
46	Oil cloth (floor and table),	8	105	116	+ 11
47	Oils,	15	175	175	.....
48	Paints,	10	57	64	+ 7
49	Paper,	32	54	58	+ 4
50	Pig iron,	4	120	170	+ 50
51	Pottery,	31	112	116	+ 4
52	Printing and book binding,	19	36	38	+ 2
53	Quarrying stone,	12	47	51	+ 4
54	Roofing (iron and stone),	5	49	61	+ 12
55	Rubber goods (hard and soft),	30	130	144	+ 14
56	Saddles and harness,	10	28	28	.....
57	Saddlery and harness hardware,	14	41	39	— 2
58	Scientific instruments,	11	129	127	— 2
59	Sash, blinds and doors,	22	29	32	+ 3
60	Shoes,	40	109	114	+ 5
61	Shirts,	22	143	139	— 4

TABLE No. 9—Average Number of Persons Employed, by Establishments, Increase or Decrease, 1900-1901—(Continued).

Office Number.	Industries.	Number of Establishments Considered.	Average Number of Persons Employed in Each Establishment. 1900.	1901.	Number—Increase (x) or Decrease (—) in 1901.	
62	Ship building,	12	44	196	+	152
63	Silk (broad and ribbon),	103	191	202	+	11
64	Silk dyeing,	20	151	178	+	27
65	Silk throwing,	18	72	79	+	7
66	Silk mill supplies,	14	40	42	+	2
67	Silver goods,	12	99	98	—	1
68	Smelting and refining (gold, silver, copper, etc.),	8	425	398	—	27
69	Soap and tallow,	14	39	41	+	2
70	Steam pipe covering,	3	20	16	—	4
71	Steel and iron (bar),	4	137	143	+	6
72	Steel and iron (structural),	16	185	188	+	3
73	Steel and iron (forging),	11	251	245	—	6
74	Textile products,	6	43	52	+	9
75	Thread,	6	447	927	+	480
76	Trunks and traveling bags,	10	60	63	+	3
77	Trunk and bag hardware,	9	81	94	+	13
78	Typewriters and supplies,,	3	148	54	—	94
79	Varnishes,	18	14	15	+	1
80	Watches, cases and material,	10	187	190	+	3
81	Window shades,	4	21	22	+	1
82	Wire cloth,	4	90	89	—	1
83	Wooden goods,	29	33	40	+	7
84	Woolen and worsted goods,	26	290	290		.....
85	Unclassified,	50	105	115	+	10
	All industries,	1,660	105	115	+	10

TABLE No. 10—Smallest Average Number of Persons Employed, by Establishments, Increase or Decrease, 1900-1901.

Office Number.	Industries.	Number of Establishments Considered.	Smallest Number of Persons Employed in Each Establishment. 1900.	1901.	Number—Increase (x) or Decrease (—) in 1901.
1	Agricultural implements,	7	30	34	+ 4
2	Artisans' tools,,	30	43	47	+ 4
3	Bicycle and bicycle parts,	4	16	12	— 4
4	Boilers,	10	85	80	— 5
5	Boxes (wood and paper),	29	42	44	+ 2
6	Brewing (lager beer, ale and porter),	32	62	57	— 5
7	Brick and terra cotta,	58	51	58	+ 7
8	Brushes,	11	24	25	+ 1
9	Buttons (metal),	9	91	91	.....
10	Buttons (pearl),	17	52	52	.....
11	Carpets and rugs,	7	156	185	+ 29
12	Carriages and wagons,	36	26	28	+ 2
13	Chemical products,	40	87	102	+ 15
14	Cigars and tobacco,	24	120	148	+ 28
15	Clothing,	16	43	49	+ 6
16	Confectionery,	4	17	20	+ 3
17	Cornices (galv. iron and copper),	12	24	29	+ 5
18	Corsets and corset waists,	11	176	174	— 2
19	Cutlery,	9	81	92	+ 11
20	Cotton goods,	39	111	140	+ 29
21	Cotton goods (finishing and dyeing),	20	188	192	+ 4
22	Electrical appliances,	20	138	135	— 3
23	Fertilizers,	11	74	81	+ 7
24	Food products,	18	73	80	+ 7
25	Foundry (brass),	11	70	71	+ 1
26	Foundry (iron),	30	126	130	+ 4
27	Furnaces, ranges and heaters,	13	77	106	+ 29
28	Glass (window and bottle),	19	56	73	+ 17
29	Graphite products,	4	286	280	— 6
30	Hats (felt),	48	105	115	+ 10
31	Hats (straw),	3	14	37	+ 23
32	High explosives,	8	84	127	+ 43
33	Inks and mucilage,	5	15	15	.....
34	Jewelry,	66	33	36	+ 3
35	Knit goods,	12	137	143	+ 6
36	Leather,	55	68	84	+ 16
37	Leather goods,	12	81	89	+ 8
38	Lamps,	8	305	313	+ 8
39	Lime and cement,	6	68	98	+ 30
40	Machinery,	92	125	134	+ 9
41	Mattresses and bedding,	6	28	29	+ 1
42	Metal goods,	56	79	76	— 3
43	Metal novelties,	12	50	50	.....
44	Mining (iron ore)	7	134	162	+ 28
45	Musical instruments,	18	76	94	+ 18
46	Oilcloth (floor and table)	8	97	103	+ 6
47	Oils,	15	169	172	+ 3
48	Paints,	10	52	60	+ 8
49	Paper,	32	49	49	.....
50	Pig iron,	4	97	150	+ 53
51	Pottery,	31	109	112	+ 3
52	Printing and book binding,	19	29	33	+ 4
53	Quarrying stone,	12	23	23	.....
54	Roofing (iron and stone)	5	46	51	+ 5
55	Rubber goods (hard and soft),	30	117	138	+ 21
56	Saddles and harness,	10	26	22	— 4
57	Saddlery and harness hardware,	14	40	38	— 2
58	Scientific instruments,	11	115	111	— 4
59	Sash, blinds and doors,	22	26	29	+ 3
60	Shoes,	40	106	111	+ 5
61	Shirts,	22	123	128	+ 5

TABLE No. 10—Smallest Average Number of Persons Employed, by Establishments, Increase or Decrease, 1900-1901—(Continued).

Office Number.	Industries.	Number of Establishments Considered.	Smallest Number of Persons Employed in Each Establishment. 1900.	1901.	Number—Increase (x) or Decrease (—) in 1901.
62	Ship blilding,	12	41	120	+ 79
63	Silk (broad and ribbon),	103	176	190	+ 14
64	Silk dyeing,	20	135	165	+ 30
65	Silk throwing,	18	64	66	+ 2
66	Silk mill supplies,	14	39	40	+ 1
67	Silver goods,	12	91	90	— 1
68	Smelting and refining (gold, silver, copper, etc.),	8	396	369	— 27
69	Soap and tallow,	14	36	37	+ 1
70	Steam pipe covering,	3	19	15	— 4
71	Steel and iron (bar),	4	128	125	— 3
72	Steel and iron (structural),	16	180	178	— 2
73	Steel and iron (forging),	11	242	237	— 5
74	Textile products,	6	39	47	+ 8
75	Thread,	6	434	912	+ 478
76	Trunks and traveling bags,	10	56	57	+ 1
77	Trunk and bag hardware,	9	70	86	+ 16
78	Typewriters and supplies,	3	142	31	— 111
79	Varnishes,	18	14	15	+ 1
80	Watches, cases and supplies,	10	174	176	+ 2
81	Window shades,	4	19	19	.....
82	Wire cloth,	4	88	85	— 3
83	Wooden goods,	29	31	36	+ 5
84	Woolen and worsted goods,	26	277	272	— 5
85	Unclassified,	50	100	110	+ 10
	All industries,	1,660	102	109	+ 7

TABLE No. 11—Greatest Average Number of Persons Employed, by Establishments, Increase or Decrease, 1900-1901.

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Greatest Number of Persons Employed in each Establishment. 1900.	1901.	Number—Increase (x) or Decrease (—) in 1901.
1	Agricultural implements,	7	46	52	+ 6
2	Artisans' tools,	30	49	53	+ 4
3	Bicycle and bicycle parts,	4	49	20	— 29
4	Boilers,	10	102	116	+ 14
5	Boxes (wood and paper),	29	45	47	+ 2
6	Brewing (lager beer, ale and porter),	32	65	59	— 6
7	Brick and terra cotta,,	58	97	110	+ 13
8	Brushes,	11	27	30	+ 3
9	Buttons (metal),	9	130	112	— 18
10	Buttons (pearl),	17	56	59	+ 3
11	Carpets and rugs,	7	176	199	+ 23
12	Carriages and wagons,	36	29	31	+ 2
13	Chemical products,	40	101	114	+ 13
14	Cigars and tobacco,	24	157	161	+ 4
15	Clothing,	16	48	70	+ 22
16	Confectionery,	4	24	28	+ 4
17	Cornices (galv. iron and copper),	12	45	41	— 4
18	Corsets and corset waists,	11	208	190	— 18
19	Cutlery,	9	87	99	+ 12
20	Cotton goods,	39	142	151	+ 9
21	Cotton goods (finishing and dyeing),	20	210	215	+ 5
22	Electrical appliances,	20	147	159	+ 12
23	Fertilizers,	11	117	129	+ 12
24	Food products,	18	97	99	+ 2
25	Foundry (brass),	11	77	73	— 4
26	Foundry (iron),	30	135	149	+ 14
27	Furnaces, ranges and heaters,	13	108	127	+ 19
28	Glass (window and bottle),	19	316	361	+ 45
29	Graphite products,	4	328	327	— 1
30	Hats (felt),	48	115	125	+ 10
31	Hats (straw),	3	228	212	— 16
32	High explosives,	8	105	149	+ 44
33	Inks and mucilage,	5	17	19	+ 2
34	Jewelry,	66	37	41	+ 4
35	Knit goods,	12	145	148	+ 3
36	Leather,	55	82	97	+ 15
37	Leather goods,	12	91	93	+ 2
38	Lamps,	8	387	378	— 9
39	Lime and cement,	6	77	140	+ 63
40	Machinery,	92	132	155	+ 23
41	Mattresses and bedding,	6	30	36	+ 6
42	Metal goods,	56	84	88	+ 4
43	Metal novelties,	12	66	77	+ 11
44	Mining (iron ore),	7	194	193	— 1
45	Musical instruments,	18	87	102	+ 15
46	Oil cloth (floor and table),	8	111	124	+ 13
47	Oils,	15	178	181	+ 3
48	Paints,	10	60	67	+ 7
49	Paper,	32	58	63	+ 5
50	Pig iron,	4	133	182	+ 49
51	Pottery,	31	115	121	+ 6
52	Printing and book binding,	19	44	48	+ 4
53	Quarrying stone,	12	65	66	+ 1
54	Roofing (iron and stone),	5	51	76	+ 25
55	Rubber goods (hard and soft),	30	139	152	+ 13
56	Saddles and harness,	10	31	31	.....
57	Saddlery and harness hardware,	14	42	39	— 3
58	Scientific instruments,	11	138	140	+ 2
59	Sash, blinds and doors,	22	31	35	+ 4

TABLE No. 11—Greatest Average Number of Persons Employed, by Establishments, Increase or Decrease, 1900-1901—(Continued).

Office Number.	NDUSTRIES.	Number of Establishments Considered.	Greatest Number of Persons Employed in each Establishment. 1900.	1001.	Number—Increase (x) or Decrease (—) in 1901.
60	Shoes,	40	113	117	+ 4
61	Shirts,	22	152	152	.....
62	Ship building,	12	47	257	+ 210
63	Silk (broad and ribbon),	103	204	211	+ 7
64	Silk dyeing,	20	165	197	+ 32
65	Silk throwing,	18	79	84	+ 5
66	Silk mill supplies,	14	41	45	+ 4
67	Silver goods,	12	109	113	+ 4
68	Smelting and refining (gold, silver, copper, etc.),	8	456	416	— 40
69	Soap and tallow,	14	43	44	+ 1
70	Steam pipe covering,	3	22	17	+ 5
71	Steel and iron (bar),	4	142	150	+ 8
72	Steel and iron (structural),	16	189	198	+ 9
73	Steel and iron (forging),	11	260	255	— 5
74	Textile products,	6	48	56	+ 8
75	Thread,	6	467	934	+ 467
76	Trunks and traveling bags,	10	63	67	+ 4
77	Trunk and bag hardware,	9	87	98	+ 11
78	Typewriters and supplies,	3	152	68	— 84
79	Varnishes,	18	15	15	.....
80	Watches, cases and material,	10	194	200	+ 6
81	Window shades,	4	23	23	.....
82	Wire cloth,	4	93	94	+ 1
33	Woolen goods,	29	36	43	+ 7
84	Woolen and worsted goods,	26	306	303	— 3
85	Unclassified,	50	109	122	+ 13
	All industries,,	1,660	108	120	+ 12

TABLE No. 12—Excess of Average Greatest over Smallest Number of Persons Employed, by Establishments, Increase or Decrease, 1900--1901.

Office Number.	Industries.	Number of Establishments Considered.	Excess of Greatest over Smallest Number of Persons Employed in each Establishment. 1900.	1901.	Number—Increase (x) or Decrease (-) in 1901.
1	Agricultural implements,	7	16	18	+ 2
2	Artisans' tools,	30	6	6	.....
3	Bicycle and bicycle parts,	4	33	8	— 25
4	Boilers,	10	17	36	+ 19
5	Boxes (wood and paper),	29	3	3	.....
6	Brewing (lager beer, ale and porter),	32	3	2	— 1
7	Brick and terra cotta,	58	46	52	+ 6
8	Brushes,	11	3	5	+ 2
9	Buttons (metal),	9	39	21	— 18
10	Buttons (pearl),	17	4	7	+ 3
11	Carpets and rugs,	7	20	14	— 6
12	Carriages and wagons,	36	3	3	.....
13	Chemical products,	40	14	12	— 2
14	Cigars and tobacco,	24	37	13	— 24
15	Clothing,	16	5	21	+ 16
16	Confectionery,	4	7	8	+ 1
17	Cornices (galv. iron and copper),	12	21	12	— 9
18	Corsets and corset waists,	11	32	16	— 16
19	Cutlery,	9	6	7	+ 1
20	Cotton goods,,	39	31	11	— 20
21	Cotton goods (finishing and dyeing),	20	22	23	+ 1
22	Electrical appliances,	20	9	24	+ 15
23	Fertilizers,	11	43	48	+ 5
24	Food products,	18	24	19	— 5
25	Foundry (brass),	11	7	2	— 5
26	Foundry (iron),	30	9	19	+ 10
27	Furnaces, ranges and heaters,	13	31	21	— 10
28	Glass (window and bottle),	19	260	288	+ 28
29	Graphite products,	4	42	47	+ 5
30	Hats (felt),	48	10	10	.....
31	Hats (straw),,	3	214	175	— 39
32	High explosives,	8	21	22	+ 1
33	Inks and mucilage,	5	2	4	+ 2
34	Jewelry,	66	4	5	+ 1
35	Knit goods,	12	8	11	+ 3
36	Leather,	55	14	13	— 1
37	Leather goods,	12	10	4	— 6
38	Lamps,	8	82	65	— 17
39	Lime and cement,	6	9	42	+ 33
40	Machinery,	92	7	21	+ 14
41	Mattresses and bedding,	6	2	7	+ 5
42	Metal goods,	56	5	12	+ 7
43	Metal novelties,	12	16	27	+ 11
44	Mining (iron ore),	7	60	31	— 29
45	Musical instruments,	18	11	8	— 3
46	Oil cloth (floor and table),	8	14	21	+ 7
47	Oils,	15	9	9	.....
48	Paints,	10	8	7	— 1
49	Paper,	32	9	14	+ 5
50	Pig iron,	4	36	32	— 4
51	Pottery,	31	6	9	+ 3
52	Printing and book binding,	19	15	15	.....
53	Quarrying stone,	12	42	43	+ 1
54	Roofing (iron and stone),	5	5	25	+ 20
55	Rubber goods (hard and soft),	30	22	14	— 8
56	Saddles and harness,	10	5	9	+ 4
57	Saddlery and harness hardware,	14	2	1	— 1
58	Scientific instruments,	11	23	29	+ 6
59	Sash, blinds and doors,	22	5	6	+ 1

TABLE No. 12—Excess of Average Greatest over Smallest Number of Persons Employed, by Establishments, Increase or Decrease, 1900--1901—(Continued).

Office Number.	Industries.	Number of Establishments Considered.	Excess of Greatest over Smallest Number of Persons Employed in each Establishment. 1900.	1901.	Number—Increase (x) or Decrease (—) in 1901.
60	Shoes,	40	7	6	— 1
61	Shirts,	22	29	24	— 5
62	Ship building,	12	6	137	+ 131
63	Silk (broad and ribbon),	103	28	21	— 7
64	Silk dyeing,	20	30	32	+ 2
65	Silk throwing,	18	15	18	+ 3
66	Silk mill supplies,	14	2	5	+ 3
67	Silver goods,	12	18	23	+ 5
68	Smelting and refining (gold, silver, copper, etc.),	8	60	47	— 13
69	Soap and tallow,	14	7	7	.....
70	Steam pipe covering,	3	3	2	— 1
71	Steel and iron (bar),	4	14	25	+ 11
72	Steel and iron (structural),	16	9	20	+ 11
73	Steel and iron (forging),	11	18	18	.....
74	Textile products,	6	9	9	.....
75	Thread,	6	33	22	— 11
76	Trunks and traveling bags,	10	7	10	+ 3
77	Trunk and bag hardware,	9	17	12	— 5
78	Typewriters and supplies,	3	10	37	+ 27
79	Varnishes,	18	1	.....	— 1
80	Watches, cases and material,	10	20	24	+ 4
81	Window shades,	4	4	4	.....
82	Wire cloth,	4	5	9	+ 4
83	Wooden goods,	29	5	7	+ 2
84	Woolen and worsted goods,	26	29	31	+ 2
85	Unclassified,	50	9	12	+ 3
	All industries,	1,660	6	11	+ 5

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901.

AGRICULTURAL IMPLEMENTS.—SEVEN ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	245	3	248	256	...	256
February,	262	3	265	286	...	286
March,	304	4	308	321	...	321
April,	319	3	322	360	...	360
May,	304	2	306	348	...	348
June,	258	2	260	312	...	312
July,	230	1	231	366	...	366
August,	220	1	221	247	...	247
September,	212	...	212	255	...	255
October,	212	...	212	238	...	238
November,	224	...	224	248	...	248
December,	252	...	252	285	...	285

ARTISAN'S TOOLS—THIRTY ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	1,314	18	1,332	1,392	17	1,409
February,	1,423	18	1,441	1,401	17	1,418
March,	1,434	18	1,452	1,405	17	1,422
April,	1,452	18	1,470	1,407	17	1,424
May,	1,454	18	1,472	1,440	17	1,457
June,	1,459	18	1,477	1,444	14	1,458
July,	1,426	18	1,444	1,432	14	1,446
August,	1,423	18	1,441	1,434	15	1,449
September,	1,427	18	1,445	1,474	15	1,489
October,	1,453	18	1,471	1,538	15	1,553
November,	1,464	18	1,482	1,561	14	1,575
December,	1,486	19	1,505	1,582	15	1,597

BICYCLE AND BICYCLE PARTS—FOUR ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	149	37	186	65	9	74
February,	160	35	195	66	11	77
March,	153	32	185	66	8	74
April,	141	32	173	70	9	79
May,	114	28	142	69	10	79
June,	72	10	82	55	7	62
July,	56	7	63	50	6	56
August,	55	8	63	48	6	54
September,	55	7	62	45	4	49
October,	70	8	78	47	3	50
November,	71	8	79	59	2	61
December,	73	8	81	46	2	48

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

BOILERS—TEN ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	861	...	861	987	...	987
February,	855	...	855	1,006	...	1,006
March,	873	...	873	1,042	...	1,042
April,	932	...	932	1,039	...	1,039
May,	975	...	975	1,061	...	1,061
June,	996	...	996	795	...	795
July,	1,001	...	1,001	913	...	913
August,	1,023	...	1,023	1,009	...	1,009
September,	1,024	...	1,024	1,008	...	1,008
October,	1,015	...	1,015	1,097	...	1,097
November,	1,003	...	1,003	1,132	...	1,132
December,	894	...	894	1,164	...	1,164

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

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	394	883	1,277	404	876	1,280
February,	394	865	1,259	405	889	1,294
March,	388	883	1,271	408	897	1,305
April,	395	912	1,307	411	900	1,311
May,	401	889	1,290	412	890	1,302
June,	399	874	1,273	414	885	1,299
July,	404	813	1,217	418	881	1,299
August,	397	838	1,235	429	894	1,323
September,	400	850	1,250	430	901	1,331
October,	399	854	1,253	431	919	1,350
November,	393	856	1,249	429	903	1,332
December,	381	875	1,256	417	900	1,317

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

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	1,745	4	1,749	1,824	3	1,827
February,	1,723	9	1,732	1,819	2	1,821
March,	1,726	10	1,736	1,833	8	1,841
April,	1,743	1	1,744	1,844	5	1,849
May,	1,738	10	1,748	1,866	4	1,870
June,	1,783	12	1,795	1,869	5	1,874
July,	1,808	5	1,813	1,892	4	1,896
August,	1,802	4	1,806	1,889	3	1,892
September,	1,805	1	1,806	1,862	3	1,865
October,	1,773	3	1,776	1,846	4	1,850
November,	1,753	4	1,757	1,833	5	1,838
December,	1,762	4	1,766	1,829	6	1,835

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

BRICK AND TERRA COTTA—FIFTY-EIGHT ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	3,045	7	3,052	3,405	26	3,431
February,	3,101	4	3,105	3,319	27	3,346
March,	3,549	4	3,553	3,876	30	3,906
April,	4,860	21	4,881	5,318	50	5,368
May,	5,327	19	5,346	5,893	56	5,949
June,	5,647	26	5,673	6,100	61	6,161
July,	5,795	27	5,822	6,323	61	6,384
August,	5,787	35	5,822	6,322	61	6,383
September,	5,524	33	5,557	6,202	65	6,267
October,	5,249	43	5,292	5,842	68	5,910
November,	4,231	43	4,274	4,789	70	4,859
December,	3,654	27	3,681	4,043	54	4,097

BRUSHES—ELEVEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	166	92	258	195	90	285
February,	169	102	271	201	98	299
March,	179	103	282	215	101	316
April,	178	101	279	202	95	297
May,	179	104	283	204	94	298
June,	173	100	273	182	94	276
July,	184	103	287	183	100	283
August,	187	103	290	188	100	288
September,	179	101	280	190	99	289
October,	180	108	288	212	115	327
November,	193	99	292	221	114	335
December,	181	105	286	223	112	335

BUTTONS (METAL)—NINE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	312	563	875	343	529	872
February,	341	478	819	340	538	878
March,	344	522	866	337	482	819
April,	339	524	863	337	501	838
May,	359	466	825	320	508	828
June,	403	505	908	374	472	846
July,	463	711	1,174	446	560	1,006
August,	391	723	1,114	382	557	939
September,	358	493	851	388	551	939
October,	409	644	1,053	403	540	943
November,	336	526	862	389	496	885
December,	377	559	936	403	498	901

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

BUTTONS (PEARL)—SEVENTEEN ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	555	326	881	566	320	886
February,	556	334	890	548	338	886
March,	559	328	887	554	328	882
April,	564	338	902	555	336	891
May,	547	341	888	573	322	895
June,	549	347	896	584	324	908
July,	557	347	904	612	327	939
August,	570	346	916	614	330	944
September,	578	349	927	629	345	974
October,	589	354	943	642	350	992
November,	599	355	954	653	347	1,000
December,	586	351	937	648	348	996

CARPETS AND RUGS—SEVEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	763	329	1,092	927	389	1,316
February,	765	341	1,106	946	400	1,346
March,	778	340	1,118	945	402	1,347
April,	826	351	1,177	939	408	1,347
May,	825	354	1,179	937	405	1,342
June,	829	349	1,178	923	404	1,327
July,	809	341	1,150	917	387	1,304
August,	835	349	1,184	920	390	1,310
September,	846	362	1,208	895	399	1,294
October,	845	366	1,211	946	414	1,360
November,	840	352	1,192	957	426	1,383
December,	864	369	1,233	970	425	1,395

CARRIAGES AND WAGONS—THIRTY-SIX ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Tatal.
January,	965	...	965	1,005	...	1,005
February,	1,003	...	1,003	1,022	...	1,022
March,	1,024	...	1,024	1,048	...	1,048
April,	1,063	...	1,063	1,078	...	1,078
May,	1,055	...	1,055	1,117	...	1,117
June,	1,055	...	1,055	1,117	...	1,117
July,	1,056	...	1,056	1,108	...	1,108
August,	1,068	...	1,068	1,078	...	1,078
September,	1,068	...	1,068	1,048	...	1,048
October,	1,049	...	1,049	1,022	...	1,022
November,	1,014	...	1,014	1,005	...	1,005
December,	1,027	...	1,027	1,001	...	1,001

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

CHEMICAL PRODUCTS—FORTY ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	2,956	523	3,479	3,421	676	4,097
February,	3,110	580	3,690	3,493	668	4,161
March,	3,124	587	3,711	3,602	710	4,312
April,	3,157	580	3,737	3,652	757	4,409
May,	3,206	606	3,812	3,630	803	4,433
June,	3,252	621	3,873	3,555	754	4,309
July,	3,198	639	3,837	3,483	788	4,271
August,	3,259	675	3,934	3,520	734	4,254
September,	3,301	641	3,942	3,534	799	4,333
October,	3,276	665	3,941	3,626	832	4,458
November,	3,334	695	4,029	3,704	786	4,490
December,	3,282	639	3,921	3,771	778	4,549

CIGARS AND TOBACCO—TWENTY-FOUR ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	920	1,804	2,724	1,149	2,477	3,626
February,	896	2,026	2,922	1,127	2,425	3,552
March,	892	2,145	3,037	1,179	2,670	3,849
April,	857	2,007	2,864	1,158	2,670	3,828
May,	918	1,732	2,650	1,196	2,662	3,858
June,	928	1,808	2,736	1,127	2,643	3,770
July,	1,042	1,931	2,973	1,090	2,617	3,707
August,	1,097	2,359	3,456	1,069	2,593	3,662
September,	1,032	1,989	3,021	1,094	2,711	3,805
October,	1,010	1,954	2,964	1,105	2,730	3,835
November,	983	2,022	3,005	1,105	2,734	3,839
December,	1,090	2,109	3,199	1,099	2,729	3,836

CLOTHING—SIXTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	285	430	715	310	475	785
February,	287	412	699	497	561	1,058
March,	286	478	764	489	576	1,065
April,	285	471	756	483	570	1,053
May,	272	428	700	454	540	994
June,	280	443	723	456	560	1,016
July,	276	418	694	468	570	1,038
August,	273	446	719	477	594	1,071
September,	308	462	770	499	619	1,118
October,	295	464	759	501	599	1,100
November,	286	440	726	472	579	1,051
December,	287	433	720	441	566	1,007

TABLE No. 13 Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued .

CONFECTIONERY—FOUR ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	45	24	69	53	28	81
February,	47	27	74	55	26	81
March,	47	27	74	51	28	79
April,	47	26	73	50	30	80
May,	49	28	77	52	30	82
June,	52	29	81	51	28	79
July,	50	21	71	48	42	90
August,	52	23	75	53	41	94
September,	53	27	80	58	38	96
October,	53	29	82	59	43	102
November,	59	35	94	58	46	104
December,	59	36	95	60	52	112

CORNICES (GALV. IRON AND COPPER)—TWELVE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total
January,	280	...	280	490	...	490
February,	282	...	282	483	...	483
March,	490	...	490	480	...	480
April,	513	...	513	430	...	430
May,	518	...	518	350	...	350
June,	522	...	522	362	...	362
July,	518	...	518	379	...	379
August,	518	...	518	462	...	462
September,	526	...	526	467	...	467
October,	527	...	527	427	...	427
November,	529	...	529	423	...	423
December,	537	...	537	405	...	405

CORSETS AND CORSET WAISTS—ELEVEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	187	1,577	1,764	155	1,779	1,934
February,	186	1,594	1,780	154	1,816	1,970
March,	187	1,637	1,824	161	1,899	2,060
April,	192	1,695	1,887	166	1,926	2,092
May,	196	1,700	1,896	165	1,905	2,070
June,	196	1,679	1,875	163	1,848	2,011
July,	192	1,647	1,839	150	1,762	1,912
August,	192	1,747	1,939	151	1,846	1,997
September,	189	1,783	1,972	159	1,853	2,012
October,	190	1,888	2,078	155	1,865	2,020
November,	193	1,847	2,040	147	1,766	1,913
December,	183	1,808	1,991	150	1,737	1,887

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued .

CUTLERY—NINE ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	536	35	571	777	72	849
February,	545	35	580	796	72	868
March,	553	35	588	813	70	883
April,	559	37	596	819	66	885
May,	553	37	590	819	66	885
June,	554	37	591	785	64	849
July,	546	38	584	764	68	832
August,	554	38	592	795	72	867
September,	563	38	601	805	75	880
October,	563	38	601	802	86	888
November,	569	38	607	802	84	886
December,	567	38	605	807	81	888

COTTON GOODS—THIRTY-NINE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	1,457	3,272	4,729	1,386	4,440	5,826
February,	1,475	3,383	4,858	1,339	4,461	5,800
March,	1,480	3,336	4,816	1,357	4,447	5,804
April,	1,486	3,386	4,872	1,361	4,445	5,806
May,	1,488	3,476	4,964	1,365	4,359	5,724
June,	1,487	2,629	4,116	1,306	4,260	5,566
July,	1,428	3,623	5,051	1,285	4,214	5,499
August,	1,451	3,645	5,096	1,276	4,203	5,479
September,	1,481	3,659	5,140	1,296	4,333	5,629
October,	1,501	3,753	5,254	1,338	4,531	5,869
November,	1,507	3,745	5,252	1,379	4,507	5,886
December,	1,513	3,755	5,268	1,373	4,493	5,866

COTTON GOODS, FINISHING AND DYEING—TWENTY ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	3,383	757	4,140	3,439	741	4,180
February,	3,376	751	4,127	3,237	727	3,964
March,	3,442	747	4,189	3,248	726	3,974
April,	3,351	750	4,101	3,139	698	3,837
May,	3,142	709	3,851	3,378	706	4,084
June,	3,107	644	3,751	3,388	684	4,072
July,	3,279	668	3,947	3,393	701	4,094
August,	3,211	661	3,872	3,542	691	4,233
September,	3,192	657	3,849	3,524	710	4,234
October,	3,310	745	4,055	3,578	720	4,298
November,	3,350	775	4,125	3,522	716	4,238
December,	3,459	738	4,197	3,517	734	4,251

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

ELECTRICAL APPLIANCES—TWENTY ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	2,138	209	2,347	2,372	322	2,694
February,	2,197	210	2,407	2,437	355	2,792
March,	2,228	213	2,441	2,474	402	2,876
April,	2,276	227	2,503	2,611	408	3,019
May,	2,255	231	2,486	2,476	406	2,882
June,	2,265	230	2,495	2,356	381	2,737
July,	2,232	209	2,441	2,763	374	3,137
August,	2,186	208	2,394	2,808	372	3,180
September,	2,219	212	2,431	2,726	371	3,097
October,	2,190	213	2,403	2,749	340	3,089
November,	2,220	208	2,428	2,753	338	3,091
December,	2,168	203	2,371	2,669	331	3,000

FERTILIZERS—ELEVEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total
January,	802	22	824	950	25	975
February,	964	24	988	1,065	24	1,089
March,	1,260	26	1,286	1,353	25	1,378
April,	1,211	26	1,237	1,395	27	1,422
May,	1,050	24	1,074	1,144	24	1,168
June,	947	24	971	957	25	982
July,	964	27	991	973	20	993
August,	1,137	16	1,153	1,007	14	1,021
September,	1,118	15	1,133	945	20	965
October,	942	22	964	867	27	894
November,	828	22	850	868	23	891
December,	795	22	817	923	22	945

FOOD PRODUCTS—EIGHTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	1,139	357	1,496	1,309	429	1,738
February,	1,134	364	1,498	1,271	395	1,666
March,	1,107	328	1,435	1,249	389	1,638
April,	1,049	267	1,316	1,187	320	1,507
May,	1,070	257	1,327	1,194	303	1,497
June,	1,042	288	1,330	1,206	335	1,541
July,	1,049	258	1,307	1,206	230	1,436
August,	1,228	364	1,592	1,216	288	1,504
September,	1,303	442	1,745	1,285	399	1,684
October,	1,252	437	1,689	1,307	406	1,713
November,	1,138	359	1,497	1,360	426	1,786
December,	1,258	413	1,671	1,253	351	1,604

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

FOUNDRY (BRASS)—ELEVEN ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	790	36	826	768	34	802
February,	808	37	845	771	34	805
March,	785	37	822	766	34	800
April,	794	35	829	753	33	786
May,	752	33	785	768	33	801
June,	737	31	768	761	35	796
July,	763	30	793	757	36	793
August,	759	34	793	773	35	808
September,	754	35	789	763	36	799
October,	741	33	774	745	33	778
November,	778	34	812	747	33	780
December,	799	37	836	760	36	796

FOUNDRY (IRON)—THIRTY ESTABLISHMENTS.

Months.	Males.	Females.	Total	Males.	Females.	Total.
January,	3,799	...	3,799	3,888	...	3,888
February,	3,864	...	3,864	3,986	...	3,986
March,	3,943	...	3,943	4,038	...	4,038
April,	3,955	...	3,955	4,081	...	4,081
May,	4,031	...	4,031	4,171	...	4,171
June,	3,982	...	3,982	4,334	...	4,334
July,	3,886	...	3,886	4,361	...	4,361
August,	3,951	...	3,951	4,406	...	4,406
September,	3,997	...	3,997	4,423	...	4,423
October,	4,049	...	4,049	4,450	...	4,450
November,	4,057	...	4,057	4,435	...	4,435
December,	3,981	...	3,981	4,463	...	4,463

FURNACES, RANGES AND HEATERS—THIRTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	1,388	...	1,388	1,377	...	1,377
February,	1,423	...	1,423	1,372	...	1,372
March,	1,451	...	1,451	1,409	...	1,409
April,	1,435	...	1,435	1,419	...	1,419
May,	1,226	...	1,226	1,462	...	1,462
June,	1,206	...	1,206	1,481	...	1,481
July,	1,081	...	1,081	1,399	...	1,399
August,	1,242	...	1,242	1,566	...	1,566
September,	1,310	...	1,310	1,645	...	1,645
October,	1,366	...	1,366	1,643	...	1,643
November,	1,511	...	1,511	1,599	...	1,599
December,	1,461	...	1,461	1,521	...	1,521

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

GLASS (WINDOW AND BOTTLE)—NINETEEN ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	6,185	158	6,343	6,370	190	6,560
February,	6,160	168	6,328	6,423	197	6,620
March,	6,180	163	6,343	6,548	206	6,754
April,	6,395	178	6,573	6,667	190	6,857
May,	6,133	163	6,296	6,577	188	6,765
June,	5,836	166	6,002	6,174	191	6,365
July,	1,593	60	1,653	2,145	93	2,238
August,	1,142	24	1,166	1,308	80	1,388
September,	5,267	127	5,394	4,044	164	4,208
October,	5,856	146	6,002	6,040	197	6,237
November,	6,312	148	6,460	6,341	195	6,536
December,	6,493	143	6,636	6,453	173	6,626

GRAPHITE PRODUCTS—FOUR ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	612	653	1,265	536	583	1,119
February,	620	668	1,288	566	615	1,181
March,	615	696	1,311	562	615	1,177
April,	616	665	1,281	577	631	1,208
May,	625	665	1,290	590	622	1,212
June,	619	658	1,277	591	651	1,242
July,	623	686	1,309	615	675	1,290
August,	606	660	1,266	623	685	1,308
September	582	591	1,173	595	650	1,245
October,	581	610	1,191	608	654	1,262
November,	687	600	1,287	616	679	1,295
December,	562	582	1,144	626	682	1,308

HATS (FELT)—FORTY-EIGHT ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	3,779	1,246	5,025	4,050	1,449	5,499
February,	3,834	1,288	5,122	4,101	1,461	5,562
March,	3,897	1,348	5,245	4,162	1,505	5,667
April,	3,891	1,363	5,254	4,132	1,502	5,634
May,	3,849	1,358	5,207	4,039	1,459	5,498
June,	3,892	1,379	5,271	4,073	1,466	5,539
July,	3,912	1,342	5,254	4,077	1,435	5,512
August,	3,963	1,428	5,391	4,164	1,482	5,646
September,	4,056	1,454	5,510	4,295	1,552	5,847
October,	4,020	1,420	5,440	4,424	1,570	5,994
November,	4,036	1,390	5,426	4,252	1,555	5,807
December,	4,003	1,377	5,380	4,169	1,502	5,671

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

HATS (STRAW)—THREE ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	185	464	649	179	452	631
February,	184	481	665	179	458	637
March,	192	491	683	176	449	625
April,	188	463	651	147	349	496
May,	166	404	570	112	216	328
June,	73	145	218	90	164	254
July,	29	14	43	37	93	130
August,	58	37	95	58	52	110
September,	95	121	216	78	169	247
October,	124	325	449	126	371	497
November,	152	384	536	181	434	615
December,	166	421	587	179	443	622

HIGH EXPLOSIVES—EIGHT ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	672	8	680	1,048	6	1,054
February,	665	6	671	1,013	4	1,017
March,	690	8	698	1,072	4	1,076
April,	754	8	762	1,044	6	1,050
May,	736	8	744	1,073	6	1,079
June,	694	8	702	1,085	6	1,091
July,	714	7	721	1,136	5	1,144
August,	761	7	768	1,136	5	1,141
September,	807	5	812	1,104	5	1,109
October,	835	6	841	1,164	7	1,171
November,	806	7	813	1,173	11	1,184
December,	805	7	812	1,179	10	1,187

INKS AND MUCILAGE—FIVE ESTABLISHMENTS.

Months.	Males.	Females.	Total	Males.	Females.	Total.
January,	65	16	81	64	14	78
February,	63	17	80	64	14	78
March,	67	17	84	66	15	81
April,	68	13	81	67	14	81
May,	67	11	78	65	13	78
June,	67	10	77	64	13	77
July,	65	10	75	68	16	84
August,	69	18	87	75	21	96
September,	68	15	83	72	19	91
October,	70	15	85	70	22	92
November,	69	15	84	70	22	92
December,	66	14	80	66	18	84

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

JEWELRY—SIXTY-SIX ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	1,681	580	2,261	1,778	620	2,398
February,	1,724	581	2,305	1,808	635	2,443
March,	1,711	584	2,295	1,821	620	2,441
April,	1,689	569	2,258	1,835	613	2,448
May,	1,656	562	2,218	1,798	616	2,414
June,	1,607	556	2,163	1,756	612	2,368
July,	1,724	552	2,276	1,765	598	2,363
August,	1,674	559	2,233	1,830	616	2,446
September,	1,721	573	2,294	1,917	619	2,536
October,	1,747	591	2,338	1,998	647	2,645
November,	1,771	663	2,434	2,018	695	2,713
December,	1,769	661	2,430	2,024	711	2,735

KNIT GOODS—TWELVE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	747	1,053	1,800	719	1,016	1,735
February,	765	1,080	1,845	708	1,034	1,742
March,	756	1,125	1,881	711	1,044	1,755
April,	750	1,114	1,864	714	1,023	1,737
May,	741	1,114	1,855	721	1,026	1,747
June,	731	1,095	1,826	716	1,004	1,720
July,	744	1,079	1,823	716	1,008	1,724
August,	740	1,079	1,819	720	1,023	1,743
September,	744	1,070	1,814	729	1,028	1,757
October,	738	1,077	1,815	711	1,054	1,765
November,	751	1,067	1,818	715	1,062	1,777
December,	744	1,033	1,777	718	1,045	1,763

LEATHER—FIFTY-FIVE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	4,150	87	4,237	4,590	82	4,672
February,	4,139	84	4,223	4,692	68	4,760
March,	4,140	81	4,221	4,870	57	4,927
April,	4,079	78	4,157	4,847	72	4,919
May,	4,043	63	4,106	4,822	106	4,928
June,	3,901	67	3,968	4,645	99	4,744
July,	3,767	64	3,831	4,505	98	4,603
August,	3,800	67	3,867	4,571	108	4,679
September,	3,993	61	4,054	4,662	102	4,764
October,	4,066	68	4,134	4,817	86	4,903
November,	4,180	68	4,248	4,904	84	4,988
December,	4,564	66	4,630	5,241	88	5,329

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

LEATHER GOODS—TWELVE ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	605	482	1,087	563	510	1,073
February,	609	498	1,107	559	518	1,077
March,	615	520	1,135	564	529	1,093
April,	572	476	1,048	566	524	1,090
May,	591	487	1,078	566	525	1,091
June,	583	479	1,062	554	527	1,081
July,	603	509	1,112	551	520	1,071
August,	614	531	1,145	562	538	1,100
September,	624	552	1,176	564	551	1,115
October,	630	549	1,179	572	547	1,119
November,	623	544	1,167	560	539	1,099
December,	615	530	1,145	552	519	1,071

LAMPS—EIGHT ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females	Total.
January,	965	1,536	2,501	1,014	1,654	2,668
February,	978	1,523	2,501	1,034	1,691	2,725
March,	1,019	1,652	2,671	1,029	1,595	2,624
April,	1,075	1,619	2,694	1,058	1,548	2,606
May,	1,103	1,597	2,700	1,106	1,473	2,579
June,	1,102	1,597	2,699	1,114	1,469	2,583
July,	1,086	1,350	2,436	1,053	1,450	2,503
August,	1,136	1,574	2,710	1,076	1,584	2,660
September,	1,174	1,765	2,939	1,120	1,714	2,834
October,	1,180	1,913	3,093	1,136	1,823	2,959
November,	1,169	1,850	3,019	1,126	1,903	3,029
December,	1,141	1,807	2,948	1,127	1,888	3,015

LIME AND CEMENT—SIX ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	412	...	412	618	...	618
February,	411	...	411	588	...	588
March,	423	...	423	701	...	701
April,	433	...	433	800	...	800
May,	447	...	447	797	...	797
June,	455	...	455	809	...	809
July,	445	...	445	817	...	817
August,	463	...	463	838	...	838
September,	460	...	460	819	...	819
October,	443	...	443	821	...	821
November,	443	...	443	824	...	824
December,	418	...	418	809	...	809

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

MACHINERY—NINETY-TWO ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males	Females.	Total.
January,	11,171	305	11,476	11,994	337	12,331
February,	11,295	308	11,603	12,331	440	12,635
March	11,461	310	11,771	12,286	341	12,627
April,	11,548	311	11,859	12,577	336	12,913
May,	11,764	319	12,083	12,451	345	12,796
June,	11,658	319	11,977	12,199	365	12,564
July,	11,515	317	11,832	12,640	342	12,982
August,	11,337	318	11,655	13,244	339	13,583
September,	11,494	321	11,815	13,247	344	13,591
October,	11,552	324	11,876	13,531	340	13,871
November,	11,673	328	12,001	13,612	339	13,951
December,	11,619	329	11,948	13,932	337	14,269

MATTRESSES AND BEDDING—SIX ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	150	26	176	151	23	174
February,	149	27	176	153	23	176
March,	147	27	174	153	25	178
April,	149	27	176	161	27	188
May,	146	27	173	165	27	192
June,	147	27	174	164	27	191
July,	145	27	172	154	26	180
August,	149	27	176	158	26	184
September,	152	27	179	176	27	203
October,	154	27	181	180	27	207
November,	153	27	180	190	25	215
December,	153	27	180	167	25	192

METAL GOODS—FIFTY-SIX ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	3,292	945	4,237	3,335	932	4,267
February,	3,436	978	4,414	3,488	1,023	4,511
March,	3,466	965	4,431	3,558	1,060	4,618
April,	3,382	925	4,307	3,559	1,037	4,596
May,	3,373	923	4,296	3,621	1,044	4,665
June,	3,300	918	4,218	3,635	1,080	4,715
July,	3,256	912	4,168	3,648	1,088	4,736
August,	3,263	903	4,166	3,661	1,065	4,726
September,	3,296	889	4,185	3,787	1,084	4,871
October,	3,320	898	4,218	3,836	1,108	4,944
November,	3,406	874	4,280	3,809	1,139	4,948
December,	3,354	888	4,242	3,805	1,126	4,931

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

METAL NOVELTIES—TWELVE ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	433	166	599	445	150	595
February,	480	164	644	462	165	627
March,	535	155	690	506	185	691
April,	521	142	663	507	174	681
May,	511	151	662	512	171	683
June,	495	155	650	527	169	696
July,	474	158	632	506	169	675
August,	480	164	644	507	173	680
September,	536	164	700	569	190	759
October,	590	198	788	621	215	836
November,	601	174	775	679	239	918
December,	547	170	717	576	201	777

MINING (IRON ORE)—SEVEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	1,457	...	1,457	1,137	...	1,137
February,	1,472	...	1,472	1,195	...	1,195
March,	1,513	...	1,513	1,229	...	1,229
April,	1,467	...	1,467	1,269	...	1,269
May,	1,543	...	1,543	1,274	...	1,274
June,	1,492	...	1,492	1,284	...	1,284
July,	1,453	...	1,453	1,305	...	1,305
August,	1,553	...	1,553	1,282	...	1,282
September,	1,525	...	1,525	1,295	...	1,295
October,	1,287	...	1,287	1,306	...	1,306
November,	1,090	...	1,090	1,319	...	1,319
December,	1,070	...	1,070	1,352	...	1,352

MUSICAL INSTRUMENTS—EIGHTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	1,367	226	1,593	1,506	216	1,722
February,	1,373	236	1,609	1,488	227	1,715
March,	1,392	238	1,630	1,458	234	1,692
April,	1,404	248	1,652	1,514	252	1,766
May,	1,338	254	1,592	1,514	258	1,772
June,	1,311	252	1,563	1,509	245	1,754
July,	1,286	226	1,512	1,586	205	1,791
August,	1,261	184	1,445	1,577	217	1,794
September,	1,300	190	1,490	1,590	239	1,829
October,	1,365	206	1,571	1,581	247	1,828
November,	1,410	229	1,639	1,581	245	1,826
December,	1,412	230	1,642	1,582	245	1,827

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

OILCLOTH (FLOOR AND TABLE)—EIGHT ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	883	...	883	906	...	906
February,	887	...	887	908	...	908
March,	882	...	882	947	...	947
April,	842	...	842	823	...	823
May,	808	...	808	847	...	847
June,	852	...	852	948	...	948
July,	865	...	865	983	...	983
August,	862	...	862	991	...	991
September,	779	...	779	955	...	955
October,	797	...	797	957	...	957
November,	785	...	785	915	...	915
December,	815	...	815	943	...	943

OILS—FIFTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	2,658	...	2,658	2,582	...	2,582
February,	2,678	...	2,678	2,593	...	2,593
March,	2,568	...	2,568	2,644	...	2,644
April,	2,537	...	2,537	2,658	...	2,658
May,	2,607	...	2,607	2,593	...	2,593
June,	2,623	...	2,623	2,636	...	2,636
July,	2,616	...	2,616	2,601	...	2,601
August,	2,640	...	2,640	2,635	...	2,635
September,	2,642	...	2,642	2,604	...	2,604
October,	2,657	...	2,657	2,710	...	2,710
November,	2,603	...	2,603	2,590	...	2,590
December,	2,628	...	2,628	2,657	...	2,657

PAINTS—TEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	486	57	543	552	63	615
February,	502	60	562	534	68	602
March,	522	61	583	569	73	642
April,	534	62	596	587	73	660
May,	539	62	601	600	74	674
June,	518	59	577	596	72	668
July,	504	53	557	598	72	670
August,	478	45	523	570	62	632
September,	505	48	553	595	63	658
October,	526	50	576	583	62	645
November,	527	52	579	572	57	629
December,	526	55	581	552	53	605

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

PAPER—THIRTY-TWO ESTABLISHMENTS.

Months.	1900 Males.	1900 Females	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	1,675	246	1,921	1,690	232	1,922
February,	1,663	243	1,906	1,678	228	1,906
March,	1,649	238	1,887	1,661	234	1,895
April,	1,628	246	1,874	1,654	218	1,872
May,	1,580	201	1,781	1,623	199	1,822
June,	1,518	185	1,703	1,563	180	1,743
July,	1,457	183	1,640	1,560	189	1,749
August,	1,469	206	1,675	1,408	162	1,570
September,	1,469	177	1,646	1,711	205	1,916
October,	1,637	230	1,867	1,732	217	1,949
November,	1,650	231	1,881	1,778	226	2,004
December,	1,664	235	1,899	1,765	226	1,991

PIG IRON—FOUR ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	636	...	636	716	...	716
February,	660	...	660	729	...	729
March,	665	...	665	669	...	669
April,	636	...	636	654	...	654
May,	665	...	665	681	...	681
June,	664	...	664	713	...	713
July,	561	...	561	677	...	677
August,	566	...	566	688	...	688
September,	587	...	587	667	...	667
October,	566	...	566	675	...	675
November,	486	...	486	666	...	666
December,	484	...	484	601	...	601

POTTERY—THIRTY-ONE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	2,769	596	3,365	2,844	643	3,487
February,	2,806	596	3,402	2,860	642	3,502
March,	2,777	613	3,390	2,849	630	3,479
April,	2,895	619	3,514	2,920	648	3,568
May,	2,909	608	3,517	2,960	654	3,614
June,	2,880	629	3,509	2,947	637	3,584
July,	2,842	611	3,453	2,927	632	3,559
August,	2,870	614	3,484	2,956	640	3,596
September,	2,920	629	3,549	3,040	685	3,725
October,	2,905	615	3,520	3,051	684	3,735
November,	2,895	627	3,522	3,063	677	3,740
December,	2,860	624	3,484	3,052	683	3,735

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

PRINTING AND BOOK-BINDING—NINETEEN ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	428	240	668	473	268	741
February,	406	154	560	422	215	637
March,	421	184	605	417	225	642
April,	436	194	630	425	211	636
May,	451	192	643	417	224	641
June,	448	197	645	403	235	638
July,	453	198	651	405	248	653
August,	462	224	686	441	233	674
September,	491	249	740	490	257	747
October,	528	307	835	554	326	880
November,	518	292	810	505	331	836
December,	487	275	762	548	364	912

QUARRYING STONE—TWELVE ESTABLISHMENTS.

Months.	Males.	Females,	Total.	Males.	Females.	Total.
January,	319	...	319	272	...	272
February,	339	...	339	283	...	283
March,	405	...	405	411	...	411
April,	594	...	594	495	...	495
May,	745	...	745	707	...	707
June,	887	...	887	773	...	773
July,	905	...	905	750	...	750
August,	914	...	914	778	...	778
September,	866	...	866	789	...	789
October,	839	...	839	770	...	770
November,	694	...	694	707	...	707
December,	416	...	416	573	...	573

ROOFING (IRON AND STONE)—FIVE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	256	21	277	253	16	269
February,	259	23	282	239	16	255
March,	272	22	294	258	14	272
April,	274	21	295	269	13	282
May,	290	19	309	266	14	280
June,	289	16	305	281	14	295
July,	284	16	300	293	14	307
August,	288	16	304	279	2	281
September,	271	15	286	301	2	303
October,	269	16	285	365	15	380
November,	293	15	308	354	14	368
December,	272	16	288	330	14	344

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued.)

RUBBER GOODS (HARD AND SOFT)—THIRTY ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	3,406	705	4,111	3,524	772	4,236
February,	3,440	766	4,206	3,634	739	4,373
March,	3,214	633	3,847	3,787	763	4,550
April,	3,532	778	4,310	3,759	766	4,525
May,	3,467	784	4,251	3,597	746	4,343
June,	3,349	750	4,099	3,545	729	4,274
July,	2,993	635	3,628	3,558	748	4,306
August,	3,091	606	3,697	3,520	748	4,268
September,	3,114	658	3,772	3,393	758	4,151
October,	3,202	714	3,916	3,432	770	4,202
November,	3,341	720	4,061	3,488	770	4,258
December,	3,528	752	4,280	3,591	792	4,383

SADDLES AND HARNESS—TEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	242	23	265	206	11	217
February,	243	23	266	249	23	272
March,	264	25	289	258	25	283
April,	280	25	305	270	25	295
May,	289	24	313	288	24	312
June,	287	25	312	276	24	300
July,	283	25	308	259	24	283
August,	253	23	276	254	24	278
September,	243	23	266	242	24	266
October,	242	21	263	245	26	271
November,	236	21	257	252	25	277
December,	239	21	260	247	25	272

SADDLERY AND HARNESS HARDWARE—FOURTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females	Total.
January,	548	24	572	516	14	530
February,	559	24	583	527	14	541
March,	565	22	587	533	15	548
April,	557	22	579	531	15	546
May,	549	22	571	528	15	543
June,	544	22	566	537	15	552
July,	539	22	561	531	14	545
August,	571	22	593	525	14	539
September,	569	23	592	524	14	538
October,	566	22	588	529	14	543
November,	548	22	570	525	14	539
December,	551	22	573	532	14	546

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

SCIENTIFIC INSTRUMENTS—ELEVEN ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	1,092	210	1,302	1,064	252	1,316
February,	1,036	224	1,260	997	248	1,245
March,	1,217	230	1,447	984	234	1,218
April,	1,263	218	1,481	1,083	229	1,312
May,	1,264	251	1,515	1,211	230	1,441
June,	1,117	252	1,369	1,166	247	1,413
July,	1,020	247	1,267	1,134	240	1,374
August,	1,108	244	1,352	1,160	246	1,406
September,	1,224	234	1,458	1,178	246	1,424
October,	1,242	243	1,485	1,252	241	1,493
November,	1,190	246	1,436	1,274	246	1,520
December,	1,150	252	1,402	1,299	244	1,543

SASH, BLINDS AND DOORS—TWENTY-TWO ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	579	...	579	647	...	647
February,	582	...	582	650	...	650
March,	618	...	618	686	...	686
April,	647	...	647	715	...	715
May,	685	...	685	740	...	740
June,	696	...	696	761	...	761
July,	674	...	674	728	...	728
August,	629	...	629	696	...	696
September,	630	...	630	694	...	694
October,	643	...	643	689	...	689
November,	666	...	666	713	...	713
December,	654	...	654	718	...	718

SHOES—FORTY ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	2,893	1,471	4,364	2,887	1,550	4,437
February,	3,004	1,557	4,561	3,039	1,628	4,667
March,	3,050	1,577	4,627	3,015	1,629	4,644
April,	2,991	1,528	4,519	2,952	1,587	4,539
May,	3,036	1,520	4,556	2,925	1,578	4,503
June,	2,976	1,572	4,548	2,945	1,645	4,590
July,	2,855	1,498	4,353	2,914	1,652	4,566
August,	2,991	1,590	4,581	3,013	1,670	4,683
September,	2,925	1,578	4,503	2,994	1,622	4,616
October,	2,962	1,517	4,479	2,958	1,580	4,538
November,	2,901	1,499	4,400	2,980	1,591	4,571
December,	2,950	1,503	4,453	2,912	1,571	4,483

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

SHIRTS—TWENTY-TWO ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	962	2,829	3,791	636	2,238	2,874
February,	959	2,839	3,798	654	2,350	3,004
March,	925	2,859	3,784	659	2,400	3,059
April,	903	2,851	3,754	674	2,536	3,210
May,	878	2,773	3,651	659	2,497	3,156
June,	765	2,742	3,507	657	2,410	3,067
July,	840	2,494	3,334	641	2,189	2,830
August,	731	2,345	3,076	757	2,054	2,811
September,	737	2,460	3,197	658	2,334	2,992
October,	890	2,729	3,619	665	2,513	3,178
November,	848	2,743	3,591	700	2,546	3,246
December,	927	2,776	3,703	718	2,630	3,348

SHIP-BUILDING—TWELVE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	497	...	497	1,443	...	1,443
February,	487	...	487	1,559	...	1,559
March,	527	...	527	1,838	...	1,838
April,	553	...	553	2,017	...	2,017
May,	559	...	559	2,114	...	2,114
June,	560	...	560	2,166	...	2,166
July,	562	...	562	2,345	...	2,345
August,	551	...	551	2,672	...	2,672
September,	523	...	523	2,922	...	2,922
October,	491	...	491	3,086	...	3,086
November,	512	...	512	3,026	...	3,026
December,	489	...	489	2,983	...	2,983

SILK (BROAD AND RIBBON)—ONE HUNDRED AND THREE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	10,609	10,661	21,270	9,706	9,854	19,560
February,	10,552	10,617	21,169	10,020	10,118	20,138
March,	10,721	10,874	21,595	10,194	10,212	20,406
April,	10,662	10,756	21,418	10,430	10,402	20,832
May,	10,558	10,603	21,161	10,492	10,554	21,046
June,	10,235	10,398	20,633	10,367	10,551	20,918
July,	10,051	10,198	20,249	10,288	10,465	20,753
August,	9,789	9,926	19,715	10,308	10,520	20,828
September,	9,215	9,411	18,626	10,251	10,590	20,841
October,	9,162	9,450	18,612	10,354	10,850	21,204
November,	9,387	9,586	18,973	10,406	10,867	21,273
December,	9,667	9,791	19,458	10,649	11,062	21,711

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

SILK DYEING—TWENTY ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	3,301	267	3,568	3,042	263	3,305
February,	3,367	277	3,644	3,150	274	3,424
March,	3,323	286	3,609	3,193	270	3,463
April,	3,229	269	3,498	3,195	274	3,469
May,	3,049	248	3,297	3,165	266	3,431
June,	2,925	235	3,160	3,159	251	3,410
July,	2,838	238	3,076	3,225	246	3,471
August,	2,741	239	2,980	3,239	257	3,496
September,	2,929	259	3,188	3,365	260	3,625
October,	3,002	267	3,269	3,582	272	3,854
November,	3,008	288	3,296	3,656	279	3,935
December,	3,021	255	3,276	3,634	266	3,900

SILK THROWING—EIGHTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	673	905	1,578	492	703	1,195
February,	664	886	1,550	544	752	1,296
March,	666	877	1,543	555	827	1,382
April,	659	888	1,547	572	873	1,445
May,	640	846	1,486	601	850	1,451
June,	628	813	1,441	630	859	1,489
July,	644	817	1,461	648	849	1,497
August,	644	818	1,462	640	833	1,473
September,	595	748	1,343	596	815	1,411
October,	555	720	1,275	618	852	1,470
November,	539	770	1,309	621	883	1,504
December,	568	808	1,376	628	862	1,490

SILK MILL SUPPLIES—FOURTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	419	133	552	417	136	553
February,	430	129	559	422	142	564
March,	432	139	571	434	140	574
April,	431	135	566	445	140	585
May,	438	131	569	445	138	583
June,	421	129	550	435	137	572
July,	414	133	547	443	140	583
August,	413	127	540	450	149	599
September,	410	132	542	446	156	602
October,	402	139	541	446	161	607
November,	418	135	553	461	162	623
December,	421	140	561	458	153	611

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

SILVER GOODS—TWELVE ESTABLISHMENTS.

Months	1900			1901		
	Males.	Females	Total.	Males.	Females.	Total.
January,	854	242	1,096	866	238	1,104
February,	905	242	1,147	880	245	1,125
March,	904	319	1,223	877	260	1,137
April,	896	242	1,138	861	230	1,091
May,	893	235	1,128	856	229	1,085
June,	896	236	1,132	874	231	1,105
July,	907	244	1,151	881	230	1,111
August,	939	245	1,184	917	274	1,191
September,	992	265	1,257	970	290	1,260
October,	998	272	1,270	1,007	302	1,309
November,	1,022	288	1,310	997	298	1,295
December,	975	276	1,251	987	288	1,275

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

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	2,771	...	2,771	2,954	...	2,954
February,	2,886	...	2,886	3,128	...	3,128
March,	2,891	...	2,891	3,116	...	3,116
April,	2,984	...	2,984	3,055	...	3,055
May,	2,973	...	2,973	3,176	...	3,176
June,	3,013	...	3,013	3,250	...	3,250
July,	3,082	...	3,082	3,220	...	3,220
August,	3,192	...	3,192	3,256	...	3,256
September,	3,107	...	3,107	3,227	...	3,227
October,	3,020	...	3,020	3,216	...	3,216
November,	2,920	...	2,920	3,253	...	3,253
December,	2,860	...	2,860	3,331	...	3,331

SOAP AND TALLOW—FOURTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	452	108	560	470	113	583
February,	451	110	561	465	114	579
March,	443	106	549	468	112	580
April,	446	115	561	469	125	594
May,	439	111	550	462	119	581
June,	428	106	534	458	119	577
July,	416	98	514	448	111	559
August,	412	91	503	419	97	516
September,	438	103	541	449	108	557
October,	450	106	556	468	125	592
November,	463	124	587	469	133	602
December,	465	139	604	473	146	619

TABLE No. 13—Persons Employed, by Industries—Aggregates by Mon hs, 1900-1901—(Continued).

STEAM PIPE COVERING—THREE ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	53	10	63	40	10	50
February,	51	10	61	36	10	46
March,	48	11	59	34	10	44
April,	49	9	58	36	10	46
May,	50	15	65	36	10	46
June,	49	9	58	34	10	44
July,	51	10	61	36	10	46
August,	52	11	63	38	10	48
September,	52	11	63	39	10	49
October,	48	12	60	39	10	49
November,	53	10	63	41	10	51
December,	54	9	63	39	10	49

STEEL AND IRON (BAR)—FOUR ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total
January,	570	...	570	582	...	582
February,	568	...	568	575	...	575
March,	564	...	564	581	...	581
April,	561	...	561	596	...	596
May,	547	...	547	602	...	602
June,	512	...	512	592	...	592
July,	537	...	537	504	...	504
August,	525	...	525	499	...	499
September,	550	...	550	597	...	597
October,	548	...	548	598	...	598
November,	538	...	538	583	...	583
December,	546	...	546	578	...	578

STEEL AND IRON (STRUCTURAL)—SIXTEEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	2,877	...	2,877	2,954	...	2,954
February,	2,937	...	2,937	2,849	...	2,849
March,	2,937	...	2,937	2,921	...	2,921
April,	2,965	...	2,965	2,876	...	2,876
May,	3,025	...	3,025	2,898	...	2,898
June,	3,021	...	3,021	3,034	...	3,034
July,	2,912	...	2,912	3,032	...	3,032
August,	2,976	...	2,976	3,099	...	3,099
September,	3,015	...	3,015	3,101	...	3,101
October,	2,999	...	2,999	3,033	...	3,033
November,	2,977	...	2,977	3,141	...	3,141
December,	2,933	...	2,933	3,165	...	3,165

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

STEEL AND IRON (FORGING)—ELEVEN ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females	Total.
January,	2,827	...	2,827	2,752	...	2,752
February,	2,860	...	2,860	2,755	...	2,755
March,	2,840	...	2,840	2,738	...	2,738
April,	2,812	...	2,812	2,655	...	2,655
May,	2,835	...	2,835	2,808	...	2,808
June,	2,799	...	2,799	2,728	...	2,728
July,	2,678	...	2,678	2,676	...	2,676
August,	2,666	...	2,666	2,607	...	2,607
September,	2,696	...	2,696	2,663	...	2,663
October,	2,732	...	2,732	2,665	...	2,665
November,	2,687	...	2,687	2,651	...	2,651
December,	2,683	...	2,683	2,674	...	2,674

TEXTILE PRODUCTS—SIX ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	132	142	274	190	125	315
February,	140	140	280	198	129	327
March,	147	140	287	190	114	304
April,	153	118	271	194	115	309
May,	143	129	272	199	115	314
June,	167	136	303	175	112	287
July,	179	125	304	176	105	281
August,	193	140	333	181	109	290
September,	185	144	329	206	106	312
October,	165	141	306	221	113	334
November,	163	138	301	212	115	327
December,	177	138	315	207	121	328

THREAD—SIX ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females	Total.
January,	674	1,162	1,836	1,576	3,897	5,473
February,	693	1,133	1,826	1,588	3,951	5,539
March,	710	1,157	1,867	1,580	3,972	5,552
April,	706	1,087	1,793	1,567	3,963	5,530
May,	678	1,088	1,766	1,568	3,997	5,567
June,	663	1,074	1,737	1,572	4,009	5,581
July,	650	1,096	1,746	1,592	3,995	5,587
August,	636	1,105	1,741	1,579	4,017	5,596
September,	621	1,174	1,795	1,552	3,983	5,535
October,	620	1,152	1,772	1,574	4,027	5,601
November,	615	1,171	1,786	1,589	4,016	5,605
December,	650	1,147	1,797	1,573	4,017	5,590

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

TRUNKS AND TRAVELING BAGS—TEN ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	529	37	566	532	38	570
February,	523	37	560	536	38	574
March,	556	37	593	570	38	608
April,	582	37	619	595	44	639
May,	590	37	627	603	44	647
June,	594	38	632	609	44	653
July,	585	38	623	606	44	650
August,	591	37	628	606	44	650
September,	593	37	630	620	44	664
October,	568	37	605	622	44	666
November,	551	37	588	586	44	630
December,	532	38	570	565	44	609

TRUNK AND BAG HARDWARE—NINE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	461	96	557	614	160	774
February,	489	133	622	624	178	802
March,	488	132	620	638	176	814
April,	520	143	663	655	209	864
May,	536	160	696	661	201	862
June,	496	124	620	659	179	838
July,	514	133	647	669	184	853
August,	511	148	659	674	197	871
September,	518	165	683	673	210	883
October,	502	161	663	670	210	880
November,	513	162	675	665	205	870
December,	478	155	633	628	190	818

TYPEWRITERS AND SUPPLIES—THREE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	570	10	580	90	4	94
February,	576	10	586	118	4	122
March,	574	10	584	126	4	130
April,	590	10	600	137	4	141
May,	583	11	594	128	4	132
June,	579	11	590	164	5	169
July,	560	10	570	170	5	175
August,	579	10	589	175	6	181
September,	584	10	594	185	6	191
October,	585	10	595	196	8	204
November,	591	10	600	192	8	200
December,	600	10	610	190	7	197

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

VARNISHES—EIGHTEEN ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total	Males.	Females.	Total.
January,	246	14	260	256	10	266
February,	246	14	260	266	10	276
March,	248	14	262	266	10	276
April,	249	14	263	262	10	272
May,	248	14	262	263	10	273
June,	242	14	256	258	10	268
July,	245	14	259	258	10	268
August,	237	14	251	254	10	264
September,	237	14	251	253	10	263
October,	238	14	252	257	10	267
November,	246	14	260	264	10	274
December,	257	14	271	263	10	273

WATCHES, CASES AND MATERIAL—TEN ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total
January,	1,319	424	1,743	1,401	492	1,893
February,	1,371	426	1,797	1,418	495	1,913
March,	1,387	436	1,823	1,428	503	1,931
April,	1,387	138	1,825	1,324	483	1,807
May,	1,381	483	1,864	1,281	482	1,763
June,	1,400	478	1,878	1,313	499	1,812
July,	1,409	507	1,916	1,381	504	1,885
August,	1,419	484	1,903	1,417	495	1,912
September,	1,413	492	1,905	1,423	520	1,943
October,	1,436	498	1,934	1,424	535	1,959
November,	1,432	503	1,935	1,424	540	1,964
December,	1,427	515	1,942	1,467	537	2,004

WINDOW SHADES—FOUR ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	85	3	88	80	3	83
February,	86	3	89	80	3	83
March,	88	4	92	83	4	87
April,	81	6	87	88	6	94
May,	81	6	87	85	6	91
June,	84	6	90	84	6	90
July,	79	6	85	73	6	79
August,	73	3	76	74	3	77
September,	79	3	82	83	3	86
October,	81	3	84	85	3	88
November,	79	3	82	87	3	90
December,	86	3	89	89	3	92

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

WIRE CLOTH—FOUR ESTABLISHMENTS.

Months.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
January,	301	52	353	309	58	367
February,	312	51	363	302	59	361
March,	304	57	361	313	62	375
April,	305	54	359	305	57	362
May,	302	53	355	299	57	356
June,	310	58	368	302	57	359
July,	306	64	370	287	59	346
August,	307	60	367	290	54	344
September,	306	55	361	297	61	358
October,	304	57	361	294	62	356
November,	303	56	359	295	61	356
December,	299	58	357	288	52	340

WOODEN GOODS—TWENTY-NINE ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	940	...	940	1,037	9	1,046
February,	977	...	977	1,046	9	1,055
March,	1,052	...	1,052	1,071	9	1,080
April,	946	...	946	1,110	9	1,119
May,	979	...	979	1,161	9	1,170
June,	984	...	984	1,220	10	1,230
July,	951	...	951	1,154	10	1,164
August,	982	...	982	1,154	11	1,165
September,	951	...	951	1,168	11	1,179
October,	916	...	916	1,163	11	1,174
November,	947	...	947	1,240	11	1,251
December,	926	...	926	1,180	11	1,191

WOOLEN AND WORSTED GOODS—TWENTY-SIX ESTABLISHMENTS.

Months.	Males.	Females.	Total.	Males.	Females.	Total.
January,	3,457	3,561	7,018	3,564	3,512	7,076
February,	3,616	3,613	7,229	3,669	3,611	7,280
March,	3,687	3,727	7,414	3,697	3,835	7,532
April,	3,706	3,942	7,648	3,565	3,818	7,383
May,	3,732	3,837	7,569	3,570	3,835	7,405
June,	3,609	3,783	7,392	3,520	3,876	7,396
July,	3,545	3,692	7,237	3,624	4,023	7,647
August,	3,556	3,748	7,304	3,667	4,037	7,704
September,	3,495	3,734	7,229	3,623	4,090	7,713
October,	3,533	3,623	7,156	3,629	4,113	7,742
November,	3,438	3,563	7,001	3,703	4,114	7,817
December,	3,387	3,534	6,921	3,743	4,126	7,869

TABLE No. 13—Persons Employed, by Industries—Aggregates by Months, 1900-1901—(Continued).

UNCLASSIFIED—FIFTY ESTABLISHMENTS.

Months.	1900			1901		
	Males.	Females.	Total.	Males.	Females.	Total.
January,	4,035	982	5,017	4,510	1,109	5,619
February,	4,054	990	5,044	4,477	1,122	5,599
March,	4,056	1,013	5,069	4,662	1,160	5,822
April,	4,047	1,023	5,070	4,751	1,215	5,966
May,	4,292	1,042	5,334	4,868	1,233	6,101
June,	4,402	1,005	5,407	4,843	1,220	6,063
July,	4,360	967	5,327	4,706	1,147	5,853
August,	4,425	947	5,372	4,604	1,157	5,761
September,	4,465	964	5,429	4,348	1,171	5,519
October,	4,503	960	5,463	4,553	1,148	5,701
November,	4,447	931	5,378	4,421	1,099	5,520
December,	4,181	923	5,104	4,398	1,108	5,506

ALL INDUSTRIES—ONE THOUSAND, SIX HUNDRED AND SIXTY ESTABLISHMENTS.

Months	Males.	Females.	Total.	Males.	Females.	Total.
January,	127,031	44,490	171,521	132,955	48,724	181,679
February,	128,967	45,069	174,036	134,995	49,892	184,887
March,	131,012	46,023	177,035	138,111	50,693	188,804
April,	133,028	45,857	178,885	140,534	50,877	191,411
May,	133,150	45,103	178,253	141,650	50,652	192,302
June,	132,573	43,639	176,212	140,639	50,364	191,003
July,	125,893	43,567	169,460	137,504	49,748	187,252
August,	126,269	44,309	170,578	138,560	49,988	188,548
September,	130,657	43,914	174,571	142,204	51,457	193,661
October,	131,395	45,098	176,493	146,125	52,868	198,993
November,	130,824	45,106	175,930	145,685	52,939	198,624
December,	130,310	45,317	175,627	145,608	52,912	198,520

ANALYSIS, TABLES NOS. 5 TO 13.

The totals of all industries on Table No. 5, shows the aggregate average number of persons employed in the 1,660 establishments covered by the presentation, to be 174,883 in 1900, and 191,307 in 1901, an increase in the number employed in the latter year of 16,424, or 9.4 per cent.

Sixty-four out of the eighty-five classified industries show an increase in the aggregate average number of persons employed in 1901 as compared with 1900, and twenty-one industries show decreases.

The following table shows the experience of thirty-two leading industries in respect to the number of persons employed in both years. The increase or decrease for each industry is given by number and percentage.

Industries.	Number of Establishments Considered	Aggregate Average Number of Persons Employed.		Increase (x) or Decrease (—) in 1901.	
		1900.	1901.	Number.	Percentage.
Brick and terra cotta,	58	4,671	5,172	+ 501	+ 10.7
Brewery products,	32	1,769	1,855	+ 86	+ 4.8
Chemical products,	40	3,825	4,340	+ 515	+ 13.4
Cigars and tobacco,	24	2,963	3,764	+ 801	+ 27.
Clothing,	16	729	1,030	+ 301	+ 41.3
Cutlery,	9	592	872	+ 280	+ 47.3
Cotton goods,	39	4,951	5,730	+ 779	+ 15.7
Electrical appliances,	20	2,429	2,966	+ 537	+ 22.1
Food products,	18	1,492	1,610	+ 118	+ 7.9
Foundry (iron),	30	3,958	4,253	+ 295	+ 7.5
Glass (window and bottle),	19	5,433	5,596	+ 163	+ 3.
Hats (felt),	48	5,294	5,656	+ 362	+ 6.8
High explosives,	8	752	1,109	+ 357	+ 47.4
Jewelry,	66	2,292	2,496	+ 204	+ 8.9
Leather,	55	4,140	4,851	+ 711	+ 17.2
Lime and cement,	6	438	770	+ 332	+ 75.8
Machinery,	92	11,825	13,176	+ 1,351	+ 11.4
Metal goods,	56	4,280	4,711	+ 431	+ 10.
Musical instruments,	18	1,578	1,776	+ 198	+ 12.5
Oil cloth,	8	838	927	+ 89	+ 10.6
Oils,	15	2,621	2,625	+ 4	+ 0.2
Pottery,	31	3,476	3,610	+ 134	+ 3.8
Pig iron,	4	598	678	+ 80	+ 13.3
Rubber goods,	30	4,015	4,322	+ 307	+ 7.6
Shirts,	22	3,567	3,065	— 502	— 14.
Shoes,	40	4,495	4,570	+ 75	+ 1.6
Silk (broad and ribbon),	103	20,240	20,792	+ 552	+ 2.7
Silk dyeing,	20	3,322	3,565	+ 243	+ 7.3
Silk throwing,	18	1,448	1,425	— 23	— 1.6
Smelting and refining (gold, silver and copper,	8	2,975	3,182	+ 185	+ 6.2
Structural steel and iron,	16	2,964	3,009	+ 552	+ 18.6
Woolen and worsted goods,	26	7,260	7,547	+ 287	+ 3.9

Tables No. 6 and 7 shows the aggregate average number of persons employed at periods of the smallest and the greatest number, for 1900 and 1901. The totals for all industries given on Table No. 6 shows that the smallest number of persons employed at periods of employment of the smallest number was 169,460 in 1900, and 181,679 for the corresponding period in 1901, an increase of 12,219 persons or 7.2 per cent. Sixty-four of the eighty-five industries included in the presentation, shows an increase in the smallest number of persons employed in 1901 as compared with 1900.

From Table No. 7, it appears that 178,885 persons were employed in 1900 at periods of employment of the greatest number, and at the corresponding periods in 1901, 198,993 persons were employed; an increase of 20,108 persons, or 11.2 per cent. Among the twenty-one industries that exhibits a decrease, there is but one, namely, mining of iron ore, that may rightfully be regarded as among the leading industries of the State. The greatest number employed at mining iron ore was 1,553 in 1900, and 1,352 in 1901, a falling off of 201 persons, or 12.9 per cent.

The presentation on Table No. 8 shows the excess of greatest number over smallest number of persons employed in 1900 and 1901, and the increase or decrease in number for the latter year.

Taking all the industries included in the presentation, it is found that the excess of the greatest over the smallest number of persons employed was 9,425 in 1900, and 17,314 in 1901, the excess of the latter year exceeding that of the former by 7,889 persons.

The figures for the leading industries are reproduced in the following table:

Industries.	Number of Establishments Considered.	Excess of Greatest over Smallest Number of Persons Employed.		Increase (x) or Decrease (—) in 1901.			
		1900.	1901.		Number.		Percentage.
Brewery products,	32	81	75	—	6	—	7.4
Brick and terra cotta,	58	2,770	3,038	+	268	+	9.7
Chemical products,	40	550	452	—	98	—	17.8
Cotton goods,	39	1,152	407	—	775	—	67.2
Electrical appliances,	20	156	486	+	330	+	211.5
Foundry (iron),	30	258	575	+	317	+	122.8
Glass (window and bottle),	19	5,470	5,469	—	1		.....
Hats (felt and wool),	48	485	496	+	11	+	2.2
Jewelry,	66	271	372	+	101	+	37.3
Leather,	55	799	726	—	73	—	9.1
Machinery,	92	607	1,938	+	1,331	+	219.2
Oils,	15	141	128	—	13	—	9.2
Pottery,	31	184	261	+	77	+	41.8
Rubber products,	30	682	399	—	283	—	41.5
Shoes,	40	263	246	—	17	—	6.5
Shirts,	22	722	537	—	185	—	25.6
Silk (broad and ribbon),	103	2,983	2,151	—	832	—	27.9
Silk dyeing,	20	664	630	—	34	—	5.1
Structural steel and iron,	16	148	316	+	168	+	113.5
Woolen and worsted goods,	26	727	793	+	66	+	9.1

Ten of the twenty industries in the foregoing table show more continuous employment in 1901 than in 1900. The others show percentages which indicate a greater degree of idleness during the latter period as compared with the former.

An examination of Table No. 8, shows forty-eight industries in which the percentage of unemployment is greater, and thirty-seven in which it is lower in 1901, as compared with 1900. Trade was not really less active in these industries in 1901 than in 1900; on the contrary many of the establishments included in the forty-eight industries showing an apparent increase in the percentage of unemployment, began the fiscal year 1901 with their normal working force, which increased later on by the employment of additional help; the difference between the greatest and smallest number of persons employed during the year is thus increased, not because some of the wage workers ordinarily employed have been laid off or discharged at some time during the year, but because as above stated, more than the normal number of persons have been employed during some months of the year.

Tables Number 9, 10, 11 and 12 deal with the various phases of employment by establishments. These tables, in the order given above, show the average number of persons employed per

establishment; the smallest number of persons employed in each establishment; the greatest number of persons employed in each establishment; and, the excess of greatest over smallest number employed in each establishment, for both the years 1900 and 1901, with the increases or decreases in number in the latter as compared with the earlier year.

The average number of persons employed per establishment in 1900 was 105, in 1901 it is 115, an increase of 10 in number, or 9.5 per cent.

The smallest average number of persons employed in each establishment was 102 in 1900, and is 109 in 1901, the gain per establishment is 7, or 6.8 per cent.

The average greatest number of persons employed per establishment was 108 in 1900, and 120 in 1901; the increase in 1901 over 1900 is 12, or 11.1 per cent.

The excess of greatest over smallest number of persons employed per establishment was 6 in 1900; in 1901, it is 11, an increase of 5, or 83.3 per cent.

Table No. 13 gives the number of males and females and the number of both sexes employed in each of the eighty-five industries by months for the years 1900 and 1901. This presentation will show at a glance down the twelve lines devoted to each industry, which of the twelve months afforded the greatest and the least amount of employment, and how the two years compare in that respect.

The variation in the number of females employed in each industry for both years is also shown in this table.

WAGES AND EARNINGS OF LABOR.

TABLES 14, 15 AND 16.

In the three following tables are shown the aggregate amounts paid wages; the average yearly earnings; and the classified weekly wage rates for each of the eighty-five industries in 1900 and 1901.

Tables No. 15 and 16 shows the amount of increases or decreases that has taken place in the total amounts of wages paid and in the yearly earnings, in 1901, as compared with 1900. It should be remembered in reading these tables, that the wages and earnings given are for wage earners only, that is to say, persons whose labor in some of the various processes enters directly into the production of the finished article. Managers, superintendents, clerks, salesmen, and other salaried persons are not included.

The figures are based on returns of the total amounts paid in wages, by each of the 1,660 establishments for the years 1900 and 1901. The classification of wages which is given by industries on Table No. 16 is based on reports from each of the establishments covering that week during the year when the largest number of persons were employed. The artes of wages range from below $5.00 to $20.00 and over per week, and the number of males and of females receiving each rate is given separately.

TABLE No. 14—Aggregate Amounts Paid in Wages, by Industries, Increase or Decrease, 1900--1901.

Office Number.	Industries.	Number of Establishments Considered.	Aggregate Amounts Paid in Wages During the Year. 1900.	1901.	Amount—Increase (x) or Decrease (—) in 1901.
1	Agricultural implements,	7	$115,107	$140,302	+ $25,195
2	Artisans' tools,	30	753,908	761,049	+ 7,141
3	Bicycle and bicycle parts,	4	41,623	25,380	— 16,243
4	Boilers,	10	516,568	543,335	+ 26,767
5	Boxes (wood and porter,	29	364,654	387,119	+ 22,465
6	Brewing (lager beer, ale and porter),	32	1,454,746	1,516,690	+ 61,944
7	Brick and terra cotta,	58	1,879,461	2,100,540	+ 221,079
8	Brushes,	11	95,000	98,864	+ 3,864
9	Buttons (metal),	9	280,713	313,670	+ 32,957
10	Buttons (pearl),	17	322,643	353,253	+ 30,610
11	Carpets and rugs,	7	411,794	487,149	+ 75,355
12	Carriages and wagons,	36	554,568	557,834	+ 3,266
13	Chemical products,	40	1,857,662	2,057,526	+ 199,864
14	Cigars and tobacco,	24	972,854	1,166,389	+ 193,535
15	Clothing,	16	247,812	360,873	+ 113,061
16	Confectionery,	4	33,477	37,768	+ 4,291
17	Cornices (galv. iron and copper),	12	133,017	151,682	+ 18,665
18	Corsets and corset waists,	11	521,348	554,497	+ 33,149
19	Cutlery,	9	240,679	383,695	+ 143,016
20	Cotton goods,	39	1,379,035	1,556,961	+ 177,926
21	Cotton goods (finishing and dyeing),	20	1,665,944	1,827,693	+ 161,749
22	Electrical appliances,	20	1,266,937	1,649,575	+ 382,638
23	Fertilizers,	11	492,336	530,887	+ 38,551
24	Food products,	18	635,815	622,361	— 13,454
25	Foundry (brass),	11	350,608	376,980	+ 26,372
26	Foundry (iron),	30	2,102,424	2,214,015	+ 111,591
27	Furnaces, ranges and heaters,	13	863,579	945,629	+ 82,050
28	Glass (window and bottle),	19	2,721,121	2,751,202	+ 30,081
29	Graphite products,	4	372,645	383,063	+ 10,418
30	Hats (felt),	48	2,694,423	2,961,505	+ 267,082
31	Hats (straw),	3	165,458	170,678	+ 5,220
32	High explosives,	8	351,028	574,035	+ 223,007
33	Inks and mucilage,	5	47,672	48,427	+ 755
34	Jewelry,	66	1,288,887	1,448,016	+ 159,129
35	Knit goods,	12	516.867	500,157	— 16,710
36	Leather,	55	1,936,538	2,373,717	+ 437,159
37	Leather goods,	12	340,589	324,357	— 16,232
38	Lamps,	8	990,715	982,510	— 8,205
39	Lime and cement,	6	202,245	324,890	+ 122,645
40	Machinery,	92	6,930,582	7,567,744	+ 637,162
41	Mattresses and bedding,	6	74,478	77,264	+ 2,786
42	Metal goods,	56	1,767,636	1,999,659	+ 232,023
43	Metal novelties,	12	258,499	280,020	+ 21,521
44	Mining (iron ore),	7	614,929	536,192	— 78,737
45	Musical instruments,	18	755,618	885,944	+ 130,326
46	Oil cloth (floor and table),	8	397,864	449,919	+ 52,055
47	Oils,	15	1,576,380	1,626,297	+ 49,917
48	Paints,	10	278,249	328,282	+ 50,033
49	Paper,	32	855,302	908,132	+ 52,830
50	Pig iron,	4	271,180	304,377	+ 33,197
51	Pottery,	31	1,929,796	2,058,531	+ 128,735
52	Printing and book binding,	19	298,167	319,844	+ 21,677
53	Quarrying stone,	12	257,999	243,422	— 14,577
54	Roofing (iron and stone),	5	154,396	137,633	— 16,763
55	Rubber goods (hard and soft),	30	1,811,521	1,961,890	+ 150,369
56	Saddles and harness,	10	144,664	141,254	— 3,410
57	Saddlery and harness hardware,	14	263,319	266,023	+ 2,704
58	Scientific instruments,	11	579,016	612,825	+ 33,809
59	Sash, blinds and doors,	22	331,854	354,487	+ 22,633
60	Shoes,	40	1,691,372	1,689,361	— 2,011
61	Shirts,	22	922,274	841,583	— 80,736

TABLE No. 14—Aggregate Amounts Paid in Wages, by Industries, Increase or Decrease, 1900--1901—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Aggregate Amounts Paid in Wages During the Year. 1900.	1901.	Amount—Increase (x) or Decrease (—) in 1901.
62	Ship building,	12	342,560	1,299,253	+ 956,693
63	Silk (broad and ribbon),	103	7,681,001	8,130,926	+ 449,925
64	Silk dyeing,	20	1,502,821	1,638,889	+ 136,068
65	Silk throwing,	18	348,075	352,242	+ 4,167
66	Silk mill supplies,	14	213,627	238,325	+ 24,698
67	Silver goods,	12	618,691	685,592	+ 66,901
68	Smelting and refining (gold, silver, copper, etc.),	8	1,537,025	1,809,561	+ 272,536
69	Soap and tallow,	14	216,302	233,215	+ 16,913
70	Steam pipe covering,	3	23,460	19,987	— 3,473
71	Steel and iron (bar),	4	290,321	264,624	— 25,697
72	Steel and iron (structural),	16	1,499,991	1,537,959	+ 37,968
73	Steel and iron (forging),	11	1,486,777	1,466,940	— 19,837
74	Textile products,	6	103,870	107,432	+ 3,562
75	Thread,	6	584,202	1,714,391	+ 1,130,189
76	Trunks and traveling bags,	10	283,343	298,009	+ 14,666
77	Trunk and bag hardware,	9	216,546	284,881	+ 68,335
78	Typewriters and supplies,	3	332,706	89,531	— 243,175
79	Varnishes,	18	186,348	192,626	+ 6,278
80	Watches, cases and material,	10	933,170	955,934	+ 22,764
81	Window shades,	4	47,665	48,454	+ 789
82	Wire cloth,	4	225,512	234,289	+ 8,777
83	Wooden goods,	29	399,251	418,528	+ 19,277
84	Woolen and worsted goods,	26	2,356,101	2,522,623	+ 166,522
85	Unclassified,	50	2,555,858	2,750,963	+ 195,105
	All industries,	1,660	$77,333,138	$85,450,085	+ $8,116,947

TABLE No. 15—Average Yearly Earnings, by Industries, Increase or Decrease, 1900--1901.

Office Number.	Industries.	Number of Establishments Considered.	Average Yearly Earnings. 1900.	Average Yearly Earnings. 1901.	Amount—Increase (x) or Decrease (—) in 1901.
1	Agricultural implements,	7	$451 40	$477 21	+ $25 81
2	Artisans' tools,	30	518 86	515 97	— 2 89
3	Bicycle and bicycle parts,	4	358 82	396 56	+ 37 74
4	Boilers,	10	541 47	532 16	— 9 31
5	Boxes (wood and paper),	29	289 18	295 06	+ 5 88
6	Brewing (lager beer, ale and porter),	32	822 35	817 62	— 4 73
7	Brick and terra cotta,	58	402 37	406 14	+ 3 77
8	Brushes,	11	339 29	327 36	— 11 93
9	Buttons (metal),	9	302 17	352 04	+ 49 87
10	Buttons (pearl),	17	354 55	378 62	+ 24 07
11	Carpets and rugs,	7	352 26	363 82	+ 11 56
12	Carriages and wagons,	36	534 78	529 30	— 5 48
13	Chemical products,	40	490 89	474 08	— 16 81
14	Cigars and tobacco,	24	328 33	309 88	— 18 45
15	Clothing,	16	339 93	350 36	+ 10 43
16	Confectionery,	4	423 76	419 64	— 4 12
17	Cornices (galv. iron and copper),	12	283 79	352 75	+ 68 96
18	Corsets and corset waists,	11	273 39	278 64	+ 5 25
19	Cutlery,	9	406 55	440 02	+ 33 47
20	Cotton goods,	39	278 54	271 72	— 6 82
21	Cotton goods (finishing and dyeing),	20	414 72	443 40	+ 28 68
22	Electrical appliances,	20	521 59	556 16	+ 34 57
23	Fertilizers,	11	480 80	500 83	+ 20 03
24	Food products,	18	426 15	386 56	— 39 59
25	Foundry (brass),	11	435 00	474 19	+ 39 19
26	Foundry (iron),	30	531 18	520 58	— 10 60
27	Furnaces, ranges and heaters,	13	643 50	634 22	— 9 28
28	Glass (window and bottle),	19	500 85	491 64	— 9 21
29	Graphite products,	4	296 45	309 67	+ 13 22
30	Hats (felt),	48	508 95	523 60	+ 14 65
31	Hats (straw),	3	370 15	394 17	+ 24 02
32	High explosives,	8	466 79	517 61	+ 50 82
33	Inks and mucilage,	5	588 54	576 51	— 12 03
34	Jewelry,	66	562 34	580 13	+ 17 79
35	Knit goods,	12	282 75	286 29	+ 3 54
36	Leather,	55	467 77	489 32	+ 21 55
37	Leather goods,	12	304 10	297 58	— 6 52
38	Lamps,	8	361 18	359 63	— 1 55
39	Lime and cement,	6	461 75	421 94	— 39 81
40	Machinery,	92	586 10	574 36	— 11 74
41	Mattresses and bedding,	6	423 17	406 65	— 16 52
42	Metal goods,	56	413 00	424 46	+ 11 46
43	Metal novelties,	12	380 15	390 00	+ 9 85
44	Mining (iron ore),	7	436 12	421 87	— 14 25
45	Musical instruments,	18	478 84	498 84	+ 20 00
46	Oil cloth (floor and table),	8	474 78	485 35	+ 10 57
47	Oils,	15	601 44	619 54	+ 18 10
48	Paints,	10	489 01	511 34	+ 22 33
49	Paper,	32	473 33	487 72	+ 14 39
50	Pig iron,	4	453 48	448 93	— 4 55
51	Pottery,	31	555 18	570 23	+ 15 05
52	Printing and book binding,	19	434 65	445 46	+ 10 81
53	Quarrying stone,	12	390 91	399 71	+ 8 80
54	Roofing (iron and stone),	5	525 15	454 23	— 70 92
55	Rubber goods (hard and soft),	30	451 16	453 93	+ 2 77
56	Saddles and harness,	10	513 00	509 94	— 3 06
57	Saddlery and harness hardware,	14	455 57	489 91	+ 34 34
58	Scientific instruments,	11	409 20	440 25	+ 31 05
59	Sash, blinds and doors,	22	516 91	504 24	— 12 67
60	Shoes,	40	376 28	367 47	— 8 81
61	Shirts,	22	258 56	274 54	+ 15 98

TABLE No. 15—Average Yearly Earnings, by Industries, Increase or Decrease, 1900--1901—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Average Yearly Earnings. 1900.	Average Yearly Earnings. 1901.	Amount—Increase (+) or Decrease (—) in 1901.
62	Ship building,	12	651 25	553 71	— 97 54
63	Silk (broad and ribbon),	103	379 49	391 06	+ 11 57
64	Silk dyeing,	20	452 38	459 72	+ 7 34
65	Silk throwing,	18	240 38	247 18	+ 6 80
66	Silk mill supplies,	14	385 61	405 31	+ 19 70
67	Silver goods,	12	519 91	580 02	+ 60 11
68	Smelting and refining (gold, silver, copper, etc.),	8	516 65	568 68	+ 52 03
69	Soap and tallow,	14	391 85	403 48	+ 11 63
70	Steam pipe covering,	3	384 59	425 25	+ 40 66
71	Steel and iron (bar),	4	528 81	461 02	— 67 79
72	Steel and iron (structural),	16	506 04	511 12	+ 5 08
73	Steel and iron (forging),	11	538 69	543 71	+ 5 02
74	Textile products,	6	348 56	345 44	— 3 12
75	Thread,	6	326 55	308 18	— 18 37
76	Trunks and traveling bags,	10	469 89	473 03	+ 3 14
77	Trunk and bag hardware,	9	335 73	337 53	+ 1 80
78	Typewriters and supplies,	3	562 95	556 09	— 6 86
79	Varnishes,	18	719 49	713 43	— 6 06
80	Watches, cases and material,	10	498 49	503 39	+ 4 90
81	Window shades,	4	554 24	556 94	+ 2 70
82	Wire cloth,	4	624 69	656 27	+ 31 58
83	Wooden goods,	29	414 59	363 31	— 51 28
84	Woolen and worsted goods,	26	324 53	334 25	+ 9 72
85	Unclassified,	50	486 74	478 26	— 8 48
	All industries,	1,660	$442 19	$446 66	+ $4 47

TABLE No. 16—Classified Weekly Wages, by Industries.

AGRICULTURAL IMPLEMENTS—SEVEN ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	20	...	20	20	...	20
$5 but under $6,	11	...	11	18	...	18
6 " " 7,	16	...	16	20	...	20
7 " " 8,	87	...	87	116	...	116
8 " " 9,	25	...	25	26	...	26
9 " " 10,	31	...	31	39	...	39
10 " " 12,	33	...	33	29	...	29
12 " " 15,	54	...	54	75	...	75
15 " " 20,	59	...	59	77	...	77
20 and over,	4	...	4	4	...	4
Total,	340	...	340	424	...	424

ARTISANS' TOOLS—THIRTY ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	209	8	217	202	3	205
$5 but under $6,	53	2	55	71	3	74
6 " " 7,	94	3	97	110	3	113
7 " " 8,	125	1	126	121	3	124
8 " " 9,	119	2	121	123	1	124
9 " " 10,	151	...	151	159	1	160
10 " " 12,	251	...	251	250	2	252
12 " " 15,	261	...	261	278	...	278
15 " " 20,	207	...	207	199	...	199
20 and over,	76	...	76	84	...	84
Total,	1,546	16	1,562	1,597	16	1,613

BICYCLE AND BICYCLE PARTS—FOUR ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	37	20	57	14	8	22
$5 but under $6,	15	7	22	3	...	3
6 " " 7,	38	3	41	8	...	8
7 " " 8,	25	...	25	13	2	15
8 " " 9,	8	...	8	4	...	4
9 " " 10,	12	...	12	7	...	7
10 " " 12,	14	1	15	10	...	10
12 " " 15,	11	...	11	7	...	7
15 " " 20,	8	...	8	2	...	2
20 and over,	1	...	1	2	...	2
Total,	169	31	200	70	10	80

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

BOILERS—TEN ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	27	...	27	28	...	28
$5 but under $6,	34	...	34	14	...	14
6 " " 7,	24	...	24	24	...	24
7 " " 8,	53	...	53	74	...	74
8 " " 9,	192	...	192	72	...	72
9 " " 10,	135	...	135	202	...	202
10 " " 12,	133	...	133	280	...	280
12 " " 15,	226	...	226	242	...	242
15 " " 20,	174	...	174	210	...	210
20 and over,	52	...	52	60	...	60
Total,	1,050	...	1,050	1,206	...	1,206

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

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	46	393	439	54	360	414
$5 but under $6,	44	219	263	41	215	256
6 " " 7,	27	140	167	27	183	210
7 " " 8,	54	76	130	38	63	101
8 " " 9,	38	24	62	45	48	93
9 " " 10,	32	9	41	53	18	71
10 " " 12,	47	6	53	59	9	68
12 " " 15,	94	3	97	92	5	97
15 " " 20,	32	...	32	38	...	38
20 and over,	11	...	11	14	...	14
Total,	425	870	1,295	461	901	1,362

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

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	22	5	27	21	4	25
$5 but under $6,	9	3	12	12	...	12
6 " " 7,	17	1	18	19	1	20
7 " " 8,	12	...	12	18	...	18
8 " " 9,	27	...	27	14	...	14
9 " " 10,	33	...	33	32	...	32
10 " " 12,	49	...	49	60	...	60
12 " " 15,	371	...	371	240	...	240
15 " " 20,	1,144	...	1,144	1,301	...	1,301
20 and over,	183	...	183	199	...	199
Total,	1,867	9	1,867	1,916	5	1,921

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

BRICK AND TERRA COTTA—FIFTY-EIGHT ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	326	22	348	276	62	338
$5 but under $6,	176	...	176	188	...	188
6 " " 7,	451	...	451	421	4	425
7 " " 8,	1,687	2	1,689	1,640	2	1,642
8 " " 9,	998	...	998	1,209	...	1,209
9 " " 10,	1,283	...	1,283	1,306	...	1,306
10 " " 12,	586	...	586	635	...	635
12 " " 15,	382	...	382	400	...	400
15 " " 20,	302	...	302	426	...	426
20 and over,	111	...	111	138	...	138
Total,	6,302	24	6,326	6,639	68	6,707

BRUSHES—ELEVEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	45	59	104	61	70	131
$5 but under $6,	10	23	33	11	24	35
6 " " 7,	10	14	24	15	11	26
7 " " 8,	13	11	24	30	3	33
8 " " 9,	10	4	14	12	3	15
9 " " 10,	19	2	21	31	2	33
10 " " 12,	13	1	14	18	...	18
12 " " 15,	42	...	42	28	1	29
15 " " 20,	24	...	24	19	...	19
20 and over,	4	...	4	7	...	7
Total,	190	114	304	232	114	346

BUTTONS (METAL)—NINE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males	Females.	Total.
Under $5,	75	452	527	71	403	474
$5 but under $6,	27	109	136	21	113	134
6 " " 7,	16	77	93	14	63	77
7 " " 8,	20	58	78	14	37	51
8 " " 9,	14	33	47	10	32	42
9 " " 10,	23	7	30	23	8	31
10 " " 12,	44	16	60	34	8	42
12 " " 15,	48	12	60	57	3	60
15 " " 20,	72	5	77	57	...	57
20 and over,	63	...	63	45	...	45
Total,	402	769	1,171	346	667	1,013

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

BUTTONS (PEARL)—SEVENTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	1909 Males.	1909 Females.	1909 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	115	86	201	127	103	230
$5 but under $6,	33	167	200	40	80	120
6 " " 7,	47	59	106	46	76	122
7 " " 8,	44	23	67	47	54	101
8 " " 9,	37	12	49	42	20	62
9 " " 10,	67	2	69	58	5	63
10 " " 12,	84	4	88	79	6	85
12 " " 15,	145	...	145	103	...	103
15 " " 20,	66	...	66	123	...	123
20 and over,	9	...	9	15	...	15
Total,	647	353	1,000	680	344	1,024

CARPETS AND RUGS—SEVEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	103	117	220	166	127	293
$5 but under $6,	55	103	158	72	109	181
6 " " 7,	157	77	234	169	60	229
7 " " 8,	159	29	188	91	27	118
8 " " 9,	89	28	117	120	40	160
9 " " 10,	68	26	94	67	19	86
10 " " 12,	117	7	124	129	4	133
12 " " 15,	64	1	65	114	3	117
15 " " 20,	30	...	30	43	9	52
20 and over,	9	...	9	5	...	5
Total,	851	388	1,239	976	398	1,374

CARRIAGES AND WAGONS—THIRTY-SIX ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	30	...	30	16	...	16
$5 but under $6,	22	...	22	32	...	32
6 " " 7,	40	...	40	44	...	44
7 " " 8,	88	...	88	86	...	86
8 " " 9,	93	...	93	90	...	90
9 " " 10,	155	...	155	129	...	129
10 " " 12,	141	...	141	184	...	184
12 " " 15,	300	...	300	293	...	293
15 " " 20,	188	...	188	204	...	204
20 and over,	30	...	30	37	...	37
Total,	1,087	...	1,087	1,115	...	1,115

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

CHEMICAL PRODUCTS—FORTY ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	237	276	513	209	383	592
$5 but under $6,	88	142	230	103	169	272
6 " " 7,	150	176	326	143	143	286
7 " " 8,	177	63	240	209	68	277
8 " " 9,	266	22	288	214	42	256
9 " " 10,	824	13	837	587	31	618
10 " " 12,	743	13	756	1,221	18	1,239
12 " " 15,	588	9	597	768	2	770
15 " " 20,	358	3	361	537	4	541
20 and over,	112	...	112	163	...	163
Total,	3,543	717	4,260	4,154	860	5,014

CIGARS AND TOBACCO—TWENTY-FOUR ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	172	861	1,033	184	958	1,142
$5 but under $6,	135	644	779	64	881	945
6 " " 7,	106	493	599	71	345	416
7 " " 8,	75	100	175	167	302	469
8 " " 9,	58	57	115	163	62	225
9 " " 10,	109	124	233	129	84	213
10 " " 12,	156	54	210	156	74	230
12 " " 15,	133	37	170	164	124	288
15 " " 20,	124	24	148	117	6	123
20 and over,	36	...	36	51	...	51
Total,	1,104	2,394	3,498	1,266	2,836	4,102

CLOTHING—SIXTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	19	166	185	25	225	250
$5 but under $6,	20	135	155	12	147	159
6 " " 7,	41	103	144	31	135	166
7 " " 8,	33	39	72	73	58	131
8 " " 9,	14	26	40	52	40	92
9 " " 10,	54	14	68	76	17	93
10 " " 12,	78	12	90	117	14	131
12 " " 15,	51	1	52	82	2	84
15 " " 20,	21	...	21	37	...	37
20 and over,	5	...	5	11	...	11
Total,	336	496	832	516	638	1,154

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

CONFECTIONERY—FOUR ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	2	22	24	1	41	42
$5 but under $6,	1	3	4	2	4	6
6 " " 7,	...	4	4	3	...	3
7 " " 8,	19	1	20	17	1	18
8 " " 9,	8	1	9	10	6	16
9 " " 10,	3	3	6	3	...	3
10 " " 12,	9	2	11	3	1	4
12 " " 15,	8	...	8	9	...	9
15 " " 20,	7	...	7	12	...	12
20 and over,	1	...	1	1	...	1
Total,	58	36	94	61	53	114

CORNICES (GALV. IRON AND COPPER)—TWELVE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	14	...	14	14	...	14
$5 but under $6,	14	...	14	35	...	35
6 " " 7,	10	...	10	22	...	22
7 " " 8,	17	...	17	15	...	15
8 " " 9,	8	...	8	5	...	5
9 " " 10,	29	...	29	57	...	57
10 " " 12,	61	...	61	97	...	97
12 " " 15,	27	...	27	30	...	30
15 " " 20,	68	...	68	74	...	74
20 and over,	15	...	15	54	...	54
Total,	263	...	263	403	...	403

CORSETS AND CORSET WAISTS—ELEVEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	12	610	622	13	616	629
$5 but under $6,	14	400	414	9	375	384
6 " " 7,	9	267	276	14	286	300
7 " " 8,	10	219	229	12	307	319
8 " " 9,	13	160	173	13	195	208
9 " " 19,	24	169	193	10	106	116
10 " " 12,	30	118	148	16	77	93
12 " " 15,	38	57	95	27	35	62
15 " " 20,	27	8	35	42	6	48
20 and over,	13	...	13	15	1	16
Total,	190	2,008	2,198	171	2,004	2,175

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued.)

CUTLERY—NINE ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	144	15	159	175	43	218
$5 but under $6,	44	9	53	67	24	91
6 " " 7,	38	5	43	52	11	63
7 " " 8,	42	3	45	43	3	46
8 " " 9,	29	3	32	65	...	65
9 " " 10,	41	3	44	76	1	77
10 " " 12,	54	...	54	100	...	100
12 " " 15,	83	...	83	108	...	108
15 " " 20,	84	...	84	96	...	96
20 and over,	23	...	23	52	...	52
Total,	582	38	620	834	82	916

COTTON GOODS—THIRTY-NINE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	235	2,272	2,507	330	2,430	2,760
$5 but under $6,	84	662	746	127	888	1,015
6 " " 7,	199	475	674	210	604	814
7 " " 8,	149	261	410	128	475	603
8 " " 9,	111	133	244	149	223	372
9 " " 10,	211	110	321	141	104	245
10 " " 12,	262	103	365	164	87	251
12 " " 15,	128	39	167	126	24	150
15 " " 20,	73	13	86	102	8	110
20 and over,	49	...	49	47	3	50
Total,	1,501	4,068	5,569	1,524	4,846	6,370

COTTON GOODS (FINISHING AND DYEING)—TWENTY ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females	Total.
Under $5,	466	354	820	442	290	732
$5 but under $6,	220	242	462	216	248	464
6 " " 7,	331	128	459	325	129	454
7 " " 8,	908	21	929	993	23	1,016
8 " " 9,	597	7	604	627	12	639
9 " " 10,	379	2	381	371	5	376
10 " " 12,	243	17	260	244	4	248
12 " " 15,	260	6	266	277	13	290
15 " " 20,	123	1	124	147	2	149
20 and over,	129	...	129	129	...	129
Total,	3,656	778	4,434	3,771	726	4,497

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

ELECTRICAL APPLIANCES—TWENTY ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	276	84	360	345	117	462
$5 but under $6,	119	29	148	154	59	213
6 " " 7,	108	55	163	165	73	238
7 " " 8,	154	47	201	220	52	272
8 " " 9,	221	13	234	206	74	280
9 " " 10,	295	6	301	347	31	378
10 " " 12,	310	2	312	325	21	346
12 " " 15,	416	...	416	456	5	461
15 " " 20,	378	...	378	539	...	539
20 and over,	110	...	110	214	...	214
Total,	2,387	236	2,623	2,971	432	3,403

FERTILIZERS—ELEVEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	36	...	36	19	...	19
$5 but under $6,	5	7	12	2	1	3
6 " " 7,	31	12	43	10	21	31
7 " " 8,	169	8	177	104	2	106
8 " " 9,	38	1	39	353	...	353
9 " " 10,	772	...	772	838	...	838
10 " " 12,	168	...	168	208	2	210
12 " " 15,	98	...	98	109	...	109
15 " " 20,	72	...	72	79	1	80
20 and over,	18	...	18	13	...	13
Total,	1,407	28	1,435	1,735	27	1,762

FOOD PRODUCTS—EIGHTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	181	303	484	120	275	395
$5 but under $6,	42	82	124	49	75	124
6 " " 7,	83	61	144	79	67	146
7 " " 8,	231	34	265	216	9	225
8 " " 9,	100	5	105	57	3	60
9 " " 10,	229	3	232	198	3	201
10 " " 12,	171	5	176	207	3	210
12 " " 15,	302	...	302	319	...	319
15 " " 20,	124	1	125	163	...	163
20 and over,	20	...	20	23	...	23
Total,	1,483	494	1,977	1,431	435	1,866

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

FOUNDRY (BRASS)—ELEVEN ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	108	22	130	91	19	110
$5 but under $6,	19	6	25	42	6	48
6 " " 7,	17	5	22	30	7	37
7 " " 8,	73	6	79	73	4	77
8 " " 9,	85	...	85	76	...	76
9 " " 10,	68	...	68	88	...	88
10 " " 12,	76	1	77	88	...	88
12 " " 15,	106	...	106	140	...	140
15 " " 20,	181	...	181	151	...	151
20 and over,	20	...	20	40	...	40
Total,	753	40	793	819	36	855

FOUNDRY (IRON)—THIRTY ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	198	...	198	180	...	180
$5 but under $6,	294	...	294	184	...	184
6 " " 7,	193	...	193	228	...	228
7 " 8,	617	...	617	482	...	482
8 " " 9,	528	...	528	736	...	736
9 " " 10,	657	...	657	757	...	757
10 " " 12,	405	...	405	571	...	571
12 " " 15,	699	...	699	680	...	680
15 " " 20,	575	...	575	719	...	719
20 and over,	191	...	191	126	...	126
Total,	4,357	...	4,357	4,663	...	4,663

FURNACES, RANGES AND HEATERS—THIRTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	54	...	54	54	...	54
$5 but under $6,	46	...	46	33	...	33
6 " " 7,	47	...	47	49	...	49
7 " " 8,	47	...	47	43	...	43
8 " " 9,	105	...	105	117	...	117
9 " " 10,	293	...	293	342	...	342
10 " " 12,	154	...	154	174	...	174
12 " " 15,	234	...	234	219	...	219
15 " " 20,	332	...	332	368	...	368
20 and over,	272	...	272	275	...	275
Total,	1,584	...	1,584	1,674	...	1,674

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

GLASS (WINDOW AND BOTTLE)—NINETEEN ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	2,095	165	2,260	1,900	172	2,072
$5 but under 6,	361	17	378	415	19	434
6 " " 7,	419	7	426	477	6	483
7 " " 8,	435	3	438	483	...	483
8 " " 9,	369	3	372	439	4	443
9 " " 10,	249	...	249	383	2	385
10 " " 12,	492	3	495	520	...	520
12 " " 15,	421	1	422	518	1	519
15 " " 20,	372	...	372	485	...	485
20 and over,	1,622	...	1,622	1,284	...	1,284
Total,	6,835	199	7,034	6,904	204	7,108

GRAPHITE PRODUCTS—FOUR ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	218	548	766	264	454	718
$5 but under $6,	69	73	142	54	73	127
6 " " 7,	46	43	89	49	47	96
7 " " 8,	24	19	43	32	35	67
8 " " 9,	19	18	37	27	12	39
9 " " 10,	30	8	38	20	9	29
10 " " 12,	75	6	81	65	11	76
12 " " 15,	66	4	70	79	1	80
15 " " 20,	65	1	66	81	1	82
20 and over,	28	...	28	30	...	30
Total,	640	720	1,360	701	643	1,344

HATS (FELT)—FORTY-EIGHT ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	251	362	613	234	341	575
$5 but under $6,	160	248	408	170	255	425
6 " " 7,	201	297	498	182	273	455
7 " " 8,	275	247	522	225	249	474
8 " " 9,	413	182	595	285	213	498
9 " " 10,	449	106	555	344	148	492
10 " " 12,	860	106	966	738	117	855
12 " " 15,	799	21	820	938	42	980
15 " " 20,	669	13	682	983	17	1,000
20 and over,	207	1	208	424	3	427
Total,	4,284	1,583	5,867	4,523	1,658	6,181

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

HATS (STRAW)—THREE ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	21	131	152	32	122	154
$5 but under $6,	3	72	75	6	46	52
6 " " 7,	10	38	48	9	60	69
7 " " 8,	6	37	43	9	52	61
8 " " 9,	4	87	91	9	50	59
9 " " 10,	13	44	57	12	42	54
10 " " 12,	16	46	62	21	33	54
12 " " 15,	40	20	60	33	21	54
15 " " 20,	72	11	83	39	1	40
20 and over,	9	...	9	10	...	10
Total,	195	486	680	180	427	607

HIGH EXPLOSIVES—EIGHT ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	23	...	23	5	3	8
$5 but under $6,	3	...	3	1	...	1
6 " " 7,	26	7	33	31	6	37
7 " " 8,	12	...	12	50	...	50
8 " " 9,	181	...	181	147	...	147
9 " " 10,	176	...	176	278	1	279
10 " " 12,	206	...	206	383	...	383
12 " " 15,	171	...	171	216	...	216
15 " " 20,	61	...	61	128	...	128
20 and over,	12	...	12	15	...	15
Total,	871	7	878	1,254	10	1,264

INKS AND MUCILAGE—FIVE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	6	17	23	4	20	24
$5 but under $6,	2	1	3	4	2	6
6 " " 7,	1	...	1	3	...	3
7 " " 8,	6	...	6	6	...	6
8 " " 9,	3	...	3	2	...	2
9 " " 10,	3	...	3	2	...	2
10 " " 12,	14	...	14	13	...	13
12 " " 15,	14	...	14	15	...	15
15 " " 20,	8	...	8	8	...	8
20 and over,	14	...	14	15	...	15
Total,	71	18	89	72	22	94

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

JEWELRY—SIXTY-SIX ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	228	236	464	224	223	447
$5 but under $6,	70	99	169	82	95	177
6 " " 7,	38	53	91	46	93	139
7 " " 8,	60	75	135	56	94	150
8 " " 9,	51	78	129	53	82	135
9 " " 10,	52	51	103	67	67	134
10 " " 12,	143	43	186	115	65	180
12 " " 15,	280	29	309	296	33	329
15 " " 20,	523	5	528	545	7	552
20 and over,	435	1	436	490	2	492
Total,	1,880	670	2,550	1,974	761	2,735

KNIT GOODS—TWELVE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	244	498	742	221	395	616
$5 but under $6,	58	249	307	55	225	280
6 " " 7,	46	172	218	56	194	250
7 " " 8,	73	104	177	66	108	174
8 " " 9,	85	91	176	80	97	177
9 " " 10,	101	18	119	111	34	145
10 " " 12,	64	11	75	80	9	89
12 " " 15,	54	15	69	56	6	62
15 " " 20,	31	2	33	26	...	26
20 and over,	19	...	19	17	1	18
Total,	775	1,160	1,935	768	1,069	1,837

LEATHER—FIFTY-FIVE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total
Under $5,	189	33	222	238	50	288
$5 but under $6,	177	13	190	236	27	263
6 " " 7,	240	18	258	248	16	264
7 " " 8,	279	15	294	251	12	263
8 " " 9,	467	4	471	453	6	459
9 " " 10,	672	4	676	709	3	712
10 " " 12,	806	...	806	1,027	...	1,027
12 " " 15,	770	1	771	892	...	892
15 " " 20,	511	1	512	699	...	699
20 and over,	245	...	245	431	...	431
Total,	4,356	89	4,445	5,184	114	5,298

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

LEATHER GOODS—TWELVE ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	172	252	424	138	264	402
$5 but under $6,	84	153	237	74	151	225
6 " " 7,	49	66	115	49	60	109
7 " " 8,	44	35	79	43	35	78
8 " " 9,	33	19	52	40	24	64
9 " " 10,	55	9	64	41	12	53
10 " " 12,	77	5	82	61	10	71
12 " " 15,	61	2	63	55	5	60
15 " " 20,	55	...	55	50	...	50
20 and over,	23	...	23	23	...	23
Total,	653	541	1,194	574	561	1,135

LAMPS—EIGHT ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	172	684	856	139	601	740
$5 but under $6,	113	304	417	82	277	359
6 " " 7,	77	429	506	107	394	501
7 " " 8,	120	359	479	71	397	468
8 " " 9,	76	152	228	97	195	292
9 " " 10,	72	70	142	113	95	208
10 " " 12,	172	46	218	183	38	221
12 " " 15,	227	16	243	221	12	233
15 " " 20,	167	3	170	187	2	189
20 and over,	44	...	44	35	...	35
Total,	1,240	2,063	3,303	1,235	2,011	3,246

LIME AND CEMENT—SIX ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	...	...	...	59	...	59
$5 but under $6,	1	...	1	13	...	13
6 " " 7,	3	...	3	25	...	25
7 " " 8,	30	...	30	88	...	88
8 " " 9,	142	...	142	155	...	155
9 " " 10,	135	...	135	139	...	139
10 " " 12,	75	...	75	197	...	197
12 " " 15,	11	...	11	120	...	120
15 " " 20,	54	...	54	51	...	51
20 and over,	3	...	3	7	...	7
Total,	454	...	454	854	...	854

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

MACHINERY—NINETY-TWO ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total
Under $5,	933	57	990	1,105	113	1,218
$5 but under $6,	279	76	355	387	71	458
6 " " 7,	381	75	456	483	76	559
7 " " 8,	563	31	594	751	38	789
8 " " 9,	737	31	768	899	38	937
9 " " 10,	1,415	27	1,442	1,513	14	1,527
10 " " 12,	1,449	23	1,472	1,763	10	1,773
12 " " 15,	2,697	9	2,706	3,139	7	3,146
15 " " 20,	3,601	...	3,601	4,024	...	4,024
20 and over,	604	...	604	623	...	623
Total,	12,659	329	12,988	14,687	367	15,054

MATTRESSES AND BEDDING—SIX ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total
Under $5,	34	1	35	58	1	59
$5 but under $6,	6	...	6	5	16	21
6 " " 7,	14	16	30	14	1	15
7 " " 8,	25	5	30	22	...	22
8 " " 9,	10	1	11	16	...	16
9 " " 10,	13	2	15	14	8	22
10 " " 12,	11	1	12	13	...	13
12 " " 15,	29	1	30	37	1	38
15 " " 20,	14	...	14	12	...	12
20 and over,	1	...	1	3	...	3
Total,	157	27	184	194	27	221

METAL GOODS—FIFTY-SIX ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	608	417	1,025	592	597	1,189
$5 but under $6,	300	209	509	295	230	525
6 " " 7,	266	145	411	332	183	515
7 " " 8,	474	101	575	507	102	609
8 " " 9,	311	51	362	324	50	374
9 " " 10,	428	27	455	499	18	517
10 " " 12,	437	14	451	421	18	439
12 " " 15,	401	4	405	472	9	481
15 " " 20,	372	...	372	472	3	475
20 and over,	149	...	149	135	...	135
Total,	3,746	968	4,714	4,049	1,210	5,259

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

METAL NOVELTIES—TWELVE ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	132	124	256	151	127	278
$5 but under $6,	53	38	91	51	34	85
6 " " 7,	41	22	63	61	52	113
7 " " 8,	39	13	52	36	10	46
8 " " 9,	78	9	87	81	8	89
9 " " 10,	63	13	76	58	3	61
10 " " 12,	44	3	47	62	2	64
12 " " 15,	78	...	78	122	1	123
15 " " 20,	61	...	61	86	...	86
20 and over,	18	...	18	23	...	23
Total,	607	222	829	731	237	968

MINING (IRON ORE)—SEVEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	42	...	42	56	...	56
$5 but under $6,	16	...	16	42	...	42
6 " " 7,	48	...	48	60	...	60
7 " " 8,	152	...	152	231	...	231
8 " " 9,	279	...	279	428	...	428
9 " " 10,	464	...	464	319	...	319
10 " " 12,	439	...	439	118	...	118
12 " " 15,	150	...	150	78	...	78
15 " " 20,	33	...	33	6	...	6
20 and over,	27	...	27	5	...	5
Total,	1,650	...	1,650	1,343	...	1,343

MUSICAL INSTRUMENTS—EIGHTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	200	123	323	151	106	257
$5 but under $6,	91	46	137	81	50	131
6 " " 7,	89	42	131	102	30	132
7 " " 8,	125	26	151	113	41	154
8 " " 9,	96	26	122	116	15	131
9 " " 10,	151	9	160	167	18	185
10 " " 12,	241	2	243	228	3	231
12 " " 15,	317	...	317	357	1	358
15 " " 20,	179	...	179	278	...	278
20 and over,	76	...	76	86	...	86
Total,	1,565	274	1,839	1,679	264	1,943

TABLE No. 16 - Classified Weekly Wages, by Industries—(Continued).

OIL CLOTH (FLOOR AND TABLE)—EIGHT ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	59	...	59	79	...	79
$5 but under $6,	17	...	17	15	...	15
6 " " 7,	52	...	52	65	...	65
7 " " 8,	103	...	103	122	...	122
8 " " 9,	167	...	167	166	...	166
9 " " 10,	185	...	185	206	...	206
10 " " 12,	104	...	104	119	...	119
12 " " 15,	115	...	115	119	...	119
15 " " 20,	86	...	86	95	...	95
20 and over,	27	...	27	35	...	35
Total,	915	...	915	1,021	...	1,021

OILS—FIFTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	91	...	91	118	...	118
$5 but under $6,	67	...	67	68	...	68
6 " " 7,	127	...	127	154	...	154
7 " " 8,	60	...	60	83	...	83
8 " " 9,	41	...	41	74	...	74
9 " " 10,	699	...	699	516	...	516
10 " " 12,	407	...	407	357	...	357
12 " " 15,	783	...	783	636	...	636
15 " " 20,	505	...	505	694	...	694
20 and over,	170	...	170	173	...	173
Total,	2,950	...	2,950	2,873	...	2,873

PAINTS—TEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	39	32	71	40	41	81
$5 but under $6,	5	17	22	16	11	27
6 " " 7,	13	1	14	16	14	30
7 " " 8,	52	2	54	36	1	37
8 " " 9,	80	4	84	65	3	68
9 " " 10,	160	1	161	202	2	204
10 " " 12,	111	2	113	109	2	111
12 " " 15,	74	1	75	80	1	81
15 " " 20,	39	1	40	44	...	44
20 and over,	15	...	15	15	...	15
Total,	588	61	649	623	75	698

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

PAPER—THIRTY-TWO ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	148	141	289	151	131	282
$5 but under $6,	78	50	128	86	39	125
6 " " 7,	109	42	151	93	32	125
7 " " 8,	317	9	326	345	23	368
8 " " 9,	201	7	208	156	4	160
9 " " 10,	275	6	281	302	5	307
10 " " 12,	162	1	163	191	2	193
12 " " 15,	166	1	167	162	1	163
15 " " 20,	129	...	129	142	...	142
20 and over,	129	...	129	112	...	112
Total,	1,714	257	1,971	1,740	237	1,977

PIG IRON—FOUR ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	13	...	13	7	...	7
$5 but under $6,	24	...	24	3	...	3
6 " " 7,	50	...	50	1	...	1
7 " " 8,	142	...	142	319	...	319
8 " " 9,	98	...	98	101	...	101
9 " " 10,	137	...	137	102	...	102
10 " " 12,	165	...	165	123	...	123
12 " " 15,	94	...	94	39	...	39
15 " " 20,	32	...	32	84	...	84
20 and over,	8	...	8	2	...	2
Total,	763	...	763	781	...	781

POTTERY—THIRTY-ONE ESTABLISHMENTS.

Classification of Weekly Wages	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	302	282	584	298	329	627
$5 but under $6,	124	111	235	102	117	219
6 " " 7,	158	75	233	138	58	196
7 " " 8,	262	79	341	230	81	311
8 " " 9,	173	42	215	177	36	213
9 " " 10,	222	25	247	230	29	259
10 " " 12,	265	8	273	283	18	301
12 " " 15,	307	12	319	362	15	377
15 " " 20,	555	2	557	653	2	655
20 and over,	629	4	633	593	3	596
Total,	2,997	640	3,637	3,066	688	3,754

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

PRINTING AND BOOK BINDING—NINETEEN ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	78	179	257	89	260	349
$5 but under $6,	21	46	67	30	54	84
6 " " 7,	38	32	70	35	44	79
7 " " 8,	33	10	43	41	21	62
8 " " 9,	15	5	20	26	10	36
9 " " 10,	33	2	35	33	1	34
10 " " 12,	60	2	62	48	...	48
12 " " 15,	72	3	75	92	4	96
15 " " 20,	115	2	118	121	3	124
20 and over,	47	...	47	49	...	49
Total,	513	281	794	564	397	961

QUARRYING STONE—TWELVE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	35	...	35	41	...	41
$5 but under $6,	9	...	9	31	...	31
6 " " 7,	21	...	21	9	...	9
7 " " 8,	266	...	266	146	...	146
8 " " 9,	212	...	212	181	...	181
9 " " 10,	138	...	138	127	...	127
10 " " 12,	77	...	77	56	...	56
12 " " 15,	63	...	63	58	...	58
15 " " 20,	89	...	89	87	...	87
20 and over,	97	...	97	96	...	96
Total,	1,007	...	1,007	832	...	832

ROOFING (IRON AND STONE)—FIVE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	6	21	27	6	1	7
$5 but under $6,	...	1	1	...	13	13
6 " " 7,	...	...	...	5	...	5
7 " " 8,	8	...	8	11	...	11
8 " " 9,	35	...	35	32	...	32
9 " " 10,	144	...	144	87	...	87
10 " " 12,	16	1	17	64	...	64
12 " " 15,	35	2	37	83	1	84
15 " " 20,	40	...	40	40	...	40
20 and over,	9	...	9	38	...	38
Total,	293	25	318	366	15	381

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

RUBBER GOODS (HARD AND SOFT)—THIRTY ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	357	248	605	350	206	556
$5 but under $6,	137	170	307	128	249	377
6 " " 7,	211	199	410	203	192	395
7 " " 8,	418	108	526	444	76	520
8 " " 9,	510	43	553	525	65	590
9 " " 10,	661	31	692	729	45	774
10 " " 12,	665	24	689	611	34	645
12 " " 15,	629	2	631	561	1	562
15 " " 20,	250	2	252	338	4	342
20 and over,	108	...	108	114	1	115
Total,	3,946	827	4,773	4,003	873	4,876

SADDLES AND HARNESS—TEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	23	8	31	20	7	27
$5 but under $6,	9	1	10	13	2	15
6 " " 7,	20	10	30	18	4	22
7 " " 8,	18	6	24	12	9	21
8 " " 9,	5	4	9	16	...	16
9 " " 10,	21	3	24	20	4	24
10 " " 12,	36	...	36	51	1	52
12 " " 15,	64	...	64	58	...	58
15 " " 20,	62	...	62	60	...	60
20 and over,	33	...	33	9	...	9
Total,	291	32	323	277	27	304

SADDLERY AND HARNESS HARDWARE—FOURTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	87	6	93	92	2	94
$5 but under $6,	30	6	36	39	3	42
6 " " 7,	37	5	42	30	3	33
7 " " 8,	39	3	42	41	3	44
8 " " 9,	42	2	44	40	2	42
9 " " 10,	31	1	32	41	1	42
10 " " 12,	65	...	65	51	1	52
12 " " 15,	140	1	141	133	...	133
15 " " 20,	94	...	94	89	...	89
20 and over,	15	...	15	11	...	11
Total,	580	24	604	567	15	582

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

SCIENTIFIC INSTRUMENTS—ELEVEN ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	206	116	322	233	161	394
$5 but under $6,	95	76	171	72	48	120
6 " " 7,	89	41	130	133	40	173
7 " " 8,	93	16	109	111	15	126
8 " " 9,	118	3	121	103	9	112
9 " " 10,	128	2	130	138	2	140
10 " " 12,	183	1	184	202	2	204
12 " " 15,	211	1	212	191	...	191
15 " " 20,	174	...	174	112	...	112
20 and over,	35	...	35	25	...	25
Total,	1,332	256	1,588	1,320	277	1,597

SASH, BLINDS AND DOORS—TWENTY-TWO ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	52	...	52	60	...	60
$5 but under $6,	9	...	9	13	...	13
6 " " 7,	29	...	29	28	...	28
7 " " 8,	60	...	60	61	...	61
8 " " 9,	40	...	40	32	...	32
9 " " 10,	102	...	102	163	...	163
10 " " 12,	97	...	97	104	...	104
12 " " 15,	176	...	176	175	...	175
15 " " 20,	162	...	162	105	...	105
20 and over,	4	...	4	12	...	12
Total,	731	...	731	753	...	753

SHOES—FORTY ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	429	496	925	488	526	1,014
$5 but under $6,	198	235	433	171	246	417
6 " " 7,	204	269	473	222	256	478
7 " " 8,	225	209	434	245	190	435
8 " " 9,	248	148	396	268	173	441
9 " " 10,	358	114	472	303	125	428
10 " " 12,	531	96	627	459	127	586
12 " " 15,	524	24	548	531	58	589
15 " " 20,	262	5	267	290	13	303
20 and over,	91	...	91	142	...	142
Total,	3,070	1,596	4,666	3,119	1,714	4,833

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

SHIRTS—TWENTY-TWO ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	158	839	997	41	808	849
$5 but under $6,	140	424	564	84	481	565
6 " " 7,	91	452	543	50	419	469
7 " " 8,	101	432	533	50	413	463
8 " " 9,	163	265	428	161	243	404
9 " " 10,	66	218	284	54	220	274
10 " " 12,	80	125	205	104	111	215
12 " " 15,	126	56	182	124	37	161
15 " " 20,	52	2	54	50	4	54
20 and over,	9	...	9	8	...	8
Total,	986	2,813	3,799	726	2,736	3,462

SHIP BUILDING—TWELVE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	7	...	7	325	...	325
$5 but under $6,	2	...	2	137	...	137
6 " " 7,	4	...	4	221	...	221
7 " " 8,	5	...	5	259	...	259
8 " " 9,	13	...	13	224	...	224
9 " " 10,	63	...	63	281	...	281
10 " " 12,	84	...	84	383	...	383
12 " " 15,	116	...	116	550	...	550
15 " " 20,	263	...	263	628	...	628
20 and over,	54	...	54	134	...	134
Total,	611	...	611	3,142	...	3,142

SILK (BROAD AND RIBBON)—ONE HUNDRED AND THREE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males	Females.	Total.
Under $5,	1,593	2,773	4,366	1,375	2,845	4,220
$5 but under $6,	637	1,699	2,336	543	1,737	2,280
6 " " 7,	681	1,486	2,167	526	1,492	2,018
7 " " 8,	1,049	1,283	2,332	925	1,248	2,173
8 " " 9,	870	854	1,724	826	881	1,707
9 " " 10,	944	918	1,862	1,026	835	1,861
10 " " 12,	1,906	1,039	2,945	2,099	1,156	3,255
12 " " 15,	1,867	781	2,648	2,016	784	2,800
15 " " 20,	1,537	211	1,748	1,583	280	1,863
20 and over,	525	17	542	416	27	443
Total,	11,609	11,061	22,670	11,335	11,285	22,620

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

SILK DYEING—TWENTY ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	153	160	313	137	135	272
$5 but under $6,	73	52	125	57	68	125
6 " " 7,	147	35	182	196	38	234
7 " " 8,	564	26	590	616	16	632
8 " " 9,	193	19	212	237	13	250
9 " " 10,	1,008	3	1,011	1,280	9	1,289
10 " " 12,	717	2	719	681	2	683
12 " " 15,	311	1	312	303	1	304
15 " " 20,	103	...	103	120	...	120
20 and over,	96	...	96	105	...	105
Total,	3,365	298	3,663	3,732	282	4,014

SILK THROWING—EIGHTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	259	267	526	262	294	556
$5 but under $6,	115	492	607	90	496	586
6 " " 7,	120	154	274	138	137	275
7 " " 8,	92	20	112	67	24	91
8 " " 9,	32	5	37	31	10	41
9 " " 10,	45	1	46	26	1	27
10 " " 12,	16	...	16	16	6	22
12 " " 15,	24	...	24	19	...	19
15 " " 20,	17	...	17	23	...	23
20 and over,	5	...	5	4	...	4
Total,	725	939	1,664	676	968	1,644

SILK MILL SUPPLIES—FOURTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	87	41	128	84	46	130
$5 but under $6,	30	34	64	35	32	67
6 " " 7,	20	24	44	30	25	55
7 " " 8,	36	17	53	39	8	47
8 " " 9,	39	12	51	37	18	55
9 " " 10,	48	2	50	45	7	52
10 " " 12,	53	8	61	61	5	66
12 " " 15,	68	4	72	47	10	57
15 " " 20,	58	2	60	56	4	60
20 and over,	25	...	25	30	...	30
Total,	464	144	608	464	155	619

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

SILVER GOODS—TWELVE ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	171	118	289	182	139	321
$5 but under $6,	49	31	80	41	25	66
6 " " 7,	40	43	83	56	36	92
7 " " 8,	30	26	56	30	23	53
8 " " 9,	46	28	74	27	20	47
9 " " 10,	30	6	36	31	17	48
10 " " 12,	60	23	83	64	25	89
12 " " 15,	164	9	173	156	24	180
15 " " 20,	327	3	330	305	11	316
20 and over,	136	1	137	178	2	180
Total,	1,053	288	1,341	1,070	322	1,392

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

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	133	...	133	12	...	12
$5 but under $6,	47	...	47	7	...	7
6 " " 7,	59	...	59	23	...	23
7 " " 8,	57	...	57	15	...	15
8 " " 9,	629	...	629	910	...	910
9 " " 10,	295	...	295	314	...	314
10 " " 12,	663	...	663	761	...	761
12 " " 15,	835	...	835	976	...	976
15 " " 20,	390	...	390	341	...	341
20 and over,	99	...	99	166	...	166
Total,	3,207	...	3,207	3,525	...	3,525

SOAP AND TALLOW—FOURTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	72	49	121	73	47	120
$5 but under $6,	14	35	49	12	35	47
6 " " 7,	17	13	30	20	15	35
7 " " 8,	16	12	28	16	12	28
8 " " 9,	32	9	41	25	9	34
9 " " 10,	114	6	120	118	10	128
10 " " 12,	108	5	113	111	5	116
12 " " 15,	50	2	52	54	2	56
15 " " 20,	24	...	24	24	...	24
20 and over,	17	...	17	17	...	17
Total,	464	131	595	470	135	605

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued.)

STEAM-PIPE COVERING—THREE ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	3	13	16	1	8	9
$5 but under $6,	1	...	1	5	...	5
6 " " 7,	1	1	2	...	...	...
7 " " 8,	4	...	4	3	...	3
8 " " 9,	2	1	3	3	2	5
9 " " 10,	10	...	10	4	...	4
10 " " 12,	7	...	7	13	...	13
12 " " 15,	11	...	11	7	...	7
15 " " 20,	14	...	14	4	...	4
20 and over,	...	...	...	1	...	1
Total,	53	15	68	41	10	51

STEEL AND IRON (BAR)—FOUR ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	30	...	30	32	...	32
$5 but under $6,	18	...	18	16	...	16
6 " " 7,	21	...	21	45	...	45
7 " " 8,	140	...	140	152	...	152
8 " " 9,	53	...	53	75	...	75
9 " " 10,	83	...	83	74	...	74
10 " " 12,	62	...	62	53	...	53
12 " " 15,	63	...	63	83	...	83
15 " " 20,	80	...	80	61	...	61
20 and over,	40	...	40	38	...	38
Total,	590	...	590	629	...	629

STEEL AND IRON (STRUCTURAL)—SIXTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males	Females.	Total.
Under $5,	85	...	85	105	...	105
$5 but under $6,	48	...	48	101	...	101
6 " " 7,	59	...	59	190	...	190
7 " " 8,	531	...	531	329	...	329
8 " " 9,	466	...	466	415	...	415
9 " " 10,	376	...	376	469	...	469
10 " " 12,	383	...	383	447	...	447
12 " " 15,	589	...	589	503	...	503
15 " " 20,	569	...	569	531	...	531
20 and over,	174	...	174	277	...	277
Total,	3,280	...	3,280	3,367	...	3,367

TABLE No. 16 - Classified Weekly Wages, by Industries—(Continued .

STEEL AND IRON (FORGING)—ELEVEN ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total
Under $5,	147	...	147	94	...	94
$5 but under $6,	91	...	91	80	...	80
6 " " 7,	149	...	149	82	...	82
7 " " 8,	297	...	297	277	...	277
8 " " 9,	481	...	481	558	...	558
9 " " 10,	474	...	474	388	...	388
10 " " 12,	299	...	299	537	...	537
12 " " 15,	306	...	306	324	...	324
15 " " 20,	498	...	498	544	...	544
20 and over,	133	...	133	106	...	106
Total,	2,875	...	2,875	2,990	...	2,990

TEXTILE PRODUCTS—SIX ESTABLISHMENTS.

Classification of Weekly Wages	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	48	77	125	46	32	78
$5 but under $6,	15	31	46	22	36	58
6 " " 7,	17	6	23	22	12	34
7 " " 8,	26	2	28	44	3	47
8 " " 9,	23	1	24	22	6	28
9 " " 10,	13	...	13	23	9	32
10 " " 12,	30	12	42	17	3	20
12 " " 15,	13	4	17	23	7	30
15 " " 20,	7	...	7	10	5	15
20 and over,	4	...	4	6	2	8
Total,	196	133	329	235	115	350

THREAD—SIX ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	185	479	664	306	1,428	1,734
$5 but under $6,	38	231	269	138	724	862
6 " " 7,	74	255	329	122	662	784
7 " " 8,	38	101	139	117	614	731
8 " " 9,	25	56	81	103	210	313
9 " " 10,	61	15	76	131	215	346
10 " " 12,	97	5	102	141	112	253
12 " " 15,	60	2	62	177	53	230
15 " " 20,	115	...	115	228	...	228
20 and over,	25	...	25	95	...	95
Total,	718	1,144	1,862	1,558	4,018	5,576

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

TRUNKS AND TRAVELING BAGS—TEN ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	79	9	88	49	13	62
$5 but under $6,	46	9	55	41	9	50
6 " " 7,	53	11	64	61	7	68
7 " " 8,	47	2	49	77	7	84
8 " " 9,	75	3	78	80	4	84
9 " " 10,	85	2	87	89	2	91
10 " " 12,	81	...	81	81	1	82
12 " " 15,	55	...	55	56	...	56
15 " " 20,	39	...	39	50	...	50
20 and over,	23	...	23	32	...	32
Total,	583	36	619	616	43	659

TRUNK AND BAG HARDWARE—NINE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	138	83	221	232	101	333
$5 but under $6,	52	28	80	58	40	98
6 " " 7,	91	22	113	95	30	125
7 " " 8,	10	8	18	32	12	44
8 " " 9,	16	10	26	24	16	40
9 " " 10,	32	6	38	52	6	58
10 " " 12,	74	5	79	54	5	59
12 " " 15,	68	2	70	53	2	55
15 " " 20,	56	...	56	44	1	45
20 and over,	16	...	16	41	...	41
Total,	553	164	717	685	213	898

TYPEWRITERS AND SUPPLIES—THREE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	44	1	45	9	1	10
$5 but under $6,	52	2	54	9	2	11
6 " " 7,	71	2	73	21	...	21
7 " " 8,	54	2	56	24	3	27
8 " " 9,	53	...	53	8	...	8
9 " " 10,	62	1	63	32	...	32
10 " " 12,	81	...	81	23	...	23
12 " " 15,	79	...	79	25	...	25
15 " " 20,	54	2	56	31	2	33
20 and over,	42	...	42	13	...	13
Total,	592	10	602	195	8	203

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

VARNISHES—EIGHTEEN ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females	1901 Total.
Under $5,	21	1	22	19	...	19
$5 but under $6,	8	...	8	11	...	11
6 " " 7,	6	1	7	7	...	7
7 " " 8,	5	1	6	8	1	9
8 " " 9,	9	3	12	11	2	13
9 " " 10,	31	1	32	32	3	35
10 " " 12,	39	3	42	43	2	45
12 " " 15,	58	3	61	55	1	56
15 " " 20,	28	1	29	40	1	41
20 and over,	54	...	54	50	...	50
Total,	259	14	273	276	10	286

WATCHES, CASES AND MATERIAL—TEN ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	200	160	360	191	133	324
$5 but under $6,	62	79	141	56	75	131
6 " " 7,	62	82	144	67	92	159
7 " " 8,	66	56	122	54	52	106
8 " " 9,	57	57	114	65	68	133
9 " " 10,	90	47	137	81	58	139
10 " " 12,	144	18	162	158	30	188
12 " " 15,	281	9	290	332	6	338
15 " " 20,	307	1	308	336	2	338
20 and over,	170	...	170	181	...	181
Total,	1,439	509	1,948	1,521	516	2,037

WINDOW SHADES—FOUR ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	4	2	6	3	2	5
$5 but under $6,	2	...	2	...	...	...
6 " " 7,	3	...	3	4	...	4
7 " " 8,	8	2	10	6	2	8
8 " " 9,	3	...	3	1	...	1
9 " " 10,	6	...	6	6	...	6
10 " " 12,	27	2	29	26	1	27
12 " " 15,	15	...	15	14	1	15
15 " " 20,	6	1	7	8	...	8
20 and over,	3	...	3	4	...	4
Total,	77	7	84	72	6	78

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

WIRE CLOTH—FOUR ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	47	21	68	33	30	63
$5 but under $6,	16	23	39	12	12	24
6 " " 7,	3	6	9	26	6	32
7 " " 8,	5	8	13	12	9	21
8 " " 9,	4	1	5	1	1	2
9 " " 10,	40	2	42	70	2	72
10 " " 12,	38	...	38	26	...	26
12 " " 15,	57	...	57	38	...	38
15 " " 20,	64	...	64	46	...	46
20 and over,	41	...	41	54	...	54
Total,	315	61	376	318	60	378

WOODEN GOODS—TWENTY-NINE ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	127	...	127	100	2	102
$5 but under $6,	49	...	49	60	...	60
6 " " 7,	92	...	92	64	...	64
7 " " 8,	71	...	71	74	3	77
8 " " 9,	84	...	84	82	...	82
9 " " 10,	123	...	123	104	2	106
10 " " 12,	209	...	209	243	2	245
12 " " 15,	180	...	180	189	...	189
15 " " 20,	91	...	91	125	...	125
20 and over,	39	...	39	41	...	41
Total,	1,065	...	1,065	1,082	9	1,091

WOOLEN AND WORSTED GOODS—TWENTY-SIX ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	777	2,533	3,310	677	2,458	3,135
$5 but under $6,	260	642	902	515	870	1,385
6 " " 7,	513	251	764	458	320	778
7 " " 8,	763	140	903	604	239	843
8 " " 9,	499	93	592	480	75	555
9 " " 10,	312	58	370	319	69	388
10 " " 12,	428	37	465	462	88	550
12 " " 15,	340	5	345	303	7	310
15 " " 20,	231	2	233	293	1	294
20 and over,	137	...	137	128	...	128
Total,	4,260	3,761	8,021	4,239	4,127	8,366

TABLE No. 16—Classified Weekly Wages, by Industries—(Continued).

UNCLASSIFIED—FIFTY ESTABLISHMENTS.

Classification of Weekly Wages.	1900 Males.	1900 Females.	1900 Total.	1901 Males.	1901 Females.	1901 Total.
Under $5,	241	520	761	505	564	1,069
$5 but under $6,	90	151	241	156	339	495
6 " " 7,	169	159	328	242	172	414
7 " " 8,	461	124	585	318	108	426
8 " " 9,	414	95	509	440	104	544
9 " " 10,	1,035	72	1,107	1,118	32	1,150
10 " " 12,	534	54	588	736	19	755
12 " " 15,	590	18	608	583	10	593
15 " " 20,	702	1	703	688	...	688
20 and over,	347	1	348	325	...	325
Total,	4,583	1,195	5,778	5,111	1,348	6,459

ALL INDUSTRIES—ONE THOUSAND, SIX HUNDRED AND SIXTY ESTABLISHMENTS.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	15,511	19,470	34,981	15,794	20,876	36,670
$5 but under $6,	6,258	9,268	15,526	6,748	10,755	17,503
6 " " 7,	8,016	7,265	15,281	8,599	7,819	16,418
7 " " 8,	14,402	4,786	19,188	14,518	5,884	20,402
8 " " 9,	13,451	3,053	16,504	15,169	3,579	18,748
9 " " 10,	19,278	2,424	21,702	20,281	2,620	22,901
10 " " 12,	19,217	2,144	21,361	21,634	2,406	24,040
12 " " 15,	21,634	1,231	22,865	23,377	1,383	24,760
15 " " 20,	19,928	329	20,257	23,165	400	23,565
20 and over,	8,733	26	8,759	9,356	45	9,401
Total,	146,428	49,996	196,424	158,641	55,767	214,408

PERCENTAGES OF PERSONS RECEIVING SPECIFIED WAGES.

Classification of Weekly Wages.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	10.60	38.96	17.78	9.96	37.44	17.10
$5 but under $6,	4.28	18.60	7.90	4.25	19.29	8.16
6 " " 7,	5.47	14.43	7.74	5.42	14.02	7.66
7 " " 8,	9.84	9.59	9.77	9.15	10.55	9.51
8 " " 9,	9.17	6.04	8.38	9.56	6.42	8.74
9 " " 10,	13.17	4.87	11.08	12.78	4.70	10.68
10 " " 12,	13.13	4.32	10.90	13.63	4.31	11.22
12 " " 15,	14.77	2.48	11.65	14.74	2.48	11.55
15 " " 20,	13.60	.66	10.33	14.61	.71	10.99
20 and over,	5.97	.05	4.47	5.90	.08	4.39
Total,	100.00	100.00	100.00	100.00	100.00	100.00

ANALYSIS, TABLES NOS. 14, 15 AND 16.

On Table No. 14, the aggregate amounts paid in wages by each of the eighty-five classified industries is given for the years 1900 and 1901, with the amounts of increase or decrease in the latter as compared with the earlier year.

Seventy industries show increases in the amounts paid in wages, and fifteen show decreases, these latter are for the most part small, while the increases are, generally speaking, large.

The following table shows the total amounts paid in wages in twenty leading industries for the years 1900 and 1901, with the amounts and percentages of increase or decrease shown in 1901 as compared with 1900.

Industries.	Number of Establishments Considered.	Aggregate Amounts Paid in Wages during the Years.		Increase (x) or Decrease (—) in 1901.	
		1900.	1901.	Amount.	Percentage.
Brewery products,	32	$1,454,746	$1,516,690	+ $61,944	+ 4.2
Brick and terra cotta,	58	1,879,461	2,100,540	+ 221,079	+ 11.8
Chemical products,	40	1,857,662	2,057,526	+ 199,864	+ 10.7
Cotton goods,	39	1,379,035	1,556,961	+ 177,926	+ 12.9
Electrical appliances,	20	1,266,937	1,649,575	+ 382,638	+ 30.2
Foundry (iron),	30	2,102,424	2,214,015	+ 111,591	+ 5.3
Glass (window and bottle),	19	2,721,121	2,751,202	+ 30,081	+ 1.1
Hats (felt and wool),	48	2,694,423	2,961,505	+ 267,082	+ 9.9
Jewelry,	66	1,288,887	1,448,016	+ 159,129	+ 12.3
Leather,	55	1,936,558	2,373,717	+ 437,159	+ 22.5
Machinery,	92	6,930,582	7,567,744	+ 637,162	+ 9.3
Oils,	15	1,576,380	1,626,297	+ 49,917	+ 3.2
Pottery,	31	1,929,796	2,058,531	+ 128,735	+ 6.6
Rubber products,	30	1,811,521	1,961,890	+ 150,369	+ 8.3
Shoes,	40	1,691,372	1,689,361	+ 2,011	+ 0.1
Shirts,	22	922,724	841,538	— 80,736	— 8.6
Silk (broad and ribbon),	103	7,681.001	8,130,926	+ 449,925	+ 5.8
Silk dyeing,	20	1,502,821	1,638,889	+ 136,068	+ 9.
Structural steel and iron,	16	1,499,991	1,537,959	+ 37,968	+ 2.5
Woolen and worsted goods,	26	2,356,101	2,522,623	+ 166,522	+ 7.1

With the exception of shirt manufacture, which exhibits a decrease of 8.6 per cent., all the industries in the foregoing table show increases in the amount paid in wages in 1901 over 1900, ranging from 0.1 per cent. in shoes, to 30.2 per cent. in electrical appliances. These selected industries may be regarded as typical of the others on Table No. 14, in which increases are shown; the percentages will range substantially the same.

The industries showing a decrease in the amount paid in wages in 1901 as compared with 1900, and the percentages of such de-

creases, are as follows: Bicycles and bicycle parts, 39 per cent; food products, 2.1 per cent.; knit goods, 3.2 per cent.; leather goods, 4.7 per cent.; lamps, 0.8 per cent.; mining iron ore, 12.8 per cent.; roofing, 10.8 per cent.; saddlery and harness, 2.4 per cent.; shoes, 0.1 per cent.; shirts, 8.7 per cent.; steam pipe covering, 14.8 per cent.; bar steel and iron, 8.8 per cent.; steel and iron forgings, 1.3 per cent.; and, typewriters and typewriter supplies, 73.1 per cent. This last named industry has practically gone out of existence in this State, one establishment in which seventy-five per cent. of the business had been done in 1900, having moved its plant out of the State in 1901.

Table No. 15 shows the average yearly earnings of persons engaged in each of the eighty-five classified industries for 1900 and for 1901. Fifty-two industries show increases in yearly earnings ranging from $97.54 in ship building, down to $1.55 in lamps. Thirty-three industries show decreases in earnings ranging from $2.89 in artisan's tools, to $67.79 in the manufacture of bar steel and iron.

The following table shows the changes in yearly earnings that have taken place in the leading industries in 1901 as compared with 1900:

Industries.	Number of Establishments Considered.	Average Yearly Earnings.		Increase (x) or Decrease (—) in 1901.			
		1900.	1901.		Amounts.		Percentages.
Brewery products,	32	$822 35	$817 62	—	$4 73	—	0.5
Brick and terra cotta,	58	402 37	406 14	+	3 77	+	0.9
Chemical products,	40	490 89	474 08	—	16 81	—	3.4
Cotton goods,	39	278 54	271 72	—	6 82	—	2.5
Electrical appliances,	20	521 59	556 16	+	34 57	+	6.6
Foundry (iron),	30	531 18	520 58	—	10 60	—	1.9
Glass (window and bottle),	19	500 85	491 64	—	9 28	—	1.8
Hats (felt and wool),	48	508 95	523 60	+	14 65	+	2.8
Jewelry,	66	562 34	580 13	+	17 79	+	3.2
Leather,	55	467 77	489 32	+	21 25	+	4.5
Machinery,	92	586 10	574 36	—	11 74	—	2.
Oils,	15	601 44	619 54	+	18 10	+	3.
Pottery,	31	555 18	570 23	+	15 05	+	2.7
Rubber products,	30	451 16	455 93	+	2 77	+	0.6
Shoes,	40	376 28	367 47	—	8 81	—	2.3
Shirts,	22	258 56	274 54	+	15 98	+	6.2
Silk (broad and ribbon),	103	379 49	391 06	+	11 57	+	3.
Silk dyeing,	20	452 38	459 72	+	7 34	+	1.6
Structural steel and iron,	16	506 04	511 12	+	5 08	+	1.
Woolen and worsted goods,	26	324 53	334 25	+	9 72	+	2.9

The increase in the average yearly earnings in 1901 as compared with 1900 for all industries is $4.47 per employe, or a very small fraction over one per cent. For the twenty leading industries included in the above table, the aggregate increase is $9.22, or a little less than 0.1 per cent. Average yearly earnings, which are obtained by dividing the aggregate amounts paid in wages by the total number of persons employed in the industry, does not convey a very accurate understanding of wage conditions; these may be better seen from the presentation of classified weekly wages, (Table No. 16), in which the actual number of persons, male and female in each industry, who are paid the rates ranging from under $5.00 to over $20.00 per week, is given for the years 1900 and 1901.

There is also a summary giving the same data for all industries combined which is reproduced in the following table:

All Industries, 1660 Establishments.

Classification of Weekly Wages.	Number of Persons Receiving Specified Wages.						Percentage of Persons Receiving Specified Wages.					
	1900.			1901.			1900.			1901.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	15,511	19,470	34,981	15,794	20,876	36,670	10.60	38.96	17.78	9.96	37.44	17.10
$5, but under $6,	6,258	9,268	15,526	6,748	10,755	17,503	4.28	18.60	7.90	4.25	19.29	8.16
6, but under 7,	8,016	7,265	15,281	8,599	7,819	16,418	5.47	14.43	7.74	5.42	14.02	7.66
7, but under 8,	14,402	4,786	19,188	14,518	5,884	20,402	9.84	9.59	9.77	9.15	10.55	9.51
8, but under 9,	13,451	3,053	16,504	15,169	3,579	18,748	9.17	6.04	8.38	9.56	6.42	8.74
9, but under 10,	19,278	2,424	21,702	20,281	2,620	22,901	13.17	4.87	11.08	12.78	4.70	10.68
10, but under 12,	19,217	2,144	21,361	21,634	2,406	24,040	13.13	4.32	10.90	13.63	4.31	11.22
12, but under 15,	21,634	1,231	22,865	23,377	1,383	24,760	14.77	2.48	11.65	14.74	2.48	11.55
15, but under 20,	19,928	329	20,257	23,165	400	23,565	13.60	.66	10.33	14.61	0.71	10.99
20 and over,	8,733	26	8,759	9,356	45	9,401	5.97	.05	4.47	5.90	0.08	4.39
Totals,	146,428	49,996	196,424	158,641	55,767	214,408	100.00	100.00	100.00	100.00	100.00	100.00

WORKING TIME AND PROPORTION OF BUSINESS DONE.

TABLES 17, 18 AND 19.

The three following tables show the average number of days in operation, the average number of hours worked per day, and the average proportion of business done, for the eighty-five classified industries during the years 1900 and 1901.

The average number of days in operation is found by multiplying the number of days reported by each establishment, by figures representing the average number of persons employed therein; the total of these multiplications for all the establishments divided by the aggregate average number of persons employed, gives an average for each industry, and for all industries. Deducting Sunday and holidays, the actual number of working days is 306 in each year. The average number of working hours per day is obtained by the same process used to ascertain the average number of days worked during the year.

The proportion of business done is based upon the greatest amount of product which can be turned out in an establishment, without increasing its present facilities. The greatest amount is considered as 100 per cent. If the product of an establishment was equal to three-quarters of its greatest capacity, the proportion of business done would be 75 per cent., while if the output was only one-half of its full capacity, the proportion of business done would be only fifty per cent.

The proportions returned by the establishments in each industry have been added and the sum divided by the full number of establishments to obtain the average for each industry, and for all industries.

TABLE No. 17—Average Number of Days in Operation, by Industries, Increase or Decrease, 1900--1901.

Office Number.	Industries.	Number of Establishments Considered	Average Number of Days in Operation. 1900.	Average Number of Days in Operation. 1901.	Amount—Increase (x) or Decrease (—) in 1901.
1	Agricultural implements,	7	291.43	292.71	+ 1.28
2	Artisans' tools,	30	290.90	294.90	+ 4.00
3	Bicycle and bicycle parts,	4	296.50	296.50	.....
4	Boilers,	10	300.03	306.50	+ 6.47
5	Boxes (wood and paper),	29	290.51	293.68	+ 3.17
6	Brewing (lager beer, ale and porter),	32	307.89	306.50	— 1.39
7	Brick and terra cotta,	58	218.92	232.50	+ 13.58
8	Brushes,	11	302.45	300.09	— 2.36
9	Buttons (metal),	9	296.78	296.78	.....
10	Buttons (pearl),	17	290.71	283.94	— 6.77
11	Carpets and rugs,	7	291.00	300.28	+ 9.28
12	Carriages and wagons,	36	302.89	302.64	— 0.25
13	Chemical products,	40	313.12	313.58	+ 0.46
14	Cigars and tobacco,	24	290.73	297.08	+ 6.35
15	Clothing,	16	284.38	290.56	+ 6.18
16	Confectionery,	4	303.00	302.50	— 0.50
17	Cornices (galv. iron and copper),	12	280.83	296.25	+ 15.42
18	Corsets and corset waists,	11	287.50	288.72	+ 1.22
19	Cutlery,	9	286.28	291.33	+ 5.05
20	Cotton goods,	39	280.35	287.44	+ 7.09
21	Cotton goods (finishing and dyeing),	20	294.30	298.05	+ 3.75
22	Electrical appliances,	20	303.12	294.85	— 8.27
23	Fertilizers,	11	266.09	287.27	+ 21 18
24	Food products,	18	283.33	275.38	— 7.95
25	Foundry (brass),	11	294.36	283.54	— 10.82
26	Foundry (iron),	30	289.20	292.53	+ 3.33
27	Furnaces, ranges and heaters,	13	284.21	285.85	+ 1.64
28	Glass (window and bottle),	19	251.67	242.73	— 8.94
29	Graphite products,	4	303.50	302.75	— 0.75
30	Hats (felt),	48	269.10	271.71	+ 2.61
31	Hats (straw),	3	258.00	244.00	— 14.00
32	High explosives,	8	280.12	274.75	— 5.37
33	Inks and mucilage,	5	288.40	287.00	— 1.40
34	Jewelry,	66	289.92	289.62	— 0.30
35	Knit goods,	12	297.54	294.33	— 3.21
36	Leather,	55	299.96	294.32	— 5.64
37	Leather goods,	12	296.76	299.67	+ 2.91
38	Lamps,	8	301.50	299.37	— 2.13
39	Lime and cement,	6	292.17	294.16	+ 1.99
40	Machinery,	92	298.55	293.77	— 4.78
41	Mattresses and bedding,	6	300.50	301.50	+ 1.00
42	Metal goods,	56	293.90	285.82	— 8.08
43	Metal novelties,	12	286.50	285.00	— 1.50
44	Mining (iron ore),	7	258.25	302.28	+ 44.03
45	Musical instruments,	18	281.37	290.00	+ 8.63
46	Oil cloth (floor and table),	8	283.25	286.75	+ 3.50
47	Oils,	15	282.87	297.33	+ 14.46
48	Paints,	10	307.60	306.00	— 1.60
49	Paper,	32	254.39	271.87	+ 17.48
50	Pig iron,	4	267.20	373.25	+ 106.05
51	Pottery,	31	301.51	305.54	+ 3.99
52	Printing and book binding,	19	300.63	300.95	+ 0.32
53	Quarrying stone,	12	231.36	238.58	+ 7.22
54	Roofing (iron and stone),	5	310.67	286.75	— 23.92
55	Rubber goods (hard and soft),	30	285.39	287.33	+ 1.94
56	Saddles and harness,	10	298.10	300.30	+ 2.20
57	Saddlery and harness hardware,	14	295.71	299.14	+ 3.43
58	Scientific instruments,	11	304.09	297.91	— 6.18
59	Sash, blinds and doors,	22	299.91	265.95	— 33.96
60	Shoes,	40	277.48	274.73	— 2.75
61	Shirts,	22	286.44	265.95	— 20.49
62	Ship buildnig,	12	283.08	291.66	+ 8.58

TABLE No. 17—Average Number of Days in Operation, by Industries, Increase or Decrease, 1900--1901—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Average Number of Days in Operation. 1900.	Average Number of Days in Operation. 1901.	Amount—Increase (x) or Decrease (—) in 1901.
63	Silk (broad and ribbon),	103	289.81	288.40	— 1.41
64	Silk dyeing,	20	293.50	298.25	+ 4.75
65	Silk throwing,	18	283.85	285.50	+ 1.65
66	Silk mill supplies,	14	275.14	291.71	+ 16.57
67	Silver goods,	12	278.00	283.83	+ 5.83
68	Smelting and refining (gold, silver, copper, etc.),	8	341.00	333.88	— 7.12
69	Soap and tallow,	14	308.50	309.21	+ 0.71
70	Steam pipe covering,	3	238.00	235.00	— 3.00
71	Steel and iron (bar),	4	286.25	282.75	— 3.50
72	Steel and iron (structural),	16	291.81	303.63	+ 11.82
73	Steel and iron (forging),	11	298.45	294.55	— 3.90
74	Textile products,	6	260.14	282.33	+ 22.19
75	Thread,	6	297.75	288.67	— 9.08
76	Trunks and traveling bags,	10	287.30	295.60	+ 8.30
77	Trunk and bag hardware,	9	301.37	300.89	— 0.48
78	Typewriters and supplies,	3	304.50	316.67	+ 12.17
79	Varnishes,	18	307.77	308.83	+ 1.06
80	Watches, cases and material,	10	291.90	288.60	— 3.30
81	Window shades,	4	295.75	290.50	— 5.25
82	Wire cloth,	4	289.75	296.75	+ 7.00
83	Wooden goods,	29	295.28	294.24	— 1.04
84	Woolen and worsted goods,	26	283.72	284.50	+ 0.78
85	Unclassified,	50	303.42	291.76	— 11.66
	All industries,	1,660	288.20	289.37	+ 1.11

TABLE No. 18—Average Number of Hours Worked per Day, by Industries, Increase or Decrease, 1900--1901.

Office Number.	Industries.	Number of Establishments Considered.	Average Number of Hours Worked per Day. 1900.	Average Number of Hours Worked per Day. 1901.	Amount—Increase (x) or Decrease (—) in 1901.
1	Agricultural implements,	7	10.00	10.00	.....
2	Artisans' tools,	30	9.80	9.86	+ 0.06
3	Bicycle and bicycle parts,	4	10.00	10.00	.....
4	Boilers,	10	9.70	9.50	— 0.20
5	Boxes (wood and paper),	29	9.55	9.68	+ 0.13
6	Brewing (lager beer, ale and porter),	32	9.86	9.86	.....
7	Brick and terra cotta,	58	9.61	9.70	+ 0.09
8	Brushes,	11	9.73	9.54	— 0.19
9	Buttons (metal),	9	9.33	9.77	+ 0.44
10	Buttons (pearl),	17	9.82	9.94	+ 0.12
11	Carpets and rugs,	7	9.71	9.57	— 0.14
12	Carriages and wagons,	36	9.81	9.83	+ 0.02
13	Chemical products,	40	9.63	9.75	+ 0.12
14	Cigars and tobacco,	24	8.95	9.57	+ 0.62
15	Clothing,	16	9.63	9.75	+ 0.12
16	Confectionery,	4	10.00	10.00	.....
17	Cornices (galv. iron and copper),	12	8.08	8.67	+ 0.59
18	Corsets and corset waists,	11	9.70	9.63	— 0.07
19	Cutlery,	9	10.00	10.00	.....
20	Cotton goods,	39	9.73	9.67	— 0.06
21	Cotton goods (finishing and dyeing),	20	9.70	9.85	+ 0.15
22	Electrical appliances,	20	9.82	9.95	+ 0.13
23	Fertilizers,	11	10.00	10.00	.....
24	Food products,	18	9.78	9.83	+ 0.05
25	Foundry (brass),	11	9.73	9.81	+ 0.08
26	Foundry (iron),	30	9.77	9.80	+ 0.03
27	Furnaces, ranges and heaters,	13	9.71	9.85	+ 0.14
28	Glass (window and bottle),	19	8.86	8.95	+ 0.09
29	Graphite products,	4	10.00	10.00	.....
30	Hats (felt),	48	9.10	9.10	.....
31	Hats (straw),	3	9.67	9.67	.....
32	High explosives,	8	10.00	10.00	.....
33	Inks and mucilage,	5	9.60	9.60	.....
34	Jewelry,	66	9.60	9.60	.....
35	Knit goods,	12	9.92	9.92	.....
36	Leather,	55	9.79	9.84	+ 0.05
37	Leather goods,	12	9.69	9.66	— 0.03
38	Lamps,	8	9.50	9.62	+ 0.12
39	Lime and cement,	6	9.66	9.33	— 0.33
40	Machinery,	92	9.79	9.70	— 0.09
41	Mattresses and bedding,	6	9.50	9.50	.....
42	Metal goods,	56	9.85	9.89	+ 0.04
43	Metal novelties,	12	9.88	9.83	.....
44	Mining (iron ore),	7	9.88	10.00	+ 0.12
45	Musical instruments,	18	9.79	9.78	— 0.01
46	Oil cloth (floor and table),	8	9.25	9.62	+ 0.37
47	Oils,	15	9.27	9.33	+ 0.06
48	Paints,	10	9.00	9.80	+ 0.80
49	Paper,	32	9.24	8.40	— 0.84
50	Pig iron,	4	9.80	9.00	— 0.80
51	Pottery,	31	9.55	9.55	.....
52	Printing and book binding,	19	9.21	9.21	.....
53	Quarrying stone,	12	9.85	9.83	— 0.02
54	Roofing (iron and stone),	5	9.17	9.40	+ 0.23
55	Rubber goods (hard and soft),	30	9.26	9.93	+ 0.67
56	Saddles and harness,	10	9.40	9.60	+ 0.20
57	Saddlery and harness hardware,	14	9.71	9.64	— 0.07
58	Scientific instruments,	11	9.91	9.82	— 0.09
59	Sash, blinds and doors,	22	9.32	9.32	.....
60	Shoes,	40	9.54	9.65	+ 0.11
61	Shirts,	22	9.56	9.59	+ 0.03
62	Ship building,	12	9.67	9.50	— 0.17

TABLE No. 18—Average Number of Hours Worked per Day, by Industries, Increase or Decrease, 1900--1901—(Continued).

Office Number.	Industries.	Number of Establishments Considered.	Average Number of Hours Worked per Day. 1900.	Average Number of Hours Worked per Day. 1901.	Amount—Increase (+) or Decrease (—) in 1901.
63	Silk (broad and ribbon),	103	9.72	9.87	+ 0.15
64	Silk dyeing,	20	9.68	9.60	— 0.08
65	Silk throwing,	18	10.00	10.00	.....
66	Silk mill supplies,	14	9.64	9.78	+ 0.14
67	Silver goods,	12	9.91	9.91	.....
68	Smelting and refining (gold, silver, copper, etc.),	8	11.14	11.25	+ 0.11
69	Soap and tallow,	14	9.71	9.64	— 0.07
70	Steam pipe covering,	3	10.00	10.00	.....
71	Steel and iron (bar),	4	10.00	10.00	.....
72	Steel and iron (structural),	16	9.63	9.38	— 0.25
73	Steel and iron (forging),,	11	10.00	9.73	— 0.27
74	Textile products,	6	10.00	10.00	.....
75	Thread,	6	10.00	10.00	.....
76	Trunks and traveling bags,	10	9.20	9.40	+ 0.20
77	Trunk and bag hardware,	9	9.62	9.67	+ 0.05
78	Typewriters and supplies,	3	9.00	9.33	+ 0.33
79	Varnishes,	18	8.94	9.22	+ 0.28
80	Watches, cases and material,	10	9.90	10.00	+ 0.10
81	Window shades,	4	9.25	9.25	.....
82	Wire cloth,	4	9.25	8.75	— 0.50
83	Wooden goods,	29	9.65	9.69	+ 0.04
84	Woolen and worsted goods,	26	9.92	10.00	+ 0.08
85	Unclassified,	50	9.69	9.06	— 0.63
	All industries,	1,660	9.64	9.66	+ 0.02

TABLE No. 19—Average Proportion of Business Done, by Industries, Increase or Decrease, 1900--1901.

Office Number.	Industries.	Number of Establishments Considered.	Average Proportion of Business Done. Percentages. 1900.	1901.	Percentages—Increase (+) or Decrease (—) in 1901.
1	Agriccultural implements,	7	70.00	71.43	+ 1.43
2	Artisans' tools,	30	79.51	81.66	+ 2.15
3	Bicycle and bicycle parts,	4	56.25	36.25	— 20.00
4	Boilers,	10	72.00	71.50	— 0.50
5	Boxes (wood and paper),	29	76.72	82.07	+ 5.35
6	Brewing (lager beer, ale and porter),	32	73.57	73.57	+ 0.02
7	Brick and terra cotta,	58	70.50	74.05	+ 3.55
8	Brushes,	11	84.55	81.82	— 2.73
9	Buttons (metal),	9	77.78	80.56	+ 2.78
10	Buttons (pearl),	17	80.00	82.06	+ 2.06
11	Carpets and rugs,	7	77.14	82.86	+ 5.72
12	Carriages and wagons,	36	79.32	76.25	— 3.07
13	Chemical products,	40	76.75	76.50	— 0.25
14	Cigars and tobacco,	24	80.23	78.54	— 1.69
15	Clothing,	16	78.44	78.12	— 0.32
16	Confectionery,	4	80.00	86.25	+ 6.25
17	Cornices (galv. iron and copper),	12	62.08	77.50	+ 15.42
18	Corsets and corset waists,	11	78.50	82.73	+ 4.23
19	Cutlery,	9	80.00	82.78	+ 2.78
20	Cotton goods,	39	80.00	85.90	+ 5.90
21	Cotton goods (finishing and dyeing),	20	87.50	86.25	— 1.25
22	Electrical appliances,	20	80.88	82.00	+ 1.12
23	Fertilizers,	11	70.45	67.27	— 3.18
24	Food products,	18	75.83	80.83	+ 5.00
25	Foundry (brass),	11	75.00	72.72	— 2.28
26	Foundry (iron),	30	80.50	82.50	+ 2.50
27	Furnaces, ranges and heaters,	13	72.14	75.71	+ 3.57
28	Glass (window and bottle),	19	80.48	82.11	+ 1.63
29	Graphite products,	4	87.50	87.50	.....
30	Hats (felt),	48	73.91	72.50	— 1.41
31	Hats (straw),	3	91.67	80.00	— 11.67
32	High explosives,	8	67.50	78.75	+ 11.25
33	Inks and mucilage,	5	79.00	78.00	— 1.00
34	Jewelry,	66	81.14	81.74	+ 0.60
35	Knit goods,	12	84.62	81.67	— 2.95
36	Leather,	55	79.91	83.73	+ 3.82
37	Leather goods,	12	82.69	80.83	— 1.86
38	Lamps,	8	75.00	70.00	— 5.00
39	Lime and cement,	6	69.17	71.67	+ 2.50
40	Machinery,	92	73.97	72.45	— 1.52
41	Mattresses and bedding,	6	72.50	69.17	— 3.33
42	Metal goods,	56	73.39	70.89	— 2.50
43	Metal novelties,	12	71.25	70.42	— 0.83
44	Mining (iron ore),	7	95.62	79.28	— 16.34
45	Musical instruments,	18	68.95	69.72	+ 0.77
46	Oil cloth (floor and table),	8	78.12	78.75	+ 0.63
47	Oils,	15	73.00	75.00	+ 2.00
48	Paints,	10	81.50	84.00	+ 2.50
49	Paper,	32	87.73	83.91	— 3.82
50	Pig iron,	4	79.00	62.50	— 16.50
51	Pottery,	31	80.33	81.23	+ 0.90
52	Printing and book binding,	19	76.84	64.21	— 12.63
53	Quarrying stone,	12	63.22	60.83	— 2.39
54	Roofing (iron and stone),	5	71.67	80.00	+ 8.33
55	Rubber goods (hard and soft),	30	82.42	82.00	— 0.42
56	Saddles and harness,	10	73.50	83.50	+ 1.00
57	Saddlery and harness hardware,	14	85.00	81.43	— 3.57
58	Scientific instruments,	11	71.82	70.00	— 1.82
59	Sash, blinds and doors,	22	70.23	76.14	+ 5.91
60	Shoes,	40	73.17	71.00	— 2.17
61	Shirts,	22	71.96	71.82	— 0.14
62	Ship building,	12	71.67	70.42	— 1.25

TABLE No. 19—Average Proportion of Business Done, by Industries, Increase or Decrease, 1900--1901—(Continued).

Office Number.	INDUSTRIES.	Number of Establishments Considered.	Average Proportion of Business Done. Percentages. 1900.	1901.	Percentages—Increase (x) or Decrease (—) in 1901.
63	Silk (broad and ribbon),	103	70.63	76.89	+ 6.26
64	Silk dyeing,	20	61.73	76.00	+ 14.27
65	Silk throwing,	18	80.75	83.06	+ 2.31
66	Silk mill supplies,	14	70.00	78.21	+ 8.21
67	Silver goods,	12	70.42	71.25	+ 0.83
68	Smelting and refining (gold, silver, copper, etc.),	8	88.57	98.75	+ 10.18
69	Soap and tallow,	14	70.36	75.36	+ 5.00
70	Steam pipe covering,	3	68.33	71.66	+ 3.33
71	Steel and iron (bar),	4	87.50	85.00	— 2.50
72	Steel and iron (structural),	16	70.63	72.81	+ 2.18
73	Steel and iron (forging),	11	74.09	83.18	+ 8.09
74	Textile products,	6	72.86	87.50	+ 14.64
75	Thread,	6	92.50	93.33	+ 0.83
76	Trunks and traveling bags,	10	67.50	69.50	+ 2.00
77	Trunks and bag hardware,	9	83.75	84.44	+ 0.69
78	Typewriters and supplies,	3	78.75	75.00	— 3.75
79	Varnishes,	18	71.11	73.88	+ 2.77
80	Watches, cases and material,	10	81.50	83.00	+ 1.50
81	Window shades,	4	88.75	76.25	— 12.50
82	Wire cloth,	4	77.50	76.26	— 1.24
83	Wooden goods,	29	77.93	75.52	— 2.41
84	Woolen and worsted goods,	26	82.80	84.23	+ 1.43
85	Unclassified,	50	80.94	77.62	— 3.32
	All industries,	1,660	76.24	77.46	+ 1.22

ANALYSIS, TABLES NOS. 17, 18 AND 19.

The average number of days in operation for the eighty-five classified industries in 1900 was 288.20, and in 1901, 289.37, an increase in the latter year of 1.11 days, or 0.38 per cent.

Of the eighty-five classified industries, 46 show an increase in the number of days in operation, ranging from 106.05 in pig iron, to 0.71 in soap and tallow. Thirty-nine industries exhibit decreases ranging from 33.96 in sashes, blinds, and doors, to 0.30 in jewelry.

In the following table, the data for the twenty leading industries showing the increase or decrease in 1901, as compared with 1900 is given.

Industries.	Number of Establishments Considered.	Average Number of Days in Operation.		Increase (x) or Decrease (—) in 1901.	
		1900.	1901.	Amount.	Percentage.
Brewery products,	32	307.89	306.50	— 1.39	— 0.4
Brick and terra cotta,	58	218.92	232.50	+ 13.58	+ 6.2
Chemical products,	40	313.12	313.58	+ 0.46	.....
Cotton goods,	39	280.35	287.44	+ 7.09	+ 2.5
Electrical appliances,	20	303,12	294.85	+ 3.75	+ 1.2
Foundry (iron),	30	289.20	292.53	+ 3.33	+ 1.1
Glass (window and bottle),	19	251.67	242.73	— 8.94	— 3.5
Hats (felt and wool),	48	269.10	271.71	+ 2.61	+ 1.
Jewelry,	66	289.92	289.62	— 0.30	.....
Leather,	55	299.96	294.32	— 5.64	— 1.9
Machinery,	92	298.55	293.77	— 4.78	— 1.6
Oils,	15	282.87	297.33	+ 14.46	+ 5.1
Pottery,	31	301.51	305.54	+ 3.99	+ 1.3
Rubber products,	30	285.39	287.33	+ 1.94	+ 0.7
Shoes,	40	277.48	274.73	— 2.75	— 1.
Shirts,	22	286.44	265.95	— 20.49	— 7.1
Silk (broad and ribbon),	103	289.81	288.40	— 1.41	— 0.5
Silk dyeing,	20	293.50	298.25	+ 4.75	+ 1.6
Structural steel and iron,	16	291.81	303.63	+ 11.82	+ 4.
Woolen and worsted goods,	26	283.72	284.50	+ 0.78	.....

Table No. 18 shows the average number of working hours per day in each of the classified industries for 1900 and 1901, with the increase or decrease where there has been any in 1901, as compared with 1900.

In twenty-five industries, the hours of labor remain the same for both years. Thirty-nine industries show increases, and twenty-one decreases; the amounts in both cases being very small. The greatest increase, 0.84, is shown in the manufacture of paper, and the greatest decrease, 0.50, took place in the wire cloth industry. Taking all industries together an average increase in working hours is shown of 0.02.

In 1901, fourteen industries are working ten hours per day, while in 1900 there was thirteen.

With the exception of the manufactories of cornices, and of glass, window and bottle, which work 8.67 and 8.86 respectively, all others are operated between nine and ten hours per day.

The following table shows the changes that have take place in working hours in 1901, as compared with 1900, in the twenty leading industries.

Industries.	Number of Establishments Considered.	Average Number of Hours Worked per Day.		Amount—Increase (x) or Decrease (—) in 1901.	
		1900.	1901.		
Brewery products,	32	9.86	9.86	.....	
Brick and terra cotta,	58	9.61	9.70	+	0.09
Chemical products,	40	9.63	9.75	+	0.12
Cotton goods,	39	9.73	9.67	—	0.06
Electrical appliances,	20	9.82	9.95	+	0.13
Foundry (iron),	30	9.77	9.80	+	0.03
Glass (window and bottle),	19	8.86	8.95	+	0.09
Hats (felt and wool),	48	9.10	9.10	.....	
Jewelry,	66	9.60	9.60	.....	
Leather,	55	9.79	9.84	+	0.05
Machinery,	92	9.79	9.70	—	0.09
Oils,	15	9.27	9.33	+	0.06
Pottery,	31	9.55	9.55	.....	
Rubber products,	30	9.26	9.93	+	0.67
Shoes,	40	9.54	9.65	+	0.11
Shirts,	22	9.56	9.59	+	0.03
Silk (broad and ribbon),	103	9.72	9.87	+	0.15
Silk dyeing,	20	9.68	9.60	—	0.08
Structural steel and iron,	16	9.63	9.38	—	0.25
Woolen and worsted goods,	26	9.92	10.00	+	0.08

Table No. 19, the last of the series of tables shows the proportion of business done by each of the eighty-five classified industries in 1900 and in 1901. The increases or decreases in this respect that appear in 1901 as compared with 1900 is given for each industry, and for all industries. The average proportion

of business done by all industries in 1900 was 76.24 per cent.; in 1901, it is 77.46, or 1.22 per cent greater than in 1900.

The table shows that in forty-seven industries, the proportion of business done has increased, and in thirty-seven industries it has decreased in 1901 as compared with the next previous year. Only one industry, the manufacture of graphite products, shows a uniform proportion, 87.50 per cent., for both years.

The increases range from 0.02 per cent. in brewery products, to 15.42 per cent. in the manufacture of cornices. The greatest decrease, 16.50 per cent., is shown in the manufacture of pig iron, with its nearest kindred industry, mining iron ore, which shows a decrease of 16.34 per cent., a close second. It appears from the table that none of the industries have been operated to their full capacity. The one that came closest to a full product is smelting and refining gold, silver, and copper, which was carried on in 1901 up to 98.75 per cent. of its capacity.

The following table shows the proportion of business done in the twenty leading industries for the years 1900 and 1901 with the increases or decreases in 1901 as compared with 1900.

Industries.	Number of Establishments Considered.	Average Proportion of Business Done. Percentages.		Percentages—Increase (x) or Decrease (—) in 1901.	
		1900.	1901.		
Brewery products,	32	73.57	73.59	+	0.02
Brick and terra cotta,	58	70.50	74.05	+	3.55
Chemical products,	40	76.75	76.50	—	0.25
Cotton goods,	39	80.00	85.90	+	5.90
Electrical appliances,	20	80.88	82.00	+	1.12
Foundry (iron),	30	80.50	82.50	+	2.50
Glass (window and bottle),	19	80.48	82.11	+	1.63
Hats (felt and wool),	48	73.91	72.50	—	1.41
Jewelry,	66	81.14	81.74	—	0.60
Leather,	55	79.91	83.73	+	3.82
Machinery,	92	73.97	72.45	—	1.52
Oils,	15	73.00	75.00	+	2.00
Pottery,	31	80.33	81.23	+	0.90
Rubber products,	30	82.42	82.00	—	0.42
Shoes,	40	73.17	71.00	—	2.17
Shirts,	22	71.96	71.82	—	0.14
Silk (broad and ribbon),	103	70.63	76.89	+	6.26
Silk dyeing,	20	61.73	76.00	+	14.27
Structural steel and iron,	16	70.63	72.81	+	2.18
Woolen and worsted goods,	26	82.80	84.23	+	1.43

TABLE No. 20—Industry Presentation, 1901.

BRICK AND TERRA COTTA.

NUMBER OF PARTNERS AND STOCKHOLDERS CONSIDERED.

Number of Establishments Reporting,	58
Number of Private Firms,	33
Number of Partners,	54
Males,	45
Females,	8
Special,	...
Estates,	1
Number of Corporations,	25
Number of Stockholders,	727
Males,	481
Females,	197
Banks, Trustees, etc.,	49
Aggregates—Partners and Stockholders,	781

CAPITAL INVESTED, STOCK USED AND GOODS MADE.

Capital Invested.

Amount of Capital Invested, ... $7,849,376

Stock Used—Aggregate Value.

Total Value of Stock Used, ... $2,025,748

Goods Made—Aggregate Value.

Total Value of Goods Made, ... $5,376,035

PERSONS EMPLOYED.

Persons Employed.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
Average Number,	5,119	53	5,172	98.97	1.03	100
Smallest Number,	3,319	26	3,345	99.22	.78	100
Greatest Number,	6,323	70	6,393	98.90	1.10	100
Excess of greatest over smallest number,	3,004	44	3,048	98.55	1.45	100

PERSONS EMPLOYED, BY MONTHS.

Months.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
January,	3,405	26	3,431	99.24	.76	100
February,	3,319	.27	3,346	99.19	.81	100
March,	3,876	30	3,906	99.23	.77	100
April,	5,318	50	5,368	99.07	.93	100
May,	5,893	56	5,949	99.06	.94	100
June,	6,100	61	6,161	99.01	.99	100
July,	6.323	61	6,384	99.04	.96	100
August,	6,322	61	6,383	99.04	.96	100
September,	6,202	65	6,267	99.12	.88	100
October,	5,842	68	5,910	98.85	1.15	100
November,	4,789	70	4,859	98.56	1.44	100
December,	4,043	54	4,097	98.68	1.32	100

WAGES, EARNINGS AND PROPORTION OF BUSINESS DONE.

Wages and Earnings.

Total amount paid in wages,	$2,100,540 00
Average yearly earnings,	406 14

Proportion of Business Done and Days in Operation.

Average proportion of business done, per cent	74.05
Days in operation, average,	232.50

CLASSIFIED WEEKLY WAGES.

Classification of Weekly Wages.	Number Receiving— Males.	Females.	Total.	Percentage Receiving— Males.	Females.	Total.
Under $5,	276	62	338	4.15	91.17	5.04
$5 but under $6,	188	...	188	2.83	...	2.80
6 " " 7,	421	4	425	6.34	5.89	6.34
7 " " 8,	1,640	2	1,642	24.70	2.94	24.48
8 " " 9,	1,209	...	1,209	18.21	...	18.03
9 " " 10,	1,306	...	1,306	19.67	...	19.47
10 " " 12,	635	...	635	9.57	...	9.47
12 " " 15,	400	...	400	6.03	...	5.96
15 " " 20,	426	...	426	6.42	...	6.35
20 and over,	138	...	138	2.08	...	2.06
Total,	6,639	68	6,707	100.00	100.00	100.00

TABLE No. 20—Industry Presentation, 1901—(Continued).

BREWING (LAGER BEER, ALE AND PORTER.)

NUMBER OF PARTNERS AND STOCKHOLDERS CONSIDERED.

Number of establishments reporting,	32
Number of private firms,	4
Number of partners,	5
Males,	5
Females,	...
Special,	...
Estates,	...
Number of corporations,	28
Number of stockholders,	522
Males,	560
Females,	58
Banks, Trustees, etc.,	4
Aggregates—partners and stockholders,	627

CAPITAL INVESTED, STOCK USED AND GOODS MADE.

Capital Invested.

Amount of capital invested, $18,352,534

Stock Used—Aggregate Value.

Total value of stock used, $3,709,761

Goods Made—Aggregate Value.

Total value of goods made, $13,341,081

PERSONS EMPLOYED.

Persons Employed.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
Average number,	1,850	4	1,854	99.78	.22	100
Smallest number,	1,819	2	1,821	99.89	.11	100
Greatest number,	1,892	8	1,900	99.58	.42	100
Excess of greatest over smallest number,	73	6	79	92.41	7.59	100

PERSONS EMPLOYED, BY MONTHS.

Months.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
January,	1,824	3	1,827	99.84	.16	100
February,	1,819	2	1,821	99.89	.11	100
March,	1,833	8	1,841	99.57	.43	100
April,	1,844	5	1,849	99.73	.27	100
May,	1,866	4	1,870	99.79	.21	100
June,	1,869	5	1,874	99.73	.27	100
July,	1,892	4	1,896	99.79	.21	100
August,	1,889	3	1,892	99.84	.16	100
September,	1,862	3	1,865	99.78	.22	100
October,	1,846	4	1,850	99.78	.22	100
November,	1,833	5	1,838	99.73	.27	100
December,	1,829	6	1,835	99.67	.33	100

WAGES, EARNINGS AND PROPORTION OF BUSINESS DONE.

Wages and Earnings.

Total amount paid in wages,	$1,516,690 00
Average yearly earnings,	818 06

Proportion of Business Done and Days in Operation.

Average proportion of business done, per cent	73.59
Days in operation, average,	306.50

CLASSIFIED WEEKLY WAGES.

Classification of Weekly Wages.	Number Receiving— Males.	Females.	Total.	Percentage Receiving— Males.	Females.	Total.
Under $5,	21	4	25	1.10	80.00	1.30
$5 but under $6,	12	...	12	.63	...	.63
6 " " 7,	19	1	20	.99	20.00	1.04
7 " " 8,	18	...	18	.94	...	.94
8 " " 9,	14	...	14	.73	...	.73
9 " " 10,	32	...	32	1.67	...	1.66
10 " " 12,	60	...	60	3.13	...	3.12
12 " " 15,	240	...	240	12.53	...	12.49
15 " " 20,	1,301	...	1,301	67.90	...	67.73
20 and over,	199	...	199	10.38	...	10.38
Total,	1,916	5	1,921	100.00	100.00	100.00

TABLE No. 20—Industry Presentation, 1901—(Continued).

GLASS (WINDOW AND BOTTLE.)

NUMBER OF PARTNERS AND STOCKHOLDERS CONSIDERED.

Number of establishments reporting,	19
Number of private firms,	6
Number of partners,	12
Males,	10
Females,	1
Special,	...
Estates,	1
Number of corporations,	13
Number of stockholders,	178
Males,	138
Females,	36
Banks, trustees, etc.,	4
Aggregates—partners and stockholders,	190

CAPITAL INVESTED, STOCK USED AND GOODS MADE.

Capital Invested.

Amount of capital invested, $4,054,865.

Stock Used—Aggregate Value.

Total value of stock used, $1,780,661

Goods Made—Aggregate Value.

Total value of goods made, $5,282,845

PERSONS EMPLOYED.

Persons Employed.	Males.	Females.	Total.	Percentages of— Males.	Females.	Total.
Average number,	5,424	174	5,598	96.89	3.11	100
Smallest number,	1,308	80	1,388	94.24	5.76	100
Greatest number,	6,667	206	6,873	97.00	3.00	100
Excess of greatest over smallest number,	5,359	126	5,485	97.70	2.30	100

PERSONS EMPLOYED, BY MONTHS.

Months.	Males.	Females.	Total.	Percentages of— Males.	Females.	Total.
January,	6,370	190	6,560	97.10	2.90	100
February,	6,423	197	6,620	97.02	2.98	100
March,	6,548	206	6,754	96 95	3.05	100
April,	6,667	190	6,857	97.23	2.77	100
May,	6,577	188	6,765	97.22	2.78	100
June,	6,174	191	6,365	97.00	3.00	100
July,	2,145	93	2,238	95.80	4.20	100
August,	1,308	80	1,388	94.24	5.76	100
September,	4,044	164	4,208	96.10	3.90	100
October,	6,040	197	6,237	96.84	3.16	100
November,	6,341	195	6,536	97.01	2.99	100
December,	6,453	173	6,626	97.39	2.61	100

WAGES, EARNINGS AND PROPORTION OF BUSINESS DONE.

Wages and Earnings.

Total amount paid in wages,	$2,751,202 00
Average yearly earnings,	491 64

Proportion of Business Done and Days in Operation.

Average proportion of business done, per cent	82.11
Days in operation, average,	242.73

CLASSIFIED WEEKLY WAGES.

Classification of Weekly Wages.	Number Receiving			Percentage Receiving		
	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	1,900	172	2,072	27.52	84.32	29.15
$5 but under $6,	415	19	434	6.01	9.31	6.11
6 " " 7,	477	6	483	6.91	2.94	6.79
7 " " 8,	483	...	483	6.99	...	6.79
8 " " 9,	439	4	443	6.35	1.96	6.23
9 " " 10,	383	2	385	5.55	0.98	5.42
10 " " 12,	520	...	520	7.56	...	7.32
12 " " 15,	518	1	519	7.50	0.49	7.30
15 " " 20,	485	...	485	7.03	...	6.82
20 and over,	1,284	...	1,284	18.58	...	18.07
Total,	6,904	204	7,108	100.00	100.00	100.00

TABLE No. 20—Industry Presentation, 1901—(Continued).

HATS (FELT.)

NUMBER OF PARTNERS AND STOCKHOLDERS CONSIDERED.

Number of establishments reporting,	48
Number of private firms,	32
Number of partners,	60
Males,	57
Females,	...
Special,	...
Estates,	3
Number of corporations,	16
Number of stockholders,	101
Males,	87
Females,	14
Banks, trustees, etc.,	...
Aggregates—partners and stockholders,	161

CAPITAL INVESTED, STOCK USED AND GOODS MADE.

Capital Invested.

Amount of capital invested, $2,933,706

Stock Used—Aggregate Value.

Total value of stock used, $4,218,157

Goods Made—Aggregate Value.

Total value of goods made, $8,729,172

PERSONS EMPLOYED.

Persons Employed.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
Average number,	4,161	1,495	5,656	73.57	26.43	100
Smallest number,	4,039	1,435	5,474	73.78	26.22	100
Greatest number,	4,424	1,570	5,994	73.81	26.19	100
Excess of greatest over smallest number,	385	135	520	74.04	25.96	100

PERSONS EMPLOYED, BY MONTHS.

Months.	Males.	Females.	Total	Percentages of Males.	Percentages of Females.	Percentages of Total.
January,	4,050	1,449	5,499	73.65	26.35	100
February,	4,101	1,461	5,562	73.73	26.27	100
March,	4,162	1,505	5,667	73.44	26.56	100
April,	4,132	1,502	5,634	73.34	26.66	100
May,	4,039	1,459	5,498	73.46	26.54	100
June,	4,073	1,466	5,539	73.53	26.47	100
July,	4,077	1,435	5,512	73,97	26.03	100
August,	4,164	1,482	5,646	73.75	26.25	100
September,	4,295	1,552	5,847	73.46	26.54	100
October,	4,424	1,570	5,994	73.81	26.19	100
November,	4,252	1,555	5,807	73.22	26.78	100
December,	4,169	1,502	5,671	73.51	26.49	100

WAGES, EARNINGS AND PROPORTION OF BUSINESS DONE.

Wages and Earnings.

Total amount paid in wages,	$2,961,505 00
Average yearly earnings,	523 60

Proportion of Business Done and Days in Operation.

Average proportion of business done, per cent.,	72.50
Days in operation, average,	271.71

CLASSIFIED WEEKLY WAGES.

Classification of Weekly Wages.	Number Receiving— Males.	Females.	Total.	Percentage Receiving— Males.	Females.	Total.
Under $5,	234	341	575	5.17	20.56	9.30
$5 but under $6,	170	255	425	3.76	15.38	6.88
6 " " 7,	182	273	455	4.02	16.47	7.36
7 " " 8,	225	249	474	4.98	15.02	7.67
8 " " 9,	285	213	498	6.30	12.85	8.06
9 " " 10,	344	148	492	7.61	8.92	7.96
10 " " 12,	738	117	855	16.32	7.06	13.83
12 " " 15,	938	42	980	20,74	2.53	15.85
15 " " 20,	983	17	1,000	21.73	1.03	16.18
20 and over,	424	3	427	9.37	0.18	6.91
Total,	4,523	1,658	6,181	100.00	100.00	100.00

TABLE No. 20—Industry Presentation, 1901—(Continued).

JEWELRY.

NUMBER OF PARTNERS AND STOCKHOLDERS CONSIDERED.

Number of establishments reporting,	66
Number of private firms,	49
Number of partners,	109
Males,	105
Females,	3
Special,	...
Estates,	1
Number of corporations,	17
Number of stockholders,	79
Males,	65
Females,	14
Banks, trustees, etc.	...
Aggregates—partners and stockholders,	188

CAPITAL INVESTED, STOCK USED AND GOODS MADE.

Capital Invested.

Amount of capital invested, $3,332,986

Stock Used—Aggregate Value.

Total value of stock used, $3,265,680

Goods Made—Aggregate Value.

Total value of goods made, $6,855,600

PERSONS EMPLOYED.

Persons Employed.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
Average number,	1,862	634	2,496	74.88	25.12	100
Smallest number,	1,756	598	2,354	74.59	25.41	100
Greatest number,	2,024	711	2,735	74.00	26.00	100
Excess of greatest over smallest number,	268	113	381	70.34	29.66	100

PERSONS EMPLOYED, BY MONTHS.

Months.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
January,	1,778	620	2,398	74.15	25.85	100
February,	1,808	635	2,443	74.01	25.99	100
March,	1,821	620	2,441	74.60	25.40	100
April,	1,835	613	2,448	74.96	25.04	100
May,	1,798	616	2,414	74.48	25.52	100
June,	1,756	612	2,368	74.16	25.84	100
July,	1,765	598	2,363	74.69	25.31	100
August,	1,830	616	2,446	74.81	25.19	100
September,	1,917	619	2,536	75.59	24.41	100
October,	1,998	647	2,645	75.54	24.46	100
November,	2,018	695	2,713	74.38	25.62	100
December,	2,024	711	2,735	74.00	26.00	100

WAGES, EARNINGS AND PROPORTION OF BUSINESS DONE.

Wages and Earnings.

Total amount paid in wages,.....$1,448,016 00
Average yearly earnings,..... 580 13

Proportion of Business Done and Days in Operation.

Average proportion of business done, per cent.,..... 81.74
Days in operation, average,.....289.62

CLASSIFIED WEEKLY WAGES.

Classification of Weekly Wages.	Number Receiving— Males.	Females.	Total.	Percentage Receiving— Males.	Females	Total.
Under $5, ...	224	223	447	11.34	29.30	16.34
$5 but under $6,.....	82	95	177	4.16	12.48	6.47
6 " " 7,.....	46	93	139	2.33	12.22	5.08
7 " " 8,.....	56	94	150	2.84	12.35	5.49
8 " " 9,.....	53	82	135	2.69	10.78	4.94
9 " " 10,.....	67	67	134	3.39	8.81	4.90
10 " " 12,.....	115	65	180	5.83	8.54	6.58
12 " " 15,.....	296	33	329	14.99	4.34	12.03
15 " " 20,.....	545	7	552	27.61	0.92	20.18
20 and over,.....	490	2	492	24.82	0.26	17.99
Total, ...	1,974	761	2,735	100.00	100.00	100.00

TABLE No, 20—Industry Presentation, 1901—(Continued).

LEATHER.

NUMBER OF PARTNERS AND STOCKHOLDERS CONSIDERED.

Number of establishments reporting,	55
Number of private firms,	28
Number of partners,	53
Males,	48
Females,	4
Special,	...
Estates,	1
Number of corporations,	27
Number of stockholders,	188
Males,	158
Females,	25
Banks, trustees, etc.,	5
Aggregates—Partners and stockholders,	241

CAPITAL INVESTED, STOCK USED AND GOODS MADE.

Capital Invested.

Amount of capital invested, $6,741,540

Stock Used—Aggregate Value.

Total value of stock used, $11,032,067

Goods Made—Aggregate Value.

Total value of goods made, $16,193,884

PERSONS EMPLOYED.

Persons Employed.	Males.	Females.	Total.	Percentages of— Males.	Females.	Total.
Average number,	4,763	88	4,851	98.19	1.81	100
Smallest number,	4,505	57	4,562	98.75	1.25	100
Greatest number,	5,241	108	5,349	97.98	2.02	100
Excess of greatest over smallest number,	736	51	787	93.52	6.48	100

PERSONS EMPLOYED, BY MONTHS.

Months.	Males.	Females.	Total.	Percentages of— Males.	Females.	Total.
January,	4,590	82	4,672	98.24	1.76	100
February,	4,692	68	4,760	98.57	1.43	100
March,	4,870	57	4,927	98.84	1.16	100
April,	4,847	72	4,919	98.54	1.46	100
May,	4,822	106	4,928	97.85	2.15	100
June,	4,645	99	4,744	97.91	2.09	100
July,	4,505	98	4,603	97.87	2.13	100
August,	4,571	108	4,679	97.75	2.25	100
September,	4,662	102	4,764	97.86	2.14	100
October,	4,817	86	4,903	98.24	1.76	100
November,	4,904	84	4,988	98.32	1.68	100
December,	5,241	88	5,329	98.35	1.65	100

WAGES, EARNINGS AND PROPORTION OF BUSINESS DONE.

Wages and Earnings.

Total amount paid in wages,	$2,373,717 00
Average yearly earnings,	489 32

Proportion of Business Done and Days in Operation.

Average proportion of business done, per cent	83.73
Days in operation, average,	294.32

CLASSIFIED WEEKLY WAGES.

Classification of Weekly Wages.	Number Receiving— Males.	Females.	Total.	Percentage Receiving— Males.	Females.	Total.
Under $5,	238	50	288	4.59	43.86	5.44
$5 but under $6,	236	27	263	4.55	23.68	4.97
6 " " 7,	248	16	264	4.79	14.04	4.98
7 " " 8,	251	12	263	4.84	10.53	4.96
8 " " 9,	453	6	459	8.74	5.26	8.66
9 " " 10,	709	3	712	13.67	2.63	13.44
10 " " 12,	1,027	...	1,027	19.81	...	19.38
12 " " 15,	892	...	892	17.21	...	16.84
15 " " 20,	699	...	699	13.48	...	13.19
20 and over,	431	...	431	8.32	...	8.14
Total,	5,184	114	5,298	100.00	100.00	100.00

TABLE No. 20—Industry Presentation, 1901—(Continued).

WOOLEN AND WORSTED GOODS.

NUMBER OF PARTNERS AND STOCKHOLDERS CONSIDERED.

Number of establishments reporting,	26
Number of private firms,	10
Number of partners,	20
Males,	19
Females,	...
Special,	...
Estates,	1
Number of corporations,	16
Number of stockholders,	315
Males,	234
Females,	61
Banks, trustees, etc.,	20
Aggregates—partners and stockholders,	335

CAPITAL INVESTED, STOCK USED AND GOODS MADE.

Capital Invested.

Amount of capital invested, $7,852,316

Stock Used—Aggregate Value.

Total value of stock used, $6,927,322

Goods Made—Aggregate Value.

Total value of goods made, $11,042,908

PERSONS EMPLOYED.

Persons Employed.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
Average number,	3,631	3,916	7,547	4,811	51.89	100
Smallest number,	3,520	3,512	7,032	50.06	49.94	100
Greatest number,	3,743	4,126	7,869	47.56	52.44	100
Excess of greatest over smallest number,	223	614	837	26.64	73.36	100

PERSONS EMPLOYED, BY MONTHS.

Months.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
January,	3,564	3,512	7,076	50.27	49.73	100
February,	3,669	3,611	7,280	50.40	49.60	100
March,	3,697	3,835	7,532	49.08	50.92	100
April,	3,565	3,818	7,383	48.42	51.58	100
May,	3,570	3,835	7,405	48.21	51.79	100
June,	3,520	3,876	7,396	47.59	52.41	100
July,	3,624	4,023	7,647	47,39	52.61	100
August,	3,667	4,037	7,704	47.60	52.40	100
September,	3,623	4,090	7,713	46.97	53.03	100
October,	3,629	4,113	7,742	46.87	53.13	100
November,	3,703	4,114	7,817	47.37	52.63	100
December,	3,743	4,126	7,869	47.56	52.44	100

WAGES, EARNINGS AND PROPORTION OF BUSINESS DONE.

Wages and Earnings.

Total amount paid in wages,	$2,522,623 00
Average yearly earnings,	334 25

Proportion of Business Done and Days in Operation.

Average proportion of business done, per cent.,	84.23
Days in operation, average,	284 50

CLASSIFIED WEEKLY WAGES.

Classification of Weekly Wages.	Number Receiving			Percentage Receiving		
	Males.	Females.	Total.	Males.	Females.	Total.
Under $5,	677	2,458	3,135	15.97	59.56	34.47
$5 but under $6,	515	870	1,385	12.15	21.08	16.56
6 " " 7,	458	320	778	10.80	7.76	9.30
7 " " 8,	604	239	843	14.25	5.79	10.08
8 " " 9,	480	75	555	11.32	1.82	6.63
9 " " 10,	319	69	388	7.53	1.67	4.64
10 " " 12,	462	88	550	10.90	2.13	6.57
12 " " 15,	303	7	310	7.15	0.17	3.71
15 " " 20,	293	1	294	6.91	0.02	3.51
20 and over,	128	...	128	3.02	...	1.53
Total,	4,239	4,127	8,366	100.00	100.00	100.00

TABLE No. 20—Industry Presentation, 1901—(Continued).

SHOES.

NUMBER OF PARTNERS AND STOCKHOLDERS CONSIDERED.

Number of establishments reporting,	40
Number of private firms,	20
Number of partners,	38
Males,	36
Females,	2
Special,	...
Estates,	...
Number of corporations,	20
Number of stockholders,	146
Males,	111
Females,	33
Banks, trustees, etc.,	2
Aggregates—Partners and stockholders,	184

CAPITAL INVESTED, STOCK USED AND GOODS MADE.

Capital Invested.

Amount of capital invested, $2,189,457

Stock Used—Aggregate Value.

Total value of stock used, $3,755,617

Goods Made—Aggregate Value.

Total value of goods made, $6,636,894

PERSONS EMPLOYED.

Persons Employed.	Males.	Females.	Total.	Percentages of— Males.	Females.	Total.
Average number,	2,961	1,609	4,570	64.79	35.21	100
Smallest number,	2,887	1,550	4,437	65.07	34.93	100
Greatest number,	3,039	1,670	4,709	64.54	35.46	100
Excess of greatest over smallest number,	152	120	272	55.89	44.11	100

PERSONS EMPLOYED, BY MONTHS.

Months.	Males.	Females.	Total.	Percentages of— Males.	Females.	Total.
January,	2,887	1,550	4,437	65.07	34.93	100
February,	3,039	1,628	4,667	65.12	34.88	100
March,	3,015	1,629	4,644	64.92	35.08	100
April,	2,952	1,587	4,539	65.04	34.96	100
May,	2,925	1,578	4,503	64.96	35.04	100
June,	2,945	1,645	4,590	64.16	35.84	100
July,	2,914	1,652	4,566	63.82	36.18	100
August,	3,013	1,670	4,683	64.34	35.66	100
September,	2,994	1,622	4,616	64.86	35.14	100
October,	2,958	1,580	4,538	65.18	34.82	100
November,	2,980	1,591	4,571	65.19	34.81	100
December,	2,912	1,571	4,483	64.95	35.05	100

WAGES, EARNINGS AND PROPORTION OF BUSINESS DONE.

Wages and Earnings.

Total amount paid in wages,	$1,689,361 00
Average yearly earnings,	367 47

Proportion of Business Done and Days in Operation.

Average proportion of business done, per cent.,	71.00
Days in operation, average	274.73

CLASSIFIED WEEKLY WAGES.

Classification of Weekly Wages.	Number Receiving— Males.	Females.	Total.	Percentage Receiving— Males.	Females.	Total.
Under $5,	488	526	1,014	15.65	30.69	20.98
$5 but under $6,	171	246	417	5.48	14.36	8.63
6 " " 7,	222	256	478	7.12	14.93	9.89
7 " " 8,	245	190	435	7.86	11.08	9.00
8 " " 9,	268	173	441	8.59	10.09	9.13
9 " " 10,	303	125	428	9.71	7.29	8.86
10 " " 12,	459	127	586	14.72	7.41	12.12
12 " " 15,	531	58	589	17.03	3.38	12.19
15 " " 20,	290	13	303	9.29	0.77	6.26
20 and over,	142	...	142	4.55	...	2.94
Total,	3,119	1,714	4,833	100.00	100.00	100.00

TABLE No. 20—Industry Presentation, 1901—(Continued).

SILK GOODS—ALL BRANCHES INCLUDED.

NUMBER OF PARTNERS AND STOCKHOLDERS CONSIDERED.

Number of establishments reporting,	141
Number of private firms,	64
Number of partners,	120
Males,	117
Females,	2
Special,	...
Estates,	1
Number of corporations,	77
Number of stockholders,	451
Males,	397
Females,	48
Banks, trustees, etc.,	6
Aggregates—Partners and Stockholders,	571

CAPITAL INVESTED, STOCK USED AND GOODS MADE.

Capital Invested.

Amount of capital invested, $24,164,601

Stock Used—Aggregate Value.

Total value of stock used, $24,913,799

Goods Made—Aggregate Value.

Total value of goods made, $43,138,797

PERSONS EMPLOYED.

Persons Employed.	Males.	Females	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
Average number,	14,185	11,598	25,783	55.02	44.98	100
Smallest number,	13,240	10,820	24,060	55.03	44.97	100
Greatest number,	14,911	12,190	27,101	55.02	44.98	100
Excess of greatest over smallest number,	1,671	1,370	3,041	54.95	45.05	100

PERSONS EMPLOYED, BY MONTHS.

Months.	Males.	Females.	Total.	Percentages of Males.	Percentages of Females.	Percentages of Total.
January,	13,240	10,820	24,060	55.03	44.97	100
February,	13,714	11,144	24,858	55.16	44.84	100
March,	13,942	11,309	25,251	55.21	44.79	100
April,	14,197	11,549	25,746	55.14	44.86	100
May,	14,258	11,670	25,928	54.99	45.01	100
June,	14,156	11,661	25,817	54.83	45.17	100
July,	14,161	11,560	25,721	55.06	44.94	100
August,	14,187	11,610	25,797	54.22	45.78	100
September,	14,212	11,665	25,877	54.14	45.86	100
October,	14,554	11,974	26,528	54.86	45.14	100
November,	14,683	12,029	26,712	54.97	45.03	100
December,	14,911	12,190	27,101	55.02	44.98	100

WAGES, EARNINGS AND PROPORTION OF BUSINESS DONE.

Wages and Earnings.

Total amount paid in wages,	$10,122,057 00
Average yearly earnings,	392 58

Proportion of Business Done and Days in Operation.

Average proportion of business done, per cent.,	78.65
Days in operation, average,	290.71

CLASSIFIED WEEKLY WAGES.

Classification of Weekly Wages.	Number Receiving— Males.	Females.	Total.	Percentage Receiving— Males.	Females.	Total.
Under $5,	1,774	3,274	5,048	11.27	26.12	17.85
$5 but under $6,	690	2,301	2,991	4.38	18.35	10.58
6 " " 7,	860	1,667	2,527	5.47	13.30	8.91
7 " " 8,	1,608	1,288	2,896	10.22	10.28	10.25
8 " " 9,	1,094	904	1,998	6.95	7.21	7.07
9 " " 10,	2,332	845	3,177	14.82	6.74	11.23
10 " " 12,	2,796	1,164	3,960	17.76	9.29	14.01
12 " " 15,	2,338	785	2,123	14.85	6.26	11.05
15 " " 20,	1,726	280	2,006	10.96	2.23	7.10
20 and over,	535	27	552	3.32	0.22	1.95
Total,	15,743	12,535	28,278	100.00	100.00	100.00

SUMMARY OF INDUSTRIAL CONDITIONS AS SHOWN BY THE DATA CONTAINED IN THE GENERAL TABLES.

In the following table the data relating to all industries drawn from the several presentations for 1900 and 1901 are brought forward.

Classification.	1900.	1901.	Increase (x) or Decrease (—) in 1901. Amounts.	Percent.
Number of establishments considered,	1,660	1,660	.....	.....
Number of private firms,	837	786	— 51	— 6.1
Number of corporations,	823	874	+ 51	+ 6.2
Number of partners,	1,462	1,376	— 86	— 5.8
Number of stockholders,	37,690	42,298	+ 4,608	+ 12.2
Capital invested,	$264,474,031	$284,332,492	+ $19,858,461	+ 7.5
Value of stock and material used,	243,339,385	257,258,761	+ 13,919,376	+ 5.7
Value of goods made and work done,	408,406,834	437,422,888	+ 29,016,054	+ 7.1
Average number of persons employed,	174,883	191,307	+ 16,424	+ 9.5
Smallest number of persons employed,	169,460	181,679	+ 12,219	+ 7.2
Greatest number of persons employed,	178,885	198,993	+ 20,108	+ 11.2
Excess of greatest over smallest,	9,425	17,314	+ 7,889	+ 83.7
Total amount paid in wages,	$77,333,138	$85,450,085	+ $8,116,947	+ 10.5
Average yearly earnings,	442.19	446.66	+ 4.47	+ 1.
Average number of days in operation,	288.20	289.37	+ 1.11	+ 4.
Average proportion of business done (per cent.),	76.24	77.46	+ 1.22	+ 1.6
Average number of hours employed per day,	9.64	9.66	+ 0.02	.....

The changes in each of the elements, the totals of which are given in the foregoing table are at once apparent. These changes show a gratifying improvement in the condition of the industries in 1901 as compared with 1900.

The number of private firms has decreased, but the falling off is due to changes from individual or partnership management, to the corporate form, and does not affect the existence of the establishments in which the change has been made. The same reason accounts for the increase in the number of corporations and stockholders; a certain number of establishments were transferred from one form of management to the other during the year 1901.

The reports on which this presentation of the industries of the State is based, were made by 1,660 identical establishments

in each year. These show that capital invested increased 7.5 per cent., value of stock and material used increased 5.7 per cent., and the value of goods made and work done increased 7.1 per cent.

The average number of persons employed exhibits an increase of 7.2 per cent., the greatest number of persons employed at any one time during the year increased 11.2 per cent., the total amount paid in wages increased 10.5 per cent., the average yearly earnings increased 1. per cent.

The average number of days in operation increased 1.6 per cent., and the average number of hours worked per day remains practically the same for both years.

Stock or Material Used and Goods Made or Work Done.

The principal articles of stock or material used and of goods made or work done by industries.

The aggregate quantities of specified articles of stock used, with their aggregate cost value.

Aggregate quantities of specified articles of goods made with their aggregate selling values.

Details of Table Number 2 of the general tables.

STOCK OR MATERIAL USED—Aggregate Quantities and Aggregate Value, 1901.

Industry. and Specified Stock Used.	Basis of Measurement.	Aggregate Quantities.	Aggregate Cost Value.
Agricultural implements—			
Iron castings,	Pounds,	750,049	$23,963
Steel and iron,	Tons,	853	40,092
Steel, iron, brass and tin,		.....	35,203
Lumber,	Feet,	229,140	7,650
Other material,		.....	77,051
Total value of material used,		.....	$183,959
Artisans' Tools—			
Steel,	Tons,	3,828	$331,599
Bar steel and iron,	Tons,	935	37,000
Steel castings,	Tons,	38	3,383
Iron castings,	Pounds,	131,317	6,389
Steel and iron,	Not given,	.....	12,545
Sheet brass,	Pounds,	63,500	12,725
Wrought iron pipe,	Pounds,	270,000	16,800
Tin,	Pounds,	5,000	800
Fuel oil,	Gallons,	150,000	5,290
Coal,	Tons,	2,900	8,385
Other material,		.....	376,471
Total value of material used,		.....	$811,387
Boilers—			
Steel plates,	Pounds,	7,809	$301,140
Iron and steel,	Tons,	420	16,800
Pig iron,	Tons,	470	7,380
Scrap iron,	Tons,	130	1,820
Castings,	Tons,	6,925	236,488

STOCK OR MATERIAL USED—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Seock Used.	Basis of Measurement.	Aggregate Quantities.	Aggregate Cost Value.
Boilers (Continued)—			
Copper,	Pounds,	125,000	$23,762
Brass,	Pounds,	17,500	2,629
Boiler tubing,	Feet,	1,782,917	341,336
Iron,	Pounds,	1,124,130	23,412
Coke,	Tons,	330	715
Coal and coke,	Cars,	10	500
Coal,	Tons,	2,580	10,320
Boiler plates, tubing, bar iron, sheet iron, beam and rivets,	Not given,	.....	12,207
Sheet iron,	Pounds,	202,400	5,962
Other material,		.....	645,362
Total value of material used,		.....	$1,629,833
Boxes (wood and paper)—			
Straw board,	Tons,	5,380	$189,926
Pulp board,	Tons,	575	23,415
News board,	Tons.	195	6,337
Paper,	Reams,	21,948	61,698
Lumber,	Feet,	9,257,197	200,842
Nails,	Kegs,	310	3,658
Glue,	Barrels,	47	1,237
Glue,	Pounds,	22,000	2,300
Glue and paste,	Barrels,	56	894
Paste,	Barrels,	170	285
Leather,	Not given,	.....	10,875
Other material,		.....	138,407
Total value of material used,		.....	$639,589
Brewing (Lager Beer, Ale and Porter)—			
Malt,	Bushels,	2,384,925	$2,026,991
Hops,	Pounds,	2,170,966	394,342
Other material,		.....	1,288,428
Total value of material used,		.....	$3,709,761
Brushes—			
Bristles,	Pounds,	34,970	$33,145
Horse hair,	Pounds,	10,000	4,000
Wood blocks,,	Gross,	3,958	5,830
Leather blocks,	Number,	75,000	2,100
Wire,	Pounds,	2,780	1,754
Fibre,	Pounds,	60,600	5,800
Leather,	Feet,	18,000	2,500
Bristles, horse hair, fibre, tampico and blocks,	Not given,	.....	17,535
Other material,		.....	54,071
Total value of material used,		.....	$126,735
Buttons (Pearl)—			
Pearl shell,	Pounds,	762,402	$269,575
Ivory nuts,	Tons,	1,700	72,000
Pearl shell,	Not given,	.....	100,568
Other material,		.....	59,222
Total value of material used,		.....	$501,365

STOCK OR MATERIAL USED—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Stock Used.	Basis of Measurement.	Aggregate Quantities.	Aggregate Cost Value.
Carpets and Rugs—			
Wool yarn,	Pounds,	2,954,589	$427,169
Cotton yarn,	Pounds,	321,600	53,750
Jute yarn,	Pounds,	1,451,000	118,500
Body filler,	Pounds,	1,800,000	126,000
Wool,	Pounds,	829,513	128,526
Other material,		.....	146,865
Total value of material used,		.....	$1,000,810
Cigars and Tobacco—			
Tobacco,	Pounds,	22,341,533	$2,708,587
Cigar boxes,	Number,	457,823	35,164
Other material,		.....	1,933,650
Total value of material used,		.....	$4,677,401
Cornices (Galvanized Iron and Copper)—			
Galvanized iron,	Pounds,	1,069,020	$50,628
Copper,	Pounds,	147,351	34,823
Zinc,	Pounds,	113,542	6,813
Tin,	Boxes,	4,630	36,073
Glass,	Boxes,	235	5,600
Tar and felt,	Not given,	.....	6,294
Iron, copper, zinc, tin, glass, etc.,	Not given,	.....	127,170
Other material,		.....	116,780
Total value of material used,		.....	$384,181
Corsets and Corset Waists—			
Jeans and satteens,	Yards,	3,447,122	321,312
Clasps and steel,	Gross,	17,865	55,305
Whalebone,	Pounds,	5,000	30,000
Steel binding wire,	Pounds,	166,800	47,520
Jeans, satteens, steels, etc.,	Not given,	.....	269,039
Other material,		.....	159,724
Total value of material used,		.....	$882,900
Cotton Goods—			
Cotton,	Pounds,	9,416,018	$988,644
Cotton cloth,	Yards,	5,210,500	458,086
Cotton yarn,	Pounds,	1,374,077	268,435
Silk yarn,	Pounds,	950	6,000
Embroideries,	Yards,	1,100,000	79,645
Embroideries,	Not given,	.....	126,533
Cotton and linen cloth,	Not given,	.....	1,237,564
Denims,	Yards,	1,173,420	88,118
Other material,		.....	861,157
Total value of material used,		.....	$4,114,182

STOCK OR MATERIAL USED—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Stock Used.	Basis of Measurement.	Aggregate Quantities.	Aggregate Cost Value.
Fertilizers—			
Bones,	Tons,	30,557	$417,920
Potash,	Tons,	10,536	306,247
Phosphate,	Tons,	51,002	306,993
Bones, chemicals, tankage, sulphuric acid and nitrate soda,	Not given,	.....	1,424,104
Other material,		.....	844,574
Total value of material used,		.....	$3,299,838
Foundry (Iron)—			
Pig iron,	Tons,	168,437	$2,580,456
Scrap iron,	Tons,	1,628	21,934
Bar iron,	Tons,	230	10,350
Sheet steel,	Tons,	610	27,450
Coal,	Tons,	921	4,643
Coke,	Tons,	2,360	10,550
Coal and coke,	Tons,	1,813	7,096
Fuel oil,	Gallons,	68,000	2,727
Pig iron, scrap iron, sheet steel and scrap steel,	Tons,	9,860	183,000
Other material,		.....	1,317,244
Total value of material used,		.....	$4,165,450
Furnaces, Ranges and Heaters—			
Pig iron,	Tons,	19,835	$323,902
Bar and angle iron,	Pounds,	654,924	11,805
Castings (iron and steel),	Pounds,	1,300,000	429,947
Castings (iron),	Tons,	120	8,123
Castings (brass),	Tons,	6	2,807
Brass tubes,	Pounds,	604,588	126,964
Wrought iron and steel,	Pounds,	150,000	11,381
Coal,	Tons,	4,536	17,063
Coke,	Tons,	2,317	8,455
Other material,		.....	351,831
Total value of material used,		.....	$1,268,218
Glass (Window and Bottle)—			
Sand,	Tons,	34,353	$479,995
Soda ash,	Tons,	14,589	261,740
Lime,	Tons,	4,161	15,223
Nitrate of soda,	Tons,	310	12,108
Coal,	Tons,	42,502	129,850
Fuel oil,	Gallons,	766,596	28,230
Wood,	Cords,	5,789	18,311
Sand, soda, lime, nitrate, etc.,	Not given,	.....	712,318
Other material,		.....	554,886
Total value of material used,		.....	$1,780,661

STOCK OR MATERIAL USED—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Stock Used.	Basis of Measurement.	Aggregate Quantities.	Aggregate Cost Value.
Hats (Felt)—			
Fur,	Pounds,	1,690,433	$1,685,842
Trimmings,	Pieces,	218,854	228,354
Bands,	Yards,	897,836	771,023
Leathers,	Dozens,	229,159	152,326
Fur, bands and trimmings,	Not given,	.....	1,175,192
Other material,		.....	905,420
Total value of material used,		.....	$4,218,157
High Explosives—			
Acids and glycerine,	Pounds,	28,920,131	$824,657
Nitrate of soda and wood fibre,	Pounds,	12,972,742	211,221
Acids,	Pounds,	11,762,151	186,170
Glycerine,	Pounds,	1,434,561	186,712
Nitrate of soda,	Tons,	2,010	78,186
Raw cotton,	Pounds,	1,789,378	104,852
Copper,	Tons,	90	30,000
Mercury,	Tons,	38	38,000
Other material,		.....	754,259
Total value of material used,		.....	$2,414,057
Jewelry—			
Gold,		.....	$1,245,598
Silver,		.....	164,661
Gold and silver (not reported separately),		.....	725,165
Precious stones,		.....	910,272
Other material,		.....	192,984
Total value of material used,		.....	$3,265,680
Knit Goods—			
Wool yarn,	Pounds,	204,960	$161,801
Cotton yarn,	Pounds,	1,198,419	221,015
Worsted yarn,	Pounds,	54,000	52,540
Silk,	Pounds,	9,450	34,060
Silk, wool and cotton yarns,	Not given,	.....	310,000
Other material,		.....	116,442
Total value of material used,		.....	$895,858
Leather—			
Hides,	Number,	530,926	$4,565,741
Goat skins,	Dozens,	222,906	1,691,680
Sheep skins,	Dozens,	25,320	157,053
Alligator skins,	Number,	5,880	3,788
Calf skins,	Dozens,	45,592	822,000
Rough leather,	Sides,	51,980	138,758
Rough splits,	Sides,	94,098	181,299
Horse hide butts,	Number,	18,245	24,225
Bark,	Tons,	6,805	85,737
Sumac,	Tons,	246	10,056
Ganibier,	Tons,	435	34,384
Linseed oil,	Gallons,	82,369	52,722
Naptha,	Gallons,	56,190	5,486

STOCK OR MATERIAL USED—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Stock Used.	Basis of Measurement.	Aggregate Quantities.	Aggregate Cost Value.
Leather (Continued)—			
Chemicals and colors,	Not given,	.....	169,700
Other hides, skins, chemicals, etc.,	Not given,	.....	1,482,298
Other material,		.....	1,607,140
Total value of material used,		.....	$11,032,067
Machinery—			
Pig iron,	Tons,	16,231	$300,287
Bar iron,	Tons,	741	35,373
Scrap iron,	Tons,	4,590	72,160
Iron,	Pounds,	4,326,701	127,436
Steel,	Pounds,	693,924	24,732
Iron and steel,	Tons,	7,178	175,749
Iron castings,	Tons,	5,004	259,851
Steel castings,	Tons,	213	23,906
Steel rails,	Tons,	831	32,093
Copper,	Pounds,	322,175	50,124
Boilers,	Number,	217	43,591
Steel shafting,	Tons,	555	21,610
Steel plates,	Pounds,	234,422	61,685
Forgings,	Tons,	330	38,622
Lumber,	Feet,	582,468	23,349
Lumber and cabinet ware (Sewing Machine Co.),	Not given,	.....	1,026,230
Copper, brass and white metal,	Tons,	105	35,440
Coal and coke,	Tons,	4,441	16,945
Pig iron, steel, iron, brass, tubes, etc.,	Not given,	.....	2,313,338
Other material,		.....	3,157,883
Total value of material used,		.....	$7,840,404
Metal Goods—			
Copper,	Pounds,	30,924,287	$5,022,270
Brass,	Pounds,	1,367,993	218,166
Brass tubing,	Pounds,	93,904	29,168
Brass tubing,	Feet,	245,745	16,017
Tin plate,	Tons,	3,000	240,000
Tin plate,	Boxes,	857	6,647
Tin,	Pounds,	725,000	35,000
Spelter,	Pounds,	858,377	42,000
Nickel,	Pounds,	90,480	45,240
Aluminum,	Tons,	10	5,655
Celluloid,	Pounds,	29,093	21,820
Zinc,	Pounds,	900,000	54,000
Sheet iron,	Tons,	1,250	75,000
Pig iron,	Tons,	1,340	21,898
Iron tubing,	Feet,	348,680	6,991
Steel,	Pounds,	710,644	75,937
Copper, brass, zinc, steel, iron, etc.,	Not given,	.....	1,679,081
Other material,		.....	541,290
Total value of material used,		.....	$8,136,180

STOCK OR MATERIAL USED—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Stock Used.	Basis of Measurement.	Aggregate Quantities.	Aggregate Cost Value.
Oil Cloth, (Floor and Table)—			
Burlap,	Tons,	1,300	$155,000
Burlap,	Yards,	5,326,270	239,150
Burlap,	Bales,	250	5,000
Cork,	Tons,	2,000	50,000
Clay,	Tons,	600	8,400
Cotton goods,	Yards,	7,304,516	469,122
Linseed oil,	Gallons,	1,136,186	583,053
Varnish,	Gallons,	30,000	27,000
Paints,	Tons,	104	40,000
Burlap, oils, paints, cork, gums and varnish,	Not given,	.....	260,815
Other material,		.....	487,762
Total value of material used,		.....	$1,837,540
Oils—			
Crude oil,	Gallons,	628,482,701	$24,463,633
Tar,	Gallons,	30,562,365	811,144
Barrels and parts,		.....	1,169,921
Other material,		.....	5,617,388
Total value of material used,		.....	$32,062,086
Paper—			
Paper stock,	Tons,	27,491	$727,346
Rope,	Pounds,	4,709,651	140,070
Jute,	Pounds,	2,143,949	27,751
Gunny,	Pounds,	10,703,612	110,014
Wax,	Pounds,	1,005,000	60,300
Paper, colors, rope, hemp, jute, etc.,	Not given,	.....	1,548,832
Clay,	Tons,	600	9,536
Other material,		.....	779,833
Total value of material used,		.....	$3,403,682
Rubber Goods (Hard and Soft)—			
Crude rubber,	Pounds,	7,853,011	$4,258,078
Scrap rubber,	Pounds,	5,603,228	352,112
Reclaimed rubber,	Pounds,	1,265,373	160,291
Cotton, duck and sheeting,	Yards,	3,249,796	498,004
Compounds,	Pounds,	3,333,824	100,458
Yarns (cotton and linen),	Pounds,	1,000,000	172,000
Cloth (duck and felt),	Not given,	.....	242,912
Crude rubber, scrap rubber, cotton compounds, etc.,	Not given,	.....	1,699,652
Other material,		.....	2,039,206
Total value of material used,		.....	$9,522,713
Shoes—			
Upper leather,	Feet,	6,030,525	$800,888
Sole leather,	Pounds,	1,138,740	360,906
Cut soles,	Pairs,	704,043	68,952
Upper and sole leather,	Not given,	.....	2,216,437
Other material,		.....	308,434
Total value of material used,		.....	$3,755,617

STOCK OR MATERIAL USED—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Stock Used.	Basis of Measurement.	Aggregate Quantities.	Aggregate Cost Value.
Shirts—			
Muslin,	Yards,	2,287,000	$301,190
Linen,	Yards,	96,320	29,870
Cotton goods,	Yards,	2,029,860	296,379
Flannel cloth,	Yards,	600,000	125,000
Muslin, linen, cotton goods, etc.,	Not given,	.....	195,575
Other material,		.....	113,093
Total value of material used,		.....	$1,061,107
Silk—			
Raw silk,	Pounds,	4,500,586	$18,125,822
Spun silk,	Pounds,	56,522	137,002
Cotton,	Pounds,	1,012,140	298,852
Other material,		.....	3,405,970
Total value of material used,		.....	$21,967,646
Silver goods—			
Gold,	Dwt's,	137,410	$142,015
Silver,	Ounces,	623,353	352,331
Silver,	Not given,	.....	94,086
Other material,		.....	280,595
Total value of material used,		.....	$869,027
Soap and Tallow—			
Tallow,	Pounds,	10,174,430	$435,897
Tallow, grease, oils, rosins, borax and caustic soda,	Not given,	.....	1,192,302
Other material,		.....	309,318
Total value of material used,		.....	$1,937,517
Steel and Iron (Structural)—			
Iron, steel and castings,	Tons,	33,197	$1,102,855
Pig iron,	Tons,	33,450	537,790
Scrap steel,	Tons,	34,000	476,000
Steel plate,	Pounds,	4,276,242	72,087
Other steel and iron,	Not given,	.....	1,055,515
Other material,		.....	499,010
Total value of material used,		.....	$3,743,257
Steel and Iron (Forgings)—			
Pig iron,	Tons,	18,549	$456,690
Steel billets,	Tons,	1,880	53,800
Steel,	Tons,	873	24,705
Scrap iron,	Tons,	8,615	192,615
Scrap steel,	Tons,	1,685	235,590
Bar iron and steel,	Tons,	1,070	49,384
Other steel and iron,	Not given,	.....	891,792
Other material,		.....	333,824
Total value of material used,		.....	$2,238,400

STOCK OR MATERIAL USED—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Stock Used.	Basis of Measurement.	Aggregate Quantities.	Aggregate Cost Value.
Trunks and Traveling Bags—			
Leather,	Sides,	5,332	$15,996
Leather,	Feet,	92,600	114,400
Skins,	Number,	7,074	9,781
Lumber,	Feet,	1,750,000	40,000
Iron,	Pounds,	43,000	13,500
Leather, lumber, metal goods, etc.,	Not given,	.....	314,348
Bag frames,	Doz's,	709	3,906
Other material,		.....	88,036
Total value of material used,		.....	$599,967
Trunk and Bag Hardware—			
Steel,	Pounds,	1,219,750	$39,358
Steel hoops,	Tons,	1,000	40,000
Tin plate,	Boxes,	4,540	50,586
Iron plate,	Boxes,	2,000	17,000
Brass,	Pounds,	444,810	74,438
Sheet zinc,	Tons,	51	7,700
Castings,	Pounds,	177,046	11,711
Iron, steel, brass, etc.,	Not given,	.....	17,761
Other material,		.....	163,538
Total value of material used,		.....	$422,092
Varnish—			
Gum,	Pounds,	3,269,183	$530,344
Linseed oil,	Gallons,	436,624	256,989
Turpentine,	Gallons,	675,664	263,735
Other gum, oil and turpentine,	Not given,	.....	368,636
Other material,		.....	438,706
Total value of material used,		.....	$1,858,410
Woolen and Worsted Goods—			
Wool,	Pounds,	22,449,688	$5,035,709
Wool stock,	Pounds,	1,538,482	83,021
Yarn,	Pounds,	174,230	106,470
Cotton,	Pounds,	138,085	12,488
Cotton warps,	Pounds,	99,803	15,969
Worsted tops,	Pounds,	184,400	73,700
Wool, cotton, silk, waste, etc.,	Not given,	.....	350,327
Other material,		.....	1,249,638
Total value of material used,		.....	$6,927,322

GOODS MADE—Aggregate Quantities and Aggregate Value, 1901.

Industry, and Specified Goods Made.	Basis of Measurement.	Aggregate Quantities.	Aggregate Selling Value.
Agricultural Implements—			
Cream separators,	Number,	5,242	$309,720
Horse cultivators and hoes,	Number,	10,009	82,440
Wheel hoes and seed drills,	Number,	7,364	36,820
Potato planters,	Number,	455	22,750
Lawn mower (horse and hand),	Number,	9,595	54,525
Harrows,	Number,	4,000	30,666
Sprayers,	Number,	100	5,000
Other implements,		.....	79,866
Total value of goods made,		.....	$621,787
Artisans' Tools—			
Files and rasps,	Dozen,	513,400	$676,200
Hammers,	Dozen,	40,279	135,162
Sledges,	Tons,	1,228	120,542
Hatchets and axes,	Dozen,	10,050	23,737
Nippers,	Dozen,	5,100	40,800
Pincers,	Dozen,	1,925	13,475
Saws,	Not given,	.....	122,666
Files, rasps, hammers, hatchets, etc.,	Not given,	.....	518,468
Other tools,		.....	416,462
Total value of goods made,		.....	$2,067,512
Boilers—			
Boilers, stationary and marine,	H. P.	211,639	$2,634,233
Boilers, stationary and marine,	Number,	108	89,647
Copper range boilers,	Number,	2,534	49,587
House heating boilers,	Number,	250	21,375
Stacks,	Number,	40	9,500
Other boilers, stacks, tanks, stokers, bridges and repairs,	Not given,	.....	288,999
Total value of goods made,		.....	$3,093,341
Boxes (Wood and Paper)—			
Paper boxes,	Number,	31,373,860	$590,529
Wood boxes,	Number,	124,100	62,478
Cigar boxes,	Number,	535,000	35,200
Jacquard cards,	Number,	2,032,500	23,000
Boxes (kind not given),	Not given,	.....	520,281
Other boxes, Jacquard cards, etc.,		.....	25,117
Total value of goods made,		.....	$1,256,605
Brewing (Lager Beer, Ale and Porter)—			
Lager beer, ale and porter,	Barrels,	2,311,032	$12,992,405
Other malt products,		.....	348,676
Total value of goods made,		.....	$13,341,081
Brushes—			
Brushes,	Gross,	10,897	$270,893
Brushes, etc.,	Not given,	.....	63,600
Total value of goods made,		.....	334,493

GOODS MADE—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Goods Made.	Basis of Measurement.	Aggregate Quantities.	Aggregate Selling Value.
Buttons (Pearl)—			
Buttons, pearl,	Gross,	194,141	$333,149
Buttons, ivory,	Gross,	165,000	110,000
Buttons and pearl goods,	Not given,	.....	637,361
Total value of goods made,		.....	$1,080,510
Carpets and Rugs—			
Carpets,	Yards,	487,750	$413,819
Jute carpets,	Rolls,	4,090	57,260
Smyrna rugs,	Number,	312,600	371,000
Smyrna rugs,	Not given,	.....	770,000
Jute rugs,	Number,	160,000	56,000
Other goods made,		.....	74,653
Total value of goods made,		.....	$1,742,732
Cigars and Tobacco—			
Cigars,	Number,	56,797,850	$1,904,272
Tobacco and snuff,	Pounds,	25,298,636	8,973,971
Total value of goods made,		.....	$10,894,243
Cornices (Galvanized Iron and Copper)—			
Cornices and skylights,	Number,	1,428	$63,297
Metal shingles,	Square feet,	564,800	46,400
Other cornices and skylights,	Not given,	.....	397,132
Other goods made,		.....	30,775
Total value of goods made,		.....	$537,604
Corset and Corset Waists—			
Corsets and corset waists,	Dozen,	288,924	$1,805,540
Corsets and corset waists,	Not given,	.....	292,678
Total value of goods made,		.....	$2,098,218
Cotton Goods—			
Cotton cloth,	Yards,	4,350,617	$915,842
Cotton yarn,	Yards,	2,779,638	596,022
Handkerchiefs,	Dozen,	2,000,000	833,353
Handkerchiefs,	Not given,	.....	1,008,000
Ladies' underwear,	Dozen,	104,150	736,100
Infant and children dresses,	Dozen,	21,929	236,875
Women's garments,	Dozen,	37,690	346,000
Fabrics,	Square yards,	1,551,948	399,964
Cotton cloth, yarn, etc.,	Not given,	.....	1,070,036
Other goods made,		.....	685,243
Total value of goods made,		.....	$6,827,435

GOODS MADE—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Goods Made.	Basis of Measurement.	Aggregate Quantities.	Aggregate Selling Value.
Fertilizers—			
Fertilizers,	Tons,	244,435	$3,816,178
Bone black,	Tons,	10,525	484,523
Grease,	Tons,	2,635	257,700
Phosphate,	Pounds,	2,306,566	51,919
Fish fertilizers,	Tons,	550	12,000
Other articles,		.....	281,768
Total value of goods made,		.....	$4,904,088
Foundry (Iron)—			
Cast iron pipe,	Tons,	121,234	$3,075,378
Iron castings,	Tons,	56,362	3,027,609
Iron castings,	Not given,	.....	1,691,766
Other articles,		.....	11,999
Total value of goods made,		.....	$7,806,752
Furnaces, Ranges and Heaters—			
Heaters,	Number,	675	$125,361
Furnaces,	Number,	987	124,701
Cooling towers,	Number,	23	195,121
Ranges,	Number,	973	18,886
Steam condensers,	Number,	244	463,184
Boilers,	Pounds,	2,090,078	95,742
Radiators,	Pounds,	8,574,898	261,790
Castings,	Pounds,	3,967,066	168,320
Castings,	Tons,	6,387	565,000
Blowers,	Number,	257	26,000
Furnaces, ranges, stoves, castings, etc.,	Not given,	.....	442,842
Other articles,		.....	626,180
Total value of goods made,		.....	$3,113,127
Glass (Window and Bottle)—			
Glass bottles,	Gross,	458,963	$1,215,248
Jars,	Gross,	69,849	172,608
Glass bottles and jars,	Not given,	.....	3,527,089
Window glass,	Boxes,	29,924	88,948
Window glass,	Not given,	.....	36,720
Other glass goods,		.....	242,232
Total value of goods made,		.....	$5,282,845
Hats (Felt)—			
Hats,	Dozen,	613,343	$7,766,176
Forming hat bodies,	Number,	1,201,750	39,743
Hatters, fur,	Pounds,	386,525	461,006
Hats,	Not given,	.....	462,247
Total value of goods made,		.....	$8,729,172

GOODS MADE—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Goods Made.	Basis of Measurement.	Aggregate Quantities.	Aggregate Selling Value
High Explosives—			
Explosives,	Pounds,	22,310,324	$2,657,851
Dynamite,	Pounds,	6,882,095	714,107
Nitro glycerine,	Pounds,	701,350	395,336
Smokeless gun powder,	Pounds,	200,000	142,000
Acids,	Pounds,	3,060,841	88,859
Blasting caps,	Packages,	300,000	120,000
Exploders,	Packages,	100,000	35,000
Other articles,		.....	5,000
Total value of goods made,		.....	$4,158,153
Jewelry—			
Finished jewelry,	Not given,	.....	$6,855,600
Total value of goods made,		.....	$6,855,600
Knit Goods—			
Underwear,	Dozen,	175,596	$1,047,280
Hosiery,	Dozen,	327,407	255,829
Hosiery,	Not given,	.....	490,000
Other articles,		.....	70,000
Total value of goods made,		.....	$1,863,109
Leather—			
Patent and enameled,	Sides,	809,622	$4,770,515
Carriage and furniture,	Sides,	75,900	1,325,495
Calf skin,	Dozen,	44,592	1,253,700
Glazed kid,	Dozen,	245,025	2,447,512
Aligator skins,	Skins,	13,122	23,468
Book binder, bag and pocketbook,	Sides,	178,296	525,322
Hat,	Gross,	30,397	171,882
Upper,	Dozen,	58,400	561,200
Artificial,	Yards,	1,345,000	631,000
Buffs,	Sides,	55,239	274,454
Patent, enameled, carriage, furniture, shoe, etc.,	Not given,	.....	3,644,838
Other leather (kind not given),		.....	564,498
Total value of goods made,		.....	$16,193,884
Machinery—			
Locomotives,	Number,	165	$2,324,892
Sewing machines and sewing machine parts),	Number,	5,000	6,852,405
Printing,	Number,	181	430,989
Printing,	Not given,	.....	204,519
Textile,	Number,	777	134,661
Canning,	Number,	265	81,395
Cigar,	Number,	1,829	124,613
Electric,	Number,	282	201,325
Woolen,	Not given,	.....	141,272
Corliss engines,	Number,	73	383,823
Marine engines,	Number,	15	67,000
Marine engines,	Not given,	.....	345,000

GOODS MADE—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Goods Made.	Basis of Measurement.	Aggregate Quantities.	Aggregate Selling Value.
Machinery (Continued)—			
Stationary engines,	Number,	532	644,498
Gas engines,	Number,	342	123,240
Other machinery and castings,	Not given,	.....	7,065,071
Total value of goods made,		.....	$19,124,703
Metal Goods—			
Copper rods, wire, etc.,	Pounds,	25,709,651	$4,685,249
Brass rods and tubing,	Pounds,	1,493,815	287,108
Brass and iron bedsteads,	Number,	47,309	323,355
Purse and bag frames,	Gross,	30,000	45,000
Belt buckles,	Gross,	7,500	45,000
Safety pins,	Gross,	500,000	200,000
Lock washers,	Number,	6,443,000	30,465
Lock washers and nut locks,	Not given,	.....	120,000
Iron nut locks,	Number,	9,984,844	52,029
Gas and electric fixtures,	Not given,	.....	160,829
Builders' brass and bronze goods,	Not given,	.....	184,161
Jar caps and trimmings,	Gross,	230,000	150,000
Cash registers,	Number,	438	50,370
Trunk and case locks,	Dozen,	5,973	13,029
Other metal goods,		.....	4,708,467
Total value of goods made,		.....	$11,055,062
Oil Cloth (Floor and Table)—			
Linoleum,	Pieces,	54,000	$810,000
Linoleum,	Square yards,	1,135,020	319,669
Linoleum and floor oil cloth,	Square yards,	2,322,226	505,433
Oil cloth (floor),	Square yards,	4,191,250	797,340
Oil cloth (table),	Yards,	5,812,064	740,329
Enamel oil cloth,	Yards,	1,400,000	180,000
Enamel oil cloth,	Pieces,	19,278	89,000
Other goods,		.....	10,090
Total value of goods made,		.....	$3,451,861
Oil—			
Refined oil,	Gallons,	373,929,695	$21,288,396
Lubricating oils,	Gallons,	37,676,418	2,971,987
Fuel oil and wax,	Gallons,	61,389,253	3,663,486
Naptha,	Gallons,	77,232,957	3,598,859
Tar,	Gallons,	30,562,365	811,144
Wax,	Gallons,	118,133	39,870
Oil vitriol,	Tons,	59,447	594,470
Benzine,	Gallons,	438,350	21,918
Fish oil and scrap,	Not given,	.....	53,650
Other oils, etc.,		.....	4,188,706
Total value of goods made,		.....	$37,232,486

GOODS MADE—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Goods Made.	Basis of Measurement.	Aggregate Quantities.	Aggregate Selling Value.
Paper—			
Wall paper,	Rolls,	32,518,181	$1,766,783
Manilla paper,	Pounds,	15,447,750	821,545
Tissue paper,	Tons,	2,523	547,330
Binder boards,	Tons,	26,472	824,914
Book paper,	Tons,	4,400	266,017
Parchment paper,	Pounds,	3,500,000	306,250
Coated paper and card,	Tons,	2,345	224,498
Waxed paper,	Not given,	.....	325,763
Copying paper,	Pounds,	1,000,000	98,000
Pouncing paper,	Reams,	1,144	22,880
Building paper,	Tons,	3,000	65,000
Roofing paper,	Tons,	2,200	70,500
Other paper,		.....	640,746
Total value of goods made,		.....	$5,980,226
Rubber Goods—			
Rubber boots and shoes,	Pairs,	1,568,331	$1,583,385
Belting,	Pounds,	2,683,143	667,409
Hose,	Pounds,	3,249,800	895,488
Packing,	Pounds,	1,364,190	429,280
Reclaimed rubber,	Pounds,	5,156,901	568,260
Pneumatic tires,	Pairs,	110,284	165,426
Mechanical goods,	Not given,	.....	810,150
Druggists' goods,	Not given,	.....	316,986
Stationers' goods,	Not given,	.....	364,822
Emery wheels,	Not given,	.....	160,255
Belting, hose, packing, etc.,	Not given,	.....	5,238,117
Other rubber goods,		.....	3,221,667
Total value of goods made,		.....	$14,421,245
Shoes—			
Men's, women's and children's shoes,	Pairs,	3,568,190	$4,055,153
Children's shoes,	Dozen pairs,	127,960	1,078,955
Boots and shoes,	Not given,	.....	1,280,703
Shoe stock,		.....	168,208
Sandals,	Pairs,	115,129	53,875
Total value of goods made,		.....	$6,636,894
Shirts—			
Shirts (men's and boy's),	Dozen,	415,527	$2,334,366
Commission work,		.....	24,712
Total value of goods made,		.....	$2,359,078
Silk (Broad and Ribbon)—			
Broad silk,	Yards,	30,119,123	$20,981,449
Broad silk,	Pieces,	71,362	2,357,260
Tie silk,	Yards,	3,567,544	2,273,609
Ribbons,	Pieces,	3,106,339	3,187,426
Ribbons,	Boxes,	228,677	2,476,491
Ribbons,	Yards,	55,005,323	1,217,477
Ribbons,	Cartons,	57,126	505,465

GOODS MADE—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Goods Made.	Basis of Measurement.	Aggregate Quantities.	Aggregate Selling Value.
Silk, Broad and Ribbon, (Continued)—			
Handkerchiefs,	Dozen,	43,443	106,428
Mufflers,	Dozen,	31,226	206,400
Vestings,	Yards,	85,114	62,556
Veilings,	Yards,	1,798,701	172,505
Veils,	Dozen,	3,300	33,484
Umbrella silk,	Yards,	185,000	140,000
Cotton plush,	Yards,	313,463	125,385
Silk plush,	Yards,	321,528	192,916
Lining silk,	Yards,	91,612	114,515
Braids,	Gross yards,	288,600	129,800
Other silk goods,		.....	2,591,226
Total value of goods made,		.....	$36,874,392
Silver Goods—			
Silverware and silver novelties,	Not given,	.....	$2,286,240
Total value of goods made,		.....	$2,286,240
Soap and Tallow—			
Laundry and toilet soap,	Pounds,	3,510,600	$185,129
Laundry, toilet and other soap,	Not given,	.....	2,181,761
Tallow,	Pounds,	2,376,827	152,750
Candles and candle stock,	Pounds,	4,750,000	375,000
Other articles,		.....	245,921
Total value of goods made,		.....	$3,140,561
Steel and Iron (Structural)—			
Structural steel and iron,	Tons,	100,087	$4,614,157
Structural steel and iron,	Not given,	.....	40,545
Wire and wire rope,	Tons,	5,286	807,011
Steel pipe,	Pounds,	6,383,218	194,270
Other articles,		.....	252,418
Total value of goods made,		.....	$5,908,401
Steel and Iron (Forgings)—			
Steel castings,	Tons,	48,128	$4,124,850
Iron and steel forgings,	Tons,	7,961	570,285
Iron and steel forgings,	Not given,	.....	142,000
Iron castings,	Pounds,	3,206,793	196,890
Iron and steel car wheels,	Tons,	4,680	352,205
Carriage and wagon springs,	Tons,	475	55,275
Other forgings,		.....	10,682
Total value of goods made,		.....	$5,452,187
Trunks and Traveling Bags—			
Trunks,	Number,	97,177	$289,500
Bags, satchels and cases,	Number,	94,573	330,289
Trunks, bags, satchels and cases,	Not given,	.....	489,500
Other articles,		.....	6,376
Total value of goods made,		.....	$1,115,665

GOODS MADE—Aggregate Quantities and Aggregate Value, 1901—(Continued).

Industry, and Specified Goods Made.	Basis of Measurement.	Aggregate Quantities.	Aggregate Selling Value
Trunk and Bag Hardware—			
Bag, purse and pocket book frames,	Gross,	62,208	$231,000
Bag frames and trunk hardware,	Not given,	.....	727,354
Total value of goods made,		.....	$958,354
Varnishes—			
Varnish,	Gallons,	936,765	$1,272,316
Varnish and Japans,	Gallons,	979,418	456,045
Varnishes,	Not given,	.....	1,409,551
Varnish, shellac, Japans and dryers,	Not given,	.....	531,851
Other articles,		.....	48,176
Total value of goods made,		.....	$3,717,939
Woolen and Worsted Goods—			
Woolen and worsted goods,	Pieces,	98,000	$2,954,000
Woolen and worsted goods,	Yards,	3,953,921	2,095,899
Woolen and worsted goods,	Pounds,	562,500	475,773
Woolen and worsted goods,	Not given,	.....	628,842
Worsted yarn,	Pounds,	4,312,076	3,437,859
Wastes,		.....	803,329
Other goods,		.....	647,206
Total value of goods made,		.....	$11,042,908

Steam Railroads in New Jersey, 1902.

This presentation is based on reports made to the Bureau by the seven great trunk line companies, whose roads traverse or terminate in New Jersey.

The data relates to employes whose duties are performed in whole or in part within the geographical limits of this State, and is for the fiscal year ending June 30, 1902. The tables show the number of miles of road owned and operated in New Jersey, the number of persons employed, classified according to the character of the service rendered, the aggregate number of days employed, the aggregate amounts paid in wages, the number of employs injured while on duty, and the number of these whose injuries resulted in death.

The average number of days employed during the year, the average number of hours worked per day, the average daily wages, and the average yearly earnings is also given, for each of the several classifications of employes. These data are given in separate tables for each road, and the totals, aggregates, and averages, are brought together in one summary table of all the lines.

The aggregate number of miles operated in 1901 was 1,660.40, and in 1902 it is 1,576.63, a decrease of 83.77 miles. The Central Railroad of New Jersey, the Delaware, Lackawanna and Western, the Erie, and the Lehigh Valley Companies report the same number of miles for both years. The Pennsylvania, and the Philadelphia and Reading Companies report small increases of 0.31 and 1.10 miles respectively. The largest decrease is reported by the New York, Susquehanna & Western Company, which operated 213.42 miles in 1901, and only 131.22 in 1902.

The aggregate number of persons employed of all classes was 32,405 in 1901, and in 1902, it is 34,809; an increase of 2,407.

The average number of days employed during the year was 305 in 1901, and in 1902 the average is 292, a decrease of 13 days.

The aggregate amount paid in wages to all classes of labor was $18,064,986 in 1901, and in 1902 it is $19,087,158, an increase of $1,022,172. The average wages per day was $1.83 in 1901, and is $1.87 in 1902, an increase of $.04 per day. The average yearly earnings show a decrease in 1902 as compared with 1901. In the earlier year the amount was $557.47, and in 1902 it is $548.34, a falling off of $9.13, which is accounted for by the fact that the average number of days worked in 1902 is 13 less than in 1901.

The accidents to employes while on duty is reported by only four of the seven companies included in the presentation, viz.: The Pennsylvania, Philadelphia and Reading, Central, and Delaware, Lackawanna and Western. The aggregate number of persons employed on these lines is 29,325, and the number of accidents to employes reported is 1,100, of which number 40 resulted in death. This is 3.74 per cent. of the total number. Ninety per cent. of the casualties occurred in the several classes of employes known as trainmen; the trackmen were also heavy sufferers, as will be seen by a reference to the tables, the largest proportion of deaths resulting from accidents, having occurred in this class of labor.

Although there are many occupations in which the nominal rates of wages are higher, the annual earnings of railroad employes, are equalled by few, and surpassed by none. The average yearly earnings of conductors and engineers is over $1,000 per year, and the general average for all classes of railroad employes is $502.31. The average yearly earnings in all industries as shown by the tables of statistics of manufactures for 1902 is $446.66 or $55.65 per year less than the average earnings of railroad men.

Railroad employes have an important advantage over most other kinds of laborers in the fact that their employment is, as a rule, absolutely steady; there is therefore little or no fluctuation in the amount of yearly income.

The railroad service employs a far greater proportion of the working population of the State than does any other single industry carried on within its borders. The service, although a dangerous one, attracts men of high physical and mental qualities, and is perhaps because of its dangers more sought after than any other form of employment.

Summary Table No. 1 shows the total aggregates and averages of all the roads brought together. The tables that follow the summary, give the same items for the roads separately, a table being devoted to each of them.

Classification of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30th, 1902.

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

SUMMARY TABLE No. 1—Aggregates and Averages by Companies.

Classification.	Number of Miles of Road in New Jersey.	Number of Persons Employed.	Aggregate number of Days Employed.	Average number of Days Employed, per Employe.	Average number of Hours Employed, per Day.	Avarage number of days during year not on duty, Sundays included.	Aggregate Amount paid in Wages.	Average Wages per Day.	Average Yearly Earnings yer Employe.	Number of Employes Injured during year.	Number of Employes whose Injuries Resulted in Death.
Pennsylvania Railroad Company,	404.84	14,799	4,366,673	295	10	70	$8,597,028 17	$1 96	$580 92	642	17
Philadelphia and Reading Railway Company,	222.61	1,933	625,612	324	.....	41	982,540 27	1 58	508 30	42	5
Central Railroad Company of New Jersey,	390.00	6,887	1,875,425	272	10.8	93	3,623,523 43	1 93	526 14	279	9
Morris and Essex Railroad Company,	176.24	5,706	1,670,013	292	10.6	73	2,866,214 95	1 72	502 31	137	9
Erie Railroad Company,	141.93	2,068	604,118	292	10.6	73	1,126,033 58	1 86	544 50	.....	....
Lehigh Valley Railroad Company,	109.79	2,272	719,714	316	.....	49	1,331,006 17	1 85	585 83	.....	....
New York, Susquehanna and Western Railroad Company,	131.22	1,144	310,860	272	10.6	93	560,811 01	1 80	490 23	.....	....
Totals,	1,576.63	34,809	10,172,415	292	10.5	73	$19,087,157 58	$1 87	$548 34	1,100	40

Classification of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30th, 1902.

Number of Persons Employed, Number of Days on Duty, Total Amount Paid in Wages, Average Daily Wage Rates, and Annual Earnings per Employe for Each Class.

Pennsylvania Railroad Company. Number of Miles of Road in New Jersey—404.84.

Classification.	Number of Persons Employed.	Aggregate Number of Days Employed.	Average Number of Days Employed per Employe.	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 Employe.	Number of Employes Injured during Year.	Number of Employes whose Injuries Resulted in Death.
Conductors,	392	130,181	332	11	33	$396,426 27	$3 05	$1,011 29	2	....
Brakemen,	924	292,391	316	11	49	588,566 21	2 02	636 98	34	....
Engineers,	410	128,991	315	10	50	449,808 63	3 49	1,097 09	4	....
Firemen,	412	131,492	319	11	46	279,030 09	2 12	677 26	4	....
Switchmen,	188	63,882	340	12	25	95,533 61	1 50	508 16	5	....
Flagmen,	351	120,763	344	12	21	183,852 78	1 52	523 80	8	1
Engine wipers, etc.,	279	86,959	312	11	53	136,554 95	1 57	489 44	6	....
Yardmen,	688	224,089	326	12	39	333,284 29	1 49	484 42	4	....
Trackmen,	1,873	538,409	287	10	78	736,167 02	1 37	393 04	71	10
Agents,	165	57,969	351	10	14	115,936 83	1 91	702 65	....	....
Assistant agents,	38	12,513	329	10	36	18,243 00	1 46	480 08	....	....
Baggagemen,	150	49,742	332	10	33	96,254 21	1 94	641 69	1	....
Clerks,	877	274,609	313	9	52	533,710 00	1 94	608 56	1	....
Other depot men,	854	282,942	331	10	34	629,719 84	2 23	737 38	29	....
Machinists and helpers,	483	153,804	318	10	47	295,449 53	1 92	611 70	10	....
Blacksmiths and helpers,	150	46,130	308	10	57	82,285 61	1 78	548 57	3	....
Boilermakers and helpers,	104	31,971	307	9	58	62,131 32	1 94	597 42	6	....
Car builders and repairers,	703	215,431	306	9	59	401,867 85	1 87	571 65	11	....
Carpenters and bridge builders,	440	124,076	282	10	83	236,484 58	1 91	537 46	34	3
Construction gangs,	175	18,598	106	10	259	24,746 20	1 33	141 41	....	....
Telegraph operators,	407	130,521	321	10	44	245,622 58	1 88	603 50	1	....
Division Superintendent's office,	54	18,224	337	9	28	54,819 88	3 01	1,015 18	....	....
Other employees,	4,682	1,232,988	263	10	102	2,600,532 89	2 11	555 43	408	3
Total,	*14,799	4,366,673	295	10	70	$8,597,028 17	$1 96	$580 92	642	17

*2,197 employees 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 30th, 1902.

Number of Persons Employed, Number of Days on Duty, Total Amount Paid in Wages, Average Daily Wage Rates, and Annual Earnings per Employe for Each Class.

Atlantic City Railroad—Delaware and Bound Brook Railroad—Port Reading Railroad (Philadelphia and Reading Railway Company). Number of Miles of Road in New Jersey—222.61.

Classification.	Number of Persons Employed.	Aggregate Number of Days Employed.	Average Number of Days Employed per Employe.	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 Employe.	Number of Employes Injured during Year.	Number of Employes whose Injuries Resulted in Death.
Conductors,	56	18,661	333	....	32	$52,438 69	$2 81	$936 41	4	....
Brakemen,	116	38,937	336	....	29	70,087 40	1 80	604 20	15	1
Engineers,	57	19,755	347	....	18	66,970 51	3 39	1,174 92	3	....
Firemen,	57	19,721	346	....	19	39,442 66	2 00	691 98	8	....
Switchmen,	27	9,307	345	....	20	12,563 94	1 35	465 33	....	....
Flagmen,	39	13,608	349	....	16	14,424 75	1 06	369 87	....	....
Engine wipers, etc.,	26	8,619	332	....	33	11,376 60	1 32	437 56	....	....
Yardmen,	28	8,974	321	....	44	17,319 83	1 93	618 57	....	....
Trackmen,	512	156,020	305	....	60	202,826 54	1 30	396 15	....	....
Agents,	72	25,201	350	....	15	40,070 28	1 59	556 53	....	....
Assistant agents,	15	5,170	345	....	20	5,689 02	1 10	379 26	....	....
Baggagemen,	34	11,942	351	....	14	21,492 55	1 80	632 13	....	....
Clerks,	47	16,487	351	....	14	24,895 43	1 51	529 69	....	....
Other depot men,	190	58,877	310	....	55	86,549 26	1 47	455 52	....	....
Machinists and helpers,	13	4,122	317	....	48	8,861 70	2 15	681 67	....	....
Blacksmiths and helpers,	4	1,155	289	....	76	2,290 60	2 00	572 65	....	....
Boilermakers and helpers,	6	1,849	308	....	57	4,163 50	2 25	693 92	....	....
Car builders and repairers,	32	10,294	322	....	43	17,499 22	1 70	546 85	....	....
Carpenters and bridge builders,	37	11,620	314	....	51	23,240 88	2 00	628 13	....	....
Construction gangs,	146	43,687	299	....	66	56,792 65	1 30	388 99	....	....
Telegraph operators,	33	11,553	350	....	15	17,908 02	1 55	542 67	....	....
Division Superintendent's office,	4	1,316	329	....	36	2,830 00	2 15	707 50	....	....
Other employees,	382	128,737	337	....	28	182,806 24	1 42	478 55	12	4
Total,	1,933	625,612	324	....	41	$982,540 27	$1 58	$508 30	42	5

Classification of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30th, 1902.

Number of Persons Employed, Number of Days on Duty, Total Amount Paid in Wages, Average Daily Wage Rates, and Annual Earnings per Employe for Each Class.

Central Railroad Company of New Jersey. Number of Miles of Road in New Jersey—390.00.

Classification.	Number of Persons Employed.	Aggregate Number of Days Employed.	Average Number of Days Employed per Employe.	Average Number of Hours Employed per Day.	Average Number of days during year not on Duty, Sundays included.	Aggregate Amount Paid in Weges,	Average Wages per Day.	Average Yearly Earnings per Employe.	Number of Employes Injured during Year.	Number of Employes whose Injuries Resulted in Death.
General officers,	2	599	299	....	66	$8,374 96	$13 98	$4,187 48	....	....
Other officers,	8	3,825	308	....	57	35,954 64	9 40	4,494 33	....	....
Clerks,	76	22,898	301	9	64	44,028 43	1 92	579 32	....	....
Station agents,	186	47,747	257	11	108	93,308 56	1 95	501 66	2	....
Other station men,	518	178,295	344	11	21	295,296 06	1 65	570 07	46	....
Engineers,	285	97,366	342	12	23	335,733 83	3 44	1,178 01	21	1
Firemen,	311	98,183	316	12	49	214,644 45	2 19	690 17	20	....
Conductors,	182	57,122	314	12	51	166,269 36	2 91	913 56	17	1
Other trainmen,	756	209,725	277	12	88	431,865 03	2 06	571 25	71	3
Machinists,	138	41,472	301	10	64	102,342 89	2 47	741 61	26	....
Carpenters,	199	68,038	342	10	23	141,252 59	2 08	709 81	6	....
Other shopmen,	754	177,690	236	12	129	333,475 55	1 88	442 27	....	....
Section foremen,	100	30,310	303	10	62	58,295 02	1 92	582 95	....	....
Other trackmen,	1,284	276,168	215	10	150	345,477 44	1 25	269 06	2	....
Switchmen, flagmen and watchmen,	357	100,465	281	12	84	168,515 87	1 67	472 03	8	1
Telegraph operators and dispatchers,	101	31,521	312	12	53	66,518 35	2 11	658 60	....	....
Employees, account floating equipment,	350	44,695	128	10	237	97,130 50	2 17	277 52	....	....
All other employees and laborers,	1,280	339,306	304	10	61	685,039 90	1 75	535 19	60	3
Total,	6,887	1,875,425	272	10.8	93	$3,623,523 43	$1 93	$526 14	279	9

Classification of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30th, 1902.

Number of Persons Employed, Number of Days on Duty, Total Amount Paid in Wages, Average Daily Wage Rates, and Annual Earnings per Employe for Each Class.

Morris and Essex Railroad Company. Number of Miles of Road in New Jersey—176.24.

Classification.	Number of Persons Employed.	Aggregate Number of Days Employed.	Average Number of Days Employed per Employe.	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 Employe.	Number of Employes Injured during Year	Number of Employes whose Injuries Resulted in Death.
Conductors,	110	36,220	329	12	36	$114,985 24	$3 17	$1,045 32	7	....
Brakemen,	311	96,684	311	12	54	197,295 86	2 04	634 39	26	1
Engineers,	194	62,253	321	10	44	208,741 66	3 35	1,075 99	6	....
Firemen,	190	62,253	321	10	44	124,113 42	1 99	653 23	13	1
Switchmen,	49	16,428	335	12	30	26,867 66	1 64	548 32	....	....
Flagmen,	344	121,115	352	12	13	129,172 80	1 07	375 50	2	....
Engine wipers, etc.,	41	13,978	341	10	24	17,200 04	1 23	419 51	....	....
Yardmen,	275	84,700	308	12	57	175,497 84	2 07	637 56	12	....
Trackmen,	1,162	269,826	232	10	133	339,781 57	1 26	292 41	15	5
Agents,	105	38,273	365	12	....	73,229 07	1 91	697 42	....	....
Baggagemen,	103	35,145	341	12	24	53,836 56	1 53	522 69	....	....
Clerks,	166	53,472	322	9.5	43	103,853 64	1 95	625 62	....	....
Other depot men,	168	67,729	403	12	....	79,127 10	1 15	470 99	1	....
Machinists and helpers,	154	46,531	302	10	63	96,516 58	2 07	626 73	2	....
Blacksmiths and helpers,	59	16,837	285	10	80	32,611 47	1 94	552 74	....	....
Boilermakers and helpers,	50	14,919	298	10	67	28,448 45	1 91	568 97	1	....
Car builders and repairers,	561	189,776	338	10	27	310,315 34	1 64	553 15	15	2
Carpenters and bridge builders,	329	76,213	232	10	133	187,205 64	2 46	569 01	13	....
Telegraph operators,	31	11,327	365	10	....	24,259 19	2 14	782 55	....	....
Division Superintendent's office,	13	4,069	313	9	52	10,720 00	2 63	824 61	....	....
Supply department,	47	14,810	315	10	50	20,774 79	1 40	442 01	....	....
Other employees,	1,244	337,455	271	10	94	511,661 03	1 52	411 30	24	....
Total,	5,706	1,670,013	292	10.6	73	$2,866,214 95	$1 72	$502 31	137	9

Classification of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30th, 1902.

Number of Persons Employed, Number of Days on Duty, Total Amount Paid iu Wages, Average Daily Wage Rates, and Annual Earnings per Employe for Each Class.

Erie Railroad Company. Number of Miles of Road in New Jersey—141.933.

Classification.	Number of Persons Employed.	Aggregate Number of Days Employed.	Average Number of Days Employed per Employe.	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 Employe.
General officers,	2	621	310	8	55	$15,757 50	$12 69	$7,878 75
Conductors,	43	14,236	331	10	34	42,798 63	3 01	995 32
Brakemen,	147	45,518	309	10	56	86,423 92	1 90	586 55
Engineers,	83	25,003	301	10	64	86,667 29	3 47	1,044 18
Firemen,	91	25,331	278	10	87	52,742 90	2 08	579 59
Switchmen, Flagmen, Engine wipers, etc., Yardmen,	130	39,643	305	12	60	76,690 96	1 93	589 93
Trackmen,	277	71,998	260	12	105	89,752 12	1 25	324 01
Agents, Assistant agents,	38	13,214	347	12	18	23,211 85	1 75	610 84
Baggagemen, Clerks, Other depot men,	344	105,091	305	12	60	163,423 92	1 56	475 07
Machinists and helpers, Blacksmiths and helpers, Boilermakers and helpers,	55	15,460	281	10	84	38,112 24	2 46	692 95
Car builders and repairers, Carpenters and bridge builders,	57	15,888	279	10	86	34,645 57	2 18	607 82
Telegraph operators,	61	20,258	331	10	34	35,752 39	1 76	586 10
Supply department, Other employees,	740	211,857	286	12	79	380,054 29	1 79	513 59
Total,	2,068	604,118	292	10.6	73	$1,126,033 58	$1 86	$544 50

Classification of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30th, 1902.

Number of Persons Employed, Number of Days on Duty, Total Amount Paid in Wages, Average Daily Wage Rates, and Annual Earnings per Employe for Each Class.

Lehigh Valley Railroad Company. Number of Miles of Road in New Jersey—109.79.

Classification.	Number of Persons Employed.	Aggregate Number of Days Employed.	Average Number of Days Employed per Employe.	Average Number of days during year not on Duty, Sundays included.	Aggregate Amounts Paid in Wages.	Average Wages per Day.	Average Yearly Earnings per Employe.
Conductors,	20	7,090	355	10	$21,595 56	$3 05	$1,079 78
Brakemen,	54	17,058	316	49	34,393 12	2 01	636 91
Engineers,	103	29,958	291	74	100,338 48	3 35	974 04
Firemen,	104	31,073	299	66	68,049 30	2 19	654 32
Switchmen, Flagmen, Yardmen,	286	97,026	350	15	196,506 54	2 03	687 08
Engine wipers, etc.,	66	29,956	454	....	42,364 72	1 41	641 89
Trackmen,	531	152,086	286	79	196,356 91	1 29	369 79
Agents, Assistant agents, Clerks,	199	69,602	350	15	143,545 07	2 06	721 33
Baggagemen, Other depot men,	579	173,847	300	65	323,473 99	1 86	558 68
Machinists and helpers,	18	5,961	331	34	12,700 95	2 13	705 61
Blacksmiths and helpers, Boilermakers and helpers,	56	19,999	357	8	32,255 09	1 61	575 98
Car builders and repairers,	41	13,253	323	42	22,381 58	1 69	545 89
Carpenters and bridge builders,	50	15,936	318	47	37,917 27	2 38	758 35
Telegraph operators,	54	18,818	348	17	31,735 92	1 68	587 70
Division Superintendent's office,	18	6,046	336	29	18,217 99	3 01	1,012 11
Other employees,	93	32,005	344	21	49,173 68	1 53	528 75
Total,	2,272	719,714	316	49	$1,331,006 17	$1.85	$585 83

Classification of Persons Employed on the Steam Railroads in New Jersey, for the Fiscal Year Ending June 30th, 1902.

Number of Persons Employed, Number of Days on Duty, Total Amount Paid in Wages, Average Daily Wage Rates, and Annual Earnings per Employe for Each Class.

New York, Susquehana and Western Railroad Company. Number of Miles of Road in New Jersey—131.22.

Classification.	Number of Persons Employed.	Aggregate Number of Days Employed.	Average Number of Days Employed per Employe.	Average Number of Hours Employed per Day.	Average Number of days during year not on Duty, Sundays included.	Aggregate Amounts Paid in Wages.	Average Wages per Day.	Average Yearly Earnings per Employe.
Conductors,	44	13,669	310	10	55	$39,913 67	$2 92	$907 13
Brakemen,	126	35,446	280	10	85	65,746 02	1 85	521 79
Engineers,	53	16,139	304	10	61	55,708 55	3 45	1,051 10
Firemen,	52	15,688	301	10	64	31,166 96	1 99	599 36
Switchmen, Flagmen, Watchmen,	57	18,468	324	12	41	29,636 04	1 60	519 93
Agents, Assistant agents,	59	20,937	355	12	10	34,062 13	1 63	577 32
Baggagemen, Clerks, Other depot men,	192	41,846	218	12	147	70,408 07	1 68	366 71
Machinists and helpers, Blacksmiths and helpers, Boilermakers and helpers,	23	6,280	273	10	92	15,146 03	2 41	658 52
Car builders and repairers, Carpenters and bridge builders,	15	4,142	276	10	89	7,896 77	1 91	526 45
Telegraph operators,	14	4,834	345	10	20	9,959 55	2 06	711 39
Other employees,	509	133,411	262	12	103	201,167 22	1 51	395 22
Total,	1,144	310,860	272	10.6	93	$560,811 01	$1 80	$490 23

The Fruit and Vegetable Canning Industry of New Jersey, 1901.

There are few industries, if any, more intimately related to the growth of population and the commercial and industrial development of the civilized world than the process for the preservation of food commonly known as "canning."

To prevent the decay of articles of food, and preserve unimpaired their flavor and nutritive qualities for long periods of time, is an end that has engaged the thoughts and exercised the ingenuity of man from the earliest time. Before the discovery of a means for doing this, life was very much on the feast or famine plane. The crops of each season were consumed where grown, or allowed to rot, for the superfluity could not be carried over to meet the wants of other years when Nature was not so bountiful.

Through the process of canning as at present carried on, the reserve stock of food supplies has become practically inexhaustible. The products of all climes are interchanged, and the luxuries that grow only in certain localities are now consumed in all.

The perfect methods now in use are the results of experiments extending backward for centuries. Evaporation and the use of salt were the only methods known or practised in the preservation of foods until about the beginning of the Nineteenth Century. The French Government enlisted the interest of scientists in the subject of preserving foods for sea service by the offer of a large reward for a successful and practical method of doing it. The hermetic sealing of foods in vessels and their immersion in boiling water to neutralize the effects of the air remaining within, was the formula finally evolved and adopted.

The process was given out to manufacturers and soon preserved foods were being produced in every country in Europe. The process was patented in England—fish, fruits and vegeta-

bles being the materials handled, and every possible effort was made to keep it a secret.

This could not be done, however, for any great length of time, and within five years after its introduction in England, workmen from establishments there, had brought a knowledge of the process to the United States. The industry was established here about 1820; the first establishment being in New York City. The formula soon became known, and food preserving establishments sprang up in all the large cities of the country.

Tin cans took the place of glass jars to a large extent, these being less liable to be broken in handling and costing less for transportation. Patents were issued to the inventor of the tin can, and a very extensive industry soon grew out of making them. Until a comparatively recent date, the cans were made by hand, and the process which was slow and expensive added materially to the cost of the food which was packed in them.

Improvements in the cans and in the method of producing them were made from time to time, until the perfect vessel now in general use was developed. The can is now entirely a machinery product and costs but little compared with the crude ones of earlier times that were made by hand.

In many New Jersey canneries, both fruit and vegetables are handled, and the cans used by several firms are manufactured on the premises.

The output for the year 1901 is not up to the average, several establishments having canned no tomatoes because of their scarcity and high price during the season. The number of establishments reporting is forty-six, five less than were operated during the season of 1900. These five are vegetable canners exclusively and their principal product being tomatoes, work was suspended because, as before stated, of the limited supply of that vegetable.

Twelve establishments are operated by corporations or stock companies and have 226 stockholders. Thirty-four are owned by private firms having a total of fifty-eight partners. As compared with 1900, there is an increase of twenty-four stockholders in the corporations, and a decrease of eight in the number of partners in private firms.

The total amount of capital invested is $873,195; that for 1900 was $897,104—a falling off for 1901 of $25,909. The cap-

ital invested in the corporate form of management is $220,495; an average of $975.60 for each stockholder. The amount controlled by private firms is $652,700, which averages $11.254 for each partner.

The total number of persons employed is 6,014, of whom 3,920 are females. In 1900, 6,428 were employed, 4,033 of the number being females. The falling off in the total number of employes for 1901 as compared with 1900 is 414.

The total amount paid in wages is $267,828, or $19,004 less than in 1900.

Twenty-three establishments employ less than 100 persons; seventeen employ from 100 to 200; three employ from 200 to 300; and three from 385 to 600. Eight establishments employing in the aggregate 1,607 persons worked an average of 63 days at canning goods, and the balance of the year on manufacturing cans. The time employed at canning and the wages paid for that work only is given in Table Number One, it having been found impossible to ascertain the number of the working force in these factories that have been retained through the year on the production of cans.

In the three other establishments, the range of employment was from 10 to 250 days, and the average for all 56.4 days. This is much in excess of the time that could have been consumed in actual canning operations, and is no doubt due to the fact that many firms, among them the largest ones, have made no distinction between the time engaged in canning when the full force was employed, and that which was spent in the after operations of marketing the goods, with only a very small proportion of that number at work. The number of days in operation is thus made to appear much greater than it really was. Thirty-four out of the forty-six establishments reporting, give a number of days in operation ranging from 10 to 60. The average time worked in these factories which constitute 74 per cent. of the total number, is 31 days, which may be accepted as the average duration of a season's work. The earnings of the men and women employed averaged $44.53 for each individual, or $1.43 per day for the time actually worked. This is an increase of 24 cents a day, as compared with the earnings of 1900.

The geographical distribution of the canneries remain the same as last year; that is to say, all but a few of the total number are

located in Salem, Cumberland, Hunterdon and Monmouth Counties. The comparative importance of the industry in these counties is in the order in which they are named above. The remaining establishments are found in Cape May, Gloucester, Mercer, Union and Ocean Counties.

The list of produce canned includes every variety of fruits and vegetables grown in New Jersey that is placed upon the market in preserved form.

The product of vegetables is as follows:

TOMATOES.

3-pound cans	746,688 doz.
2-pound cans	17,804 doz.
Gallon cans	60,431 doz.

GREEN PEAS.

3-pound cans	1,800 doz.
2-pound cans	178,489 doz.

LIMA BEANS.

3-pound cans	1,100 doz.
2-pound cans	143,192 doz.

ASPARAGUS.

3-pound cans	700 doz.

PUMPKIN.

3-pound cans	28,621 doz.
2-pound cans	120 doz.
Gallon cans	3,342 doz.

STRING BEANS.

2-pound cans	4,173 doz.

SWEET POTATOES.

3-pound cans	34,842 doz.
2-pound cans	2,274 doz.

BEETS.

3-pound cans	1,400 doz.

SQUASH.

3-pound cans	1,200 doz.

CORN.

3-pound cans	100 doz.

BAKED BEANS.

3-pound cans	6,000 doz.

The varieties and quantities of fruit canned were as follows:

STRAWBERRIES.

1-pound cans	2,136 doz.
2-pound cans	6,139 doz.
Gallon cans	14,766 doz.

PEARS.

3-pound cans	35,225 doz.
2-pound cans	656 doz.

BLACKBERRIES.

2-pound cans	784 doz.

RASPBERRIES.

2-pound cans	132 doz.

CHERRIES.

2-pound cans	120 doz.
Gallon cans	351 doz.

PEACHES.

3-pound cans	33 doz.
Gallon cans	881 doz.

PINEAPPLE.

3-pound cans	25 doz.

APPLES.

3-pound cans	200 doz.
Gallon cans	1,811 doz.

RHUBARB.

Gallon cans	117 doz.

GOOSEBERRIES.

2-pound cans	20 doz.

The location, capital invested, number of persons employed, number of days in operation, and selling value of the product is given for each establishment on Table Number One, which follows. On Tables Number Two and Three are shown the varieties and quantities of canned fruits and vegetables produced by individual factories.

The Fruit and Vegetable Canning Industry of New Jersey.

Location of Canneries, 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 1901.

TABLE No. 1.

Office Number.	Location of Cannery.	Management: Private Firm? Number of Partners.	Management: Corporation? Number of Stockholders.	Capital Invested.	Number of Persons Employed: Male.	Number of Persons Employed: Female.	Number of Persons Employed: Total.	Total Amount Paid in Wages.	Selling Value of Product.	Number of Days in Operation.
1	Alloway,	1	.....	$25,000	65	105	170	$4,955	$19,450	40
2	Bridgeton,	2	.....	25,000	75	110	185	10,459	44,291	30
3	Bridgeton and Greenwich,	.....	3	25,000	124	370	494	23,857	11,596	275
4	Bridgeton,	2	.....	25,000	50	150	200	8,000	40,800	100
5	Bridgeton,	1	.....	20,000	40	90	130	6,899	21,158	30
6	Bridgeton,	.....	3	56,000	75	115	190	8,000	38,315	30
7	Bridgeton,	.....	3	10,020	50	100	150	4,000	18,000	100
8	Bordentown,	1	.....	25,900	50	127	177	9,500	55,000	120
9	Canton,	3	.....	50,000	50	110	160	4,450	32,000	240
10	Cedarville,	2	.....	20,000	80	140	220	6,528	53,328	84
11	Cedarville and Cape May,	2	.....	27,000	60	100	160	11,000	75,000	60
12	Centerton,	1	.....	20,000	16	7	23	400	5,380	42
13	Claysville,	1	.....	17,500	68	114	182	9,500	53,464	40
14	Daretown,	1	.....	10,000	32	60	92	4,000	13,000	11
15	Daretown,	1	.....	1,500	6	13	19	200	1,700	12
16	Deerfield,	1	.....	2,000	7	18	25	200	2,162	18
17	Elizabeth,	2	.....	6,000	14	40	54	350	7,000	20
18	Elmer,	1	.....	30,000	80	120	200	5,058	21,766	40
19	Fairton,	3	.....	12,000	50	110	160	4,500	39,000	35
20	Freehold,	1	.....	150,000	220	165	385	73,000	237,000	170
21	Glassboro,	2	.....	16,000	16	60	76	1,941	11,394	33
22	Greenwich,	4	.....	18,000	70	125	195	5,000	36,000	90
23	Hancock Bridge,	2	.....	2,000	10	20	30	900	6,400	30
24	Hightstown,	2	.....	7,500	11	35	46	400	7,400	24
25	Hopewell,	.....	52	6,000	15	68	83	1,660	10,817	33
26	Lambertville,	2	.....	8,200	32	60	92	1,082	10,540	21
27	Lower Alloway Creek,	1	.....	2,000	5	9	14	325	2,200	16
28	Mount Holly,	.....	6	15,000	40	30	70	4,500	25,000	100
29	Mount Holly,	2	.....	10,000	10	30	40	2,000	4,000	61
30	Newport,	3	.....	12,000	50	90	140	4,724	26,905	58
31	Pennsgrove,	1	.....	12,000	20	42	62	1,126	10,000	36
32	Phalanx,	1	.....	19,000	15	50	65	3,000	14,450	60
33	Quinton, Hancocks Bridge and Pennsville,	.....	3	45,015	200	400	600	20,000	110,000	250
34	Red Bank,	1	.....	15,000	26	44	70	3,345	9,563	32
35	Ringoes,	.....	45	6,000	18	40	58	600	3,380	10
36	Rio Grande,	.....	5	14,000	35	80	115	2,800	21,000	60
37	Salem,	2	.....	30,000	60	100	160	2,650	17,500	22
38	Salem,	1	.....	2,000	4	9	13	400	3,080	20
39	Seeley,	.....	7	3,500	15	25	40	794	9,600	13
40	Shiloh,	3	.....	8,000	30	42	72	2,200	11,700	35
41	South Dennis,	2	.....	10,000	24	40	64	1,981	17,391	28
42	Titusville,	.....	87	4,560	21	27	48	944	2,956	29
43	Woodstown,	2	.....	12,000	40	90	130	2,400	18,000	12
44	Woodstown,	.....	4	15,400	50	110	160	3,500	22,500	18
45	Williamstown,	.....	8	20,000	50	100	150	4,000	11,200	40
46	Yorktown,	1	.....	3,000	15	30	45	700	5,000	15
	Total,	58	226	$873,195	2,094	3,920	6,014	$267,828	$1,320,886	2,643

The Fruit and Vegetable Canning Industry of New Jersey.

Product of Canned Fruit and Vegetables for the Year 1901.

TABLE No. 2—Fruits.

Office Number.	Location of Cannery.	Pears.		Strawberries.			Cherries.	
		3-pound cans. Dozens.	2-pound cans. Dozens.	1-pound cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.
2	Bridgeton,	.....	.....	.....	.....	2,000	.....	73
3	Bridgeton and Greenwich,	.....	.....	2,136	2,328	575	20	.....
4	Bridgeton,	.....	.....	.....	1,000	1,700	.....	28
6	Bridgeton,	8,000	.....	.....	.....	3,500	.....	125
7	Bridgeton,	600	.....	.....	.....	.....	.....	.....
10	Cedarville,	3,000	456	.....	760	1,291	.....	.....
12	Centreton,	250	.....	.....	.....	.....	.....	.....
13	Claysville,	1,800	.....	.....	.....	2,400	.....	.....
19	Fairton,	1,350	.....	.....	.....	2,100	.....	125
21	Glassboro,	4,200	.....	.....	.....	.....	.....	.....
22	Greenwich,	1,500	.....	.....	.....	.....	.....	.....
24	Hightstown,	.....	.....	.....	50	.....	100	.....
28	Mt. Holly,	1,000	200	.....	2,000	200	.....	.....
30	Newport,	.....	.....	.....	.....	1,000	.....	.....
32	Phalanx,	25	.....	.....	.....	.....	.....	.....
34	Red Bank,	.....	.....	.....	.....	.....	.....	.....
36	Rio Grande,	1,000	.....	.....	.....	.....	.....	.....
40	Shiloh,	12,500	.....	.....	.....	.....	.....	.....
	Total,	35,225	656	2,136	6,138	14,766	120	351

The Fruit and Vegetable Canning Industry of New Jersey.

Product of Canned Fruit and Vegetables for the Year 1901.

TABLE No. 2—Fruits—(Continued).

Office Number.	Location of Cannery.	Apples.		Peaches.		Black-berries.	Rasp-berries.	Goose-berries.	Rhubarb.	Pineapple.
		3 pound cans. Dozens.	Gallon cans. Dozens.	3-pound cans. Dozens	Gallon cans. Dozens.	2-pound cans. Dozens.	2-pound cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.	3-pound cans. Dozens.
2	Bridgeton,		1,799							
3	Bridgeton and Greenwich,					784	132	20		
4	Bridgeton,		12	8					117	
6	Bridgeton,				400					
7	Bridgeton,									
10	Cedarville,									
12	Centreton,									
13	Claysville,									
19	Fairton,									
21	Glassboro,									
22	Greenwich,									
24	Hightstown,									
28	Mt. Holly,									
30	Newport,									
32	Phalanx,	200		25						25
34	Red Bank,				481					
36	Rio Grande,									
40	Shiloh,									
	Total,	200	1,811	33	881	784	132	20	117	25

The Fruit and Vegetable Canning Industry of New Jersey.

Product of Canned Fruit and Vegetables for the Year 1901.

TABLE No. 3—Vegetables.

Office Number.	Location of Cannery.	Tomatoes.			Lima Beans.		Peas.		String Beans.
		3-pound cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.	3-pound cans. Dozens.	2-pound cans. Dozens.	3-pound cans. Dozens.	2-pound cans. Dozens.	2-pound cans. Dozens.
1	Alloway,	19,400		2,100					
2	Bridgeton,	14,905		4,313					
3	Bridgeton and Greenwich,	77,962				17,540			
4	Bridgeton,	14,000		3,900		8,400			
5	Bridgeton,	9,620							
6	Bridgeton,			9,000		2,000			
7	Bridgeton,			5,000					
8	Bordentown,	7,672		50		13,000		33,822	333
9	Canton,	40,000							
10	Cedarville,	45,261				685			
11	Cedarville,	30,000		3,500		1,400		28,000	
12	Centerton,	2,200			100				
13	Clayville,	28,000		3,700					3,840
14	Daretown,	16,666							
15	Daretown,	2,000							
16	Deerfield,	1,880							
17	Elizabeth,	6,000							
18	Elmer,	19,362							
19	Fairton,	10,500		2,430					
20	Freehold,					100,167		116,667	
21	Glassboro,		2,204	538					
22	Greenwich,	20,000		10,000					
23	Hancock's Bridge,	8,000							
24	Hightstown,			900					
25	Hopewell,	11,000							
26	Lambertville,	10,540							
27	Lower Alloway Creek,	2,130							
28	Mt. Holly,	5,000	3,600	100	1,000		1,600		
29	Mt. Holly,	2,000							
30	Newport,	18,000		1,300					
31	Pennsgrove,	10,888							
32	Phalanx,*	8,000					200		
33	Quinton, Hancocks Bridge and Pennsville,	78,000	12,000	7,000					
34	Red Bank,	2,694							
35	Ringoes,	2,600							
36	Rio Grande,	20,000							
37	Salem,	21,666							
38	Salem,	2,800							
39	Seeley,	12,000							
40	Shiloh,	108,000							
41	So. Dennis,	14,492							
42	Titusville,	3,250							
43	Woodstown,	16,000							
44	Woodstown,	20,000							
45	Williamstown,			5,600					
46	Yorktown,	4,150		1,000					
	Total,	746,688	17,804	60,431	1,100	143,192	1,800	178,489	4,173

*This firm also reports 6,000 Doz. 3 lb. cans baked beans.

The Fruit and Vegetable Canning Industry of New Jersey.

Product of Canned Fruit and Vegetables for the Year 1901.

TABLE No. 3—Vegetables—(Continued).

Office Number.	Location of Cannery.	Corn.	Pumpkins.			Squash.	Sweet Potatoes.		Beets.	Asparagus.
		3-pound cans. Dozens.	3-pound cans. Dozens.	2-pound cans. Dozens.	Gallon cans. Dozens.	3-pound cans. Dozens.	3-pound cans. Dozens.	2-pound cans. Dozens.	3-pound cans. Dozens.	3-pound cans. Dozens.
1	Alloway,									
2	Bridgeton,				265					
3	Bridgeton and Greenwich,		3,070				25,388			
4	Bridgeton,		4,700		150				1,400	
5	Bridgeton,									
6	Bridgeton,									
7	Bridgeton,		2,000				7,000			
8	Bordentown,		8,023		177					
9	Canton,									
10	Cedarville,									
11	Cedarville,						6,000			
12	Centerton,		240							
13	Clayville,		2,600			700				
14	Daretown,									
15	Daretown,									
16	Deerfield,									
17	Elizabeth,									
18	Elmer,		2,488	120			1,954			
19	Fairton,				375					
20	Freehold,									
21	Glassboro,							2,274		
22	Greenwich,									
23	Hancock's Bridge,									
24	Hightstown,				1,100					
25	Hopewell,									
26	Lambertville,									
27	Lower Alloway Creek,									
28	Mt. Holly,									
29	Mt. Holly,					500				500
30	Newport,				200					
31	Pennsgrove,									
32	Phalanx,	100								200
33	Quinton, Hancock's Bridge and Pennsville,									
34	Red Bank,				1,075					
35	Ringoes,									
36	Rio Grande,									
37	Salem,									
38	Salem,									
39	Seeley,									
40	Shiloh,		5,500							
41	So. Dennis,									
42	Titusville,									
43	Woodstown,									
44	Woodstown,						4,500			
45	Williamstown,									
46	Yorktown,									
	Total,	100	28,621	120	3,342	1,200	44,842	2,274	1,400	700

PART II.

Economic Condition of the Building Trades.

The Problem of the Unemployed.

Cost of Living in New Jersey.

Tables of Population of New Jersey, from the United States Census of 1900.

Wage Rates and Earnings of Building Trades Workmen in New Jersey.

The wage rates of bricklayers, masons, stone cutters, carpenters, and other workmen engaged in the occupations known collectively as the building trades, are higher than those paid in most, if not any other mechanical occupation.

Men of these trades are oftener before the public contending with their employers for more pay and shorter hours, than any other class of workmen. If the fundamental purpose of the trades union movement is to reduce working hours and increase wages, as it undoubtedly is, then it may be truly said that the building trades have done more for the success of that policy than any or all other divisions of labor combined.

The experience of this group of trades would therefore seem to furnish particularly suitable material for studying the conditions of wages and earnings of labor which have been brought about largely through the influence of organization.

Not all the men considered in this inquiry are members of the organizations of their craft. Of the entire number considered, 1,394, there are 420, or a small fraction over 30 per cent. who have no trade union affiliations. In localities where trade organizations exist, there seems to be no difference in the hours of labor, and only a slight variation in wages, the non-union men, of course, getting the smaller amount. In places where there is no union of the trade, the wages of workmen is lower and the hours of labor higher than elsewhere. It thus seems to be a fact beyond question, that unionism is the influence that operates favorably upon both.

But the purpose in view in making this inquiry is to ascertain the actual earnings or income yielded by the comparatively high wage rates of these particular workmen, and the relation it bears to their family responsibilities.

To get at the facts as nearly as possible, statements were obtained

from a certain number of workmen of each trade in the principal cities where their labor is most in demand. Building work in the large towns is always more plentiful than in smaller ones, and consequently wages are higher and employment steadier in them than elsewhere. This circumstance in connection with the fact that the period covered by the inquiry was one of phenominal activity in building, is favorable to showing the highest possible earnings of the workmen under consideration, at their present wage rates.

The reports obtained from the men among whom the canvass was made, who, by the way, are all married and have families, gives the wage rates per week, and the number of days that each of them was idle during the twelve months ending February 28, (1) from want of work; (2) from sickness and (3) from strikes. No account is taken of the days and fragments of days lost from the many other causes that in out of door work interferes so much with steadiness of labor in the course of a year.

Taking 306 as the standard number of working days and deducting the time involuntarily lost from the three causes named, we have the highest possible annual earnings or income by multiplying the remaining days by the given wage rates. This amount is divided to show the weekly earnings and subdivided to arrive at the proportion afforded by the weekly income for each member of the family whose support is drawn entirely from that fund.

As before stated, the persons considered are all married, and in the tables are divided to show the number who own their homes and those who pay rent, with the amounts paid annually by these latter to the landlord.

To reduce to its simplest elements the comparison between the amount of income and the liabilities, it must be made to cover, children who earn their own living in whole or in part are not counted among the number dependent upon the workman.

The results of the inquiry are given in the four tables which follow. Summary tables number one and two show the averages for the State at large and the same data is given by localities in the two succeeding ones.

Although everything intended to be brought out by the inquiry may be seen and readily understood by an examination of the tables, still a brief reference to some of the principal points shown in them seems not to be out of place.

The trades considered, thirteen in number, are as follows: Brick-

layers, stone masons, masons' laborers, plasterers, lathers, stone cutters, architectural sheet iron workers, electrical workers, roofers, structural iron workers, plumbers, carpenters and house painters.

Summary Table Number One, gives the total number considered for each trade, these being separated into union and non-union men: the average number of days idle from want of work, sickness and strikes; the average number of days employed during the year; the average rate of daily wages, and the average number of hours worked per day.

Seventy per cent. of the total number reporting are members of the unions of their several trades. The range of unemployment is from 52 to 105 days; the plumbers were idle the smaller, and the structural iron workers the greater length of time. The difference in this respect is owing to the fact that the structural iron mechanics work on the outside of buildings exposed to the chances of bad weather, and must stop operations in case of storms arising, while the plumbers who are employed in indoors can work without interruption in any kind of weather. This difference in the continuity of employment at once explains and justifies the larger wage rates demanded by men whose work is done wholely out of doors; without this difference the outdoor workmen could not, in his limited season, support a family at all. Other trades that lost a hundred days and over are the masons' laborers, and the roofers. The plasterers and lathers work under shelter in enclosed buildings; that the conditions are substantially the same for both, is shown by the fact that their time lost for want of work, is ninety and eighty-nine days respectively.

All the trades except the masons' laborers, show a loss of time from sickness, the range being from an average of two days among the plasterers to ten days reported by the roofers.

The percentage of the average time lost that is charged to sickness is as follows:

	Per Cent.
Bricklayers,	5.6
Stone masons,	10.5
Plasterers,	2.2
Lathers,	6.3
Stone cutters,	7.
Architectural sheet iron workers,	9.1
Roofers—tar, gravel and slate,	10.
Structural iron workers,	4.7
Electrical workers,	3.6
Plumbers,	13.
Carpenters,,	8.5
House painters,	5.9

The number of days lost through sickness, taking all the trades together, averages a fraction over five. As shown above, the plumbers, in proportion to the total number of days idle, suffered most severely on this account than did the workmen in any of the other trades. The chief menace to the health of plumbers is in the repairing of old work that has been improperly done in the first place, and this constitutes a large part of his routine of labor. In repairing such work, there are generally very bad odors from which the workman is liable to get sick.

The water-closets, privies, ,and waste pipes that have been poorly constructed are very bad in this respect. Nearly all the work is enclosed in the walls of houses, and many people wait until the smell becomes unendurable, and often until some disease such as malaria, typhoid, or diphtheria attacks some member of the family, before calling in the services of the plumber.

Work of this character engages much, perhaps most of the journeyman plumbers' time, and it is not surprising that men of the most robust constitution are often obliged to retire from the trade at an early age with a shattered constitution.

The average daily wage rates for the trades, leaving out the mason laborers, ranges from $2.43 for house painters, to $3.75 paid to structural iron workers. The wage rates of all the others are on a gradually ascending scale between these two extremes. In seven out of the thirteen trades, the average wage rates are under $3 a day.

The number of hours worked per day as shown by the tables, prove that all the building trades have made substantial progress in getting them below the old time standard of ten hours. The structural iron workers have a uniform work day of eight hours in the three cities of Newark, Paterson, and Jersey City, the only towns from which reports on this trade were received. The plumbers and house painters average exactly nine hours a day, and the architectural sheet iron workers, a small fraction over that figure.

All the other trades have an average work day that range between 8.2 and 8.8 hours per day. In all the large cities the wage rates are higher and the hours of work lower than in the smaller towns. The low wage rates and long hours which prevail in these places, produces the average shown in the tables for the entire State.

Summary Table Number Two shows the average earnings of each of the trades for a period of twelve months, and the same sum reduced to show the weekly income. The number who own their

own homes, and the number who pay rent, with average amount paid annually to the landlord is given; the average number of persons in the family supported wholely out of the workman's earnings, and the per capita division showing the amount per week for each member of the family completes the data contained in the table.

The average earnings for the twelve months ranges between $485 for masons' laborers and $815 for stone masons. Stone cutters earned $801, and the next highest amount, $772, is credited to the plasterers. The year's earnings of house painters, structural iron workers, and roofers, is much below $600. The electrical workers, architectural sheet iron workers, and lathers earned between $600 and $700; the others averaged amounts varying between $700 and $800. It is, however, by examining the column in which the twelve months' earnings are reduced to a weekly basis, that the meagre character of the returns produced by the labor of these workmen with their comparatively high wage rate, may be best understood.

The following table shows the wage rates per day, the time involuntarily lost, and the weekly earnings by averages, beginning with the highest:

	Wage rate per day.	Number of days idle.	Weekly earnings.
Stone masons,	$3 69	85	$15 67
Stone cutters,	3 64	57	15 40
Plasterers,	3 62	92	14 85
Bricklayers,	3 42	89	14 46
Plumbers,	2 81	53	13 63
Lathers,	3 25	95	13 15
Architectural Sheet iron workers,	2 82	66	13 04
Electrical workers,	2 78	82	12 33
Carpenters,	2 58	70	11 77
Structural iron workers,	3 75	105	10 86
Roofers,	2 74	100	10 85
House painters,	2 43	85	9 86
Mason laborers,	2 32	101	9 32

Of the total number reporting, only 267, or 19 per cent. own their homes; the others, 1,122 in number, or 81 per cent., pay an average annual rent which ranges from $85 to $142; the general average for all being $115.50 a year. This amount charged against weekly earnings will reduce the figures given above to the extent of $2.25 a week, leaving a remainder which must be made to cover the cost of food, clothing, doctor's bills, and medicine when sickness occurs, and also the many other wants of a family averaging only a small fraction of a unit less than four in number.

The period covered by the inquiry was one of the most active and

prosperous known to the building trades during many years; all the circumstances are, therefore, favorable to showing the best this class of workmen can hope for under present wage rates. That their weekly earnings are small, considering the generally dangerous character of the work they do, and its important relation to the safety, comfort, and general welfare of society, should go without saying; and if the earnings of at least some of them were increased fifty or even one hundred per cent., fair minded men would still regard them as far from being excessively paid.

The foregoing represents the average condition in the State at large. Turning to the several cities and towns included in the inquiry, something approaching uniformity in wage rates and hours of labor is shown to prevail for each trade, particularly those having the strongest unions.

Bricklayers are paid $4 a day and work eight hours in Newark, Jersey City, and Camden. In Paterson and Passaic, they receive $3.60 for eight hours, and in Trenton only $2.36, although here also, the eight hour day is established. In all other places, with the exception of Sea Isle City and adjoining towns where there is no union of the trade, bricklayers' wages range from $3.46 to $3.70, and the hours of labor from 8.2 to 9.3 per day.

Owing to the fact that building operations were not equally active in all places, a marked difference in the actual earnings of workmen in the various towns is shown as follows:

	Per Week.
Camden,	$17 70
Atlantic City,	16 29
Woodbury,	15 48
Bridgeton,	14 97
Vineland,	14 94
Salem,	14 11
Jersey City,	14 38
Newark,	14 31
Passaic,	13 84
Paterson,	13 53
Millville,	13 50
Cape May,	12 34
Trenton,	10 75

Stone masons work eight hours a day in Atlantic City and Camden, and nine hours in all other places named on the tables, except at Vineland and Woodbury, where the hours are 9.2 and 9.5 respectively. The highest wage rates are paid at Camden, $4 a day; the range in other places is from $3.50 to $3.84 per day.

The earnings making allowance for lost time were as follows:

	Per Week.
Camden,	$17 54
Atlantic City,	16 87
Bridgeton,	15 95
Cape May,	15 76
Woodbury,	15 00
Salem,	14 92
Millville,	14 77
Vineland,	14 59

Plasteres work eight hours per day in all places except Cape May and Ocean City, where nine hours is the standard. Four dollars a day is the average in Newark and Jersey City; in Paterson and Passaic it is $3.60; in Camden and Cape May, $3.50, and $3.16 at Atlantic City. In Newark the men averaged 185 days' work, and earned $14.23 per week. In Jersey City it was 190 days' work, and $14.61 weekly earnings. In Passaic and Paterson, the year's work was respectively 200 and 193 days, and the weekly earnings $13.84 and $13.36. A number of days much closer approximating full time, was worked by plasterers in all the other towns, and although wage rates were lower in them than in the cities named above, the weekly earnings were greater, but the highest is only $16.35, which was paid in Camden.

The lathers show about the same weekly earnings as the plasterers in the several towns. In Newark, Jersey City, Paterson and Passaic, their wage rates are from $3.50 to $4 per day, but owing to the fact that in each of these places the loss of time was very great, the actual earnings per week for the year was less than in other cities, where work, although at lower wages, is much steadier.

In Jersey City the earnings were $12.79 per week; in Newark, $11.55; in Paterson, $9.40, and in Passaic, only $9.34. Camden leads in point of weekly earnings, the average amount being $17.17.

Plumbers average $3.50 per day in Atlantic City, and Jersey City; in Newark, Paterson and Passaic, $3.00; $2.97 and $2.71 in Camden and Cape May respectively, and $2.50 per day in all other towns. The largest weekly earnings, $16.09, are shown at Atlantic City, and the smallest, $11.10, at Vineland. Bridgeton, Millville, and Vineland plumbers have no unions and work 10 hours per day; those at Atlantic City, Camden, Cape May, and Salem, 9 hours; while in Newark, Jersey City, Passaic, and Paterson, the standard is 8 hours a day.

The wage rates of carpenters varies between the lowest—$2.50 per day—paid at Bridgeton, and the highest, $3.00, paid only at Newark and Jersey City. In all the other towns the rates are $2.50 or $2.60 a day. In Atlantic City, Newark, Camden, and Jersey City, the hours of labor are eight, and in all the other towns nine per day. Newark shows the largest weekly earnings, $13.84, and Bridgeton the smallest, $9.70.

Painters work ten hours a day at Bridgeton, Millville, Vineland, and Woodbury. There is no union of the trade in either place, and wage rates are lower than elsewhere, excepting Salem, where it is $2.00 for nine hours. In most places, $2.50 is the standard, but more is paid in Camden, Cape May, and Jersey City, the highest, $2.91 per day, being at Cape May. Camden, where the daily wage rate is $2.63, shows the highest weekly earnings, $13.40; in Passaic, it was only $9.04, owing to the greater number of days idle for want of work.

Economic Condition of Workmen Employed in the Building Trades for the Twelve Months Ending February 28, 1902.

Average Number of Days Idle and Number of Days Employed. Average Wages per Day and Average Number of Hours Worked per Day.

SUMMARY TABLE No. 1—Averages for the State.

Occupation.	Total Number Considered.	Number Who Are		Average Number of Days Idle During the Twelve Months from			Total Number of Days Idle.	Average number of days employed during the twelve months, 306 working days to the year.	Average Rate of Wages per Day.	Average Number of Hours Worked per Day.
		Members of the Union.	Not Members of the Union.	Want of Work.	Sickness.	Strikes.				
Bricklayers,	183	151	32	82	5	2	89	217	$3 42	8.6
Stone masons,	74	53	21	76	9	.....	85	221	3 69	8.8
Masons' laborers,	79	64	15	96	.....	5	101	205	2 32	8.4
Plasterers,	73	69	4	90	2	.....	92	214	3 62	8.3
Lathers,	79	69	10	89	6	.....	95	211	3 25	8.6
Stone cutters,	24	15	9	53	4	.....	57	249	3 64	8.2
Architectural sheet iron workers,	118	71	47	59	6	.....	66	240	2 82	9.1
Roofers (tar, gravel and slate),	16	12	4	90	10	.....	100	206	2 74	8.2
Structural iron workers,	43	40	3	100	5	.....	105	201	3 75	8
Electrical workers,	124	83	41	79	3	.....	82	224	2 78	8.8
Plumbers,	191	113	78	44	7	2	53	253	2 81	9
Carpenters,	211	146	65	62	6	2	70	236	2 58	8.7
House painters and paper hangers,	174	88	86	80	5	0.5	85	221	2 43	9

Economic Condition of Workmen Employed in the Building Trades for the Twelve Months Ending February 28, 1902.

Year's Earnings, Number Who Own Home, Amount of Rent Paid, Number of Persons Supported Wholly Out of Earnings, Per Capita Dvision of Earnings.

SUMMARY TABLE No. 2—Average for the State.

Occupation.	Average Earnings for the Twelve Months.	Average Weekly Income.	Number Who Own Their Homes.	Number Who Pay Rent.	Average Amount Paid Yearly in Rent.	Average Number of Persons in Family Supported Wholly Out of Earnings.	Per Capita Division of Earnings Among the Number to be Supported; Amount Per Week for Each.
Bricklayers,	$752	$14 46	65	118	$114	4	$3 61
Stone masons,	815	15 67	33	41	112	4.5	3 48
Masons' laborers,	485	9 32	5	74	85	4	2 33
Plasterers,	772	14 85	15	58	115	3.8	3 91
Lathers,	684	13 15	15	64	106	3.7	3 55
Stone cutters,	801	15 40	7	17	142	3.2	4 81
Architectural sheet iron workers,	678	13 04	24	94	110	3.2	3 52
Roofers (tar, gravel and slate),	564	10 85	.....	16	132	3.2	3 39
Structural iron workers,	565	10 86	1	42	124	3.2	3 39
Electrical workers,	641	12 33	10	114	116	3.5	3 52
Plumbers,	709	13 63	24	167	123	3.5	3 89
Carpenters,	612	11 77	45	166	116	3.6	3 27
Painters,	513	9 86	23	151	107	3.2	3 21

Economic Condition of Workmen Employed in the Building Trades for the Twelve Months Ending February 28, 1902.

Average Number of Days Idle and Number of Days Employed. Average Wages per Day and Average Number of Hours Worked per Day.

TABLE No. 1—Averages by Localities.

Occupation.	Location.	Number Considered.	Number Who are Members of Union.	Average Number of Days Idle During the Twelve Months From			Average Number of Days Employed During the Twelve Months.	Average Wages Per Day for the Time Worked.	Average Number of Hours Worked per Day.
				Want of Work.	Sickness.	Strike.			
Bricklayers,	Atlantic City,	5	4	66	7	4	229	$3 70	8.2
Bricklayers,	Bridgeton,	13	13	76	5	.....	225	3 46	9
Bricklayers,	Camden,	10	10	65	9	.....	232	4 00	8
Bricklayers,	Cape May,	17	1	71	5	.....	230	2 79	9
Bricklayers,	Jersey City,	10	10	116	2	1	187	4 00	8
Bricklayers,	Millville,	11	11	102	8	.....	196	3 59	9
Bricklayers,	Newark,	51	51	119	1	.....	186	4 00	8
Bricklayers,	Ocean City,	2	.....	72	11	.....	223	3 50	9
Bricklayers,	Passaic,	9	9	106	.....	.....	200	3 60	8
Bricklayers,	Paterson,	10	10	111	.....	.....	195	3 60	8
Bricklayers,	Sea Isle City and adjoining towns,	8	.....	76	6	.....	224	2 25	9
Bricklayers,	Salem,	14	14	72	5	.....	229	3 50	9
Bricklayers,	Trenton,	8	8	42	1	26	237	2 36	8
Bricklayers,	Vineland,	6	3	76	8	.....	222	3 50	9.3
Bricklayers,	Woodbury,	9	7	67	9	.....	230	3 50	9
Stone masons,	Atlantic City,	3	3	67	5	.....	234	3 75	8

Economic Condition of Workmen Employed in the Building Trades for the Twelve Months Ending February 28, 1902.

Average Number of Days Idle and Number of Days Employed. Average Wages per Day and Average Number of Hours Worked per Day.

TABLE No. 1—Averages by Localities—(Continued).

Occupation.	Location.	Number Considered.	Number Who are Members of Union.	Average Number of Days Idle During the Twelve Months From			Average Number of Days Employed During the Twelve Months.	Average Wages per Day for the Time Worked.	Average Number of Hours Worked per Day.
				Want of Work.	Sickness.	Strike.			
Stone masons,	Bridgeton,	22	22	80	10	.....	216	3 84	9
Stone masons,	Camden,	10	10	68	11	.....	228	4 00	8
Stone masons,	Cape May,	9	.....	71	8	.....	227	3 61	9
Stone masons,	Millville,	7	7	97	10	.....	199	3 86	9
Stone masons,	Salem,	3	3	71	13	.....	222	3 50	9
Stone masons,	Vineland,	16	6	81	7	.....	218	3 48	9.2
Stone masons,	Woodbury,	4	2	72	11	.....	223	3 50	9.5
Masons' laborers,	Jersey City,	5	5	90	.....	.....	216	2 50	8
Masons' laborers,	Paterson,	10	5	105	.....	.....	201	2 12	9
Masons' laborers,	Passaic,	10	.....	100	.....	.....	206	2 08	9
Masons' laborers,	Newark,	50	50	124	.....	.....	202	2 40	8
Masons' laborers,	Trenton,	4	4	63	.....	23	220	2 50	8
Plasterers,	Atlantic City,	6	6	54	3	.....	249	3 16	8
Plasterers,	Camden,	7	7	59	4	.....	243	3 50	8
Plasterers,	Cape May,	2	.....	79	7	.....	220	3 50	9

Plasterers,	Jersey City,	5	5	116	.....	.....	190	4 00	8
Plasterers,	Newark,	41	41	121	.....	.....	185	4 00	8
Plasterers,	Ocean City,	2	.....	71	.....	.....	235	3 62	9
Plasterers,	Passaic,	4	4	106	.....	.....	200	3 60	8
Plasterers,	Paterson,	6	6	113	.....	.....	193	3 60	8
Lathers,	Atlantic City,	3	3	59	2	.....	245	3 00	8
Lathers,	Bridgeton,	2	2	65	3	.....	238	2 50	9
Lathers,	Camden,	2	2	54	5	.....	247	3 50	8
Lathers,	Cape May,	6	.....	68	7	.....	231	3 50	9
Lathers,	Jersey City,	4	4	140	.....	.....	166	4 00	8
Lathers,	Millville,	6	5	107	10	.....	189	3 50	9
Lathers,	Newark,	25	25	128	6	.....	172	3 50	8
Lathers,	Passaic,	10	10	139	4	.....	162	3 00	8
Lathers,	Paterson,	7	7	138	5	.....	163	3 00	8
Lathers,	Salem,	5	5	68	6	.....	234	3 50	9
Lathers,	Trenton,	3	3	57	9	.....	240	2 66	8
Lathers,	Vineland,	4	3	68	5	.....	233	3 44	9.2
Lathers,	Woodbury,	2	.....	62	10	.....	234	3 12	10
Stone cutters,	Newark,	16	7	45	3	.....	258	3 53	8.3
Stone cutters,	Harrison,	8	8	60	4	.....	242	3 75	8
Gas fitters,	Bridgeton,	2	.....	36	5	.....	265	2 50	10
Gas fitters,	Vineland,	3	.....	28	2	.....	276	2 50	10
Architectural sheet iron workers,	Atlantic City,	3	3	64	12	.....	230	3 50	9
Architectural sheet iron workers,	Bridgeton,	2	.....	48	3	.....	255	3 50	10
Architectural sheet iron workers,	Camden,	9	9	52	9	.....	245	2 75	9
Architectural sheet iron workers,	Cape May,	6	.....	68	6	.....	232	2 62	9
Architectural sheet iron workers,	Passaic,	30	20	70	11	.....	225	2 84	9
Architectural sheet iron workers,	Jersey City,	5	.....	43	.....	.....	263	3 00	8
Architectural sheet iron workers,	Paterson,	14	9	76	9	.....	221	2 70	9
Architectural sheet iron workers,	Newark,	12	12	83	4	.....	219	3 00	8
Architectural sheet iron workers,	Ocean City,	2	.....	63	7	.....	236	2 75	9
Architectural sheet iron workers,	Salem,	13	13	36	9	.....	261	2 50	9
Architectural sheet iron workers,	Trenton,	5	5	20	.....	2	284	2 50	9
Architectural sheet iron workers,	Vineland,	9	.....	81	5	.....	220	2 50	10
Architectural sheet iron workers,	Woodbury,	8	.....	57	7	.....	242	2 50	10
Roofers—Tar and gravel,	Jersey City,	4	.....	82	3	.....	221	1 87	8
Roofers—Slate,	Jersey City,	3	3	92	8	.....	206	3 75	8
Roofers—Slate,	Trenton,	4	4	75	27	.....	204	2 75	9
Roofers—Plastic slate,	Paterson,	5	5	110	3	.....	196	2 60	8
Structural iron workers,	Newark,	24	24	108	5	.....	193	3 75	8

Economic Condition of Workmen Employed in the Building Trades for the Twelve Months Ending February 28, 1902.

Average Number of Days Idle and Number of Days Employed. Average Wages per Day and Average Number of Hours Worked per Day.

TABLE No. 1—Averages by Localities—(Continued).

Occupation.	Location.	Number Considered.	Number Who are Members of Union.	Average Number of Days Idle During the Twelve Months From			Average Number of Days Employed During the Twelve Months	Average Wages per Day for the Time Worked.	Average Number of Hours Worked per Day.
				Want of Work.	Sickness.	Strike.			
Structural iron workers,	Paterson,	9	9	101	6	.....	199	3 75	8
Structural iron workers,	Jersey City,	10	7	90	5	.....	211	3 75	8
Electrical workers,	Atlantic City,	9	9	24	2	.....	280	3 50	8
Electrical workers,	Bridgeton,	10	.....	103	2	.....	201	2 50	10
Electrical workers,	Camden,	9	9	33	3	.....	273	3 60	9
Electrical workers,	Cape May,	9	.....	113	4	.....	189	2 92	8.5
Electrical workers,	Jersey City,	10	10	73	5	.....	228	3 00	8
Electrical workers,	Millville,	8	6	80	3	.....	223	2 87	8
Electrical workers,	Newark,	20	20	65	3	.....	208	3 00	8
Electrical workers,	Passaic,	10	10	60	4	.....	242	2 30	9
Electrical workers,	Paterson,	10	10	96	4	.....	206	2 70	8
Electrical workers,	Salem,	9	9	83	5	.....	218	2 37	9
Electrical workers,	Vineland,	10	.....	98	3	.....	205	2 31	10
Electrical workers,	Woodbury,	10	.....	118	2	.....	186	2 25	10
Plumbers,	Atlantic City,	9	9	59	8	.....	239	3 50	9

Plumbers,	Bridgeton,	10	.....	53	7	.....	246	2 45	10
Plumbers,	Camden,	9	9	37	5	.....	264	2 97	9
Plumbers,	Cape May,	10	.....	41	4	.....	261	2 71	9
Plumbers,	Jersey City,	10	10	46	5	.....	255	3 50	8
Plumbers,	Millville,	12	.....	33	14	.....	259	2 50	10
Plumbers,	Newark,	50	50	37	13	.....	256	3 00	8
Plumbers,	Ocean City,	9	.....	44	5	.....	257	2 55	9
Plumbers,	Passaic,	15	12	69	3	6	228	3 00	8
Plumbers,	Paterson,	15	15	32	8	.....	266	3 00	8
Plumbers,	Salem,	10	.....	38	9	.....	259	2 50	9
Plumbers,	Trenton,	10	8	22	4	21	259	2 60	8
Plumbers,	Vineland,	10	.....	69	6	.....	231	2 50	10
Plumbers,	Woodbury,	12	.....	41	5	.....	260	2 50	10
Carpenters,	Atlantic City,	15	13	57	5	11	233	2 63	8
Carpenters,	Bridgeton,	15	15	72	11	.....	224	2 25	9
Carpenters,	Camden,	13	13	46	7	.....	253	2 56	8
Carpenters,	Cape May,	10	.....	59	11	.....	236	2 50	9
Carpenters,	Jersey City,	10	10	70	5	.....	231	3 00	8
Carpenters,	Millville,	12	.....	64	12	.....	230	2 75	9
Carpenters,	Newark,	50	50	63	4	.....	242	3 00	8
Carpenters,	Ocean City,	10	2	59	3	.....	244	2 50	9
Carpenters,	Passaic,	10	9	80	5	.....	221	2 60	9
Carpenters,	Paterson,	10	10	72	4	.....	230	2 50	9
Carpenters,	Salem,	10	.....	55	9	.....	242	2 50	9
Carpenters,	Sea Isle City,	9	.....	77	4	.....	225	2 50	9
Carpenters,	Trenton,	12	9	20	2	12	272	2 47	9
Carpenters,	Vineland,	15	12	67	9	.....	230	2 50	9
Carpenters,	Woodbury,	10	3	62	5	.....	239	2 50	9
House painters and paper hangers,	Atlantic City,	12	10	61	4	.....	241	2 25	9
House painters and paper hangers,	Bridgeton,	12	.....	73	8	.....	225	2 42	10
House painters and paper hangers,	Camden,	20	20	37	4	.....	265	2 63	9
House painters and paper hangers,	Cape May,	10	.....	72	5	.....	229	2 91	9
House painters and paper hangers,	Jersey City,	25	18	108	6	.....	192	2 75	8
House painters and paper hangers,	Millville,	10	.....	95	7	.....	204	2 15	9.8
House painters and paper hangers,	Newark,	25	20	92	5	.....	209	2 50	8
House painters and paper hangers,	Passaic,	10	.....	112	6	.....	188	2 50	9
House painters and paper hangers,	Paterson,	12	10	73	3	.....	230	2 50	8.1
House painters and paper hangers,	Salem,	10	.....	73	7	.....	226	2 00	9
House painters and paper hangers,	Trenton,	10	10	76	3	6	221	2 70	8.3
House painters and paper hangers,	Vineland,	10	.....	83	6	.....	217	2 05	10
House painters and paper hangers,	Woodbury,	8	.....	85	4	.....	217	2 25	10

Economic Condition of Workmen Employed in the Building Trades for the Twelve Months Ending February 28, 1902.

Year's Earnings, Number who Own Home, Amount of Rent Paid, Number of Persons Supported wholly out of Earnings, Per Capita Division of Earnings.

TABLE No. 2—Average by Localities.

Occupation.	Location.	Average Earnings for the Twelve Months.	Average Weekly Income.	Average Who Own Their Homes.	Number Who Pay Rent.	Average Amount Paid Yearly in Rent.	Average Number of Persons in Family Supported Wholly Out of Earnings.	Per Capita Division of Earnings Among the Number to be Supported; Amount per Week for Each.
Bricklayers,	Atlantic City,	$847	$16 28	4	1	$110	4	$4 07
Bricklayers,	Bridgeton,	779	14 98	10	3	100	4.3	3 48
Bricklayers,	Camden,	928	17 84	10	.....	.....	4.3	4 15
Bricklayers,	Cape May,	642	12 34	3	14	104	3.7	3 33
Bricklayers,	Jersey City,	748	14 38	.....	10	158	3.1	4 64
Bricklayers,	Millville,	704	13 54	4	7	111	4.2	3 22
Bricklayers,	Newark,	744	14 31	4	47	124	3.8	3 76
Bricklayers,	Ocean City,	781	15 02	1	1	108	3.5	4 29
Bricklayers,	Passaic,	720	13 84	1	4	112	3	4 61
Bricklayers,	Paterson,	702	13 50	4	3	120	3.7	3 65
Bricklayers,	Sea Isle City and adjoining towns,	504	9 69	5	2	114	5.3	1 83
Bricklayers,	Salem,	802	15 42	14	.....	.....	3.7	4 16
Bricklayers,	Trenton,	796	15 31	1	4	119	4.6	3 33
Bricklayers,	Vineland,	777	14 94	1	5	110	5.1	2 93
Bricklayers,	Woodbury,	805	15 49	3	5	98	3.8	4 07
Stone masons,	Atlantic City,	878	16 88	2	1	120	4.3	3 92
Stone masons,	Bridgeton,	829	15 94	12	9	108	4.4	3 62
Stone masons,	Camden,	912	17 54	1	9	135	4.4	3 99
Stone masons,	Cape May,	819	15 75	4	5	106	4.1	3 84

Stone masons,	Millville,	768	14 77	6	1	120	4.3	3 43
Stone masons,	Salem,	777	14 94	2	1	96	5	2 99
Stone masons.	Vineland,	756	14 54	4	12	104	4.4	3 30
Stone masons,	Woodbury,	781	15 02	2	2	108	5	3 00
Masons' laborers,	Jersey City,	540	10 38	.....	5	101	3.2	3 24
Masons' laborers,	Paterson,	426	8 15	1	8	76	3.9	2.09
Masons' laborers,	Passaic,	428	8 15	1	9	73	3.6	2 26
Masons' laborers,	Newark,	485	9 32	3	44	84	4.1	2 27
Masons' laborers,	Trenton,	550	10 58	.....	4	90	5.2	2 03
Plasterers,	Atlantic City,	787	15 13	2	4	109	3	5 04
Plasterers,	Camden,	851	16 36	1	6	134	4.1	3 99
Plasterers,	Cape May,	770	14 81	.....	2	108	3.5	4 23
Plasterers,	Jersey City,	760	14 61	.....	4	150	3.2	4 56
Plasterers,	Newark,	740	14 23	6	33	111	3.6	3 95
Plasterers,	Ocean City,	851	16 36	2	.....	.....	5	3 27
Plasterers,	Passaic,	720	13 85	2	2	90	3.7	3 75
Plasterers,	Paterson,	695	13 36	2	4	108	3.7	3 61
Lathers,	Atlantic City,	$735	$14 13	1	2	$108	3	$4 71
Lathers,	Bridgeton,	595	11 44	.....	2	102	3	3 81
Lathers,	Camden,	865	16 63	.....	2	141	3.5	4 75
Lathers,	Cape May,	809	15 56	2	4	100	3.4	4 57
Lathers,	Jersey City,	664	12 77	.....	3	132	3	4 29
Lathers,	Millville,	662	12 73	2	4	107	2.7	4 71
Lathers,	Newark,	602	11 57	.....	21	110	2.8	4 13
Lathers,	Passaic,	486	9 35	3	7	100	2.4	3 89
Lathers,	Paterson,	489	9 40	4	3	106	2.8	3 35
Lathers,	Salem,	819	15 75	3	2	99	3	5 25
Lathers,	Trenton,	639	12 29	.....	2	78	3	4 09
Lathers,	Vineland,	802	15 42	.....	4	96	2.8	5 51
Lathers,	Woodbury,	730	14 04	.....	2	93	4.5	3 12
Stone cutters,	Newark,	911	17 54	5	11	144	3.3	5 31
Stone cutters,	Harrison,	690	13 27	2	6	140	3.1	4 28
Gas fitters,	Bridgeton,	663	12 75	1	1	84	3	4 25
Gas fitters,	Vineland,	690	13 27	.....	3	96	3.6	3 68
Sheet iron workers,	Atlantic City,	805	15 48	.....	3	120	4.7	3 29
Sheet iron workers,	Bridgeton,	892	17 15	.....	2	102	4	4 29
Sheet iron workers,	Camden,	674	12 96	1	8	132	3.3	3 93
Sheet iron workers,	Cape May,	608	11 50	1	5	91	4.5	2 55
Sheet iron workers,	Jersey City,	789	15 17	3	2	132	3.2	4 74
Sheet iron workers,	Passaic,	639	12 29	5	20	114	3.4	3 61

Economic Condition of Workmen Employed in the Building Trades for the Twelve Months Ending February 28, 1902.

Year's Earnings, Number who Own Home, Amount of Rent Paid, Number of Persons Supported wholly out of Earnings, Per Capita Division of Earnings.

TABLE No. 2—Averages by Localities—(Continued).

Occupation.	Location.	Average Earnings for the Twelve Months.	Average Weekly Income.	Number Who Own Their Homes.	Number Who Pay Rent.	Average Amount Paid Yearly in Rent.	Average Number of Persons in Family Supported Wholly Out of Earnings.	Per Capita Division of Earnings Among the Number to be Supported; Amount per Week for Each.
Sheet iron workers,	Paterson,	597	11 48	7	7	103	3.5	3 28
Sheet iron workers,	Newark,	657	12 57	3	7	104	3.2	3 93
Sheet iron workers,	Ocean City,	639	12 29	.....	2	120	3.5	3 51
Sheet iron workers,	Salem,	653	12 56	.....	13	95	3.8	3 30
Sheet iron workers,	Trenton,	710	13 65	2	3	108	5	2 73
Sheet iron workers,	Vineland,	550	10 56	2	7	94	3	3 52
Sheet iron workers,	Woodbury,	605	11 63	.....	8	93	3.6	3 23
Roofers—Tar and gravel,	Jersey City,	413	7 94	.....	3	124	2.3	3 45
Roofers—Slate,	Jersey City,	773	14 86	.....	4	150	3.5	4 24
Roofers—Slate,	Trenton,	561	10 78	.....	4	111	4	2 69
Roofers—Plastic slate,	Paterson,	510	10 78	.....	5	144	3	3 27
Structural iron workers,	Newark,	724	13 92	1	18	134	3.7	3 76
Structural iron workers,	Paterson,	746	14 34	.....	15	107	2.5	5 73
Structural iron workers,	Jersey City,	791	15 21	.....	10	130	3.4	4 47
Electrical workers,	Atlantic City,	980	18 84	.....	2	108	3.5	5 38

Electrical workers,	Bridgeton,	503	9 67	3	4	96	2	4 83
Electrical workers,	Camden,	983	18 90	1	8	136	4.3	4 37
Electrical workers,	Cape May,	552	10 61	2	7	99	2.6	4 08
Electrical workers,	Jersey City,	684	13 15	.....	10	158	3.6	3 65
Electrical workers,	Millville,	640	12 31	.....	8	108	1.3	2 86
Electrical workers,	Newark,	624	12 00	.....	20	131	2.7	4 44
Electrical workers,	Passaic,	557	10 71	.....	10	114	2.5	4 28
Electrical workers,	Paterson,	556	10 69	.....	10	138	2.5	4 27
Electrical workers,	Salem,	517	9 94	.....	14	110	2.8	3 55
Electrical workers,	Vineland,	674	12 96	3	12	108	3.5	3 70
Electrical workers,	Woodbury,	419	8 05	1	9	88	2.3	3 50
Plumbers,	Atlantic City,	837	16 09	4	5	120	3.4	4 73
Plumbers,	Bridgeton,	613	11 79	.....	10	108	3.2	3 66
Plumbers,	Camden,	784	15 07	1	8	133	4.1	3 68
Plumbers,	Cape May,	707	13 59	3	7	112	3.7	3 67
Plumbers,	Jersey City,	893	17 17	.....	10	164	3	5 72
Plumbers,	Millville,	648	12 46	3	9	108	3	4 15
Plumbers,	Newark,	768	14 77	1	49	144	3.5	4 22
Plumbers,	Ocean City,	655	12 59	3	6	108	4	3 14
Plumbers,	Passaic,	684	13 15	2	13	138	3.2	4 11
Plumbers,	Paterson,	798	15 34	1	14	164	4.1	3 74
Plumbers,	Salem,	648	12 46	1	9	84	3.5	3 56
Plumbers,	Trenton,	673	12 94	2	8	120	3.5	3 70
Plumbers,	Vineland,	578	11 11	3	7	108	3.4	3 27
Plumbers,	Woodbury,	650	12 50	.....	12	108	3.6	3 47
Carpenters,	Atlantic City,	614	11 81	5	10	118	3.3	3 59
Carpenters,	Bridgeton,	504	9 69	3	12	108	3.7	2 62
Carpenters,	Camden,	648	12 46	2	11	144	3.5	3 56
Carpenters,	Cape May,	590	11 34	3	7	100	4.1	2 76
Carpenters,	Jersey City,	693	13 27	2	8	130	2.7	4 91
Carpenters,	Millville,	633	12 17	5	7	113	4.6	2 64
Carpenters,	Newark,	726	13 96	4	46	120	2.8	4 99
Carpenters,	Ocean City,	610	11 72	2	8	115	4.4	2 66
Carpenters,	Passaic,	575	11 06	3	7	122	3.4	3 25
Carpenters,	Paterson,	575	11 06	2	8	121	3.7	2 99
Carpenters,	Salem,	605	11 63	3	7	105	3.4	3 42
Carpenters,	Sea Isle City,	563	10 82	2	8	96	3.8	2 84
Carpenters,	Trenton,	672	12 92	5	7	143	3.4	3 80
Carpenters,	Vineland,	575	11 06	2	13	103	4.2	2 63
Carpenters,	Woodbury,	598	11 50	2	8	103	3.4	3 38
House painters and paper hangers,	Atlantic City,	542	10 42	3	9	108	3.6	2 78
House painters and paper hangers,	Bridgeton,	535	10 28	2	10	106	3	3 42
House painters and paper hangers,	Camden,	542	10 42	3	17	142	3.3	3 16
House painters and paper hangers,	Cape May,	534	10 27	2	8	95	3	3 42
House painters and paper hangers,	Jersey City,	528	10 15	1	24	147	3.2	3 17
House painters and paper hangers,	Millville,	439	8 44	2	8	96	3	2 81

Economic Condition of Workmen Employed in the Building Trades for the Twelve Months Ending February 28, 1902.

Year's Earnings, Number who Own Home, Amount of Rent Paid, Number of Persons Supported wholly out of Earnings, Per Capita Division of Earnings.

TABLE No. 2—Averages by Localities—(Continued).

Occupation.	Location.	Average Earnings for the Twelve Months.	Average Weekly Income.	Number Who Own Their Homes.	Number Who Pay Rent.	Average Amount Paid Yearly in Rent.	Average Number of Persons in Family Supported Wholly Out of Earnings.	Per Capita Division of Earnings Among the Number to be Supported; Amount per Week for Each.
House painters and paper hangers,	Newark,	523	10 06	1	23	113	3.5	2 87
House painters and paper hangers,	Passaic,	470	9 04	2	8	103	3.4	2 66
House painters and paper hangers,	Paterson,	575	11 06	2	10	108	3.2	3 46
House painters and paper hangers,	Salem,	452	8 69	.....	10	86	2.7	3 22
House painters and paper hangers,	Trenton,	597	11 42	3	7	104	4	2 85
House painters and paper hangers,	Vineland,	445	8 56	1	9	91	3.3	2 60
House painters and paper hangers,	Woodbury,	488	8 62	1	7	90	3	2 87

The Problem of the Unemployed.

What practical measure of relief can government extend to those who, willing to work can find none to do, is a question on which light is desired in almost all civilized countries at the present time.

The number of hands available for work in cities at least is always in excess of the opportunities to labor afforded either in them, or at a distance, which could be traversed each day by the workmen.

A very large number of persons, male and female, are without permanent employment, having only chance jobs which lasts but a short time, leaving them idle for long periods before work is again found.

There are others who through the fluctuations of their particular trades or occupations are thrown out of work, and also the very large class who have learned no trade and possess no special knowledge of anything useful, and have therefore nothing to offer for employment but physical strength. The lot of these is hard, but still harder is that of those who have become physically unfit to compete with other workmen; this class is always largely increased by the discharge of the least efficient at times when trade is dull.

It is a fact that in cities there is at all times a very large number of persons who are idle the greater part of the time. Among these are many middle aged men who are not able to compete with the more youthful workmen that are in demand. The competition in trade has become so keen that employers favor young men for their activity and more ready adaptability to new and economical processes of production. This tendency to reject a man because of age is growing among employers, and whether as a business policy it be right or wrong, there is no doubt of its bringing the middle aged man in ever increasing numbers face to face with the grim problem of how the necessaries of existence are to be provided for the remainder of his life.

It quite frequently occurs that men of middle or advanced age are left in idleness through the failure or the withdrawal from business

of the firms in whose employ the best years of their lives had been spent. The prospect confronting such men is indeed hard. Having been, as is quite frequently the case, in that one employment from early youth, their faculties trained to its requirements alone, when confronted with the necessity for seeking another, a state of things faces them in business organization with which they have little or no acquaintance and to the requirements of which they cannot adapt themselves even if an opportunity were given them.

Under the present order of things precarious employment with uncertain earnings is the best that men of this class can look for in the future. How such persons may be assisted to find steady employment is a question of profound importance to the State.

In the new industries starting into being in various parts of the country, there are prospects of employment for those who constitute the over-supply of labor in the great cities, if means were devised to make such opportunities available to them.

Enterprise is often checked in places remote from the large cities for want of the labor that is vainly seeking employment in these great centres of population. How serious is the evil of the growing number of the unemployed is shown by the degree of attention which has been for some years and is now being given to it. The States of New York, Ohio and Illinois have established free employment bureaus in their large cities whose special duties are to bring the idle workman and the opportunity to work together.

These offices are now in operation several years and have apparently been instrumental in doing much toward helping to lessen the number of the unemployed.

The City of Chicago has five free employment agencies which are managed by the State Bureau of Labor Statistics. A report issued on February 15th, 1902, shows that from the establishment of the offices on August 2nd, 1899, a period of 133 weeks, the number of males who had filed applications for employment was 56,707, and the number of females 35,571. The total number of applications for help filed at the five offices during the same time was 87,795, or 46,572 males and 41,223 females. Positions were secured for 40,322 males, or 71 per cent. of the total number of applicants, and for 33,707 females, or 95 per cent. of all who applied.

The Illinois law forbids the furnishing of help by the free employment offices to any employers whose workmen are on strike.

New York maintains only one free employment agency which is

situated in the city of New York. During the twelve months ending December 31st, 1900, there were registered 5,732 persons as applicants for employment of whom 2,157 were males and 3,575 females. Of the men, 621 were married and 318 of these report 704 children, 558 of whom were wholly dependent on them for support. Eight hundred and twenty-eight women report being married, and 559 of these have 903 children, 676 of whom were dependent on them.

The applications for help filed at the agency for the year numbered 201 for men and 3,325 for women; the total number of situations secured was, for both sexes, 2,969. The system has yielded such satisfactory results in New York city that the Labor Commissioner of the State who has charge of the agency urges its extension to other large cities.

In Ohio, which was the first State to adopt the system, agencies are established in the five largest towns—Cincinnati, Cleveland, Columbus, Toledo, and Dayton. During the year 1900, the total number of applicants, male and female, who registered for employment was 20,855, and the number who applied to the agency for help, 22,-437; the demand for females was 15,829, and for males only 6,608 Positions were secured for 4,714 males and 8,630 females.

In all three of the States which maintain these free employment agencies, the officials having charge of them speak in the highest terms of praise of the value of the work they do, both for the unemployed and for those who want help, and the experiment has been so emphatically sanctioned by public approval that the system is likely to be retained and extended. There are no reliable statistics on the subject of the unemployed in this State, and it seems impossible in view of the nature of the subject that there should be any of an accurate character. But it is a fact proven by common observation that there are even in the best of times a great number in all our large cities. Many of these are strong, healthy men, able to perform a fair day's work, others are of the kind that either through impaired health or advancing age have been forced out of the front rank of their chosen occupations by their more youthful and vigorous competitors.

Whatever the causes, the evil of unemployment with all its attendant consequences is one with which almost every large centre of population is sadly familiar. Much serious thought has been given to the subject, but as yet without developing any plan for dealing

with the problem otherwise than through the old channels of poor relief.

The liberal and wise policy which provides comfortable and attractive school buildings at the expense of the State for the mental culture of children of all classes, might well be extended to helping distressed parents to secure employment through which the physical wants of their little ones may be supplied.

An information bureau is maintained by the Department of Public Instruction as a part of its organization through which teachers needing employment and districts requiring their services are brought together and their wants mutually cancelled.

No fees of any kind are exacted from either of the parties benefited, the expense of carrying on the Bureau being defrayed out of the fund appropriated for maintaining the department. This information bureau is therefore nothing more or less than a free employment agency for school teachers, carried on at public expense.

If this is wise public policy in the case of teachers, and it would seem that no reasonable argument can be advanced against the proposition that it is so, why should not its benefits be extended to artisans, laborers and all others whose incomes are derived from salaries or wages. Indeed on the plea of "first things first," or extending help to the most necessitous, the latter classes have by far the best claim to being considered; for while the teacher's responsibilities are generally limited to their personal wants, those of manual laborers, almost universally include those of wives and families as well.

The growth and development of civilization is controlled and guided by the intelligence of mankind applied to its wants and necessities as they arise.

In whatever way human suffering can be diminished or the comforts of the comparatively indigent increased, private benevolence or enlightened and humane public policy has always provided means for carrying out plans having such purposes in view.

Clinics for the treatment of all kinds of physical ills brings the highest degree of medical and surgical skill to the relief of the poorest and humblest sufferer without cost.

Free public baths are provided in many American and European cities, each establishment requiring for its maintenance a greater outlay of money than the free employment offices where such exist, are known to cost.

These are only some of the instances in which the collective power of society is used for the benefit of those on whom circumstances impose the hardest burdens of life, and whose lot would be still harder without such help.

The report of the United States Industrial Commission contains some testimony taken during its investigations on the subject of unemployment, which goes to show how much it is regarded by the workingman as a growing evil, that in the interest of the public should be dealt with in a broad, liberal spirit. The competition of idle workmen has caused many reductions of the wages of those employed, and is at all times a standing menace to them. It is to lesson the strain of this competition as far as possible, by making the present volume of industry furnish employment for greater numbers, that the workmen's unions have so vigorously taken up the advocacy of the eight hour day. Either there must be such a change in hours, or new lines of activity must be developed which will absorb a large proportion of the unemployed; if neither is done, or rather until either of these changes occur, the idle workman will, as he must do, stand ready to accept employment on any terms that may be offered to him. The dread of what is sure to follow this competition for employment, based on the proposition of who shall work for the least wages, causes the employed workman to seek the protection of the Union. An additional handicap is thus placed upon the idle non-unionist, it being the policy of the workmen who are organized to insist that such opportunities for work as may occur in their trades be given to their fellow unionists.

In his testimony before the United States Industrial Commission, a high official of the Boot and Shoe Workers' Union says: "The large and increasing number of the unemployed is a serious and growing evil." "At the hearings on the subject in Massachusetts in the winter of 1893-1894, the property owning class seemed to take no interest in the matter." The witness expressed the opinion that the burden of supporting the unemployed should be thrown upon the property owning class in particular, by enforcing the requirement which exists in the constitution of Massachusetts, that each town and city shall employ or support all poor and indigent persons.

The Commissioner of Labor Statistics of New York, discussing the same subject before the Industrial Commission says: "The one free employment office in New York has been of great value, particularly in breaking up private employment or intelligence offices, so

called, which were more or less fraudulent in their methods, and which in many instances gave no return whatever to the poor for the fee which they exacted." "Some office or agency is necessary for the unorganized workers. Even a first-class mechanic cannot readily find employment in a great city like New York unless through some such means."

"The labor unions have agencies of their own; they are supposed to give opportunities for work to their men in the order in which they are registered. It often happens that this is not done; that friends of those in charge of the office are given jobs without registering at all, while those who should have employment, go without."

Much testimony to the same purport was offered at the various sittings of the Commission by men qualified to speak on the subject, all pointing to the necessity of providing some form of free agencies for helping the unemployed to find opportunities for work.

In New Jersey this sentiment took the form of a bill introduced during the session of the Legislature of 1900, which provided that Boards of Aldermen in cities *might* establish such offices, appoint necessary superintendents and clerks, and pay their services with other expenses of maintenance as other municipal charges are paid. The bill failed to pass, but the fact of its introduction proves the existence of a widespread sentiment in favor of extending the help of Government in this form to the unemployed.

In most European countries, the evils of unemployment are much greater and more widespread than in any part of ours. In them the trouble is of longer standing and much greater acuteness than it is here, and the measures of relief far more drastic thany anything yet proposed among us. Government abroad not only helps to find employment for idle laborers, but actually provides it in the form of work on the public domain, or on the government roads and buildings. The relief afforded the labor market by these measures, coupled with the opportunity enjoyed by all, but the most extremely poor, of emigrating to the United States, prevents social conditions in most of the countries of the Old World from decending to a level so low as to be intolerable. But that freedom of emigration is bringing to our shores large numbers of people for whose labor there is no immediate demand, and who, generally speaking, find work by underbidding those already here in the matter of wages. Our own difficulties in dealing with this perplexing question are thus being very seriously increased.

The industrial world is under much obligation to the Governments of the British Colonies of New Zealand and New South Wales for the boldness and enterprise displayed in the measures adopted by them for dealing with this and other intricate social problems, and the results which may be expected to manifest themselves in the fullness of time, will be looked for with keen interest by all interested in the advancement of the human race.

Among the most comprehensive and far-reaching measures for dealing with the evil of unemployment is the one which was adopted and put in operation by the Government of the Australian Colony of New South Wales. As an example of bold, earnest effort to relieve the distress inseparable from enforced idleness, it is without a parallel among the acts of Government. Many of the features of the plan of relief are incapable of application in any part of our country by reason of radical difference in the relation of Governments, National and State, to the people; but others of them might be adopted without seriously interfering with our social and political training. A condensed summary of the plan of relief, and also of the first annual report of the Commission appointed to carry it out is presented without further comment.

The minute of the Premier of the Colony dated March 18, 1899, addressed to the chairman of an advisory board composed of twelve gentlemen, among the most distinguished in the professional, public, and business life of the colony, which was appointed by the Minister of Public Instruction, Labor and Industry, explains fully the situation to be dealt with; it is as follows:

SUBJECT—THE PROBLEM OF THE UNEMPLOYED.

"For many years, at intervals and constantly since 1890, the question of the unemployed and what to do with them, has been pressing itself upon public notice.

"Public works have been pressed on from time to time, but the trouble has proved to be one which is not to be solved in this way.

"On Monday last I received a deputation consisting of a number of citizens and some representatives of the unemployed, who have devoted much time and evident ability to the subject, and these gentlemen have submitted an outline scheme.

"By general consent, the persons to be dealt with can be roughly divided into three classes: (1) The able-bodied unemployed, equal

to any reasonable degree of manual labor. (2) The unemployed who cannot do a fair day's manual labor, mostly because of advancing years; and (3) Those who wish to live at the expense of others, without work—in other words, the 'loafers.' 'For the first class, there ought always to be work available, if not in private employment, in carrying out 'public work' including the improvement of the vast public estate of the Colony, by means of an improved supply and distribution of water in the country districts by means of drainage works, and by clearing and fitting lands for settlement and production.

"For the second class more advanced methods will be necessary. I allude to the older men. If many of these could earn a few shillings a week, their case would be provided for in the homes of those related to them. That means work in some Metropolitan Area. Others of the same class without families settled in Sydney might find a home and work on some labor settlement farther off. In either case their labor to some small extent would come into competition with the labor of others, but that cannot be allowed to stop the way, although it may have to be consideerd in the methods of working.

"So far as the able unemployed are concerned, there would not be so many complications, because clearly, work can be found for them of advantage to all and of injury to none.

"There remains the worst class of the unemployed—those who will not work, however destitute, if they can live upon the community; that is to say, upon people nearly as poor as themselves. At present, many members of this class could be dealt with under the vagrant act, but the public would still have to support them.

"It does not seem feasible that the system adopted in the case of vagrant boys with so much advantage to the State, might be adopted in a modified form in dealing with adults; in other words, instead of sending them to prison they could be set to work for their food and shelter so long as they would not work upon their own account, as every other person has to do.

"If the cabinet concurs in these views, the next point is, what shall be done? I may say at once that I would be sorry to see these new departures carried out by merely and exclusively official agencies.

A very high degree of ability, very rare qualities of discretion, and above all, the most earnest zeal, are all vitally necessary in such difficult and, we must admit, experimental developments. At the same

time the responsibility of the Government to the public for what is done must be fully preserved.

"Following upon these lines, I recommend that a board be established to advise the Government and to carry out practically the objects herein set forth, and that the board consist of three Ministers of the Crown and nine other members, with power to make rules for the conduct of their proceedings and to make proposals to give effect to the objects set forth, and with power to carry out the work, subject in all respects to the approval of the Governor-in-Council."

The first "progress report" of the advisory board was submitted on July 14, 1899; it showed that fourteen meetings of the board had been held for the purpose of obtaining reliable information as to the number and classes of persons then out of employment in the Colony.

These meetings were attended by officers of various public departments and by private individuals in a position to furnish such information as the Board desired on the subject of the unemployed.

The Superintendent of the Labor Bureau estimated the number of the unemployed in the City of Sydney at between 3,000 and 4,000, and from 8,000 to 10,000 in the whole Colony, with a strong tendency to increase owing to the effects of the drought and the winter season. The proportion of skilled laborers among these is very small, the great majority even of the able-bodied men were found to be of the "unskilled laborers'" class.

They began their work with the determination to reject all schemes of relief which could be regarded as merely temporary assistance to the needy and concentrated its attention on developing some plan of work that would be not only permanent but also reproductive.

Having these ends in view and for the purpose of relieving the pressing distress as speedily as possible, the Board submitted twelve recommendations, all having relation to improvements on the public lands or on roads or buildings controlled by the Government.

These were: 1. Forest thinning, which work, experience had shown to be in a high degree reproductive. The expenditures already made in prosecuting it, had, according to the report of the Board of Forestry increased the number of marketable mature trees which average fifteen to the acre in thinned forests, the value of the future timber crop in these districts having been increased fully 300 per cent.

2. Bogan Scrub Lands. Clearing these lands of the bush and

scrub timber growths, thus placing them in a condition for settlement and cultivation.

3. Eradication of the Prickly-Pear. Investigations made by the Board show that large areas of vacant crown lands are being rendered useless by reason of the growth of the prickly-pear, and that although private owners and conditional lessees are required to eradicate the pest, it has been found impossible heretofore to cope with it by reason of the inactivity of the Government in the matter.

4. Conversion of the City Tramway System. This work being already authorized, the Board considered that, if proceeded with on a large scale, employment might be found on it for a large number of the skilled laborers among the able-bodied unemployed.

5. Grading of the Southern Railway Line. The carrying out of this work had already been sanctioned, and it was estimated that it would provide employment for at least 2,000 able-bodied men. The Board were anxious that no part of this labor should be secured by recent arrivals from other colonies or foreign countries, and suggested that in addition to applicants being required to produce certificates of electors' rights in this and similar classes of work, the whole of the men to be employed should be registered in the city or country agencies of the Labor Bureau.

6. Duplication of the Milson's Point Railway Line beyond St. Leonards. The importance of giving an improved service to this rapidly growing district was recognized by the Railway Commission which had recommended a grant by Parliament to carry out this necessary and productive work. The Board urged that steps be taken to proceed with it as soon as possible. The married, unskilled laborers of the Metropolitan Area, who cannot without great inconvenience leave their homes, could be employed here.

7. Drainage of Land in the Gwydir District. This work would effect a much needed improvement in half a million acres of land. A large force of unskilled laborers might be put to work upon it, and this immense section of public land be rendered available for settlement.

8 and 9. Repainting Iron Bridges, and clearing lands for cemetery purposes in districts near to Sydney.

10. Repairing and Repainting Public Buildings and Offices, many of which, it is represented to the Board, are depreciating in value for want of such attention. The Board urged that this work be proceeded with as soon as possible, as it would have the merit of pre-

serving public property and giving employment to a number of men.

11. Building Road to Mining Field. The Board recommends that a road be constructed to at least one of the mines in the Barragorang fields, which it is informed has produced encouraging results, notwithstanding the expense the owners have been put to through having to convey the ore over an almost impassable road to the smelting works.

12. Glebe Island. The Board recommends that men be put to work cutting down parts of the island, and utilizing the material for reclamation and for constructing walls around the island for wharfage purposes. Such improvements would, in the judgment of the Board, greatly enhance the value of this property.

These several projects for furnishing work have relation only to the ale-bodied laborers who are capable of doing a fair day's work. More difficulties were encountered in devising means of employing those whose age prevented their doing work of a character requiring physical vigor. It was found that there were many of that class that had been compelled by necessity to accept temporary shelter in some one of the charitable homes, who could, if an opportunity were given them, do some kind of light productive work; this class of men would show less hesitation about accepting public assistance, if they could feel that they were doing something, however little, in return for support.

In taking testimony relative to the unemployed, a man who was an expert engineer, blacksmith, and boilermaker, was given a hearing. He stated that he had worked only about six weeks out of fifteen months, and the greatest difficulty in the way of getting employment was his age, although still under fifty years. This man had applied for the position of teacher in blacksmithing at a technical college and had been refused the place because of his being over forty years of age, although he was in every way eminently qualified to fill it. His last employment of what may be called a steady kind, was as manager of the shops of the Milbourne Locomotive and Engineering Company. During the time of his engagement twenty-five locomotives and other rolling stock with a number of steel bridges were built directly under his supervision. In his search for work, this man said he had found almost in every instance where he made an application, that his age, regardless of physical condition, was urged

against him, although perfectly able to do a good day's work and willing to take a job as a common workman.

Another, also an engineer by profession, who had had much to do with managing enterprises employing large numbers of laborers, and who had also given much thought to the unemployed question, gave his views on the subject to the Board; they were in part as follows: "Relief works unless they are of a reproductive nature, should never be entered upon, as they leave the men on the completion of the work, in the same position as that which they held at their commencement, the relief pay not being sufficient to enable them to effect any saving. Apart from that, there is nothing in prospect to act as an incentive to persevere.

"Only those who are too old to make a new start in life should be placed on such works.

"For the permanent solution of the difficulty, suitable areas must be selected, each possessing certain natural resource and advantage, and such industries only should be established as are not in competition with established trades.

"Provisions should be made for an expenditure of $2,500 per man, extending over a period of five years—say $1,000 for the first year, $500 per annum for the next two years, and $250 per annum for the succeeding two years. This would include the current rate of wages for three and a half or four days a week, the cost of purchasing materials, stores and machinery, and materials for barracks, workshops and certain improvements. During this period trades should be established and the areas brought to the self supporting stage. A certain system of State credit currency should be adopted until obligations are met or satisfied, thus ensuring domestic supplies and reasonable individual wants during the development period. It may be advisable to conduct work on the State improvements continuously. Then shifts of three days should be adopted allowing the workers to follow their special trade, or to work on the land during the other three days, thus finding room for double the number of workers.

"Among the industries that might be established are such as are likely to grow out of the development of the settlement."

The Board visited the Hawkesbury Agricultural College, the Salvation Army Farm, and several of the charity settlements, to obtain an insight into the methods pursued at these establishments in dealing with the idle men who come to them for assistance. In these places it was found that good and promising work was being done,

mostly of the preparatory kind, however, although in one of the settlements all the food used by the inhabitants was being raised on the land already cleared.

After months spent in investigation of the conditions to be dealt with, and a careful scrutiny of the many plans submitted for dealing with the problem of the unemployed, the Advisory Board presented its Second Progress report on the subject to the Premier of the Colony.

This document, a very lengthy one, contains a clear and highly sympathetic review of every phase of the subject; it is in part as follows:

CLAIMS FOR STATE AID.

"While we do not for one moment desire to encourage the idea that the Government is a milch cow to be drawn upon at all times, we nevertheless, feel that a large responsibility rests upon the Government of any country to turn its resources to the most profitable uses by the judicious employment of the labor of its people.

"We have in this Colony large areas of land not at present utilized to the best advantage, owing to difficuclty of access rendering it impossible for the most suitable class of settlers to use it according to its full capacity of production. It therefore seems to the Board a proper thing for the Government to use its capital in offering facilities which will place upon the Colony lands, a body of producers who can at the earliest possible time utilize their holdings to the best advantage of the State and themselves.

"We fully admit that our land laws afford easy means for men possessed of capital to secure holdings, but at the same time there exists a numerically large class of deserving men who are debarred from making homes for their families by want of the necessary funds.

"For such men, it is the duty of the Government to provide facilies and thus to evolve, from a class of men who are drifting into a condition of poverty and ultimate dependence upon the State, a race of independent workers contributing to, instead of living upon, the wealth of the community.

"Large numbers of the present occupiers of land have been called upon to suffer hardships and difficulties which have made their lives one long round of drudgery. Want of capital has delayed them in

clearing the land, fencing, and otherwise improving it, so that years have elapsed before its productive capacities could be brought to that satisfactory condition which men assisted by means to overcome the initial difficulties could secure in, perhaps, one-tenth of the time. These initial difficulties have driven struggling settlers too often to obtain financial assistance at high rates of interest, resulting frequently in holdings becoming a source of income to the money-lender only, instead of to the pioneers, who eventually become so disheartened by the heavy load of interest that payments fall into arrears, holdings deteriorate, and utter ruin follows. Timely assistance would, in most cases, have enabled settlers thus ruined to become prosperous colonists."

As a first step toward a practical attempt to relieve the unemployed who are not settlers on the land and do not desire to try the experiment of bettering their condition in that way, the Board recommends the opening of a central office in Sydney under the supervision of an energetic and capable officer, who has a knowledge of the condition and requirements of the idle workmen, and who is known to have such sympathy for them as would inspire those seeking work with confidence that their necessities being fully understood, the power of the official and the office would be exerted to the uttermost on their behalf. This office is to be called the Labor Intelligence Department, and all in search of employment should be supplied there with information as to where and what kind of work is available, and also with laws relating to the industrial affairs of the colony, such as the land laws, mining acts, factory acts, conciliation and arbitration, and matter relating to other subjects having any relation to the interest of labor. The Superintendent or official in charge of the department should keep in touch with all the trade and industrial movements in the colony, in order that the fullest information should be at his disposal in giving advice as to where employment could be found, for the purpose of gathering this data sub-agencies should be established in all the centres of population. Officers in charge of these sub-agencies should send in to the central office regular monthly reports showing the number of unemployed, with particulars as to their trade or calling, and at the same time indicating whether a scarcity or surplus of any particular class of labor exists. In this way it may reasonably be expected that early intelligence will be obtained as to the prospects of obtaining work in any particular locality, and by rapidly transferring idle labor to where it could be

readily absorbed, the supply and demand would be more evenly balanced.

The department should not, however, attempt to supply men to take the place of those on strike or in any way antagonize trade protective organizations.

Unemployed workmen who desire to avail themselves of the facilities of the department must register in the office the following particulars regarding themselves: Date of application, trade or occupation of the applicant, whether married or single, number of persons dependent upon applicant, age, previous employment, period employed, reason for leaving work, and physical capacity at the time of registering.

After the first registration, the applicant is required to re-register at least once a month personally or by letter, failure to do so will be regarded as meaning that the man has found employment, and his name is removed from the register. A registry office for women is provided for, to be a part of the labor intelligence department, but under the direct care of a female superintendent.

An official monthly publication is recommended in connection with the department, that will contain reports on the labor conditions in the various centres, rates of wages, number of unemployed, and the demand for labor in the various districts. Decisions under the Arbitration Act, and prosecutions under the Factories' Act, as well as articles of interest concerning industrial questions should also be published in this paper.

To provide for the class of unemployed whose necessities compel them to appeal for temporary relief, labor depots in all large centres of population are to be established under the plans of the Board. These places of temporary refuge should be open to all persons not of notoriously bad character; shelter in them should be for a limited period, and conditional on good behaviour. Persons admitted will be as far as possible, engaged upon some kind of work while they remain in the depot, so that their own exertions may contribute to covering the expenses incurred on their account.

The assembling of idle men at places where they will be required to work, will enable those in charge to separate the industrious and deserving workmen from the incorrigible idlers who may subsequently be transferred to one of the compulsory labor colonies or settlements, for the establishment of which the plan of the Board provides.

Industrious and deserving men, both the partially capable and the able-bodied who apply at the labor depots are to be sent to Industrial Farm Settlements, where it is hoped their work in the various industries which may be carried on in addition to agriculture, will eventually make these establishments self-sustaining.

Competition with outside industries is to be avoided as far as possible but it is not believed that the maximum product of such settlements can have any appreciable influence on the ordinary market for labor. Among the industries suggested as suitable are poultry raising, bee-keeping, dairy-farming, fruit-growing, and the cultivation of potatoes, cereals and other farm products; the manufacturing industries recommended are those that will meet the requirements of the inmates, the surplus products of these could be used in charitable institutions or they might with advantage be exported to other countries.

All persons entering these settlements are to be placed on an equal footing upon admission, but as a great diversity of capacity will surely be found among them, a careful classification is to be made as soon as the skill and capacity of settlers can be ascertained.

Eight hours per day is suggested as the working time for adults, and remuneration is to be board, residence, clothing, etc., on a scale of allowance proportionate to the work done and the means available. A system of technical education in agriculture is part of the settlement plan, and every inmate is required to attend the classes where such instruction is imparted, to the end that the industrious and intelligent individuals among them may ultimately become qualified to carry on farming on their own account. The rules framed for the government of the farms should not be unduly oppressive, but prompt dismissal should be the penalty for disobedience, idleness, drunkenness, and immorality.

Assisted Settlement Blocks is the next stage to which the Board's plan carries the workmen who have gone through the Industrial Farm Settlement with a clean record; here permanent homes and an independent living will be provided for those who have shown their ability to undertake mixed farming pursuits.

For the purpose of carrying out this part of the plan, large areas of good land, not too difficult of access with either a good rainfall or some system of permanent irrigation must be secured. These areas are to be divided into blocks of a size dependent on climate, the quality of the soil, and position as regards a market; but each block must

be equal to supporting the family to which it is assigned. Interest will be charged on the capital expended and also on the unimproved value of the land. These blocks are to be rendered available to intending settlers of eighteen years of age and upwards, upon terms of perpetual lease, subject to the payment of interest charges, and the observance of the following conditions:

1. Occupation and proper use of the land to be an obligatory condition; all leases to be subject to forfeiture for a break in continuous residence and failure to perform a reasonable amount of useful work.

2. Two and one-half per cent. on the unimproved value of the land to be paid by the lessee, payment to commence at the end of the second year of occupation. The land to be subject to reappraisement, but not so as to increase the rental value in consequence of increasement of value caused solely by the labor and expenditures of the settler thereon.

3. The cost of clearing, fencing and building, together with that of tools, seeds, etc., which may be supplied to settlers is a first charge on the said improvements, and repayable with interest at the rate of four per cent., after the expiration of the second year, in annual installments extending over a period of twenty years. Where assistance is granted to a settler, permanent improvements of an assessed value equal to the advance given, must be made upon his holding. Where improvements are made at Government cost, their insurance must be provided for at the charge of the settler.

4. Each settler is limited to one block, and the controlling authorities reserve the right to cancel any lease if the land is not being used to the best advantage, or if for any good reason the continued residence of the lessee be not conducive to the interests of the settlement.

5. Leases to contain provisions for the creation and maintenance of channels for drainage or irrigation purposes and for the planting and preservation of trees for timber and shade, and such reservation of mineral rights as may be necessary.

6. Settlers may, subject to approval, transfer their holdings and the rights appertaining thereto, transferees being subject to the same conditions as those which govern the transferers.

As a further means of assisting deserving settlers who have a

knowledge of agricultural pursuits, and who desire to co-operate in the working of farms, the Board recommends that crown lands should be leased to parties of co-operators, and also that advances of money be made from the public funds for the establishment of co-operative industries in connection with such settlements.

The foregoing plans deal with two of the three classes into which the unemployed are divided by the Advisory Board. The Labor Intelligence Department to help the able-bodied worker to employment in the general channels of industry, whether the same be controlled by private or Government authority, and the Industrial Farm Settlements to assist the partly able as well as those who are wholly so.

There remains then the third class composed of those who will not work voluntarily, in other words, the "loafers," as they are so bluntly designated by the Board. This class is admittedly the hardest one to deal with, the peculiar nature of the circumstances requiring that they shall be placed under a discipline containing the principles of moral suasion and compulsion. In other words those who are not utterly degenerate should be encouraged by rewards to adopt industrious habits, and the others compelled to do so by the stern hand of authority. The plan proposed by the Board for dealing with this class is as follows:

COMPULSORY LABOR COLONY.

"With a view to dealing effectively with the persistently idle and vagrant class, we recommend that a compulsory labor colony be established, to which such persons may be committed. This Colony should be entirely separated from the industrial farms, both as to situation and management. It should be under the control of an officer appointed by the Government for that special purpose, and its aim should be to effect the reformation of the inmates as far as possible, and to compel them to earn by their labor, an amount equivalent to the cost of their maintenance.

"This establishment should be provided with means for carrying on such industries as may be found suitable to the capacity and character of the inmates. The latter should be carefully classed, and any indication of a desire to reform, stimulated by such encouragements in the way of better food and small luxuries as may foster a spirit of industry among them.

"To the compulsory labor colony should be sent all persons who

are now committed to goal for the offences of vagrancy, or having insufficient visible means of support; and the provisions of the vagrant act with such amendments thereof as may be necessary in the circumstances, should be made applicable to this establishment. The period of enforced residence in the Colony should be fixed at not less than twelve months for the first offence, and two years for the second."

Some further recommendations deal with the importance of early training in at least the rudiments of the various trades and callings, and urge the extension of a system of agricutltural instruction to the primary schools. This measure is strongly urged because on the whole there is good reason for believing that the land to a large extent offers the best means of permanently solving the question of how to provide for the unemployed. Teachers should be given a course of elementary instruction in agriculture at one of the department's experimental farms; after they have become qualified to impart instruction to others, classes in agriculture should be organized in the primary schools. No set courses should be established, but each country school should adapt itself to local circumstances. Around these schools experimental plots could be established, or should this not be practicable, arrangements could be made with some reliable local farmer to devote a certain portion of his land to such purposes; the pupils could thus be given both practical and theoretical instruction.

With the filing of this report, the existence of the Advisory Board came to an end, it having been dissolved by the Government at the request of its members on February 5, 1900.

In May, 1900, the Governor of the Colony appointed a permanent Labor Commission consisting of four members, to provide work for the unemployed. The appointment was accomplished by a memorandum addressed to the Commissioners setting forth in detail the scope of the duties entrusted to them. The commissioners are advised that they will be expected to organize and control all labor (male and female) not absorbed by private enterpirse, or in the regular employ of the Government, and assist the workers to obtain employment.

The first annual report giving details of the work accomplished and projected was submitted to the Minister for Public Works on October 31, 1901.

The plans put into operation by the new commission for relieving

the unemployed are on the same general lines as those submitted by their predecessors in the work, the Advisory Board.

The Commission was made by direction of the Prime Minister, a sub-department of the Department of Public Works, and was given full control of the Government Labor Bureau, the Casual Labor Farms, and such other branches and institutions as are now in existence, or that may be at any time founded in pursuance of their recommendations.

The new system, as established by the Labor Commission, for dealing with the unemployment problem, is set forth in detail in the report. It is as follows:

DESCRIPTION OF SYSTEM.

"Briefly described, the system is as follows: Upon applying for registration each man is required to produce an elector's right in his own name; he is then questioned by the classification officer, and assigned to one and sometimes two, of the five classes previously mentioned. He is then required to furnish particulars of age, birthplace, social (conjugal) condition, dependents, and previous employment. These are entered on a numbered card, on which spaces are provided for them; this card also contains provisions for entering up all particulars as to subsequent dealings with the man—offers of work, acceptance, or refusals, periods of employment, character and ability reports, advances, refunds, etc., and thus form a complete record of all transactions between the office and the applicant.

"A minutely divided alphabetical index enables reference to be at once made to the registration card of any man, and the history of his dealings with the department can be seen at a glance. As soon as the registration card is filled up, the applicant is required to sign it as a certificate of the correctness of the information supplied, and for comparison with any future signatures purporting to be his. A small pocket card bearing a corresponding number and containing name, address, occupation, and age, and similarly signed, is given to the applicant together with a parchment envelope for its preservation. A duplicate of such small card is placed in a specially devised and divided cabinet, in order of date of registration. When application is made for men to carry out public or relief works, a sufficient number of cards is taken in strict rotation or order of registration from the cabinet devoted to the particular class of men required, and noti-

fication is sent to each man's address either by post card or telegram, that work has been found for him.

"If any man so notified fails to report, others again in their turn are notified, until the requisite number has been obtained.

"These cabinets having divisions for men eligible and waiting for work; those at work (so far as is known), and those who have failed to report monthly as required; the cards are removed monthly from one division to the other as may be necessary. Thus, if a man is sent to work, his cabinet card is placed in the 'at work' division, in one of the seventy-five alphabetically indexed sub-divisions. When he reports off work and wanting more, the card is again moved to the eligible division, but placed behind all others awaiting work. The cards of men who refuse work when offered, or fail to respond to notices sent them, are similarly treated, any legitimate excuse being accepted, in which latter case the card is replaced in the front of the eligible division to await the next call for work. At the end of each month the cards of those who have made no report during the month just ended are removed from the eligible section and placed in one of the seventy-five alphabetical sub-divisions of the non-reported section.

"Thus a system of exact rotation is maintained with automatic accuracy, each man being offered work in his proper rotation, and his subsequent treatment depending entirely on the fidelity with which he does his work and complies with the regulations.

"Deprivations and loss of rotation are used to meet improper behavior and classification is changed where experience proves that such a course is necessary."

CLASSIFICATION OF APPLICANTS.

"It may be pointed out that this new system is the first organized effort to classify the applicants for employment. Of course it is not possible to accurately estimate a man's physical capacity without seeing him actually at work, but it is surprising to the uninitiated to see what a really small percentage of cases fail to justify the first classification, when made by an experienced officer. Such errors as are made are corrected when a man proceeds to work. Then his classification is determined by actual experience and observation; and as all officers-in-charge of works are empowered to pay a man more or less than the rate attached to his classification according to his

abilities, no unfairness can arise without almost immediate correction. All such changes are reported to the commission, and the man's classification is raised or lowered accordingly. To meet cases wherein allegations are made of unfair treatment on the part of officers in charge, no man's classification is permanently lowered until a second report, from another officer on another work, confirms the adverse opinion originally expressed."

The regulations for classification provide that married men shall have preference for work over single men. On all work in and adjacent to Sydney, only married men will be employed, so long as married men are available.

First-class men will be paid seven shillings per day; second-class men, six shillings per day, and third-class men, five shillings.

Should the officer in charge of any work consider any second-class man worth seven shillings per day, or any third-class man worth six shillings per day, he will be paid such higher amount.

On notification thereof by the officer in charge to the Commissioner, such man's classification will be changed as the case may require.

Should the officer in charge of any work consider any man sent to him worth less than the rate of pay belonging to his classification, he will at once discharge him or reduce his rate to the next lower class and report the circumstances to the labor commissioners who will thereupon lower the man's classification accordingly.

COLLECTION OF STATISTICS.

"This system is also the first attempt to procure accurate statistics concerning those who call themselves unemployed. It has always been quite well known that many idle and dissolute men have associated themselves with the genuine unemployed, but no method of identifying them by their records has been previously attempted. As a consequence there are a number of men who have been known at the bureau for the past nine years, and who never have had in all that time, sufficient initiative to do anything for themselves; but limpet-like have always clung to the Government and taken part in every unemployed agitation that has occurred during that period. It is no doubt true, that some of the information furnished by the men is misleading, but as no means exist at present for testing its accuracy, we are compeled to accept the statements made. This is minimized, however, by the searching nature of the questions asked and

also by the fact that many of the subsequent particulars are furnished by department officers, and thus each man's record is gradually built up."

CLASSIFICATION TO BE REVISED.

"In this connection it may be mentioned that the officer in charge of each work is furnished with a form for a report showing the personal conduct and working ability of each man sent to the work. These particulars are given in three grades, viz.—very good, good, and decline to certify. Thus a process of selection is continually going on and means are thus found for separating the good and willing workers from the loafers and incapables. To give practical value to these records, it is contemplated sub-dividing each of the present classes and to give preference to those who have proved themselves good and trustworthy workmen. At the same time those who have continually refused work when offered to them, without reasonable excuse, will be removed from the registers altogether. It has been found that some men have refused as many as five consecutive offers of employment."

The report points out the advantages of the new system of registration over the one formerly in use at the labor bureau. The exact fairness of the rotation system under which all element of chance are set aside and every applicant assured of an opportunity for employment when his turn comes, is gone into by the Commissioner. Under the rules, each man may devote all his time to looking for employment, feeling certain that when his turn comes he will receive a notice to present himself at the office and go to work. Another important advantage is that men residing at such a distance that it is impossible or very inconvenient for them to attend at the office, may obtain forms, have themselves registered and do all their business through the medium of the post office.

MONTHLY REPORTING.

"Under this system, too, each man's co-operation is sought in his own interest, and he is made to feel that he himself, is to some extent, responsible for the treatment he will receive. Thus the responsibility of bringing or sending his pocket card to be stamped once a month is thrown on every man. Those who neglect this, suffer accordingly, while those who comply reap the double advantage of

their own care and the other man's neglect. Periodical reporting is regarded as necessary to prevent the books being filled with names of men who register for one reason or another but who do not really desire work.

LOCAL AND CONJUGAL PREFERENCES.

There are two preferences given by which strict rotation is somewhat affected. The first is, that where any work is situated at a distance from the city, men in the eligible list who reside in close proximity to the locality of the work, have the first call when men are asked for. The other is that married men are given a preference over single men in certain cases, and married men with families of dependent children are given a further preference over married men supporting wives only, in the like circumstances.

The preference to married men is especially made in regard to work in or adjacent to Sydney, and it is manifestly just to employ married and family men as near to their homes as circumstances will permit, while requiring single men without dependents to go to the works that are further afield. Single men with dependent relatives are treated the same as married men.

DIFFICULTY OF GETTING MEN AWAY FROM THE CITY.

"It may be noted here that a rooted objection to leaving Sydney is evinced by a very large number of applicants for work, and all sorts of excuses are put forward, and subterfuges resorted to with a view to procuring work without the necessity of leaving the vicinity of the city. A sick wife or child is so persistently pleaded as to lead the unitiated to believe that we have the most unhealthy city in the world. Every established case of the kind is met with prompt sympathy, and all possible allowance made, but where no evidence is adduced to sustain such claims, they are set down as attempts to cover a disinclination to accept the particular work offered.

EMERGENCY WORK FOR IMMEDIATE RELIEF OF DESTITUTION.

"In addition to the work offered in his rotation to every man who complies with the regulations, a certain amount of work is given, apart from rotation, to urgent cases of distress. During a period

of six months 517 orders, each representing three days' work at loading sand into trucks were given for the purpose of affording temporary relief in such cases of destitution. Some men were given two and in a few instances, three of these orders, but the great majority had only one order; showing that in many cases the 17s., 6d. (average wage) thus earned tided over a difficulty and helped the recipient to live until other employment was available. All the men who received such orders were married. Work should always be available for such cases. To hand every man who claims to be destitute and starving, an order for a few days' work with immediate payment at the end of the first day, is better than any system of doles, which demoralizes the recipient and destroys his independence. Any system of relief that does not exact work in return from those able to labor, must of necessity produce evil results and should receive no countenance. A really efficient relief system would give every man in need a half a day's work on every working day for a brief period, all work being task work, and paid on results only.

In this way alone may the idle and dissolute be sifted from among the unfortunate; and really needed relief given to the deserving in such a way as to provide ample subsistence without offering them any inducements to hang on to the government one moment after they can find work in the ordinary channels of employment.

RATES OF PAY AND CHANGES OF CLASSIFICATION.

"The three grades of unskilled laborers are paid respectively 5, 6 and 7 shillings per day of eight hours on all Government works; while mechanics and artisans are all paid the trade union rate for their particular trade or calling.

On private work, the Commission do not seek to interfere with the rate of wages, except in some cases, where abnormally small wages are offered, we point out to the employer that he cannot expect to obtain satisfactory workmen for the small remuneration which he offers. To further obviate intereference with the labor market, the Commission always refuse to forward men to any place whether either a strike or lockout is in operation, or where either seems to be eminent.

COUNTRY RANCHES AND AGENCIES.

"There are at present forty-two branches or labor agencies dis-

tributed among all the most important towns in the Colony. Their management up to the present time has been in the hands of the clerks of Petty Sessions, but this arrangement has not been altogether satisfactory. It is now proposed to utilize instead, the Road Superintendents in towns where any are stationed; first, because it is under them that the men will be employed, if employed at all in the district; and because many of them interview the Superintendent from time to time, seeking work. Further, these officers have from the nature of their positions, a much better knowledge and judgment of applicants than any other Government officer could be expected to have, and are, therefore, the best able to classify those applying, and to determine their fitness for any particular work.

"In towns under municipal government, it is thought that the Council Clerks would be suitable agents, so far as their knowledge of, and connection with residents is concerned.

COUNTRY UNEMPLOYED.

"Although we have forty-two county agencies as previously stated, the number of registrations made thereat is very small, in many cases none at all during the whole past year. Some of the agencies have done no business since their establishment, owing in part to want of knowledge that they are available and, to a much larger extent, to the fact that there are but a few of what is generally termed "unemployed" men excepting in Sydney and the other large towns.

"There are at times, those who call themselves unemployed, but, as a rule, that is only when some Government work is commenced in their neighborhood. Nearly all such men own pieces of land varying from an allotment to a small section, on which they have a residence rent free and debt free. They make more or less of a living by working for the larger land owners in their vicinity, or by shearing sheep in season. These men have always a shelter and can obtain food, and are not therefore to be classed with the destitute unemployed of Sydney and the large provincial towns. Few of them, however, earn such wages as the Government pays for road and water conservation works, so that as soon as anything of the kind is started within reach of their homes, many of them clamor that they are unemployed and object to men from Sydney being sent to the work. Because of the higher wages on the Government work, they readily abandon any work they may have, feeling

certain that they can return to it, or to some similar employment when the Government work is finished.

ASSISTANCE GIVEN TO UNEMPLOYED.

"The list of concessions made to men who register as unemployed is a long one, and the assistance given to enable them to proceed to work is greater here than in any other part of the world. Railway fares at reduced rates are given them on short journeys, at three-fourths of the ordinary fare, while for distances over 20 miles, return tickets are issued at single fares. These concessions are limited to parties of six or more traveling together. Where work lasts beyond the ordinary duration of the tickets, they are made available for such longer periods as will enable the holders to complete all the work they can get. Serviceable blankets and tents are supplied to all who need them at actual cost price to the department. The cost of all fares and goods, together with half pay orders for wives or other relatives, is deducted from the men's earnings, the deductions being spread over such a period that no man will be left without at least ten shillings in every week with which to buy food.

"To make sure that the wives and children at Sydney shall not want while the husband and father is in the country at work, each married man is required to sign an order before going to work, empowering the department to pay to his wife every fortnight any proportion of the wages earned by him, not less than one-half, that he may wish to insert in the order. The moneys are promptly and regularly paid at the Paymaster's office in Sydney, postal notice being sent to the wives when the money is available.

"No portion of the Commission's work has received more careful attention than the arrangements to secure prompt payment of these allowances. In urgent cases, the amount earned has been frequently exceeded and special advances have been authorized and paid in many cases before money was earned to cover them. Of course, some losses have followed this very humane and peternal treatment, but this is unfortunately inevitable in any such system.

"It may, however, be reasonably claimed that the very laudable work of averting want and distress from women and children more than justifies what has been done, all losses notwithstanding.

"A further assistance extended to the men consists in their being conveyed at Government expense from the railway to the scene of their labor if the distance exceed ten miles. In some remote

places, the department has been compelled to open stores for supplying the men with provisions and in all such cases the supplies have been furnished at actual cost price without even carriage added.

GUARANTEED RATION SUPPLY.

"Until recently, all local officers gave guarantees to local storekeepers for the period to first pay day, whether two weeks or a month, for all stores supplied to men working on a job. This privilege was, however, flagrantly abused, many men obtaining as much stores as they could get, and then leaving without earning enough to pay the bill, and in a number of cases without going to work at all. As a consequence, the minister has ordered that no such guarantee be given in future. This inflicts considerable hardship on many honest men who have no means to purchase stores and who, being without credit, are unable to obtain food and are consequently compelled to refuse work they would otherwise glady accept. It is hard to understand why with these concessions and careful provisions, so many men refuse to take work offered them. For such conduct in the case of single men at least, there can be little or no excuse.

"While on the subject of restriction of concessions, or revocation of those previously enjoyed, attention may be drawn to the very great amount of money lost by the indiscriminate issue of railway tickets to men claiming to have work in various parts of the country. During the not quite ten years that the Government Labor Bureau has been in existence, no less than £60,000 has been lost in this way, all of which has, of course been added to the ordinary burdens of the tax payer. In addition to tickets, many men who call themselves prospectors or miners, were supplied with tickets to the auiferous portions of the country and also with rations, miner's rights, tents, blankets, and in some cases tools, as well. In very few cases have these advances been repaid, and they form a large share of the unadjusted advances above referred to. Under present regulations no railroad tickets are issued except to men having definite engagements to go to work, or a personal guarantee of some known respectable person to refund the fare advanced, in the course of three months, should the applicant for a ticket fail to do so.

"The loss on tickets advanced during the past two years has been £1,700 and £2,000 respectively.

PROMPT AND SYMPATHETIC ADMINISTRATION.

"A special feature of the new system is the large amount of trouble that has been taken to secure a prompt and sympathetic administration of all matters concerning the unemployed.

Every man having a complaint or grievance on which he desired to be heard, or a suggestion for improvement to offer has been received patiently and given every encouragement to explain all that he thought and felt, oftentimes in most useless and wearisome detail. There are often so many of these complaints, that during some entire days, the Chief Commissioner can do no other work than listen to them. The average number who interview the Commissioner for the purpose of stating grievances is about fifty per day. It is worthy of remark that among this large number of complaints very few indeed are found to have any really solid basis. Where the contrary is the case and it is found that through mistake or otherwise, wrong of any kind has been done, the proper remedies are at once applied, and the equities of the matter thoroughly satisfied."

The Government Labor Bureau which had been in existence upward of ten years before the establishment of the Labor Commission was abolished, its duties as modified and recast by the new regulations being assumed by the Commission.

The following statistical analysis of the Commissions first year's experience in dealing with the unemployed is very interesting.

(a) Only about one-third of the total number registered as unemployed during the twelve months are new registrations, viz: 2,858 out of 10,501. The other two-third were on the old registers and have been identified as former habitues of the Bureau. From this, it would seem that the number of fresh cases is less and not more, than in former years.

(b) Out of nearly 1,100 registered in the clerical and mechanical divisions, only a few over half are willing to accept laboring work of any kind; a fair deduction from this circumstance is that their lack of adapability is to a very large extent responsible for their distressed condition.

The bodily vigor of these men is shown to be of rather low order, for such as were willing to labor had to take places in the second grade or among those who are only partially able to do a fair day's work. Many were found to be below that rating, and only a very few proved equal to really hard manual labor.

(c) Investigations into the ages of those who have applied to the

Commission for assistance shows that few of them are under 20 years; the larger number are between 20 and 30, and 30 and 40; nearly 2,900 are found in each of these divisions. Those between 40 and 50 number nearly as many, viz: 2,261. Between 50 and 60, the number falls to less than 1,500, while only 718 are registered as being over 60. It is the experience of the Commission that many men set down their age at less than it really is, fearing they might be debarred from work if their actual age were known. Of the number who are registered as over 60, one-half were found to be only third grade physically, and many are entirely incapable of anything beyond the very lightest labor.

(d) In viewing the conjugal condition of applicants, it is found that married men and widowers predominate. In the aggregate there are 11,000 children not able to maintain themselves, dependent on them.

(e) The investigation of origin or nationality of applicants shows that New South Wales and Great Britain (which includes British possessions other than the Australian Colonies) have furnished substantially the entire number in all classes, and that these two countries have each yield an almost equal number, viz., New South Wales, 4,785, and Great Britain, 4,653. Only 692 came from all the other Australian colonies, while from the foreign countries, including the United States, there came only 371.

(f) The statistics of monthly reporting shows that 18,000 separate reports were made and recorded. The degree of interest displayed by the applicants in the efforts to help them, cannot be safely deducted from the number of reports made, as many names were on the registry for only a few days, and the time for reporting in such cases had not yet arrived.

This system of registration and monthly reporting is favorable to forming an estimate of the number who register, but really do not want work; for of the total number of men registered during the twelve months covered by the Commissioners' report, viz., 9,442, there were 3,485, or nearly 37 per cent who from time of registration had never reported as wanting work, or placed themselves under official notice in any way.

The Commission express the fear that "these men have registered to escape the imputation of being vagrants and vagabonds, by using the registration card as a proof that they have looked for work." Ulterior motives of various kinds have doubtless influenced a number of others, while a large proportion no doubt entertained the notion that they had only to register to be at once put into permanent

Government situations, and finding this an illusion have taken no further steps in the matter. In estimating the demand for work these men may be safely struck off the total number who honestly desire to obtain it. Some, however, of the number who registered and failed have undoubtedly found permanent work in the country districts after being assisted by a railroad ticket. No accurate conclusions can be drawn from comparison of the number registered and the number who reported, but it is curious that they show, on the whole, that each man got an offer of work, for each monthly report he made.

(g) Coming to the statistics of work offered and its distribution, the report of the Commission shows that out of 16,173 offers of work made to various men, 7,899 only were accepted; 3,237 were refused, while no less than 5,036 elicted no response at all. These offers were made to 8,139 individual men, thus giving a general average of two offers to each man. Of these 5,049 men accepted work representing 7,899 separate works or say one and a half jobs to each man. Three thousand and ninety individual men either refused the work tendered them, or did not in any way respond to the offer.

Regarding the duration of the employment, and the reasons that governed such periods, the figures show that in 3,175 jobs, about 40 per cent. of the whole, the duration of the employment was under one month. On these particular works, the records show that 925 men either voluntarily left or were discharged for incompetency within one month of starting, those who voluntarily threw up the jobs being far more numerous than those who were dismissed. In 1,493 cases the work lasted over one month, but under three months; and in 535 cases, the work lasted more than three months. Some of these latter lasted up to twelve months, and in a few cases for a much longer period, the work being still in progress at the time of making the report.

The foregoing figures relate almost entirely to Government work. In many cases where men were sent to private employment, no reports were subsequently received from them, and there is, therefore no means of determining the duration of their employment.

An investigation of the reasons for which men abandoned the employment given them discloses the fact that 3,201, or 44 per cent. were honorably discharged on the completion of the work to which they were sent. Only 179 were discharged for disorderly conduct or incompetence. Sickness and accident compelled 159 to leave, while no less than 1,454 voluntarily abandoned their work before its completion.

Reports made to the Commission by the officers in charge of the works on the personal conduct and ability to work of men placed under their control, show that 797 were marked "very good," 4,894 "good," and 460 without marking which is equivalent to unsatisfactory. In 4,894 cases no records were obtained. This number includes all those engaged on work at the close of the year covered by the report. Of the number marked unsatisfactory, twice as many were so designated on account of their work, as were thus characterized for bad conduct, proving that many were well behaved but unfit to do the work to which they were assigned, in a proper manner.

That the work obtained through the Commission is almost entirely manual labor is shown by the fact that out of 217 men registered in the clerical and professional class, work to which they were accustomed could be found for only 21, and in the mechanic and artisan class of 880 men registered, only 315 were offered work at their trades, and in most cases these offers were only a few day's work. Taking both classes together, only about one-half of the offers were accepted, but many turned their hands to manual labor.

The total number of men in the three manual labor classes who by reason of non-compliance with the regulations were never offered work, was 1,938, about 1,100 of whom were rejected during the last two months of the period under review.

The Government determined to clear some of the traveling stock routes of timber and brush that impeded the free transit of cattle droves, and placed the work of carrying out the improvements under the control of the labor commission. It was arranged that men desirous of taking up this work should organize themselves into gangs of seven, each gang selecting one of their number as a "ganger" to represent them in all transactions with the Government; the work was to be paid for at a certain price per acre, which was to be fixed by the local road superintendent and the stock inspector acting together. The routes most easily accesible from the railway lines were selected to operate on. The Labor Commission furnished railway fares, tents, blankets, cooking utensils and tools, charging them against earnings and gradually deducting their cost as wages accrued.

Operations were begun under a price per acre, which, experienced officers believed, would allow a good average workman doing a fair day's work to earn seven shillings.

Of course, as the work was specially set apart for elderly men and those of weak physique, it was not expected that they would earn so much. Fifteen gangs from which all able bodied laborers

and unmarried men were excluded, were sent to five districts previously selected, three gangs going to each district.

Each gang was in charge of a superintendent who was responsible for the work and the payment of the men. Orders for payments to wives in Sydney were left by a majority of men, who also signed an agreement to share alike in all payments, and be jointly and severally liable for all advances made to any member of the gang. They were also assured that the work would last at least three months.

Notwithstanding, that the basis on which payments would be made was explained with all possible clearness to every man, in nearly every instance they interpreted it to mean that wages of seven shillings a day were guaranteed, whatever the quantity and quality of the work performed, or the capacity of the individual might be.

The experience of three gangs of seven men each, in one district, is typical of them all, and shows how the experiment worked.

This party began work on a block of 1,194 acres, at one shilling and three pence per acre. In a short time after beginning the work complaints began to be received from the men that the rate paid did not enable them, though doing their utmost, to earn more than three shillings per day instead of the seven shillings they expected. The overseer's report made after three week's operation showed a very different state of affairs.

The overseer summarizes the working qualities or capacity for labor of the men composing the three gangs in this way:

No. 1 gang—"Most indifferent workers; only two fairly suitable, and even these are slow. Four are very poor workers, one being almost useless; one man solely occupied in cooking for the others."

No. 2 gang—"Five men very fair; one acts as cook for six workers."

No. 3 gang—"Three good men, three very poor, one cooks."

Summing up, the overseer states that although the men were not suited to the work, the majority in fact requiring to be taught, it was quite possible for them to earn five or six shillings per day at the rate fixed. The prices, were, however, on their persistent appeals, raised to a figure which the road superintendent considered would easily enable them all to earn at least six shillings per day, working as they had previously done.

A report on the earnings of these three gangs issued after their contracts had been fulfilled, showed that number one and three gangs had averaged exactly six shillings per day, and gang number

two averaged on the same work, a fraction of a penny more than seven shilings per day. After nearly three months observation of these gangs, the overseer who had general charge of them stated that only five out of the twenty-one men were good workers. Some of the others he declares were "very lazy," "schemers," "very poor workers," etc., while a few, he says, were "willing enough but incompetent." Three abandoned the work whilst making seven shillings per day, and one very old man deserted whilst earning six shillings per day.

The experience of the gangs sent to the other districts is very similar. Complaints on the men's side as to the lowness of the rate and consequent small wages and discontent at having been deceived by the alleged promise of seven shilings per day. On the other hand, the failure to earn fair wages is attributed by the Road Superintendent and Overseers to the fact that "many were unsuitable," " men too old, others lazy"; "men simply did not work"; "some would not do a fair day's work, nor allow others to do so."

One ganger asserted that his gang deposed him because he insisted on their doing a fair day's work of eight hours, and declared that instead of their doing so, the day's work was usually but little more than six for five days in the week, and three on Saturday.

In the main, the work carried on upon these lines seems to have been productive of rather unsatisfactory results. The land cleared remained of course, as one of its useful products, but the labor cost averaged 12 shilings per acre, whereas seven shillings according to the judgment of experts would have been a fair price. Most of the men employed were not permanently benefited, their surplus earnings where any remained, having been spent in drink when the job was finished, and they themselves in as helpless and dependent a position as before it began, but there appears to have been some highly honorable and encouraging exceptions to this rule the Commision reports—"Some of the men paid their wives £4 per month for nearly five months, paid for their own equipment and maintenance, and had about £12 in hand at the conclusion of the work."

For the reasons given above, it is not surprising that the Commission do not regard the experiment of placing unemployed men of miscellaneous qualifications at work on the co-operative system. It is declared by them to have proven "unsatisfactory both to those it was devised to assist and also to the officers who were responsible for the work"; the able and willing seemed in a short time to regulate their work by that of the feeble and lazy who appear all through the various stages of the experiment to have been in a

majority in all the gangs, the result being that the work of each of them is reduced to a common measure much below what was expected. Theoretically the co-operative system of working should the commissioners say, appeal to the best qualities in the workman's nature.

"It places him on a much higher plane, and enables him to more fully comprehend the dignity of labor. Under the co-operative system of work, he is his own master and has a personal interest in the economical and and successful carrying out of the work."

CASUAL LABOR FARM.

The casual labor farm which was started in 1893 on an area of 2,140 acres of land granted by act of Parliament for a village settlement to be worked on the co-operative basis, seems also to have produced results as unsatisfactory as were those of the co-operative gang system. The Commission's report states that one hundred men with their families, totaling 480 persons, began operations on this land under a Board of Control, which assisted the individual members on a communal basis out of the funds advanced in the terms of the act.

The soil was found to be poor and the water supply insufficient, and although the Government more than doubled the amount of funds advanced at the beginning of the undertaking, failure was apparent in less than two years. The population decreased to 281, and to 104, eight months later. All attempts to make the settlement self supporting by cultivating the soil had been abandoned, and the sole revenue was derived from cutting fire wood for sale. The co-operative principal was abandoned after three years' trial, and the settlement was converted into a Casual Labor Farm, and control assumed by the Government.

A report made on the improvements made up to this time showed that these consisted of ninety rude huts, a saw mill, and a bullock team. All these except about a third of the huts were sold before the transfer.

Felling the timber appears to have been the only attempt made to improve the soil, and this had been so carelessly done that no cultivation was possible until the stumps of the trees were removed. The new management took up the work of clearing, fencing and ploughing the land and repairing the huts; its control lasted from June, 1896, to June, 1900, a period of four years.

The financial result for that time as reported by the Commission

was: Expenditure, £5,354.16; receipts, £1,628.17; a net loss of £3,725.19, or slightly under £1,000 per annum.

The Labor Commissioners assumed direct control of the farm in the latter part of 1900. An investigation which they made into the state of the farm disclosed a rather discouraging condition of things. Out of the entire area of 2,140 acres, only 160 were cultivated, the crops being mangolds, maze, potatoes, cabbage, kale, etc. Twenty acres being planted with fruit trees which were, generally, of a poor quality. From 200 acres, the trees had been merely felled and the stump left standing. The soil, which as before said, was very poor, produced meagre crops, the product of 16 acres being value at only £20. The arrangements for the conservation of water for irrigation purposes were quite inadequate. The average number of men on the farm was 20 and as the loss was nearly £1,000 per annum, the cost per man was nearly one pound per week.

The living arrangements for the inhabitants of the farm were found to be of the rudest description, the huts being of slabs, unlined, fitted with rough bunks, tables and seats. No sanitary arrangement whatever had been attempted. Discouraged with the outlook for placing the farm on a self-sustaining basis, or even reducing the loss incidental to maintaining it to a reasonable figure, the Commission recommended that the settlement be kept in the best order possible, without making any permanent improvement, with a view to selling or leasing it at an early date, the proceeds to be used for the establishment of a labor farm on improved lines and in a suitable locality.

The efforts of the Commission to find some more suitable site for the industrial farm not meeting with success, they proceeded to work energetically to make the best of what they had. The net results of the first year's administration showed the deficiency reduced from the former average of nearly £1,000 to but a little over £400.

The earnings of the farm were nearly doubled, and the weekly average number of men maintained was 38 as compared with 20 the previous year. Besides achieving these important financial results, the comforts of the men were much increased by improvements in the huts in which they reside, and their furnishings. Much other work was done which is not immediately productive, but notwithstanding all this, the cost to the state per man for maintaining the farm, was only a little over 5 shillings per week, as against the average of one pound for the same period during the co-operative management.

The results of these endeavors to improve both morally and phy-

sically, the condition of those whose poverty compelled them to resort to the farm, is interestingly set forth by the Commission, in the following terms:

"With a small percentage the results have been nil. These have been of the loafer type, whose ideas were summed up by two individuals who left surprised at the fact that it was not a retreat from hard work, asserting that they "did not come here to work." With others, however, the result has been different. Some idea of ploughing and general farm work has been given them, which enabled a few to find local employment. But the chief favorable result was the general improvement, physical and moral, noticeable in those who left, as contrasted with their condition on arrival. Many came broken down, barely clad, and absolutely destitute; after a refit, the regular discipline, good plain food, easy work in the open air, all combined to effect a wholesome and striking improvement.

That the advantages were appreciated by the men, is quite evident from letters asking that the period of three months, the usual limit of a man's stay, might be extended. The reasons given for their applications show what an advantage such a place is for the men for whom it is designed.

A few quotations will suffice. Extensions are asked to "tide me over the winter;" "till sugar cane cutting starts"; "till shearing starts"; etc.

Another states that he has "paid several small debts since being here" another "paid off 8 shillings to the departments for fare advanced"; another pleads "extension would be of infinite value to me, my stay here has benefited me in mind and body"; while one pleads his past service as a reason "for extension." This important part of the work of providing temporary help for the unemployed, and for impressing the shiftless with habits and ideas of self help seems on the whole to have been as successful as could reasonable have been expected. The results, however, show conclusively that mere "admission to the land" is not, as claimed by an important school of social economists, all that is required to solve the problem of how to abolish poverty. In this case, the land free of cost was given, with supplies of necessaries for starting, at least equal to those at the disposal of the ordinary pioneer settler, who voluntarily goes into a new country and achieves competence by reducing its wild lands to cultivation. Making full allowance for the casual character of the settlers, it would still seem that even the smallest amount of adaptability and energy, the margin of deficiency in the returns from their work after four years of experience should have

been less than one pound, nearly $5 a week per man; an amount sufficient to keep him comfortably without requiring him to do any kind of labor. The worst showing was for the four years during which the settlement was run on co-operative principals, the occupants, themselves practically managing everything. The superior form of organization and discipline introduced by the Commission on taking charge reduced the deficiency per man nearly 60 per cent. in one year, and its continuance on the same lines will, doubtless before long, make the farm more than self sustaining.

THE LABOR DEPOT AND REFUGE.

An important part of the plan of relief for the unemployed instituted by the Labor Commission, is an establishment bearing the above name for the reception of deserving persons so destitute as to require immediate relief. This institution is designed to be a temporarily refuge for those who sleep in the public parks at night, and who beg alms in the street on the plea that they are without food and shelter. At the time of issuing the Commissions first report, the labor depot had only just been completed, and although some 25 inmates had been admitted, sufficient experience had not been had to furnish material for a report on its practical working.

The rules adopted, provides that destitute and shelterless men be admitted, and in return for food and shelter they should be expected to do a fair amount of work. That the labor be made to vary with the amount of relief granted, and in addition to shelter and food, a small payment be made.

That rational amusements be provided, as well as books and papers, together with some attempt at affording opportunities for education.

That men be placed in the way of obtaining employment, or drafted to proposed labor farm, and that the term of residence be restricted to one month.

The site on which the buildings for the depot is erected consists of 260 acres; the structures—two in number, are each 100 feet long by 30 feet wide. One of the buildings which has a concrete floor is used as a dormitory. The men are provided with either wooden stretchers or iron bedsteads, to which is added a mattress well stuffed with clean straw, pillows, sheets, white blankets, and colored coverlets. Mirrors, combs and brushes are provided, and every man is furnished with a clean towel each week for his own exclusive use and soap without limit. The dining room is furnished with

substantial white wood tables and forms, the table service being of tin. The regulations have been so modified as to make the depot a home of more permanency for elderly and partially capable men, rather than the purely casual shelter it was at first designed to be. Casuals are still accommodated, however, when they present themselves.

In this retreat, within easy walking distance of any part of Sydney, men who by reason of age or physical incapacity are thrust out of the ordinary channels of employment, may find a home in which for such small amount of work as they are able to do, the necessaries of life and not a few of its comforts will be given.

The food supplied is plain and wholesome, no objection can be offered on the score of variety and quantity; every day there is served to each inmate, one pound of meat, one pound of bread, one pound of potatoes, and one pound of other vegetables. Porridge each morning with milk, sugar, syrup, tea, coffee and biscuit are also served. "Add to this comfortable beds, compulsorily kept clean, in a good atmosphere, and with plenty of room, abundance of hot and cold water, with every facility for bathing and washing both their persons and clothes, it will be seen that every material necessity is well looked after."

The buildings are supplied with electric lights, a large reading room with books, magazines, and the daily paper, which are furnished free of charge. There are also games of cards, dominoes, draughts, etc., so that apparently the lot of those who make the labor depot their home is superior to many of not most working people who are able bodied and in regular employment.

The partially able men for whom it is intended, such as broken down clerks and professional men, and others who are weak from privation or disease, find in the depot a refuge where they may recover their lost energies, and yet be in reach of any opportunity for suitable work that may occur.

The work is on much the same lines as at the casual labor farm before described, but of an even lighter character, and is therefore reserved for the least physically competent of those who apply.

For the general run of applicants, the full time allowed is three months, but in numerous instances an extension of time is asked, and such requests are always granted.

For aged persons of good character and previous activity of life, the depot is practically a permanent home. The place is open to every man to earn bed and board, so long as he obeys the regulations and labors for what is given him. All taint of paupersim is

carefully avoided at the institution, and men may preserve their self respect because conscious that they are earning all they get so far as their ability permits.

Residents may receive visits from friends, and may pass in and out as freely as if the place were their own, the only limitations being the regulations which are framed solely with a view to the peace comfort and well being of them all. So heartily and ungrudgingly is this benevolence extended by society to its weak, and for the time being at least, helpless members, that instead of seeking to make admission difficult, or placing impediments in the way of those who need its protection, the broadest publicity is given to the fact that here is an institution where absolutely any man may have his bed and his food every day for a period of three months without in any way depriving him of the opportunity to secure work in the regular lines of employment. After breakfast, he may spend the entire morning looking for work, and if unsuccessful, may return to the depot, and by work at light task for three hours before supper, he may secure his two meals and bed, and so fit himself to commence the struggle of life the next day refreshed and hopeful. Of course, care is taken to exclude those who have private resources of any kind, or old-age pensions.

As before stated, the regulations of the depot provides for the payment of a small money return to those who work in excess of what is required for bed and board. To estimate the amount that should be paid to them, a mark system is followed by which twenty marks may be earned each day. At the end of each week, the man is credited with the money value of the marks earned by him during the preceding week, and these amounts are held until he leaves the depot, and he then has a not insignificant sum of money in his pocket with which to again begin the battle of life, in addition to a very much improved physique derived from the liberal diet, and regular life he has recently enjoyed.

From June 1901, up to the date of the Commission's report, 57 orders for admission were issued; 9 failed to report, 25 left after a period of residence varying from a few days to two months, and 23 were still in the depot on August 31, 1901.

The manager reports the conduct of all as good during the period of their stay. At the time of making the report, only two officers were engaged at the institution, the Manager, and Labor Master or Agricultural Instructor. As the number of inmates increases, it is intended to provide an instructor skilled in mechanical pursuits.

Mending of shoes and clothing would be very advantageous, as many of the inmates come in shoeless and ragged.

It has been suggested that men who have homes and dependents, might be permitted to earn a certain amount of rations by working at the depot, and allowed to carry these supplies to their needy ones, but such a departure from the original system would have many bearings, all of which require careful consideration before arriving at a decision.

INDUSTRIAL FARMS.

Having dealt with those branches of the work of relieving the unemployed which demanded the most immediate attention, the Commission next directed its efforts to the establishment of industrial farms to which might be sent people of a somewhat higher physical grade than those provided for at the Casual Farm, or the Labor Depot, but who are still unable to maintain themselves in the ordinary avocations of life.

It was decided that considering the class of persons for which it was provided, the institution should be of a more permanent home-like and educational character than either of those already in existence; also that it must be open to married couples and their children and not confined to men. This important part of the work was still but a project at the date of the Commission's report, August 31, 1901; it had, however, been approved by the Government, and steps were being taken at that time to secure the necessary sites, after which the work of laying out the farms and perfecting plans for their administration was to proceed without delay. For satisfactory sites, the following features are deemed essential by the Commission:

(a) Sufficient area to render diversity of industry possible, and to accommodate and supply 500 persons. This is estimated as between 2,000 and 1,500 acres.

(b) Soil of good agricultural quality, suitable for mixed farming.

(c) Ample water supply and facilities for conservation of water for irrigation.

(d) Proximity to Sydney in order to secure a market, minimise carriage and facilitate continued supervision."

The main lines for the management of the industrial farms as laid down by the Commission, subject of course to such changes as may be suggested by experience:

1. The farm shall be of approximately 2,000 acres, of good quality of land, good climate and rainfall, and within 50 miles of Sydney.

2. To be placed in charge of a skilled agriculturalist, used to handling men.

3. Residents to be selected by the Commissioners as accommodations become available, to a total number of 500 persons, divided approximately into 100 married couples, 200 children, and 100 single men.

4. Housing to be in cottages, one to each family, with a single man boarder, if possible. Barricks or hut accommodations for single men not taken as lodgers.

5. Women as well as men to be employed, the former in washing, cooking, fruit preserving, etc.

6. Common kitchens and dining rooms for three main meals in each a day.

7. Production and employment to be so diversified as to cover as far as possible, every requirement.

8. Competition with private producers to be avoided. Production disposed of to go to Government institutions or to be exported.

9. Eight hours to be a day's work, except in cases of emergency.

10. Payments to consist of lodging, food, and a small monetary allowance.

11. Entrants to be admitted on an equality, but careful grading and classification to follow.

12. Technical instruction to be given by Government instructors.

13. Residents unable to earn their own subsistence within three months, to be removed.

14. Ordinary period of residence to be six months, but to be lengthened by mutual consent.

15. Every facility to be afforded residents to pass into ordinary employment.

16. Facilities to be afforded to those considered suitable and desirous of doing so, to take up assisted settlement blocks.

17. Such other regulations as would enforce good order, sobriety, etc."

The opinion is expressed by the Commission that such a farm cannot reasonably be expected to be self-supporting in any less time than five years after its establishment. To bring about success in that time every natural advantage must be sought as the inefficiency of the labor that will have to be depended on, and the continued influx of persons totally inexperienced in this mode of life, with the

necessary frequent loss of partly trained inmates who go out to take ordinary employment elsewhere, constitute a very heavy handicap.

But regardless of the question of their becoming self-sustaining, there can be no doubt that such industrial farms as are contemplated would be of very great advantage to the state; at least they would always produce some set off against the cost of maintaining the idle who cannot help themselves, and who must be supported in some way, at public expense entirely, if they are not placed in the way of earning their living in whole or in part themselves. The influence of the farm with its rational discipline and steady habits of industry would surely in time inculcate self-reliance and thrift among hundreds who had become shiftless and despondent through long continued struggle with adversity.

Many hundreds of these men, improved physically, mentally and morally should be returned from the farms to a useful life in the ordinary channels of employment every year.

ASSISTED SETTLEMENT BLOCKS.

The plan for the establishment of settlers on individual blocks of land which, subject to certain conditions, they may use entirely as they please, is the natural corollary and outcome of the Industrial Farms.

Nothing had been done toward furthering the work on these lines by the Commission beyond adopting in its entirety, the very comprehensive plan submitted by their predecessors, the Advisory Board, the essential points of which have been fully quoted in another part of this article.

COMPULSORY LABOR COLONY OR FARM.

As stated before in reviewing the plans submitted and recommended for adoption by the Advisory Board, the class of persons for whom the Compulsory Labor Colony is designed are the "loafers" and vagrants who under any condition of industry prefer idleness to work; these are supported either by industrious but poor relatives who can illy afford to carry the burden, or else eke out a precarious existence by begging, supplemented by petty pilfering whenever the same may be safely done.

Although the Commission is no less stern in their characterization of these parasites of society than was the Advisory Board, it still looks hopefully on the prospects of reformation for some individ-

uals of this class through a judicious mixture of persuasion and compulsion in the discipline under which they will live at the labor colony.

That the Commission is not mistaken as to the character of the material to be dealt with is shown by their own language in introducing the subject: "We are much impressed with the necessity of establishing at a very early date some place to which might be committed the loafer, the vagrant and other pestential persons who will never work if they can by any possibility exist without it, and whose presence among the community is a source of continual danger, both of moral and physical contagion. Park prowlers who rob our children of the use of the beauty spots intended for their recreation, are an eyesore and a disgrace by day, and a menace by night. Hotel loafers and human parasites of all kinds should no longer be permitted to go their nefarious ways unchecked.

Such things are so rife in Sydney and thrust their hideous presence so boldly on public attention, that no time should be lost in taking effective measures for their suppression.

We are of opinion that a large percentage of even this unpromising material can be reformed, and made into useful members of society, but the method must be heroic. They mush be dealt with on the Apostolic principal. "If any will not work, neither shall he eat." We desire to see no man starve, but if any man will not, of his own free will, earn subsistence, when the opportunity of doing so is afforded him, then he should be compelled by whatever force may be necessary, to earn that which he eats."

In summing up the results of their labor for the twelve months covered by the report, the Commissioners express regret that the work available has been so much alike in character. The call seems to have been almost exclusively for unskilled labor, mainly with pick and shovel.

Ninety per cent. of all the work to which the unemployed were brought through the agencies of the Commission, has been road-making or repairing, dam-sinking, water channel cutting, and clearing. Five per cent. has been cutting scrub, prickly pear and ring barking. The other five per cent. includes mechanics and artisans work, miscellaneous and unclassified occupations, in which there was this small demand for labor.

This somewhat lengthy review of the comprehensive and liberal plans adopted by the Government of New South Wales for dealing with the problem of the unemployed, is still only an abstract of the volumnious report on the system as adopted, and the results real-

ized, so far as it had been put in operation. The great importance of the subject itself and the unexampled liberality and enterprise displayed in the measures decided upon by the authorities of this comparatively new country, for checking the growth of an evil that is spreading its ominous shadow over all the industrial nations of the world, would justify an even fuller treatment.

Economists everywhere, particularly those who hold the view that individual effort is weakened by systematic charity will look with interest for the results of this bold attempt on the part of a people, to maintain a minimum standard of living, which shall afford the real necessaries of life and not a few of its comforts for everyone.

It is indeed a noble benevolence that discerns the uses that idle men may be put to, and assists them by providing means whereby they may help themselves.

Cost of Living in New Jersey, 1902.

Retail Prices at Which a Selected List of Articles of Household Supplies Were Sold in the Leading Cities and Towns of All the Counties of the State, During the Month of June, 1902.

This presentation is based upon returns made by retail dealers from the cities and towns named in the tables, and shows the prices for the various articles of household supplies that prevailed during the month of June, 1902.

The figures for the four previous years are given in Summary Tables No. 2 and 3 and these for 1902 are compared with those of 1898, the increases or decreases of prices in 1902 as compared with 1898, being noted in each case where a change has taken place. The returns for each year are from the same sources.

Because of the confusion in the coal trade which completely upset standard selling prices, that commodity has been omitted from the list of household supplies on which the presentation is based.

Summary Table No. 1 shows the cost of the bill of goods as returned by dealers in the towns and cities named in the table. The place showing the lowest price for the entire list of supplies is entered first on the table; other localities follow in the order in which their prices compare in cheapness with the first named town.

Although every possible effort has been made to insure these returns being made on a basis of standard goods of uniform quality, the prices quoted for the same articles differ so much in the returns from one locality as compared with another, that the quality of the goods reported must be lower, or the quantity smaller in places where these articles are sold at such abnormally low figures.

Table No. 1 should therefore be read in the light of this explanation. The returns from some localities may be on the basis of first quality goods throughout the entire list, while those of others may be drawn from a line largely made up of articles of a lower and cheaper grade. However, even with this possible inexactness, the table furnishes an excellent chart of the cost of living in all parts of the state.

Summary Table No. 2 shows the cost of the bill of supplies in each city and town for the years 1898, 1899, 1900, 1901 and 1902. The prices for 1902 are compared with those of 1898, and the absolute amount of increases or decreases are shown. The prices quoted are for the month of June each year, and therefore such season influences as there may be are alike in all places.

The average cost of the bill was $11.46 in 1898; in 1899, the cost had fallen to $10.63; in 1900 it was $10.83; in 1901, $11.38; and in 1902 it had fallen to $10.84, or $0.62 less than the figures of 1898, the year of comparison.

Forty-one localities show reductions in the cost of the bill of supplies in 1902 as compared with 1898, which amount in the aggregate to $57.91, while twenty places show increases which taken together foots up $20.64. The aggregate net decrease is therefore $37.27.

Summary Table No. 3 shows the average selling price of each article contained in the bill by standard trade measures or quantities.

The prices of 1898 and 1902 are compared and the decreases or increases in the latter as compared with the earlier year is given. The number of articles showing an increase in price is 28; the items are however, very small, the aggregate amount being only $0.770. The articles exhibiting decreases are 15 in number. With the exception of the two grades of flour per barrel, which show decreases in price of $1.599 for first, and $1.509 for the second quality, the sum of the decreases is very small.

The aggregate amount of all decreases is $3.233, and the net decrease as compared with 1898 is $2.461. The largest increases shown in the list have taken place in meats of the various kinds presented in the tables; these have advanced from one to four and a fraction cents in 1902 over the prices that prevailed in 1898. In fact almost without exception the prices of the various cuts of all meats, beefs, mutton and pork, steadily increased each year since 1898.

SUMMARY 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.

The comparative cost is shown by the position of each locality in the table; the cheapest being first and others following in the order in which the cost of the bill compares with the first named city or town.

County.	City or Town.	Total Cost of Entire Bill of Goods.
Hunterdon,	Califon,	$9 37
Morris,	Middle Valley,	9 60
Warren,	Port Colden,	9 74
Hudson,	Jersey City,	9 75
Morris,	Flanders,	9 76
Middlesex,	Cranbury,	9 92
Morris,	Boonton,	9 93
Sussex,	Swartswood,	10 04
Hudson,	Harrison,	10 04
Sussex,	Monroe,	10 06
Morris,	Bartley,	10 10
Hunterdon,	Glen Gardner,	10 15
Atlantic,	Hammonton,	10 25
Hunterdon,	New Germantown,	10 26
Burlington,	Burlington,	10 27
Warren,	Blairstown,	10 28
Union,	Elizabeth,	10 33
Warren,	Allamuchey,	10 34
Monmouth,	Marlboro,	10 41
Monmouth,	Matawan,	10 42
Camden,	Camden,	10 42
Morris,	Dover,	10 44
Ocean,	Manahawkin,	10 49
Bergen,	Hackensack,	10 53
Ocean,	Colliers Mills,	10 59
Warren,	Oxford,	10 61
Hudson,	Hoboken,	10 64
Warren,	Marksboro,	10 67
Morris,	Chester,	10 70
Somerset,	Somerville,	10 71
Gloucester,	Clayton,	10 71
Middlesex,	Cheesequake,	10 72
Cumberland,	Bridgeton,	10 74
Burlington,	Mt. Holly,	10 75
Passaic,	Passaic,	10 76
Warren,	Washington,	10 77
Hunterdon,	Flemington,	10 82
Salem,	Salem,	10 85
Morris,	German Valley,	10 94
Essex,	Newark,	10 99
Cape May,	Cape May,	10 99
Morris,	Drakestown,	11 01
Bergen,	Garfield,	11 02
Hunterdon,	High Bridge,	11 08
Warren,	Belvidere,	11 09
Bergen,	Rutherford,	11 11
Atlantic,	Mays Landing,	11 14
Monmouth,	Seabright,	11 23
Warren,	Phillipsburg,	11 31
Burlington,	Bordentown,	11 35
Monmouth,	Freehold,	11 39
Essex,	South Orange,	11 39

SUMMARY TABLE No. 1—(Continued).

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

The comparative cost is shown by the position of each locality in the table the cheapest being first and others following in the order in which the cost of the bill compares with the first named city or town.

County.	City or Town.	Total Cost of Entire Bill of Goods.
Mercer,	Princeton,	11 44
Cumberland,	Millville,	11 45
Passaic.	Paterson,	11 46
Morris,	Port Oram,	11 48
Essex,	Belleville,	11 53
Sussex,	Stillwater,	11 60
Sussex,	Newton,	11 73
Mercer,	Trenton,	11 78
Warren,	Hackettstown,	11 91
Essex,	Orange,	11 94
Essex,	East Orange,	11 94
Middlesex,	New Brunswick,	12 02
Burlington,	Moorestown,	12 03
Essex,	Montclair,	12 52
Middlesex,	Metuchen,	12 68
Average cost of entire list in the State,		$10 84

SUMMARY TABLE No. 2—Cost of Living in New Jersey.

The Cost of Living in New Jersey—Total Cost of the Entire List of Articles in Various Cities and Towns of the State During the Month of June—Comparison of the Cost of the List for the Years 1898, 1899, 1900, 1901 and 1902.

County.	City or Town.	Cost of Entire List of Articles. 1898.	1899.	1900.	1901.	1902.	Increase (x) or Decrease (—) in 1902 as compared with 1898.
Atlantic,	Egg Harbor,	$10 65	$9 48	$13 67	$10 78	.....	.....
	Hammonton,	11 47	9 99	11 67	10 99	10 25	—$1 22
	Mays Landing,	10 96	9 14	10 33	12 85	11 74	+ 18
Bergen,	Garfield,	11 92	10 92	11 82	11 74	11 02	— 90
	Hackensack,	11 44	10 58	9 87	10 94	10 53	— 91
	Rutherford,	12 50	12 74	11 96	11 34	11 11	— 1 39
Burlington,	Bordentown,	.....	14 04	12 16	11 04	11 35	.....
	Burlington,	12 40	9 32	10 73	10 48	10 27	— 2 13
	Mt. Holly,	12 67	12 32	10 58	10 88	10 75	— 1 92
	Moorestown,	14 14	13 26	12 69	13 06	12 03	— 2 11
Camden,	Camden,	11 27	8 63	9 21	11 01	10 42	— 85
Cape May,	Cape May,	15 51	10 02	11 19	12 14	10 99	— 4 52
Cumberland,	Bridgeton,	11 08	10 69	11 30	10 80	10 74	— 34
	Millville,	14 34	10 55	11 61	11 65	11 45	— 2 89
Essex,	Belleville,	12 70	12 58	11 62	11 86	11 53	— 1 17
	East Orange,	11 77	12 64	12 12	12 02	11 94	+ 17
	Montclair,	11 77	10 68	10 22	13 11	12 52	+ 75
	Newark,	11 31	11 22	9 58	10 60	10 99	— 32
	Orange,	12 69	12 75	11 57	11 67	11 94	— 75
	South Orange,	.....	.....	.....	12 99	11 39	.....
Gloucester,	Clayton,	11 12	11 96	15 01	10 82	10 71	— 41
Hudson,	Harrison,	8 50	9 09	7 65	11 46	10 04	+ 1 54
	Hoboken,	11 44	9 37	11 01	11 31	10 64	— 80
	Jersey City,	11 43	11 25	10 81	11 09	9 75	— 1 68
Hunterdon,	Califon,	8 94	8 91	5 83	9 68	9 37	+ 43
	Flemington,	14 26	13 69	13 57	11 70	10 82	— 3 44
	Glen Gardner,	10 11	10 47	10 07	13 18	10 15	+ 04
	High Bridge,	11 54	10 04	8 54	11 27	11 08	— 46
	New Germantown,	9 75	9 18	11 08	10 12	10 26	+ 51
Mercer,	Princeton,	13 94	9 18	12 24	12 57	11 44	— 2 50
	Trenton,	13 07	12 13	13 57	11 18	11 78	— 1 29
Middlesex,	Cheesequake,	.....	.....	.....	11 29	10 72	.....
	Cranbury,	12 18	9 38	9 42	10 97	9 92	— 2 26
	Dunellen,	13 24	12 62	12 81	13 70	.....	.....
	Metuchen,	13 09	10 78	12 22	11 67	12 68	— 41
	New Brunswick,	11 14	8 27	8 39	11 91	12 02	+ 88
Monmouth,	Freehold,	12 68	11 71	11 10	10 66	11 39	— 1 29
	Marlboro,	12 39	10 73	10 93	10 04	10 41	— 1 98
	Matawan,	11 53	8 23	9 52	11 81	10 42	— 1 11
	Seabright,	13 59	13 88	13 87	11 83	11 23	— 2 36
Morris,	Bartley,	.....	10 82	10 60	10 64	10 10	.....
	Boonton,	11 37	12 13	11 77	12 57	9 93	— 1 44
	Chester,	10 60	10 29	10 87	11 28	10 70	+ 10
	Dover,	11 62	10 61	11 81	11 26	10 44	— 1 18
	Drakestown,	.....	.....	.....	11 68	11 01	.....
	Flanders,	8 14	9 90	9 25	10 67	9 76	+ 1 62
	German Valley,	11 33	10 05	10 47	11 26	10 94	— 39
	Middle Valley,	9 73	8 37	9 09	10 86	9 60	— 18
	Port Oram,	12 91	10 41	12 29	10 83	11 48	— 1 43
Ocean,	Colliers Mills,	11 86	10 95	10 42	10 15	10 59	— 1 27
	Manahawkin,	.....	12 98	10 81	11 25	10 49	.....
Passaic,	Passaic,	11 82	10 80	10 41	10 46	10 76	— 1 06
	Paterson,	11 59	13 00	12 14	12 09	11 46	— 13
Salem,	Salem,	12 59	10 94	11 42	11 57	10 85	— 1 74
Somerset,	Somerville,	13 70	13 36	13 05	11 66	10 71	— 2 99

SUMMARY TABLE No. 2—Cost of Living in New Jersey—(Continued).

The Cost of Living in New Jersey—Total Cost of the Entire List of Articles in Various Cities and Towns of the State During the Month of June—Comparison of the Cost of the List for the Years 1898, 1899, 1900, 1901 and 1902.

County.	City or Town.	Cost of Entire List of Articles.					Increase (x) or Decrease (—) in 1902 as compared with 1898.
		1898.	1899.	1900.	1901.	1902.	
Sussex,	Monroe,	7 00	8 87	8 17	10 40	10 06	+ 3 06
	Newton,	12 12	11 94	10 95	12 46	11 73	— 39
	Stillwater,	11 17	9 93	9 48	10 49	11 60	+ 43
	Swartswood,	7 76	10 23	9 38	10 35	10 04	+ 2 28
Union,	Elizabeth,	10 11	10 39	10 16	10 81	10 33	+ 22
Warren,	Allamuchy,	.....	9 35	9 49	10 86	10 34	.....
	Beattystown,	8 54	10 32	9 86	11 28	10 70	+ 2 16
	Belvidere,	12 32	9 97	12 01	13 09	11 09	— 2 23
	Blairstown,	11 24	10 26	10 19	11 09	10 28	— 96
	Hackettstown,	11 37	11 57	10 68	12 03	11 91	+ 54
	Marksboro,	9 40	9 15	9 19	10 63	10 67	+ 1 27
	Oxford,	8 81	8 06	7 63	10 55	10 61	+ 1 80
	Phillipsburg,	10 75	7 84	10 67	11 49	11 31	+ 56
	Port Colden,	10 85	8 19	10 98	10 76	9 74	— 1 11
	Washington,	8 67	8 97	10 55	11 79	10 77	+ 2 10
Average for entire State		11 46	10 63	10 83	11 38	10 84	— 0 62

SUMMARY TABLE No. 3—Cost of Living in New Jersey.

Cost of Living in New Jersey—Comparison of Average Retail Prices, Month of June, for 1898, 1899, 1900, 1901 and 1902.

Articles.	Basis of Quantities.	Average Retail Price.					Increase (x) or Decrease (—) in 1902 as Compared with 1898.
		1898.	1899.	1900.	1901.	1902.	
Flour, wheat, first quality,	Barrel,	$6.753	$5.292	$5.037	$5.154	$5.194	—$1.559
Flour, wheat, second quality,	Barrel,	5.958	4.312	4.135	4.368	4.449	— 1.509
Oatmeal, loose,	Pound,	.044	.040	.041	.041	.044	.....
Oatmeal, package,	Package,	.106	.104	.109	.099	.101	— .005
Sugar, granulated,	Pound,	.059	.059	.059	.068	.054	— .005
Molasses, New Orleans,	Gallon,	.479	.491	.515	.523	.519	+ .040
Syrup,	Gallon,	.401	.404	.410	.424	.423	+ .022
Bread, large,	Loaf,	.....	.....	.....	.082	.084	.....
Bread, small,	Loaf,	.....	.....	.....	.049	.475	.....
Butter, first quality,	Pound,	.219	.232	.238	.235	.280	+ .061
Butter, second quality,	Pound,	.169	.195	.201	.195	.218	+ .049
Lard,	Pound,	.091	.088	.099	.111	.127	+ .036
Eggs,	Dozen,	.....	.....	.....	.173	.208	.....
Cheese, best,	Pound,	.141	.143	.155	.154	.158	+ .017
Cheese, medium,	Pound,	.110	.117	.121	.115	.113	+ .003
Coffee, Rio,	Pound,	.190	.171	.182	.167	.170	— .020
Coffee, Java,	Pound,	.320	.331	.314	.304	.296	— .024
Coffee, Maracaibo,	Pound,	.250	.234	.239	.236	.235	— .015
Tea, black, first quality,	Pound,	.641	.660	.657	.605	.630	— .011
Tea, green, first quality,	Pound,	.627	.652	.647	.607	.622	— .005
Tea, mixed, first quality,	Pound,	.587	.600	.622	.572	.597	+ .010
Potatoes, white,	Bushel,	1.161	.972	.675	.975	1.091	+ .070
Potatoes, sweet,	Bushel,	1.208	1.080	.979	1.075	.....	.....
Beef, roast, rib,	Pound,	.156	.156	.160	.162	.179	+ .023
Beef, roast, chuck,	Pound,	.118	.116	.123	.124	.152	+ .034
Beef, steak, sirloin,	Pound,	.187	.190	.193	.195	.225	+ .038
Beef, steak, round,	Pound,	.152	.146	.161	.164	.188	+ .036
Beef, corned, round,	Pound,	.120	.106	.119	.134	.143	+ .023
Beef, corned, brisket,	Pound,	.075	.072	.071	.079	.099	+ .024
Beef, smoked,	Pound,	.249	.254	.260	.259	.259	+ .010
Pork, fresh,	Pound,	.112	.112	.121	.127	.153	+ .041
Pork, salt,	Pound,	.095	.094	.101	.117	.126	+ .031
Bacon,	Pound,	.121	.121	.126	.141	.155	+ .034
Ham,	Pound,	.119	.122	.137	.139	.151	+ .032
Shoulder,	Pound,	.084	.072	.098	.099	.118	+ .034
Mutton, leg,	Pound,	.145	.149	.151	.155	.172	+ .027
Mutton, breast,	Pound,	.094	.091	.093	.098	.120	+ .026
Mackerel, salt, No. 1,	Pound,	.154	.164	.170	.145	.141	— .013
Mackerel, salt, No. 2,	Pound,	.128	.127	.128	.113	.109	— .019
Tomatoes,	Can,	.109	.100	.098	.089	.112	+ .003
Corn,	Can,	.101	.098	.102	.094	.096	— .005
Succotash,	Can,	.116	.111	.111	.111	.110	— .006
Rice,	Pound,	.082	.082	.080	.076	.074	— .008
Prunes, first quality,	Pound,	.086	.111	.107	.105	.106	+ .020
Prunes, second quality,	Pound,	.102	.077	.076	.068	.073	— .029
Raisins, seeded,	Pound,	.095	.103	.109	.115	.111	+ .015
Vinegar,	Gallon,	.....	.....	.....	.207	.214	.....
Soap, common,	Cake,	.043	.041	.043	.048	.049	+ .006
Kerosene oil,	Gallon,	.100	.097	.117	.111	.107	+ .007
Coal, stove,	Ton,	5.025	5.010	5.025	5.182	.....	.....
Coal, nut,	Ton,	4.855	4.830	4.731	5.017	.....	.....
Coal, chestnut,	Ton,	4.789	4.660	4.785	4.935	.....	.....

Total amount of decrease in prices in 1902 as compared with 1898, $3,233.
Total amount of increase in prices in 1902 as compared with 1898, $0.772.
Net decrease in price of entire list, $2.461.

TABLE No. 4—Cost of Living.

Retail Prices of Groceries and Supplies for the Month of June, 1902.

County.	City or Town.	Wheat Flour. First Quality—25 pounds	Wheat Flour. Second Quality—25 pounds.	Wheat Flour. Prepared—per pound.	Oatmeal. Per pound.	Oatmeal. Per 2-pound Package.	Sugar, granulated, per pound.	Molasses, N. O., per gallon.	Syrup, best, per gallon.
Atlantic,	Hammonton,	$ 64	$ 60	$ 4	$ 3	$ 10	$ 5	$ 45	$ 35
	Mays Landing,	70	60	3	4	10	5½	40	48
Bergen,	Garfield,	68	58	4	4	10	5¼	50	48
	Hackensack,	63	55	4	3	10	5	50	40
	Rutherford,	60	48	4	4	10	5	48	50
Burlington,	Bordentown,	70	60	4	5	10	5½	60	50
	Burlington,	65	50	4	4	10	5	40	25
	Mt. Holly,	65	55	4	4	10	5	45	45
	Moorestown,	70	58	4	4	10	5½	50	50
Camden,	Camden,	70	50	5	4	8	4¾	40	35
Cape May,	Cape May,	80	60	4	4	8	5	50	40
Cumberland,	Bridgeton,	70	60	4	5	10	5	50	25
	Millville,	75	60	3	6	10	5½	60	50
Essex,	Belleville,	70	55	6	4	12	5¼	60	50
	East Orange,	70	55	4	4	15	5¼	55	45
	Montclair,	70	65	5	5	11	5¼	65	50
	Newark,	70	55	4	5	10	6	55	45
	Orange,	70	65	5	5	10	5	50	40
	South Orange,	70	60	3	4	11	5	60	40
Gloucester,	Clayton,	65	60	4	5	10	5	50	40
Hudson,	Hoboken,	65	63	4	5	10	6	50	40
	Harrison,	65	55	4	4	10	5	40	40
	Jersey City,	55	50	4	4	9	5	50	35
Hunterdon,	Califon,	65	55	5	4	8	5	35	35
	Flemington,	75	55	5	5	10	5	60	40
	Glen Gardner,	60	50	5	5	10	5	50	40
	High Bridge,	70	55	4	5	10	5	50	40
	New Germantown,	55	50	4	5	12	6	60	50
Mercer,	Princeton,	75	60	4	5	10	5½	60	50
	Trenton,	63	50	3	3	8	5	45	40
Middlesex,	Chessequake,	70	60	4	5	10	6	45	40
	Cranbury,	65	55	4	4	10	5	50	40
	Metuchen,	75	65	6	5	12	6	75	50
	New Brunswick,	63	55	6	6	12	5½	55	50
Monmouth,	Freehold,	70	58	4	5	10	5	40	40
	Marlboro,	65	58	4	4	12	5	40	40
	Matawan,	70	60	3	5	10	5	50	40
	Seabright,	75	70	6	4	12	5½	50	50
Morris,	Bartley,	70	50	5	3	10	5½	40	40
	Boonton,	65	55	4	4	10	5	40	35
	Chester,	70	55	5	5	13	5½	50	50
	Dover,	60	55	4	3	10	5	45	40
	Drakestown,	60	60	4	4	12	5½	60	45
	Flanders,	60	50	4	4	10	5½	50	40
	German Valley,	65	60	4	4	8	5	70	40
	Middle Valley,	65	60	4	5	10	5	50	40
	Port Oram,	75	70	5	5	15	5	60	40
Ocean,	Colliers Mills,	65	50	4	5	10	6	40	50
	Manahawkin,	65	60	5	5	10	6	60	45
Passaic,	Passaic,	59	50	3	4	10	5	60	38
	Paterson,	62	55	4	4	10	5	60	45
Salem,	Salem,	70	60	4	5	10	5½	50	50
Somerset,	Somerville,	65	58	5	5	10	5	50	40
Sussex,	Monroe,	65	60	5	5	10	5	50	40
	Newton,	57	54	6	4	10	5¼	60	50
	Stillwater,	65	55	4	4	10	6	60	40
	Swartswood,	58	57	4	4	10	5½	40	40
Union,	Elizabeth,	60	55	5	3	10	5	45	45

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION. County.	City or Town.	Wheat Flour. First Quality—25 pounds.	Wheat Flour. Second Quality—25 pounds.	Wheat Flour. Prepared—per pound.	Oatmeal. Per pound.	Oatmeal. Per 2-pound Package.	Sugar, granulated, per pound.	Molasses, N. O., per gallon.	Syrup, best, per gallon.
Warren,	Allamuchy,	65	60	4	8	12	5½	50	40
	Beattystown,	65	60	5	5	10	5½	60	40
	Belvidere,	65	55	4	5	10	5	60	40
	Blairstown,	70	55	8	5	10	5	50	40
	Hackettstown,	75	55	3	5	10	6	60	40
	Marksboro,	62	55	4	5	10	5½	55	40
	Oxford,	60	55	4	4	10	5½	60	50
	Phillipsburg,	65	57	4	3	12	5½	60	40
	Port Colden,	65	55	4	3	10	5	50	40
	Washington,	70	55	4	5	15	5	60	40
		.664	.568	.043	.044	.101	.054	.519	.423

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION.		Bread.		Butter.				Cheese.	
County.	City or Town.	Large—per loaf.	Small—per loaf.	First Quality—per pound.	Second Quality—per pound.	Lard—per pound.	Eggs—per dozen.	Best—per pound.	Medium—per pound.
Atlantic,	Hammonton,	$ 8	$ 5	$ 29	$ 20	$ 14	$ 17	$ 17	$ 14
	Mays Landing,	8	5	32	20	14	22	16	12
Bergen,	Garfield,	10	5	26	23	14	23	15	12
	Hackensack,	8	5	25	23	10	20	15	12
	Rutherford,	10	5	25	22	14	25	18	12
Burlington,	Bordentown,	8	5	30	25	14	21	16	12
	Burlington,	10	5	30	25	11	24	16	12
	Mt. Holly,	10	5	30	27	13	24	15	13
	Moorestown,	10	5	28	25	13	23	16	12
Camden,	Camden,	5	2½	26	22	13	19	14	11
Cape May,	Cape May,	8	5	29	27	12	20	18	16
Cumberland,	Bridgeton,	10	5	30	25	13	22	16	14
	Millville,	8	5	32	25	13	24	16	14
Essex,	Belleville,	8	5	27	20	15	25	17	12
	East Orange,	8	5	28	24	14	24	15	12
	Montclair,	10	5	28	26	14	24	18	16
	Newark,	10	3	27	24	14	24	16	12
	Orange,	8	5	27	25	11	23	18	14
	South Orange,	8	5	27	25	13	22	18	12
Gloucester,	Clayton,	10	5	30	25	13	22	15	12
Hudson,	Hoboken,	8	5	26	22	10	20	15	13
	Harrison,	5	3	25	23	10	20	15	12
	Jersey City,	9	5	25	23	12	20	15	12
Hunterdon,	Califon,	6	4	20	16	12	18	14	12
	Flemington,	8	4	25	20	12	20	16	12
	Glen Gardner,	10	5	22	15	14	20	15	10
	High Bridge,	6	4	26	22	12	20	16	12
	New Germantown,	8	5	25	14	10	30	16	8
Mercer,	Princeton,	7	5	32	25	14	21	16	12
	Trenton,	8	2	25	20	12	19	18	13
Middlesex,	Chessequake,	8	5	28	22	12	22	15	12
	Cranbury,	8	5	26	22	14	18	15	12
	Metuchen,	10	5	28	22	14	25	16	14
	New Brunswick,	8	5	28	25	15	25	18	12
Monmouth,	Freehold,	6	4	28	20	14	22	15	12
	Marlboro,	5	3	28	25	13	18	15	12
	Matawan,	8	5	28	25	14	25	15	12
	Seabright,	8	5	30	28	14	25	16	12
Morris,	Bartley,	7	5	24	20	13	18	16	12
	Boonton,	6	5	25	22	12	20	16	13
	Chester,	8	5	25	20	12	20	16	10
	Dover,	10	5	27	22	10	20	16	12
	Drakestown,	7	5	22	18	14	20	16	12
	Flanders,	7	5	20	10	13	20	16	12
	German Valley,	7	5	20	16	10	18	16	13
	Middle Valley,	9	5	18	15	10	16	15	12
	Port Oram,	8	5	28	25	14	25	13	10
Ocean,	Colliers Mills,	8	5	30	25	13	18	15	12
	Manahawkin,	8	5	30	28	13	24	16	12
Passaic,	Passaic,	8	5	24	20	10	20	13	9
	Paterson,	10	5	26	24	14	25	16	12
Salem,	Salem,	10	5	30	25	13	22	16	12
Somerset,	Somerville,	8	5	28	24	14	20	16	12
Sussex,	Monroe,	8	5	26	23	11	17	15	12
	Newton,	7	5	28	26	14	18	16	12
	Stillwater,	8	5	25	20	14	18	16	12
	Swartswood,	7	5	25	20	12	18	15	12
Union,	Elizabeth,	10	5	25	22	13	20	14	12

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION.		Bread.		Butter.				Cheese.	
County.	City or Town.	Small—per loaf.	Small—per loaf.	First Quality—per pound.	Second Quality—per pound.	Lard—per pound.	Eggs—per dozen.	Best—per pound.	Medium—per pound.
Warren,	Allamuchy,	7	5	25	18	12	20	16	12
	Beattystown,	6	5	20	18	14	16	16	12
	Belvidere,	10	5	22	20	14	22	16	12
	Blairstown,	8	5	18	16	12	18	16	13
	Hackettstown,	6	4	28	24	15	18	16	14
	Marksboro,	8	5	20	18	12	17	16	12
	Oxford,	10	5	20	18	14	18	16	13
	Phillipsburg,	9	4	28	25	14	20	16	14
	Port Colden,	9	5	20	16	14	18	15	12
	Washington,	9	5	20	15	14	18	16	12
		.084	.475	.280	.218	.127	.208	.158	.113

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month ef June, 1902.

LOCATION.		Coffee.			Tea.			
County.	City or Town.	Rio—per pound.	Maracaibo—per pound.	Java—per pound.	Best Black—per pound.	Best Green—per pound.	Best Mixed—per pound.	Potatoes—White—per bushel.
Atlantic,	Hammonton,	$ 16	$ 18	$ 32	$ 60	$ 60	$ 60	$ 95
	Mays Landing,	25	23	32	60	60	60	110
Bergen,	Garfield,	20	25	30	70	70	60	100
	Hackensack,	11	23	30	60	50	63	100
	Rutherford,	18	22	28	75	75	40	100
Burlington,	Bordentown,	20	25	28	60	60	60	110
	Burlington,	15	25	35	60	60	60	100
	Mt. Holly,	18	25	30	60	60	60	110
	Moorestown,	15	21	38	100	80	100	110
Camden,	Camden,	12	21	35	60	60	60	125
Cape May,	Cape May,	12	25	35	60	60	60	90
Cumberland,	Bridgeton,	15	20	30	60	60	60	110
	Millville,	25	32	35	60	60	60	100
Essex,	Belleville,	20	25	30	60	60	60	125
	East Orange,	20	25	32	80	70	80	125
	Montclair,	18	25	32	100	75	75	125
	Newark,	15	25	32	60	60	60	110
	Orange,	19	25	30	60	60	60	190
	South Orange,	20	25	30	60	60	60	125
Gloucester,	Clayton,	13	22	30	60	60	60	110
Hudson,	Hoboken,	15	25	30	60	60	60	110
	Harrison,	10	20	30	50	50	50	100
	Jersey City,	15	25	30	45	45	45	100
Hunterdon,	Califon,	12	16	25	55	55	55	80
	Flemington,	25	25	35	60	60	60	110
	Glen Gardner,	18	22	32	60	60	50	100
	High Bridge,	20	25	30	60	75	50	120
	New Germantown,	12	20	30	60	60	60	100
Mercer,	Princeton,	20	25	35	75	75	50	100
	Trenton,	16	24	35	80	80	80	160
Middlesex,	Chessequake,	18	28	32	45	45	45	120
	Cranbury,	13	22	30	50	50	50	110
	Metuchen,	15	25	34	80	80	80	125
	New Brunswick,	18	25	34	80	80	80	110
Monmouth,	Freehold,	13	25	30	80	80	80	140
	Marlboro,	15	20	28	60	60	60	110
	Matawan,	15	22	28	60	60	50	75
	Seabright,	18	30	35	50	50	50	110
Morris,	Bartley,	15	18	25	60	60	60	100
	Boonton,	15	28	32	50	50	50	100
	Chester,	15	20	30	80	80	50	100
	Dover,	14	25	28	59	59	59	110
	Drakestown,	20	25	30	70	60	65	100
	Flanders,	15	25	28	50	50	50	100
	German Valley,	20	30	35	60	60	55	120
	Middle Valley,	13	15	25	60	60	45	100
	Port Oram,	20	25	30	60	60	50	120
Ocean,	Colliers Mills,	25	25	30	60	60	60	90
	Manahawkin,	25	20	30	40	40	40	75
Passaic,	Passaic,	18	25	30	60	60	60	140
	Paterson,	15	25	30	60	60	60	150
Salem,	Salem,	20	25	35	60	60	60	100
Somerset,	Somerville,	13	20	30	60	60	60	100
Sussex,	Monroe,	15	25	25	50	50	50	110
	Newton,	22	25	30	90	90	90	100
	Stillwater,	18	20	30	75	75	75	110
	Swartswood,	15	20	30	50	50	30	110
Union,	Elizabeth,	15	25	32	60	60	60	80

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION.		Coffee.			Tea.			
County.	City or Town.	Rio—per pound.	Maracaibo—per pound.	Java—per pound.	Best Black—per pound.	Best Green—per pound.	Best Mixed—per pound.	Potatoes—White—per bushel.
Warren,	Allamuchy,	18	20	25	50	50	50	110
	Beattystown,	23	30	35	50	80	50	90
	Belvidere,	20	25	35	80	80	80	100
	Blairstown,	20	20	25	80	60	70	80
	Hackettstown,	20	25	35	80	70	75	120
	Marksboro,	18	25	30	60	60	60	120
	Oxford,	13	20	30	60	60	60	100
	Phillipsburg,	15	20	35	60	60	60	150
	Port Colden,	15	18	25	56	60	50	85
	Washington,	15	25	35	60	60	60	100
		.170	.235	.296	.630	.622	.597	1.091

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION.		Beef.						
County.	City or Town.	Roast Rib—per pound.	Roast Chuck—per pound.	Steak, Sirloin—per pound.	Steak, Round—per pound.	Corned, Round—per pound.	Corned, Brisket—per pound.	Smoked—per pound.
Atlantic,	Hammonton,	$ 18	$ 14	$ 26	$ 20	$ 15	$ 12	$ 22
	Mays Landing,	20	16	25	18	15	12	25
Bergen,	Garfield,	16	14	22	16	15	12	25
	Hackensack,	23	16	23	18	16	18	28
	Rutherford,	22	16	24	22	18	10	30
Burlington,	Bordentown,	18	16	25	18	15	12	25
	Burlington,	18	14	25	20	16	12	20
	Mt. Holly,	16	14	23	20	12	8	30
	Moorestown,	18	12	25	20	14	8	20
Camden,	Camden,	20	14	28	22	18	14	25
Cape May,	Cape May,	16	18	22	20	12	14	30
Cumberland,	Bridgeton,	16	14	22	20	12	10	32
	Millville,	18	15	28	22	10	8	30
Essex,	Belleville,	18	16	22	20	10	13	32
	East Orange,	18	16	25	18	15	12	30
	Montclair,	18	16	25	18	15	12	25
	Newark,	18	12	22	16	16	12	30
	Orange,	18	16	25	18	15	12	30
	South Orange,	18	16	25	18	15	12	25
Gloucester,	Clayton,	16	16	20	16	15	12	25
Hudson,	Hoboken,	16	14	20	22	12	9	30
	Harrison,	20	18	20	18	14	12	30
	Jersey City,	16	14	23	20	12	7	25
Hunterdon,	Califon,	15	14	18	18	14	12	22
	Flemington,	14	14	20	18	16	8	32
	Glen Gardner,	18	16	20	16	12	12	24
	High Bridge,	20	18	24	18	15	12	25
	New Germantown,	14	12	16	14	15	12	22
Mercer,	Princeton,	18	16	25	18	15	12	22
	Trenton,	22	16	25	20	16	12	25
Middlesex,	Chessequake,	20	16	22	16	15	9	25
	Cranbury,	16	14	18	16	12	6	25
	Metuchen,	22	16	24	22	20	10	30
	New Brunswick,	18	16	25	18	15	12	30
Monmouth,	Freehold,	20	14	22	20	20	8	20
	Marlboro,	16	13	25	20	10	12	30
	Matawan,	25	14	25	20	12	8	28
	Seabright,	18	16	25	18	15	12	25
Morris,	Bartley,	18	14	20	18	12	10	25
	Boonton,	18	14	20	18	12	10	20
	Chester,	16	15	18	16	10	8	16
	Dover,	14	15	22	20	16	10	18
	Drakestown,	16	15	24	20	15	8	25
	Flanders,	20	16	20	18	14	7	25
	German Valley,	18	16	18	18	15	8	25
	Middle Valley,	10	15	16	12	15	8	20
	Port Oram,	22	18	20	18	12	8	30
Ocean,	Colliers Mills,	16	15	24	20	15	8	28
	Manahawkin,	20	18	25	20	12	10	40
Passaic,	Passaic,	18	14	24	20	16	10	25
	Paterson,	18	16	24	20	20	7	19
Salem,	Salem,	18	16	22	18	12	8	30
Somerset,	Somerville,	22	18	25	22	15	10	18
Sussex,	Monroe,	14	12	16	14	12	7	25
	Newton,	18	13	25	22	16	8	25
	Stillwater,	18	15	25	22	20	8	30
	Swartswood,	18	15	28	22	15	8	25
Union,	Elizabeth,	22	14	22	20	12	10	28

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION.		Beef.						
COUNTY.	CITY OR TOWN.	Roast Rib—per pound.	Roast Chuck—per pound.	Steak, Sirloin—per pound.	Steak, Round—per pound.	Corned, Round—per pound.	Corned, Brisket—per pound.	Smoked—per pound.
Warren,	Allamuchy,	18	15	22	20	12	8	25
	Beattystown,	18	14	20	18	14	12	25
	Belvidere,	16	12	18	16	15	8	25
	Blairstown,	16	14	20	16	10	8	20
	Hackettstown,	20	16	22	22	16	12	30
	Marksboro,	16	15	24	20	15	8	28
	Oxford,	20	18	22	18	14	8	25
	Phillipsburg,	18	14	25	20	14	8	25
	Port Colden,	14	12	18	18	12	8	25
	Washington,	16	15	24	20	15	8	30
		.179	.152	.225	.188	.143	.099.	.259

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION.		Pork.					Mutton.	
County.	City or Town.	Fresh—per pound.	Salt—per pound.	Bacon—per pound.	Ham—per pound.	Shoulder—per pound.	Leg—per pound.	Breast—per pound.
Atlantic,	Hammonton,	$ 16	$ 12	$ 15	$ 16	$ 11	$ 14	$ 10
	Mays Landing,	16	14	16	16	13	20	12
Bergen,	Garfield,	16	14	15	16	10	13	10
	Hackensack,	14	14	15	15	11	18	14
	Rutherford,	18	18	16	16	12	18	10
Burlington,	Bordentown,	16	14	18	17	13	16	12
	Burlington,	16	12	16	15	11	16	8
	Mt. Holly,	14	12	16	15	10	18	10
	Moorestown,	16	13	17	15	13	16	8
Camden,	Camden,	16	14	18	14	12	14	8
Cape May,	Cape May,	15	14	16	15	18	20	18
Cumberland,	Bridgeton,	15	12	15	15	13	16	12
	Millville,	18	13	16	16	14	18	8
Essex,	Belleville,	17	16	17	16	14	16	8
	East Orange,	16	13	16	15	13	16	12
	Montclair,	16	14	16	15	13	16	12
	Newark,	18	16	18	16	12	12	8
	Orange,	16	14	16	16	12	16	12
	South Orange,	16	14	16	15	13	16	12
Gloucester,	Clayton,	16	10	16	14	12	18	12
Hudson,	Hoboken,	15	14	16	15	12	14	8
	Harrison,	16	14	16	15	12	14	10
	Jersey City,	14	12	16	15	12	16	10
Hunterdon,	Califon,	14	10	15	14	10	18	16
	Flemington,	14	12	16	16	12	16	8
	Glen Gardner,	16	12	14	14	12	16	12
	High Bridge,	16	12	16	15	10	22	20
	New Germantown,	12	12	14	16	12	14	10
Mercer,	Princeton,	16	15	16	15	12	16	12
	Trenton,	15	14	18	15	12	18	8
Middlesex,	Chessequake,	16	14	16	16	12	20	16
	Cranbury,	14	10	16	14	11	16	8
	Metuchen,	18	15	18	16	13	18	8
	New Brunswick,	16	15	20	16	13	16	12
Monmouth,	Freehold,	12	10	15	15	12	16	10
	Marlboro,	16	12	16	14	12	20	12
	Matawan,	18	13	16	16	11	15	10
	Seabright,	16	14	16	14	12	16	12
Morris,	Bartley,	12	12	12	14	11	20	10
	Boonton,	15	12	15	15	12	16	12
	Chester,	13	11	12	15	10	20	16
	Dover,	14	14	14	14	11	16	10
	Drakestown,	15	12	16	15	12	18	18
	Flanders,	13	12	16	14	12	16	8
	German Valley,	15	10	12	20	12	18	16
	Middle Valley,	12	8	16	14	10	18	16
	Port Oram,	18	12	14	15	12	22	18
Ocean,	Colliers Mills,	15	10	16	15	11	18	16
	Manahawkin,	16	13	15	14	12	20	25
Passaic,	Passaic,	14	12	15	14	12	16	14
	Paterson,	16	13	16	15	12	20	12
Salem,	Salem,	16	10	16	15	11	16	8
Somerset,	Somerville,	18	14	22	14	10	20	10
Sussex,	Monroe,	15	12	16	15	12	16	10
	Newton,	16	12	16	15	11	16	8
	Stillwater,	18	12	16	16	12	25	16
	Swartswood,	18	12	16	16	14	18	16
Union,	Elizabeth,	12	14	14	14	10	12	10

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION.		Pork.					Mutton.	
County.	City or Town.	Fresh—per pound.	Salt—per pound.	Bacon—per pound.	Ham—per pound.	Shoulder—per pound.	Leg—per pound.	Breast—per pound
Warren,	Allamuchy,	14	12	10	14	12	18	16
	Beattystown,	10	10	12	14	11	25	20
	Belvidere,	15	13	16	15	12	12	5
	Blairstown,	14	12	14	15	10	16	8
	Hackettstown,	15	15	16	15	14	18	10
	Marksboro,	15	13	10	13	10	18	16
	Oxford,	15	12	14	16	12	20	14
	Phillipsburg,	16	14	16	16	10	16	8
	Port Colden,	15	10	12	14	10	18	16
	Washington,	15	12	15	14	11	18	16
		.153	.126	.155	.151	.118	.172	.120

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION.		Mackerel.		Canned Goods.				Prunes.	
County.	City or Town.	Salt Mackerel No. 1—per pound.	Salt Mackerel No. 2—per pound.	Tomatoes—per 2-pound can.	Corn—per can.	Succotash—per can.	Rice—per pound.	First Quality—per pound.	Second Quality—per pound.
Atlantic,	Hammonton,	$ 12	$ 10	$ 8	$ 9	$ 9	$ 6	$ 9	$ 7
	Mays Landing,	16	12	12	15	12	8	10	6
Bergen,	Garfield,	15	12	12	10	14	7	12	9
	Hackensack,	10	8	10	9	9	5	12	10
	Rutherford,	20	15	10	10	12	8	12	9
Burlington,	Bordentown,	16	12	10	10	12	9	12	10
	Burlington,	13	10	12	5	10	7	10	5
	Mt. Holly,	12	10	10	10	12	8	10	5
	Moorestown,	15	12	11	9	10	6	12	8
Camden,	Camden,	10	8	10	5	9	5	14	5
Cape May,	Cape May,	10	8	9	9	12	7	10	7
Cumberland,	Bridgeton,	13	11	13	10	10	8	12	10
	Millville,	18	14	16	10	10	10	10	8
Essex,	Belleville,	20	11	10	10	13	10	13	7
	East Orange,	15	12	13	10	10	9	12	9
	Montclair,	22	14	13	12	12	6	12	9
	Newark,	14	12	12	8	12	6	10	6
	Orange,	14	12	10	10	10	8	10	8
	South Orange,	16	12	12	10	12	8	12	8
Gloucester,	Clayton,	15	12	10	10	10	8	10	5
Hudson,	Hoboken,	16	11	10	8	10	6	12	5
	Harrison,	15	10	10	10	10	6	10	8
	Jersey City,	14	12	9	10	10	8	9	7
Hunterdon,	Califon,	16	9	9	8	9	6	10	8
	Flemington,	10	8	12	10	10	6	10	8
	Glen Gardner,	12	10	10	10	12	8	10	6
	High Bridge,	16	12	12	10	13	7	10	6
	New Germantown,	14	12	10	10	14	8	10	6
Mercer,	Princeton,	15	12	14	9	10	6	10	8
	Trenton,	18	12	10	7	9	8	12	8
Middlesex,	Chessequake,	14	10	12	12	15	8	10	7
	Cranbury,	12	10	8	10	10	8	10	5
	Metuchen,	20	15	13	10	10	7	15	5
	New Brunswick,	18	11	10	12	15	7	12	8
Monmouth,	Freehold,	15	10	10	10	10	8	10	6
	Marlboro,	11	9	8	10	10	6	10	5
	Matawan,	12	10	9	10	14	8	10	6
	Seabright,	16	10	10	10	15	8	10	8
Morris,	Bartley,	13	12	10	10	10	8	10	8
	Boonton,	12	10	11	10	10	6	10	8
	Chester,	12	10	12	10	12	8	10	4
	Dover,	18	12	11	8	10	7	12	9
	Drakestown,	14	10	12	10	13	10	10	7
	Flanders,	12	10	12	10	10	8	9	5
	German Valley,	12	12	10	10	10	8	10	8
	Middle Valley,	10	12	10	8	10	5	8	5
	Port Oram,	14	12	12	10	10	8	12	10
Ocean,	Colliers Mills,	12	10	15	10	10	8	12	8
	Manahawkin,	12	8	10	10	10	8	12	10
Passaic,	Passaic,	15	10	10	10	10	6	10	5
	Paterson,	16	12	9	10	13	8	10	9
Salem,	Salem,	15	10	10	10	10	5	12	5
Somerset,	Somerville,	13	10	12	8	10	8	10	8
Sussex,	Monroe,	12	10	12	10	12	8	8	6
	Newton,	16	12	8	10	13	8	12	10
	Stillwater,	15	10	15	10	13	7	10	8
	Swartswood,	12	10	14	10	10	7	8	6
Union,	Elizabeth,	15	10	13	9	10	7	13	9

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION. County.	City or Town.	Mackerel. Salt Mackerel No. 1—per pound.	Mackerel. Salt Mackerel No. 2—per pound.	Canned Goods. Tomatoes—per 2-pound can.	Canned Goods. Corn—per can.	Canned Goods. Succotash—per can.	Rice—per pound.	Prunes. First Quality—per pound.	Prunes. Second Quality—per pound.
Warren,	Allamuchy,	10	8	13	10	13	10	12	10
	Beattystown,	14	12	12	10	10	8	10	6
	Belvidere,	12	10	12	10	10	8	10	5
	Blairstown,	12	10	12	10	12	5	10	8
	Hackettstown,	16	14	15	10	12	10	12	10
	Marksboro,	14	10	12	10	13	8	8	9
	Oxford,	12	10	13	8	12	6	10	8
	Phillipsburg,	15	12	12	10	10	8	12	10
	Port Colden,	13	10	13	8	12	8	8	5
	Washington,	15	12	10	10	15	5	10	8
		.141	.109	.112	.096	.110	.074	.106	.073

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION. County.	City or Town.	Seeded Raisins—per pound.	Vinegar—per gallon.	Babbit's Laundry Soap—per cake.	Oil, Kerosene—per gallon.	Totals.
Atlantic,	Hammonton,	$ 10	$ 18	$ 5	$ 10	$10 25
	Mays Landing,	12	18	5	11	11 14
Bergen,	Garfield,	12	20	5	10	11 02
	Hackensack,	12	25	5	10	10 53
	Rutherford,	12	20	5	10	11 11
Burlington,	Bordentown,	12	24	5	10	11 35
	Burlington,	10	20	5	10	10 27
	Mt. Holly,	12	20	5	10	10 75
	Moorestown,	13	20	5	10	12 03
Camden,	Camden,	11	15	4	8	10 42
Cape May,	Cape May,	10	24	5	12	10 99
Cumberland,	Bridgeton,	10	18	5	11	10 74
	Millville,	12	20	5	12	11 45
Essex,	Belleville,	12	25	5	11	11 53
	East Orange,	13	25	4	12	11 94
	Montclair,	12	25	5	12	12 52
	Newark,	11	25	5	10	10 99
	Orange,	10	25	5	11	11 94
	South Orange,	12	25	5	13	11 39
Gloucester,	Clayton,	12	20	5	10	10 71
Hudson,	Hoboken,	12	20	5	10	10 64
	Harrison,	10	25	5	10	10 04
	Jersey City,	10	20	4	12	9 75
Hunterdon,	Califon,	10	15	5	10	9 37
	Flemington,	10	20	5	10	10 82
	Glen Gardner,	10	20	5	10	10 15
	High Bridge,	12	15	5	10	11 08
	New Germantown,	12	20	5	10	10 26
Mercer,	Princeton,	10	25	5	11	11 44
	Trenton,	12	20	5	12	11 78
Middlesex,	Chessequake,	12	25	5	12	10 72
	Cranbury,	10	20	5	10	9 92
	Metuchen,	12	25	5	14	12 68
	New Brunswick,	12	22	5	13	12 02
Monmouth,	Freehold,	10	20	5	10	11 39
	Marlboro,	11	18	5	10	10 41
	Matawan,	12	20	5	10	10 42
	Scabright,	12	25	5	12	11 23
Morris,	Bartley,	10	20	5	10	10 10
	Boonton,	10	20	5	10	9 93
	Chester,	10	25	5	12	10 70
	Dover,	10	25	4	12	10 44
	Drakestown,	10	25	5	12	11 01
	Flanders,	10	20	5	10	9 76
	German Valley,	12	25	5	10	10 94
	Middle Valley,	10	20	5	10	9 60
	Port Oram,	11	25	5	12	11 48
Ocean,	Colliers Mills,	11	15	5	10	10 59
	Manahawkin,	10	20	5	12	10 49
Passaic,	Passaic,	10	20	5	10	10 76
	Paterson,	12	25	5	12	11 46
Salem,	Salem,	12	20	5	8	10 85
Somerset,	Somerville,	10	20	4	12	10 71
Sussex,	Monroe,	10	25	5	10	10 06
	Newton,	10	20	5	9	11 73
	Stillwater,	12	25	5	12	11 60
	Swartswood,	12	20	5	12	10 04
Union,	Elizabeth,	10	25	5	12	10 33

TABLE No. 4—Cost of Living—(Continued).

Retail Prices of Groceries and Supplies for the Month of June, 1902.

LOCATION. County.	City or Town.	Seeded Raisins—per pound.	Vinegar—per gallon.	Babbit's Laundry Soap—per cake.	Oil, Kerosene—per gallon.	Totals.
Warren,	Allamuchy,	13	20	5	12	10 34
	Beattystown,	10	24	5	11	10 70
	Belvidere,	12	20	5	12	11 09
	Blairstown,	12	25	5	10	10 28
	Hackettstown,	12	20	5	10	11 91
	Marksboro,	10	20	5	10	10 67
	Oxford,	12	20	5	12	10 61
	Phillipsburg,	12	20	5	9	11 31
	Fort Colden,	10	20	5	10	9 74
	Washington,	12	20	5	8	10 77
		.111	.214	.049	.107	10.841

Tables of Population of New Jersey, from the United States Census of 1900.

UNITED STATES CENSUS, 1900.

TABLE No. 1—Population of New Jersey, 1790 to 1900.

Census Years.	Population.	Increase.	
		Number.	Percent.
1900,	1,883,669	438,736	30.4
1890,	1,444,933	313,817	27.7
1880,	1,131,116	225,020	24.8
1870,	906,096	234,061	34.8
1860,	672,035	182,480	37.3
1850,	489,555	116,249	31.1
1840,	373,306	52,483	16.4
1830,	320,823	43,397	15.6
1820,	277,426	31,864	13.0
1810,	245,562	34,413	16.3
1800,	211,149	27,010	14.7
1790,	184,139	.....	.....

UNITED STATES CENSUS, 1900,

TABLE No. 2—Population of New Jersey by Counties, 1790 to 1900.

COUNTIES.	1900	1890	1880	1870	1860	1850	1840	1830	1820	1810	1800	1790
Atlantic,	46,402	28,836	18,704	14,093	11,786	8,961	8,726	.....	.....	.....	.....	.....
Bergen,	78,441	47,226	36,786	30,122	21,618	14,725	13,223	22,412	18,138	16,603	15,156	12,601
Burlington,*	58,241	58,528	55,402	53,639	49,730	43,203	32,831	31,107	28,822	24,979	21,521	18,095
Camden,	107,643	87,687	62,942	46,193	34,457	25,422	.....	.....	.....	.....	.....	.....
Cape May,	13,201	11,268	9,765	8,349	7,130	6,433	5,324	4,936	4,265	3,632	3,066	2,571
Cumberland,	51,193	45,438	37,687	34,665	22,605	17,189	14,374	14,093	12,668	12,670	9,529	8,248
Essex,	359,053	256,098	189,929	143,839	98,877	73,950	44,621	41,911	30,793	25,984	22,269	17,785
Gloucester,	31,905	28,649	25,886	21,562	18,444	14,655	25,438	28,431	23,071	19,744	16,115	13,363
Hudson,	386,048	275,126	187,944	129,067	62,717	21,822	9,483	.....	.....	.....	.....	.....
Hunterdon,	34,507	35,355	38,570	36,963	33,654	28,990	24,789	31,060	28,513	24,556	21,261	20,153
Mercer,	95,365	79,978	58,061	46,386	37,419	27,992	21,502	.....	.....	.....	.....	.....
Middlesex,	79,762	61,754	52,286	45,029	34,812	28,635	21,893	23,157	21,470	20,381	17,890	15,956
Monmouth,	82,057	69,128	55,538	46,195	39,346	30,313	32,909	29,233	25,038	22,150	19,872	16,918
Morris,	65,156	54,101	50,861	43,137	34,677	30,158	25,844	23,666	21,368	21,828	17,750	16,216
Ocean,*	19,747	15,974	14,455	13,628	11,176	10,032	.....	.....	.....	.....	.....	.....
Passaic,	155,202	105,046	68,860	46,416	29,013	22,569	16,734	.....	.....	.....	.....	.....
Salem,	25,530	25,151	24,579	23,940	22,458	19,467	16,024	14,155	14,022	12,761	11,371	10,437
Somerset,	32,948	28,311	27,162	23,510	22,057	19,692	17,455	17,689	16,506	14,725	12,815	12,296
Sussex,	24,134	22,259	23,539	23,168	23,846	22,989	21,770	20,346	32,752	25,549	22,534	19,500
Union,	99,353	72,467	55,571	41,859	27,780	.....	.....	.....	.....	.....	.....	.....
Warren,	37,781	36,553	36,589	34,336	28,433	22,358	20,366	18,627	.....	.....	.....	.....
The State,	1,883,669	1,444,933	1,131,116	906,096	672,035	489,555	373,306	320,823	277,426	245,562	211,149	184,139

*Part of Burlington annexed to Ocean since 1890.

UNITED STATES CENSUS, 1900.

TABLE No. 3—Increase in Population of New Jersey by Counties, 1890 to 1900.

Counties.	Increase.	
	Number.	Percent.
Atlantic,	17,566	60.9
Bergen,	31,215	66.1
Burlington,	*287	*0.5
Camden,	19,956	22.8
Cape May,	1,933	17.2
Cumberland,	5,755	12.7
Essex,	102,955	40.2
Gloucester,	3,256	11.4
Hudson,	110,922	40.3
Hunterdon,	848	2.4
Mercer,	15,387	19.2
Middlesex,	18,008	29.2
Monmouth,	12,929	18.7
Morris,	11,055	20.4
Ocean,	3,773	23.6
Passaic,	50,156	47.7
Salem,	379	1.5
Somerset,	4,637	16.4
Sussex,	1,875	8.4
Union,	26,886	37.1
Warren,	1,228	3.4
The State,	438,736	30.4

*Decrease.

UNITED STATES CENSUS, 1900.

TABLE No. 4—Population of the Incorporated Cities, Towns, Villages and Boroughs of New Jersey, 1890 and 1900.

Cities, Towns, Villages and Boroughs.	Population	
	1900.	1890.
Absecon town,	530	501
Allendale borough,	694	.....
Allenhurst borough,	165	.....
Allentown borough,	695	.....
Anglesea borough,	161	161
Asbury Park city,	4,148	.....
Atlantic City,	27,838	13,055
Atlantic Highlands borough,	1,383	945
Avalon borough,	93	.....
Bayhead borough,	247	.....
Bayonne city,	32,722	19,033
Beach Haven borough,	239	.....
Belmar borough,	902	.....
Belvidere town,	1,784	1,768
Bergenfield borough,	729	.....
Beverly city,	1,950	1,957
Bloomfield town,	9,668	7,708
Bogota borough,	337	.....
Boonton town,	3,901	2,981
Bordentown city,	4,110	4,232
Bound Brook borough,	2,622	1,462
Bradley Beach borough,	982	.....
Branchville borough,	526	.....
Bridgeton city,	13,913	11,424
Brigantine city,	99	.....
Brooklyn borough,	75	.....
Burlington city,	7,392	7,264
Caldwell borough,	1,367	.....
Camden city,	75,935	58,313
Cape May City,	2,257	2,136
Cape May Point borough,	153	167
Carlstadt borough,	2,574	1,549
Chatham borough,	1,361	780
Chesilhurst borough,	283	.....
Clayton borough,	1,951	1,807
Cliffside Park borough,	968	.....
Clinton borough,	816	913
Collingswood borough,	1,633	539
Cresskill borough,	486	527
Deal borough,	70	.....
Deckertown borough,	1,306	993
Delford borough,	746	.....
Dover town,	5,938	.....
Dumont borough,	643	.....
Dunellen borough,	1,239	1,060
East Millstone town,	447	475
East Newark borough,	2,500	.....
East Orange city,	21,506	13,282
East Rutherford borough,	2,640	1,438
Egg Harbor city,	1,808	1,439
Elizabeth city,	52,130	37,764
Elmer borough,	1,140	842
Englewood city,	6,253	.....
Englewood Cliffs borough,	218	.....
Englishtown borough,	410	444
Fairview borough,	1,003	.....
Fanwood borough,	399	.....
Fieldsboro borough,	459	.....
Florham Park,	752	.....
Freehold town,	2,934	2,932
Frenchtown borough,	1,020	1,023

UNITED STATES CENSUS, 1900.

TABLE No. 4—Population of the Incorporated Cities, Towns, Villages and Boroughs of New Jersey, 1890 and 1900. (Continued).

Cities Towns, Villages and Boroughs.	Population. 1900	Population. 1890.
Garfield borough,	3,504	1,028
Glen Ridge borough,	1,960	.....
Glen Rock borough,	613	.....
Gloucester City,	6,840	6,564
Guttenberg town,	3,825	1,947
Hackensack town,	9,443	6,004
Hackettstown town,	2,474	2,417
Haddonfield borough,	2,776	2,502
Hammonton town,	3,481	3,833
Harrison town,	10,596	8,338
Harvey Cedars borough,	39	.....
Hasbrouck Heights borough,	1,255	.....
Hawthorne borough,	2,096	.....
Helmetta borough,	447	.....
High Bridge borough,	1,377	.....
Highlands borough,	1,228	.....
Hightstown borough,	1,749	1,875
Hoboken city,	59,364	43,648
Holly Beach borough,	569	217
Hopewell borough,	980	.....
Irvington town,	5,255	.....
Island Heights borough,	316	271
Jamesburg borough,	1,063	887
Jersey City,	206,433	163,003
Junction borough,	998	518
Kearny town,	10,896	.....
Keyport town,	3,413	3,411
Lambertville city,	4,637	4,142
Lavalette city,	21	.....
Leonia borough,	804	.....
Linden borough,	402	936
Linwood borough,	495	536
Little Ferry borough,	1,240	781
Lodi borough,	1,917	998
Long Branch town,	8,872	7,231
Longport borough,	80	.....
Madison borough,	3,754	2,469
Manasquan borough,	1,500	1,506
Matawan borough,	1,511	1,491
Maywood borough,	536	.....
Merchantville borough,	1,608	1,225
Metuchen borough,	1,786	770
Midland Park borough,	1,348	.....
Millstone borough,	200	.....
Milltown borough,	561	.....
Millville city,	10,583	10,002
Montclair town,,	13,962	8,656
Montvale borough,	416	.....
Morristown town,	11,267	8,156
Mountainside borough,	367	.....
Mt. Arlington borough,	275	.....
Neptune City borough,	1,009	.....
Netcong borough,	941	.....
Newark city,	246,070	181,830
New Brunswick city,	20.006	18,603
New Providence borough,	565	.....
Newton town,	4,376	3,003
North Arlington borough,	290	.....
North Caldwell borough,	297	.....

UNITED STATES CENSUS, 1900.

TABLE No. 4—Population of the Incorporated Cities, Towns, Villages and Boroughs of New Jersey, 1890 and 1900. (Continued).

Cities, Towns, Villages and Boroughs.	Population.	
	1900.	1890.
North Plainfield borough,	5,009	.....
North Spring Lake borough,	361	277
Ocean City,	1,307	452
Old Tappan borough,	269	.....
Orange city,	24,141	18,844
Palisades Park borough,	644	.....
Park Ridge borough,	870	.....
Passaic city,	27,777	13,028
Paterson city,	105,171	78,347
Pemberton borough,	771	834
Penngrove borough,	1,826	.....
Pennington borough,	733	588
Perth Amboy city,	17,699	9,512
Phillipsburg town,	10,052	8,644
Plainfield city,	15,369	11,267
Pleasantville borough,	2,182	.....
Point Pleasant Beach borough,	746	.....
Pompton Lakes borough,	847	.....
Port Oram borough,	2,069	775
Princeton borough,	3,899	3,422
Rahway city,	7,935	7,105
Raritan town,	3,244	2,556
Red Bank town,	5,428	4,145
Ridgefield borough,	584	.....
Ridgewood village,	2,685	1,047
Riverside borough,	561	.....
Riverton borough,	1,332	1,075
Rockaway borough,	1,483	.....
Rocky Hill borough,	354	.....
Roselle borough,	1,652	996
Rutherford borough,	4,411	2,293
Saddle River borough,	415	.....
Salem city,	5,811	5,516
Seabright borough,	1,198	.....
Sea Isle City borough,	340	766
Seaside Park borough,	73	.....
Secaucus borough,	1,626	.....
Somers Point,	308	191
Somerville town,	4,843	3,861
South Amboy borough,	6,349	4,330
South Atlantic City borough,	69	.....
South Bound Brook town,	883	801
South Cape May borough,	14	.....
South Orange village,	4,608	3,106
South River borough,	2,792	1,796
Spring Lake borough,	526	.....
Stockton borough,	590	.....
Summit City,	5,302	3,502
Surf City borough,	9	.....
Tenafly borough,	1,746	1,046
Totowa borough,	562	.....
Trenton city,	73,307	57,458
Undercliff borough,	1,006	.....
Union town,	15,187	10,643
Upper Saddle River borough,	326	.....
Vailsburg borough,	2,779	786
Vineland borough,	4,370	3,822
Wallington borough,	1,812	.....
Washington borough,	3,580	2,834

UNITED STATES CENSUS, 1900.

TABLE No. 4—Population of the Incorporated Cities, Towns, Villages and Boroughs of New Jersey, 1890 and 1900. (Continued).

Cities, Towns, Villages and Boroughs.	Population.	
	1900.	1890.
Wenonah borough,	498	383
West Cape May borough,	696	757
West Hoboken town,	23,094	11,665
West New York town,	5,267	.....
West Orange town,	6,889	4,358
Westwood borough,	828	.....
Wildwood borough,	150	.....
Woodbury city,	4,087	3,911
Woodcliff borough,	329	.....
Woodridge borough,	582	575
Woodstown borough,	1,371	1,516

UNITED STATES CENSUS, 1900.

TABLE No. 5—Population of the Principal Cities of New Jersey, 1820 to 1900.

Cities.	1900.	1890.	1880.	1870.	1860.	1850.	1840.	1830.	1820.
Atlantic City,	27,838	13,055	5,477	1,043	687	.....	.....	.....	.....
Bayonne,	32,722	19,033	9,372	3,834	.....	.....	.....	.....	.....
Camden,	75,935	58,313	41,659	20,045	14,358	9,479	3,371	.....	.....
Elizabeth,	52,130	37,764	28,229	20,832	11,567	5,583	4,184	3,455	3,515
Hoboken,	59,364	43,648	30,999	20,297	9,662	2,668	.....	.....	.....
Jersey City,	206,433	163,003	120,722	82,546	29,226	6,856	3,072	.....	.....
Newark,	246,070	181,830	136,508	105,059	71,941	38,894	17,290	10,953	6,507
Passaic,	27,777	13,028	6,532	.....	.....	.....	.....	.....	.....
Paterson,	105,171	78,347	51,031	33,579	19,586	11,344	7,596	.....	.....
Trenton,	73,307	57,458	29,910	22,874	17,228	6,461	4,035	3,925	3,942

UNITED STATES CENSUS, 1900.

TABLE No. 6—Increase in Population of the Principal Cities of New Jersey, 1820 to 1900.

Cities.	Increase from 1890 to 1900.		Increase from 1880 to 1890.		Increase from 1870 to 1880.		Increase from 1860 to 1870		Increase from 1850 to 1860.		Increase from 1840 to 1850.		Increase from 1830 to 1840.		Increase from 1820 to 1830.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Atlantic City,	14,783	113.2	7,578	138.4	4,434	425.1	356	51.8	.....	.....	.....	.....	.....	.....	.....	.....
Bayonne,	13,689	71.9	9,661	103.1	5,538	144.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Camden,	17,622	30.2	16,654	40.0	21,614	107.8	5,687	39.6	4,879	51.5	6,108	181.2	.....	.....	.....	.....
Elizabeth,	14,366	38.0	9,535	33.8	7,397	35.5	9,265	80.1	5,984	107.2	1,399	33.4	729	21.1	*60	*1.7
Hoboken,	15,716	36.0	12,649	40.8	10,702	52.7	10,635	110.1	6,994	262.1	.....	.....	.....	.....	.....	.....
Jersey City,	43,430	26.6	42,281	35.0	38,176	46.2	53,320	182.4	22,370	326.3	3,784	123.2	.....	.....	.....	.....
Newark,	64,240	35.3	45,322	33.2	31,449	29.9	33,118	46.0	33,047	85.0	21,604	125.0	6,337	57.9	4,446	68.3
Passaic,	14,749	113.2	6,496	99.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paterson,	26,824	34.2	27,316	53.5	17,452	52.0	13,993	71.4	8,242	72.7	3,748	49.3	.....	.....	.....	.....
Trenton,	15,849	27.6	27,548	92.1	7,036	30.8	5,646	32.8	10,767	166.6	2,426	60.1	110	2.8	*17	*0.4

*Decrease.

PART III.

Oyster Industry of New Jersey.

Diseases of Occupations—The Hat, Jewelry, Shoe and Cotton and Woolen Mill Operatives.

The Oyster Industry in New Jersey.

HISTORICAL.

The United States Census of 1890, classed New Jersey as the fourth state in the oyster industry. The value of the product of its waters that year having been surpassed only by that of Maryland, Virginia and New York in the order named.

The extensive coast and natural peculiarities of the waters surrounding New Jersey are in the highest degree favorable for attaining the best results in oyster culture.

There is probably no single industry in the state that has received so much attention from the Legislature and has had so many laws enacted to compel the observance of regulations made for the purpose of placing and maintaining the business of raising and taking oysters on a scientific plane. Greed and ignorance on the part of many, and constant strife between conflicting interests have greatly injured the industry and prevented the evolution of really scientific methods and their adoption by proper fostering legislation.

Some natural features of New Jersey should make her pre-eminent as an oyster producing state. While in amount of water area, she is behind Connecticut, Maryland or Virginia, the character of her water beds excels them all. Her coast line is dotted with the mouths of rivers, coves, bays and inlets, all of which are more fertile places for oyster culture than the deeper waters of the larger areas. The salt water line of New Jersey extends from Newark southward to Cape May, thence for some fifty miles along Maurice Cove, in Delaware Bay, and on some distance up the Delaware River. At numerous points along this extensive shore, the character of the under water land and depth of water is wonderfully favorable for the cultivation of seed and preparing oysters for market.

Mr. Ingersoll in his report on the oyster industry of the United States which was published with the Census of 1880, thus speaks of the topography of New Jersey from the standpoint of oyster culture.

"The coast of New Jersey south of Sandy Hook, like that of

Long Island and for similar reasons, forms a favorable region for oyster growth. Long, desolate beaches stand without, and between them and the mainland stretch great salt lagoons protected from the sea and receiving a constant supply of fresh water into their shallow and marshy basins. These "bays" extend in almost unbroken continuance from the Southern line of Monmouth county to Cape May, while in Monmouth County itself, there are several indentations of the otherwise abrupt coast line, which affords the oyster grower an opportunity to practise his profession."

Through all these waters and northward to New York Bay, oysters were so plentiful in the early days that according to a chronicle of 1621, very large oysters were too common at New Amsterdam to find a market, everybody being able to supply themselves without charge."

Early colonial literature contains many references to the richness of the waters of the new land in sea foods, the oyster always receiving particular mention. The early settlers had not to "discover" the beds, for they appear to have grown so abundantly along the edges of New York Bay, and the entering streams, Shrewsbury, Raritan, Passaic, Hackensack, Hudson and East Rivers, that they must have been visible to the most careless observer. The Indians were found by the colonists to have been in the habit of gathering oysters and clams, and depended upon them largely for their food.

In Ingersoll's work there is given a verse of a poem by an early Dutch settler and poet, of which this plentifulness is the theme.

"Crabs, mussels, oysters, too, there be,
So large that one does overbalance three
Of those of Europe; and in quantity
No one can reckon."

Again quoting Ingersoll—

"Then as now, it appears that all the hard work of obtaining the delicacies fell upon the women. A quaint old book written by William Wood and published in London in 1634, entitled "New England's Prospects, etc.", contains a poem upon the kinds of shell fish in which the following elegant verse occurs:

"The luscious lobster, with the crab-fish raw,
The brinish oyster, mussel, periwigge,
And tortoise sought by the Indian squaw,

Which to the flattes dance many a winter's jigge,
To dive for cockles and to dig for clams,
Whereby her lazy husband's guts she crams."

Sir George Carteret, mentions as an inducement to colonists whom he wants to settle in the region about the mouth of the Raritan, that the Bay (i. e. of New York) and Hudson River "are plentifully stored with sturgeon, great bass and other scale fish, eels, and shell fish, as oysters, etc., in great plenty and easy to take."

The truth of the above assertion is fully borne out by these extracts from letters taken from Smith's "History of New Jersey," which were written from what is now Perth Amboy to parties in England, somewhere about 1686. "And at Amboy Point and several other places, there is abundance of brave oysters." "Oysters I think, would serve all England." "We have one thing more particular to us, which the others want also, which is vast oyster banks, which is the constant fresh victuals during the winter to English as well as Indians; of these there are many all along our coasts from the sea as high as against New York, whence they come to fetch them."

"Oyster shells upon the point to make lime withal, which will wonderfully accommodate us in building good houses (of stone) cheap, warm for winter and cool for summer." "We have store of clams, esteemed much better than oysters; on festivals the Indians feast with them; there are schallops (scallops), but in no great plenty." Just how far up the Hudson River this "store" of oysters extended is not definitely known. The Rev. Samuel Lockwood is quoted by Ingersoll as placing the highest point where they ever flourished, at Tellers Point near Sing Sing. Another authority, Captain Metzgar, quoted by Ingersoll, mentioned Rockland Lake as the northern limit. The distance from here to Sandy Hook, fully fifty miles, is said to have been an almost continuous oyster bottom for the entire way.

Bedlows Island in the harbor was first known as Big oyster Island, and some rocks and tide bars to the south of it as Little Oyster Island, a title by which it is still known.

In the waters between the western shore of Staten Island and the New Jersey coast line from Bergen Point and Elizabeth, to the mouth of the Raritan River, the natural conditions were especially favorable. Everywere in these swift running waters, oysters grew abundantly. From the broad expanse of shallow water lying south of the Island which is called variously by Staten Islanders and Jer-

seymen, Staten Island Sound or Raritan Bay, the oysters famous in the New York markets as "Sounds," "Keyports," and "Amboys" were taken. The Shrewsbury River enters the Bay near Sandy Hook, and here was another oyster centre, famous at one time as planting grounds, and still quite productive, as was also Princess Bay on the southeastern shore of the Island.

The immense wealth of these waters in oysters at one time, is thus strikingly set forth by Prof. Lockwood:

"Near Conasconk Point on the shores of Raritan Bay, about a mile and a half south of Keyport, was once a famous bed of oysters shells covering many acres. So long ago as 1855, we examined it carefully and pronounced it a kitchen-midden, or Indian refuse heap, accumulated through many generations.

In 1862, we communicated our discovery to Dr. Chas. Rau the archaeologist, and took him to the spot, freely giving him what we had gathered in the observations of years.

The Professor made it the subject of a paper in the Smithsonian report for 1864, which was probably the pioneer in that class of investigation on our Continent.

That shell heap has well nigh disappeared. Some of it has been used for making roads—but the stranger fact is that it was used up as ballast in Keyport oyster vessels, going for southern plants and being thrown out in Chespeake Bay, furnished culch of an excellent sort, cleaner than fresh oyster shells could possibly be. These Indian leavings attest the abundance of native oysters in Raritan Bay. They "fished" on the bed of "naturals" which was afterwards famous as the "Chingarora bed." Even so recent as sixty years ago (1820) the shore for some distance on these parts presented a lively scene every fall. From far and near came the farmers with their wagons, to lay in the winter store of "Chingaroras."

Pursuing the same subject in an article in Popular Science Monthly, 1874, Prof. Lockwood says that in former times all the suitable waters of New York and New Jersey abounded in native oysters. There is, he says, a curious map of the city of New York which gives the waters of the entire harbor; it is dedicated to Gov. Moore of the province of New York. Its date is 1767, and its author signs himself "B. Ratzer, Surv'r in His Majesty's 60th American Reg't."

A large tract of water is marked the "Oyster Banks." In that area of what was then fine native oysters, is now the vast stretch of "madeland," laid down by the filling in of the City's refuse by a railroad company. To quote Prof. Lockwood's exact words:

"The time was when the entire waters west of the channel, be-

ginning south of Jersey City and surrounding Ellis and Bedloe's Islands and Robbins Reef, and a little way beyond Constables Point, up the Kill von Kull, altogether some six miles in a straight line, was a rich bank of native oysters and supposed to be inexhaustable.

"This bivalve once flourished up the Hudson as far as five or six miles beyond Tellers' Point, and with some allowance for variation of locality, an oyster bed extended between this spot and Sandy Hook, being a distance of quite fifty miles. Now taking this stretch with Raritan Bay the inside of Staten Island and Newark Bay, there would be an expanse of water not less than three hundred and fifty square miles, of which, probably, the half at least would constitute oyster grounds of varying richness. It can hardly be questioned that when the European settled here, that which is now the eastern coast-line of the United States contained several times more of these bi-valves than did all the rest of the world."

In Tangier Sound, Maryland, alone, according to the Coast Survey Report, there are twenty-eight beds whose united area is 17,976 square nautical miles, and twice that extent of additional bottom where oysters are occasionally caught.

The very shells left inland in many places by the aboriginal oyster eaters, make mounds of vast extent; in some instances these have been found thirty feet high.

Ingersoll mentions that at Damariscotta, a seaport village in Maine, there are piles of oysters shells varying from one to six or seven feet in depth, packed closely together and all ready to crumble unless handled with the greatest care. These piles or heaps run uninterruptedly along both sides of the river to the southern end of Salt Bay, where they reach their greatest magnitude. It has been estimated that not less than 8,000,000 cubic feet of shells are thus piled up and easily accessible. All the shells in these deposits are of very large size and some even gigantic. Shells have been taken out repeatedly that exceeded a foot in length, and according to Ingersoll, one of fifteen inches is reported. They are, as a rule, long, narrow, and somewhat curved, or scimiter shaped. All traces of color on inside or outside has disappeared.

Shell mounds like these, are found in many other parts of the Atlantic Coast of America, and their presence shows conclusively that in places the oyster attained a size far greater than any known at the present day. They also prove that for a time reaching far back of the arrival of the first European explorers, the Indians were

well acquainted with the edible qualities of the various shell fish, and ate all that we now make use of.

The oyster and clam seems to have been their favorite as they are ours, and there is reason for believing that wherever these could be obtained, the Indians were accustomed to assemble periodically for a feast of mullosks and maze. That fine old institution, the Rhode Island Clam Bake, may be but a perpetuation of these festivities.

EARLY OYSTER LEGISLATION.

Prof. Ingersoll says: "With reference to oyster matters, history is mute during the close of the seventeenth and beginning of the eighteenth centuries, except that chance allusions here and there show that large numbers of persons—nearly everybody in fact—took advantage of this natural storehouse of food to supplement their luxuries in summer and victual their cellars for winter.

"It is also evident that the fame of Carteret's "great plenty and easy to take" had spread abroad, and so many aliens sailed into the placid bay to rake upon the "vast banks," that at last the Colonists became alarmed for the continuance of their precious supply.

This state of affairs resulted in the passage of a law by the colony of New York as early as 1715, which was the first colonial law in relation to oysters; it provided—

"That from and after the publication of this act, it shall not be lawful for any person or persons whatsoever (native free Indians only excepted) from and after the first day of May until the first day of September, annually, to gather, rake, take up, or bring to the market any oysters whatever, under the penalty of twenty shillings for every offense, to be recovered before any of His Majesty's Justices of the Peace who are hereby authorized and required to hear and fully determine the same, one half thereof to him, her or them, that shall bring the same to effect, and the other half to the poor of the place where the offense shall be committed.

And that it shall not be lawful for any negro, Indian or Mulatto slave to sell oysters in the city of New York at any time whatsoever upon the penalty of twenty shillings for every offense, to be paid by the Master or Mistress of such slave or slaves, to be recovered and applied as aforesaid.

This act to be in force from the publication hereof, during the term of five years and no longer."

Four years later (1719) like causes impelled the Colony of New Jersey to protect the oyster beds within its jurisdiction, for the Legislature that year resolved:

"Whereas, it is found by daily experience, that the oyster beds within this Province are wasted and destroyed by strangers and others, at unseasonable times of the year, the preservation of which will tend to the great benefit of the poor people and others inhabiting this Province; Be it Therefore Enacted," etc.

This law provided that oysters should not be gathered between May 10, and September 1, and that no oysters should be put upon any vessel or boat not wholely owned within the province. Provisions for seizure of boats and vessels found taking oysters during the forbidden time were provided, and special officers were appointed to enforce the law.

Owing to the extent to which the beds around Staten Island were worked by crews of boats from New England, New Jersey, and elsewhere, a second law was passed in 1730, and a third in 1737 by the colonial legislature of New York. The principal of exclusiveness contained in the New Jersey Act must have commended itself to the New Yorkers, for all its provisions were embodied in the preamble and the body of their law of 1737.

The act forbids anyone "directly or indirectly to rake, ... any oysters within this colony and put them on board any canoe, perianger, flat, scow, boat, or any other vessel whatsoever, not wholly belonging to, and owned by, persons who live within the aforesaid colony," under penalty of having the craft and all its contents seized. Ten citizens of Richmond County, some of whose names still figure in the oyster business of Staten Island, were named as a special police to carry out the law.

In 1775, New Jersey realizing the disadvantage of having her beds and markets open till May 10th, when those of New York were closed on May 1st, changed her closing date to May 1st, also.

A new provision was added to the New Jersey law which forbade "a practice that hath prevailed of raking and gathering great quantities of oysters with intent to burn the same for lime only, whereby great waste is made, and the oyster beds thereby in danger of being entirely destroyed." The penalties incurred by an offender under this new law were very severe.

Both colonies made their laws in a spirit of hostility antd retaliation, for Jerseymen and Staten Island Planters, then as ever since, often had mutually beligerent encounters.

The Revolutionary War put a total stop to the oyster business for a period of eight years, although the oyster beds were not allowed to rest meanwhile; the oyster laws of both colonies were suspended

and raking to an extent unlimited as to quantities or seasons, was carried on by all who chose to take up the business.

Many and fierce were the conflicts out on the waters and along the Staten Island and New Jersey shores of the Kill von Kull, Staten Island Sound, and Raritan Bay between former New York and New Jersey oystermen, who fought out their old quarrels under the guise of Torys or Continentals, for the Staten Islanders were, generally, loyal to King George, while the Jerseymen favored the patriot cause.

The following summary gives the statutes of New Jersey that were of general application to the oyster interests of the state up to 1880. It embraces all legislation on the subject outside of acts affecting special localities only, and is taken from Ingersoll's work on the oyster industry of the United States.

I. Forbids raking on an oyster bed, or gathering any oysters or shells, or offering any oysters for sale between May 1 and September 1, in Bergen, Essex, Middlesex, Monmouth, Cape May, Salem, and Gloucester Counties; between July 1 and September 1, in Hudson, Union and Cumberland Counties; and between May 1 and October 1, in Burlington, Atlantic and Ocean Counties. In case of violation whether oysters are taken or not, the offender shall pay $10 for each offense, but persons may at any time take and sell oysters from their private beds. In Cumberland County, moreover, it is forbidden any person to take oysters in any manner on Sunday, or between 8 P. M. and 4 A. M., under liability to imprisonment and a fine of from $50 to $500.

II. No person residing within or without the State, shall rake for or gather oysters in any waters of the state, with a dredge or any sort of instrument answering the purpose of a dredge, under penalty of $50 fine, provided that this and the sixth section shall not apply, so far as regards persons residing in the State, to the Delaware Bay, except within Burlington County.

III. Justices of the Peace shall issue warrants, and constables arrest those violating the preceeding sections.

IV. Forbids selling or offering for sale oysters in this state, between May 1 and September 1, except that in Cape May County, the time is extended to October 1; provided that owners of planted oysters may take up and sell at any time. Penalty, $5 fine.

V. Forbids gathering oysters in this state to be made into lime, or to be used in the manufacture of iron.

VI. No vessel or craft of any sort permitted to carry an oyster

dredge, or anything to be used for that purpose, under penalty of $50 fine.

VII. No one who has not been an actual resident or inhabitant of the state for six months may rake or gather clams, oysters or shellfish for himself or employer, in any waters of the state. Violations of this law is a misdeamor, punishable by imprisonment, or fine not exceeding $150, or both, with forfeiture of boat and all apparatus. Resisting an officer engaged in enforcing this statute, subjects each person implicated to an added fine of $30.

IX. Makes it lawful for "any person owning marsh or meadow in this state, within the boundaries of which there shall be creeks, ditches or ponds where oysters grow or will grow, and where such creeks or ditches do not lead to any public landing, to lay or plant clams or oysters therein, and for the preservation of which to erect a fence, hang or affix gates or locks across said creek or ditches, to prevent any person or persons from entering the same."

Sec. 12. If any unauthorized person be found with a boat inside any fence or gate as aforesaid, where clams or oysters have been planted, or shall break down any such fence or boundaries, he shall be liable for every offence to imprisonment for not more than six months, or to a fine not to exceed $100, or both; provided that the free navigation of no thoroughfare or channel be obstructed.

X. No persons, under any pretense whatever, shall take away "from any natural oyster-banks or beds in this state, any old shells, other than such as cannot be removed or separated from the oysters without injuring the same; and all such shells shall be culled and separated from the oysters and thrown back upon the said natural beds or banks." Penalty of $10 and forfeiture of offending boat and tools. But this does not prohibit persons taking shells from their own private beds.

The foregoing provisions are contained in the general act of 1846 for the protection of clams and oysters, with such supplements thereto as were adopted up to 1880; additional statutes enacted since that date, applicable to all waters of the state, taken from the revision of 1896, (Title "Clams and Oysters") and the annual laws from that date to 1901, are as follows. (Section numbers of the Revision are used).

44. That any person or persons, citizens of this state, now (1891) using or occupying any grounds lying under tide-waters of this state for the planting or cultivation of oysters thereon, said grounds not being natural clam grounds, or natural oyster-seed beds, and the same shall have been so used and occupied since January first,

1880, shall be confirmed in their right to use such grounds for the purpose of planting and cultivating oysters, and the oyster planted and grown thereon shall be the personal property of the person or persons using or occupying the grounds; but the grounds must have been marked by stakes, buoys, or suitable monuments during the time aforesaid, and oysters actually planted upon the grounds so marked; provided, that nothing in this section shall apply to any of the waters of Ocean County.

46. That it shall not be lawful for any person who is not an actual inhabitant and resident of this state for the period of six months, to rake or gather clams, oysters, or other shell fish, either on his own account, or for the benefit of his employer, in any of the rivers, bays, or other waters of this State, on board of any canoe, flat, scow, boat or other vessel; persons offending herein shall forfeit and pay twenty dollars, and the vessel employed with all the clams, oysters, clam-rakes, tongs, tackle, furniture and apparel, shall be forfeited and the same seized and disposed of in the manner described in the ninth and tenth sections of this act; provided, that nothing contained herein shall apply to or affect any act, matter or thing herein prohibited if done or committed between the first day of April and the fifteenth day of June, including both days in each year.

55. That any person who shall hereafter (1895) dredge upon, or who shall throw or cast his oyster dredge or any other instrument used for the purpose of catching oysters upon any oyster bed duly staked up within or under any of the waters of this State, belonging to or in the possession of any person or persons without permission of the owner or holder of the oyster bed, shall be deemed guilty of a misdemeanor, and on conviction, punished by a fine not exceeding five hundred dollars, or by imprisonment for any term not exceeding two years, or both; any boat or vessel used in the commission of such offense, with everything on board shall be forfeited, and the same seized, secured and sold, the proceeds of such sale, after deducting all expenses, shall be paid to the collector of the oyster fund of the Maurice River Cove and Delaware Bay Oyster Association.

56. Makes it a misdemeanor to take or attempt to take, oysters from a locality marked by stakes or buoys without the owner's consent, punishable by fine not exceeding five hundred dollars, and imprisonment for any term not exceeding two years, or both; boat with all its contents to be forfeited, seized and sold, the proceeds to go as provided in section 55, but nothing in this act shall give any person or persons the right to or privilege to take, have, hold, use, or occupy, possess, or enjoy any exclusive right in any natural oy-

ster bed or ground. All general acts inconsistent with the provisions of this act are repealed.

59. That from and after the passage of this act (1895), it shall be unlawful for any person or persons to take from the natural beds beneath the waters of the state, by means of boats, tongs, dredges, rakes or otherwise, any clams, the shells of which will measure less than one and one-half inches in length; persons so offending are deemed guilty of a misdemeanor; penalty not less than twenty-five, nor more than one hundred dollars fine, at the discretion of the justice before whom the case is brought.

60. That any person or persons buying, selling or offering to buy or sell any clams, the shells of which measure less than one and one-half inches in length shall be deemed guilty of a misdemeanor, and upon conviction thereof shall pay a fine of not less than twenty-five or more than one hundred dollars at the discretion of the justice before whom the action is brought; the oyster commissioners in their respective districts are empowered to make all necessary arrests for violations of the provisions of this act.

95. That no person shall catch or take oysters from any of the natural beds in any of the bays, rivers, coves, creeks or waters of this state for the purpose of planting in the waters of any other state. Persons violating any of the provisions of this act are guilty of a misdemeanor and liable to fine not exceeding two hundred dollars, or imprisonment for a term not exceeding one year, or both.

97. That any person who shall hereafter dredge upon or throw or cast his oyster dredge or any other instrument for the purpose of catching oysters upon any oyster bed duly staked up within the waters of the State belonging to any other person, without the permission of such owner, shall be deemed guilty of a misdemeanor and upon conviction shall be punished by a fine not exceeding two hundred dollars, or by imprisonment for any term not exceeding one year, or both.

140. That it shall be unlawful for any person or persons who have not been residents for six months next preceding (1886 to plant seed or grow oysters in the waters of any river or bay; and any oysters, oyster shells or other material for seeding or growing oysters so planted, shall become public property, and may be caught or taken up by any citizen of this State; persons violating the provisions of this act shall be deemed guilty of a misdemeanor, and on conviction thereof shall be subject to a fine not exceeding one year, or both at the discretion of the court.

148. That for the purpose of promoting the propogation and growth of seed oysters, and to protect the natural oyster beds of this state, the said natural oyster beds shall be (1893) and they hereby are divided into seven districts as follows:

District No. 1—Newark Bay and adjacent waters.

District No. 2—Barnegat Bay, north of Gunning River.

District No. 3—From Gunning River, south to Roses Point.

District No. 4—From Roses Point south to the division line between Atlantic County and Ocean County.

District No. 5—The bays and waters of Atlantic County.

District No. 6—The bays and waters of Cape May County.

District No. 7—The waters of Delaware Bay and Maurice River Cove.

Two commissioners are appointed for each district for a term of three years, who are required before entering on the duties of the office, to subscribe to an oath or affirmation before the clerk of the county wherein they reside, to faithfully discharge the duties of their office. The Governor is empowered to fill vacancies in the Commission from whatever cause arising.

150. That the Commissioners shall make a careful inspection of the natural oyster-grounds in their respective districts and whenever and wherever in their opinion it is expedient to cause a supply of shells to be spread on the grounds of the said natural oyster grounds in this state, which from any cause have become depleted, the shell shall be purchased by the commission at the lowest price, and spread between the thirtieth day of April and the first day of September in each year for the period of three years, and until the appropriation hereinafter made for the purpose shall be exhausted.

152. That each of the Commissioners shall be entitled to receive for each day's actual service in the discharge of his duties, the sum of three dollars and no other compensation.

153. That for the purposes of carrying out the provisions of this act there shall be appropriated the sum of five thousand dollars annually for the period of three years; which sum of five thousand dollars shall be distributed as follows:

For waters north of Cedar Creek Point in Barnegat Bay in the county of Ocean to Pennsylvania Railroad Bridge, the sum of seven hundred dollars.

For the mouth of Mullica River and adjacent waters, known as graveling oyster beds, the sum of five hundred dollars.

For the mouth of Tuckerton Creek and adjacent waters, the sum of one hundred and fifty dollars.

For the mouth of Parkerton Creek and adjacent waters, the sum of one hundred dollars.

For the mouth of West Creek and adjacent waters, the sum of one hundred and fifty dollars.

For Dinner Point to north side of Cedar Run, the sum of one hundred and fifty dollars.

For Delaware Bay and Maurice River Cove in Cumberland County, the sum of five hundred dollars.

For Newark Bay and adjacent waters, the sum of six hundred and fifty dollars.

For the mouth of Great Egg Harbor River and adjacent waters, including Atlantic County, five hundred dollars, and for Cape May County, five hundred dollars.

The remaining ten hundred dollars shall remain as a reserve fund in the event that it may become necessary that any one particular district may require a greater expenditure than is here provided, in which case the Commissioners in meeting assembled, may determine the proportion to be allotted to such district, and also for the purpose of meeting other incidental expenses, not herein specially provided for.

156. That it shall not be lawful for any person or persons to rake, tong, dredge, or in any manner whatsoever, to remove any of the shells having spawn adhering thereto so as aforesaid spread upon the beds, within two seasons thereafter; persons offending against the provisions of this act are deemed guilty of a misdemeanor and are subject on conviction to a fine of fifty dollars and imprisonment for a term not exceeding three months, or both; the Commissioners in their respective districts are empowered to make all necessary arrests.

157. That it shall be unlawful for any person or persons to in any manner disturb or work upon any grounds occupied by the State for the purpose of planting shells, until the second season after the spat have adhered to the shells so planted.

158. The taking of oysters from any natural oyster seed grounds during the close season, or the violation of any provision of the culling act, is a misdemeanor and punishable on conviction by a fine of fifty dollars for each offense, or imprisonment in any county jail for the period of three months, or both.

159. The oyster Commissioners have authority under this act to arrest any one caught violating its provisions. The Commissioners are empowered to wear a badge to distinguish their authority, and must be recognized and respected as officers empowered to en-

force the provisions of this act, and also to enforce all existing laws relating to the natural oyster grounds of the state.

161. This section re-enacts the provisions contained in section 44, with the exemption of Ocean County from its requirements and the date (1880) when the occupancy of the grounds commenced, left out.

163. That it shall be unlawful for any person without the permission of the persons holding or using the grounds to work from boats or otherwise with rakes, dredges, or other appliances upon any of said grounds, and thereby to injure, disturb, or remove the oysters planted and growing thereon; and it shall be the duty of any constable or duly appointed special officer, and lawful for any other person, to seize and secure any boat or appliance used in violation of this law, and immediately to give information thereof to any justice of the peace in the county wherein such seizure is made, who is empowered to hear and determine whether such boat or appliance was used in violation of this law. If found to have been so used, the boat and appliances shall be sold in such manner as the justice may direct, the proceeds after deducting all proper charges, shall be paid one-half to the person making the seizure, and one half to the treasurer of the state for the use of the State.

164. That no grounds now (1894) set apart and used for claming purposes in this State, shall be occupied and used for the purpose of planting and cultivating oysters.

165. That all stakes used for marking grounds shall be elastic and yielding, and shall not impede navigation nor interfere with the drawing of seines in any place customarily used for seine fishing.

166. That any person or persons who shall plant oysters on any of the natural oyster beds lying under water now known and recognized as natural oyster beds, from which there is now gathered seed or young oysters for planting purposes, shall be deemed trespassers and such planted oysters shall be forfeited to the public, who shall have the right of going upon said beds and taking said planted oysters and converting them to their own use at any time when it is lawful to take oysters from the said natural beds.

167. That nothing in this act shall give any person or persons the right or title to any of said lands as against the State, and the State may at any time alter or repeal this act, or the Riparian Commissioners may make grants the same as if this act had not been passed.

168. That none of the provisions of this act shall apply to the Delaware Bay or Maurice River Cove.

170. That any person or persons removing any stakes, buoys or monuments erected for the purposes set forth in the act to which this is a supplement, shall, upon conviction thereof, pay a fine of twenty dollars or be imprisoned in the county jail for a period not exceeding ninety days, either or both at the discretion of the Court.

Chapter 196, Laws of 1896, repeals so much of Section 46, Revised Statutes, as provides that "nothing contained herein shall apply to or effect any act, matter or thing herein prohibited if done or committed between the first day of April and the fifteenth day of June, including both days in any year."

Chapter 146, Laws of 1898, amends the act of 1896 to promote the propogation and growth of seed oysters and to protect the natural oyster beds of this State; (Sections 148, 150, 152, 153, 156, 157, 158, and 159, Revised Statutes) the amendments reduces the number of oyster districts from seven to six, and re-arranges their bounderies as follows:

District Number One—Barnegat Bay, north of Gunning River.

District Number Two—From Gunning River, south to Gaunts' Point.

District Number Three—From Gaunts' Point south to the south side of Great Bay, Atlantic County.

District Number Four—From south side of Great Bay to the division line between Atlantic and Cape May Counties.

District Number Five—The waters of Cape May County.

District Number Six—The rivers and creeks of Delaware Bay and Maurice River Cove.

It shall not be lawful for any person or persons to rake, tong, dredge, or in any way disturb or work upon any grounds occupied by the State of New Jersey for the purpose of planting shells, until the second season after the spat have adhered to the shells so planted, providing the catch is sufficient to justify the said Commissioners in turning them out for public grounds; penalty for violating the provisions of this act, fifty dollars fine and imprisonment in any county jail for a period of three months; but the provisions of this section are not to apply to the rivers and creeks of Delaware Bay and Maurice River Cove.

For the purpose of carrying out the provisions of this act, ten thousand dollars annually is made available, when appropriated, for the period of three years, of which sum the following amounts shall be distributed in the various districts named in the act for the purchase and spreading of shells as follows:

First district, a sum not to exceed twelve hundred dollars.

Second district, a sum not to exceed five hundred dollars.

Third district, a sum not to exceed eight hundred and fifty dollars.

Fourth district, a sum not to exceed eight hundred and fifty dollars.

Fifth district, a sum not to exceed seven hundred dollars.

Sixth district, a sum not to exceed fifteen hundred dollars.

The remainder of the sum annually appropriated, or such portion of it as may be necessary, shall be available for the payment of Commissioners appointed to carry out the provisions of this act, the surplus to be used as a majority of the Commissioners may decide.

Chapter 175, Laws of 1900, provides that from and after the passage of this act it shall be unlawful for any person or persons to take from the natural beds beneath the waters of this State, by means of boats, tongs, dredges, rakes or otherwise, or to have in their possession, or to buy or sell, or to offer to buy or sell, any clams commonly called hard mud clams, the shells of which will measure one inch in width or thickness across the back or hinge, except said clams be taken from beneath the waters of Atlantic County, in which case they shall not measure less than one and one-quarter inches in length, or to buy or sell, or to offer to buy or sell, any clams commonly called hard sand clams, the shells of which will measure one inch in width or thickness across the back or hinge except the said clams be taken beneath the waters of Atlantic County, in which case they shall not measure less than one and one-quarter inches in length, or to buy or sell, or to offer to buy or sell any clams commonly called soft shell clams, the shells of which will measures less than two inches in length; the penalty incurred by persons convicted of violating the provisions of this act is a fine of not less than twenty-five dollars, nor more than one hundred dollars, at the discretion of the justice of the peace before whom the case is brought, in default of payment of fine, the convicted person shall be committed to the county jail for a period not less than ten days nor more than thirty days; one moiety of the fine, after deducting the fees of the justice and officer making the arrest, to be paid to the overseer of the poor of the township in which the offense was committed, the other to be paid to the warden, constable or person who made the complaint.

Chapter 177, Laws of 1900, provides "a uniform procedure for the enforcement of all laws relating to the taking of natural seed oysters and clams and the protection of the natural seed oyster grounds

of the State and for the recovery of penalties for the violation thereof."

All laws general or special for the protection of natural seed oyster grounds, and regulating the taking or possession of natural seed oysters and clams are to be hereafter enforced, and penalties for violations recovered in accordance with the provisions of this act. Much of the difficulties heretofore experienced in the enforcement of the laws relating to the clam and oyster industry, have arisen from the want of that uniformity in the procedure for the punishment of transgressors, which is established by this statute, and its influence for good on the oyster industry in the future will, no doubt be very great. This very properly closes the chapter on oyster and clam legislation having general application to all the waters of the state, and there remains to be noted the many laws on the subject that have only a local application. But first, a brief historical notice of the points along the coast of New Jersey south of the waters surrounding Staten Island, that have been in the past, or are now, famous for their product of oysters and clams.

The material is drawn mainly from Ingersoll's work and depicts conditions as he found them in 1880.

Shrewsbury—is just at the heel of Sandy Hook and the base of the Navesink Highlands. It comprises the Navesink and Shrewsbury Rivers, and is the most northern of the indentations of the coast of New Jersey to which reference has been made.

Shrewsbury is one of the oldest and most famous oyster regions in the vicinity of New York, and its product has always enjoyed a high reputation in her markets. Quoting a newspaper review of the oyster interests in the vicinity of New York, published in 1856, Ingersoll reproduces the paragraphs relating to Shrewsbury as follows:

"The number of men engaged in the oyster fisheries of Shrewsbury is 250. Of these more than one-half are engaged in transplanting from the natural beds in Newark Bay to the artificial beds on the coast of Shrewsbury.

Shrewsbury oysters are said to be not inferior even to those procured from the best beds of the East River; they are a smaller oyster, but in proportion to their size, they contain more meat. The beds cover an extent of two or three miles and are owned exclusively by the farmers along the banks of the Shrewsbury River; the beds extend across the river which is between two and three hundred yards wide. When the tide recedes, the oysters are exposed to view, and may be gathered with an ordinary pitchfork. The pro-

cess of "tonging" is only necessary with those that lie in the bed of the river, and therefore comparatively few boats are required. The farmers employ persons to take them up at low tide and send them to market to be sold on their own account. In some instances they enter into a sort of partnership with oystermen owning sail-boats who obtain one-half the profits in consideration of taking them from the beds and carrying them to the city.

An oyster bed is almost as valuable as a gold mine, less injurious to health, and easier to work. Their owners are not only well to do in the world, but are considered by those engaged in the trade wealthy. They are not required to pay any tax for their privileges, and there is very little risk attending their business, compared to that to which others are subject. About $200,000 worth is sold during the year and this amount is inadequate to the demand. There is no possibility of an increase in the supply, however, for the only part of the river capable of growing them is already laid out in beds, and its productive powers are now taxed to the fullest extent.

Shrewsbury never possessed any natural oyster beds, and its celebrated stock always was and still is, obtained from transplanting young, obtained now largely from Keyport and Staten Island Sound.

"At present" wrote Prof. Lockwood in 1873, "the Shrewsbury is accounted the emperor of the bivalves, and will fetch in market wholesale, from $1.50 to $3.50 a hundred." But for years back their production has grown less and less, and a much greater number of reputed "Shrewsburys" are sold as such, than are taken out of these waters.

During the winter of 1879-1880, only about 20,000 bushels were harvested, by about 15 planters. About one-third of these were brought from Keyport and transplanted to the Shrewsbury River, where they will grow in two years to a very large size. Long Branch absorbs most of these oysters; one dealer states that from his depot alone 125,000 oysters and 40,000 clams were used each season.

In early days, a special law was passed applying to these waters as follows:

"It shall not be lawful for any person or persons to rake, or carry any oysters other than by wading in and picking up by hand the same within the following bounds, in the river commonly called the North or Navesink, lying within the county of Monmouth, above a direct line from the store house of Eseck White, on the Shrewsbury side of the river, to the dwelling house of Thomas Layton, on

the Middletown side of the river aforesaid. Penalty, $10 for each offense."

There is also a law extant against erecting stakes, or any other means of using "wares" or "syke-nets" for taking fish on the bottom of the Shrewsbury River where oysters are planted.

The proud distinction once enjoyed by the Shrewsbury as the producer of the "emperor of bivalves" has, apparently, passed away; whether for good and all, or only for a time, will depend, the local planters believe, on the action the Legislature may take in the matter in the near future. If the same protection enjoyed by the oystermen of Delaware Bay and Maurice Cove under the acts of 1899 and 1901 is, as it should be, extended to those engaged in the industry here, the Shrewsbury will soon regain much, if not all, of its old importance, and become once more the center of profitable oyster culture it was years ago. But the view of the future taken by local planters is not very hopeful. One of them residing at Oceanic on the N. Shrewsbury, describes the condition of the industry on the river as follows: "Up to August 1901, the sewerage of the town of Red Bank was emptied into the Shrewsbury; a new sewer system was put in operation on that date and the river is now pure and wholesome, There has been no natural oysters since the year 1868, about. Although the sewerage is no longer discharged into the river, the bottom is filling rapidly with clay anl loam brought down from the sloping banks of the river by the heavy freshets of spring and fall. This sediment will cover the young oysters, therefore there are few if any young seed planted.

Two and three-year-old oysters are mostly put down; these are placed in the water in the spring to fatten and acquire a flavor, and are taken up in the fall for market. In the upper river there is a growth on the river bottom known as cabbage, and also a heavy growth of seed grass; both of these water weeds are very detrimental to healthy oyster and clam life.

In October 1901, a severe storm broke down what is known as the sea wall, letting in great quantities of salt water; the oysters on the bottom became poor and green in color and many died. Those that lived were unfit for marketing. The season of 1901 was very bad from the foregoing and other causes, and many oystermen suffered heavy losses; but, at the present time the river, having freshened up, is in good condition.

The worst enemy the oyster has in these waters is the parasite

known as the drill, which first appeared here in 1892. It is believed to have been brought from Connecticut in a shipment of twenty-five thousand bushels of oysters that were laid down in these waters in 1892. This consignment was a total loss through the ravages of the drill, which in one season multiplied to such an extent as to cover the river bottom, even to clinging to and floating on the sea grass wherever it grew. Oysters were killed by thousands; in 1895, six thousand bushels of two-year-olds from the Raritan River were totally destroyed. In 1900, the same firm planted one thousand bushels of Raritan River's again, and succeeded in saving two-thirds of them. In September 1901, there was little or no loss on account of the drill, the freshets of that spring having virtually exterminated them. These pests thrive in medium salt water, but fresh water kills them. The clams were not attacked by the drill. But although strange enemies to oyster life, and unlooked for causes of destruction to it come and go, the river pirate or oyster thief is with us always. There are many of these depridations on the Shrewsbury, and their pilferings which are carried on openly are a great loss to the planters. These people take the ground that the planters having no leases, makes all oyster deposits here natural beds, from which all, regardless of who has planted the seed, have an equal right to take oysters. The enterprising planter who sows the seed, without which the river would soon become barren of oyster life, is often obliged to rely on his shot gun to aid him in gathering the crop for which he has expended his labor and money. This state of things exists at the present time.

All reputable planters on the river are unanimous in the opinion that the state should lease them the rights for which they are willing to pay, and then protect them in their possession. In fact this must be done or oyster culture in these waters will have to be abandoned. As it is now, the oyster industry, although famous here not many years ago, is now nearly extinct; whether it becomes absolutely so, deepnds on the action the Legislature may take in the matter of protecting those who are now engaged in it.

The catch of the Shrewsbury for the season of 1901 was, as ascertained by an agent of the Bureau of Statistics, by count, 870,000 prime oysters, which sold for six, seven, seven fifty and a small quantity of them as high as eight dollars per thousand. The average per thousand was seven dollars, and the total sum realized amounted to $6,090. Two hundred and ninety thousand cullings were taken

which sold for $3.50 and $3.75 per thousand; the total amount being $1,078. For primes and cullings together the catch of 1901 brought the planter $7,168. These figures compared with the $200,000 worth quoted above as the value of the catch in these waters in 1853, shows that the oyster industry here has declined since then almost to the point of extinction.

The catch of clams for 1901 was 450,000, these were marketed for $3.50 per thousand.

THE NATURAL BEDS OF THE RARITAN RIVER.

These beds were once famous for the abundance and fine flavor of their oysters. It was here that the "great store" of the luscious bivalves to which Governor Carteret so boastfully referred in his description of the advantages offered by his colony, were found. At the present time a large area of bottom once teeming with oysters is covered from the shore to the channel with condemned brick and other similar waste material from the yards along the river banks. Irretrievable damage has been done to some of the beds along the river by the sewerage of factories situated on the water front.

But by far the larger part of the beds may be restored in a few years to their old condition of productivity by judicious sowing of shell and spawn. If this were done and the seedsmen prevented from disturbing the grounds for two years, the results would be the greatest producing natural beds in the State.

There are about fifty seedsmen who make a living out of these beds. The average catch for each man is six bushels per day for two hundred and forty days in the year. The seed sells for an average of forty cents per bushel. The aggregate product of their labor is seventy-two thousand bushels, which brings in money, twenty-eight thousand eight hundred dollars, or an average of five hundred and seventy-six dollars each.

The culling law is openly violated here, and the shells that should be thrown back by the tonger is often carried away, rendering the ground from which they are taken poorer to just that extent. The quanttiy of seed taken is said to be slowly diminishing from year to year, but the price is advancing. In 1901, it sold for forty cents a bushel, while the catch of 1902 brought fifty, and in some cases sixty cents a bushel.

Much complaint is made of the injustice of leaving these important

waters out of the districts that are shelled at the expense of the State, at present it is, to quote the expression of a local planter, "taking everything out of the water and giving nothing back."

Fourteen Perth Amboy planters report a catch for 1901 of fifty-four thousand three hundred (54,300) bushels of prime oysters, which were marketed for from ninety cents to one dollar and a quarter a bushel, the average price obtained being a little in excess of one dollar per bushel.

Three of these planters not included among the seedsmen before referred to, took twenty-one thousand (21,000) bushels of seed from the Raritan natural beds, which they set out for cultivation. Had the same quantity been purchased from outside, it would have cost from forty to fifty cents per bushel; the value of the seed on the basis of forty cents if added to the amount realized on the sale of primes, would make the total product of the cultivated beds of Perth Amboy and the Raritan River natural beds about as follows:

	Value.
Bushels of marketable oysters, 54,300	$54,300
Bushels of seed taken by planters, 21,000	8,400
Bushels of seed taken by fifty seedsmen, 72,000	28,000
Total amount for which marketable oysters and seed were sold	90,700

Nineteen thousand, seven hundred and eighty-eight (19,788) bushels of seed was planted, the aggregate cost of which to the planters was nine thousand, one hundred and seventy-five ($9,175) dollars. Eighty per cent. of this seed was obtained from the Raritan River, and the remainder from Staten Island Sound, New York Bay, and Connecticut.

KEYPORT.

This is the next point south of Perth Amboy where the oyster industry is carried on. Here there is the same familiar complaint of the destruction of oysters by freshets which wash the silt upon the beds in quantities large enough to cover the oysters; the mussels that smother them by growing over the beds in solid banks knitted together by the strong thread with which these mollusks join them-

selves, and there is always here as elsewhere, the oyster pirate who helps himself to the products of other men's industry, whenever opportunity favors his doing so.

The provisions of the act of March 24th, 1899, for the better protection of the oyster industry in Delaware Bay and Maurice River Cove were extended by Chapter 33, Laws of 1902, to the waters of Raritan Bay.

The value of this act is already shown by the quantity of seed oysters planted since its enactment, which is greater than that of any one reecnt year. The catch of prime oysters for 1901, reported to the Bureau by ten planters of Keyport, was fifty-six thousand (56,000) bushels. Forty-six thousand of these were sold for one dollar a bushel, and ten thousand for ninety cents a bushel. Only three thousand bushels of clams were taken and these brought an average price of one dollar a bushel.

The quantity of seed planted was thirty-one thousand, nine hundred (31,900) bushels, for which in the aggregate, fourteen thousand nine hundred and seventy dollars ($14,970) was paid. The price per bushel ranged from forty to fifty cents, the average being forty-seven cents. Raritan Bay and Virginia, each furnished nine thousand six hundred bushels of this seed,and from Staten Island Sound and Cheesequake Creek came nine thousand five hundred, and three thousand two hundred respectively.

SHARK RIVER.

The next point southward connected with the oyster industry is Shark River.

More than thirty years ago there was considerable oyster industry here which, it was thought, could be extended and the river made very profitable. Laws were enacted in 1870, which authorized the Board of Chosen Freeholders of Monmouth county to occupy, during twenty years, for oyster culture, Shark River, within certain specified boundaries for the purpose of oyster culture.

The freeholders were authorized and directed by the act to appoint commissioners to survey and sub-divide the part of the river within the boundaries, into two-acre plots, which were to be rented for oyster culture to the highest bidder at public auction; no individual to have more than two acres, and no company more than five.

About 1877, two hundred lots were said to be leased at an annual

rental of two dollars a year, and many persons were employed, but the industry declined and for many years back there has been only enough to supply the local demand in summer of the hotels on the neighboring beaches.

BARNEGAT BAY.

No oysters exist or are cultivated anywhere between Shark River and Barnegat Bay; but, within the last named sheet of water there is a very large industry established many years ago.

The great heaps of shells found about the banks of the bay, show that here as elsewhere, the Indians were accustomed to come and feast upon the oysters.

The natural beds are very extensive. Beginning a few miles above the village of Barnegat,they exceed nearly ten miles northward and have an average width of about two miles. These beds are known as the Cedar Creek Grounds.

The bottom here is gravelly and well sprinkled with shell and other kinds of culch. This is one of the great sources of the supply of seed for all the southward coast. Seed is also sent in considerable quantities from here to the Raritan, and Staten Island waters. These beds are said to have lost much of their strength through carlessness in culling the seed taken away; this wasteful course pursued for many years back has seriously depleted the shell deposit on the bottoms, and therefore the culch on which the spawn might rest has grown very scarce.

The gravellings, a large shoal of gravel several square miles in extent, at the point, where the Mullica River enters the Bay, is another rich ground for gathering seed oysters. The Cedar Creek seeds have generally had the preference from planters, as it seems to live and grow into better shape on the local beds. The gravellings hold out well, although enormous quantities of culch are taken away through improper culling, and nothing returned. At least, this was the case until a few years ago. The Culling Law is now more strictly enforced, and the State, through its shell commission is doing valuabe work in restoring the beds to good condition. Planting was carried on in Barnegat Bay according to Ingersoll, ,as early as 1832, and laws made by the Legislature about that time provided that "any person, being a citizen of New Jersey and a resident of Ocean county might stake off any quantity of land covered by water,

not exceeding two acres, marking the boundaries by stakes or other marks, and to plant oysters; provided that the shore owners shall have the right and preference to stake off as far as their deeds allow by running their lines for that purpose. That oysters within the boundaries of all said waters shall be the private personal property of the persons so occupying the land; and any person who shall injure or carry away the same, shall be guilty of larceny, and shall forfeit all the implements used for taking the same."

It would seem that the language of this law was plain enough to protect the interests of those who availed themselves of the privileges which it offered. However, public sentiment does not appear to have favored the measure, and men were unwilling to invest money and labor in planting when there was no certainty of being allowed to reap the reward of their outlay. Hence, oyster raising at Barnegat progressed very slowly although hundreds of acres of perfectly good bottom was lying idle, and plenty of capital ready to be employed in the business.

Ingersoll states that the entire crop reported for 1882 was less than eight thousand bushels, and at the same time cites the following case to show how profitable oyster planting may be made here: "A man laid down a bed of young oysters which cost him $13. After two years he employed a man to take up and sell all that were upon the beds, giving his agent one-half. The returns to him were $57, his agent taking the like amount, showing an increase in two years of about one thousanl per cent. In addition to this, a dozen or fifteen bushels were eaten by each of the two families.

Shelling has proved very successful in Barnegat Bay and it is said one hundred bushels of seed may reasonably be expected from twenty bushels of stool, laid down anywhere in the upper part of its waters. Such culch beds have, however, always been popularly regarded as "natural ground" and everybody so inclined will rake them regardless of the law or the planters' rights. It has even happened that oysters taken by an owner off his private beds and placed in a creek to freshen, have been raided by thieves, and though he could prove the theft, he was unable to recover in the local courts.

The Oyster Act of 1902, however, promises to change all this; when it shall have been put in full operation, the rights of planters who comply with the moderate requirements of the act, will receive just recognition and protection. This law places all lands and oyster beds under the tidal waters of Ocean county, under the control of a

State Oyster Commission to be known as the Oyster Commission for the district of Ocean county. The Commission consists of three persons, appointed by the Governor for a term of three years; these gentlemen must be citizens of the State of New Jersey, and must be directly interested or engaged in the taking, planting and cultivating of oysters in the tidal waters of Ocean county. The act also provides for the appointment of an oyster superintendent for a term of three years. To this commission is entrusted the power and it is made their duty to enforce the provisions of this and all other acts regulating the taking, planting or cultivating of oysters in the tidal waters of Ocean county. The Commission are directed first before leasing any grounds, to set apart a portion of land under tidal water, to be known and held as public clam grounds. All lands not so reserved, excepting that part of Barnegat Bay, bounded on the north by Pennsylvania Railroad Bridge at Barnegat pier, and on the south by a line drawn from the center of Middle Point, on the south side of Cedar Creek, east to the Cedar Creek Life Saving Station, and also all those lands lying under the tidal waters of Great Bay and Mullica River, north of a line running from Gravelling Point in a southwesterly course, to the Atlantic county line, they are empowered and directed to lease to applicants who have been for twelve months citizens of New Jersey.

These leases are to be for a term not exceeding ten years, at an annual rental of not less than fifty cents nor more than three dollars per acre or fraction thereof for the first ten acres leased, and not less than one dollar for each additional acre, or fractional part of an acre. The yearly rental of grounds must be paid thirty days before the commencement of the year, and leases are forfeited if rental is not paid on time. Any person having grounds staked off under any present law, usage, or custom on the fifteenth of September, 1901, shall be first entitled to apply for and receive a lease for the grounds so occupied; but such application must be filed at the office of the Commission within sixty days after this act takes effect. In default of this application the lands may be leased to any other person qualified to take them up under the law. The Oyster Commission are required from time to time as applications are made for leases to cause measurements to be made, and the metes and bounds of lands already leased, ascertained, and marked by ranges, monuments or other means, so that the limits of the lands embraced within such leases may be accurately fixed and easily located.

Maps of the leased lands must be made by the Commission and kept on file in their office. Persons who have held and planted grounds within the limits excepted as above described, are given two years time from June first, 1902, to remove the oysters and culch planted thereon by them.

Every person entitled by law to engage in the business of catching, planting and growing oysters in the tidal waters of Ocean county, must procure a license from the oyster superintendent. The license is for one year and the fee $2.50. Each licensed person must display his license number in black figures at least six inches in length on the port bow of his boat, and no person without a license is permitted to take more than two bushels of oysters in one day.

The Oyster Commission before issuing a lease shall cause the person applying for it to make oath that he is a citizen of the State and an actual resident for the twelve months next preceding the date of his application, and that he will properly plant or cause to be planted oysters thereon.

Parties applying for licenses to the Oyster Superintendent must make oath to their citizenship also before one is granted.

All moneys and fees received by the Oyster Superintendent under this act is for the use of the State, returns must be made to the Comptroller of the amounts collected on or before the tenth of each month.

The expenditures of the Oyster Commission in carrying out the provisions of the act are limited to the amount received from the Oyster Superintendent.

Tonging for oysters on any of the unleased lands under the tidal waters of Ocean county is allowed only from the first day of October to and including the thirtieth day of April of each year. Tonging on leased or unleased lands can be carried on only from one hour before sunrise to one hour after sunset.

The act requires all oysters and shells brought up by tongers from the natural beds, to be carefully culled as soon as they are emptied from the tongs upon the culling board of the boat, and all shells and other material, except oysters, must be immediately thrown back upon the beds or grounds from which they were taken. Oysters must be culled so closely that three bushels taken from any part of the deck shall not contain more than fifteen per cent. of shells and other material. Any person who shall cull otherwise than as above

provided is deemed guilty of a misdemeanor; persons licensed under the provisions of this act who refuse to stop when hailed by any officer of the State Oyster Commission, who desires to examine the oysters on his boat, may have their licenses revoked. Members of the Oyster Commission and the several captains or masters of guard boats are given power to arrest all violaters of this or any other law relating to the cultivation of oysters, on view and without special warrant.

Dredging upon unleased oyster ground is forbidden. The penalty for violating any of the provisions of this act or any other law for regulating the taking, planting or cultivating of oysters in the tidal waters of Ocean county, that is not repealed by this act, is, on convictoin, a fine not exceeding one thousand dollars or imprisonment in State prison not exceeding five years, or both at the discretion of the court. This is the substance of the law that has established over the tidal waters of Ocean county, a State supervision and protection of the oyster industry that is practically identical with that which prevails under the act of 1899 in the more valuable oyster grounds of Delaware Bay and Maurice River Cove.

The change wrought by the law from the "go as you please" system that prevailed heretofore is a very great one, and as may be supposed provokes the opposition of many.

Under the old methods, the industry was threatened with extinction. The man who harvested the oysters was quite likely not to be the one who planted them. Those who were the most successful raiders under the old system, now find fault with being deprived of what they regard as their long established right to gather at will the natural products of the sea, but the more discerning believe that this act will save the oysters of Barnegat Bay from annihilation, and be the means of developing a great industry, which will bring to all concerned vastly increased returns. Others find fault because, they claim, only those on the lower part of the bay and near to the grounds, can derive any advantage from the lands reserved as natural beds. It is claimed that these rush in and grab the seed oysters as soon as they are dumped, while others living further up the bay are unable to get their share. Some complaint is made that seed oysters are sown or rather dumped in heaps, instead of being scattered broadcast, and that they are thus more easily seized by the grabbers. It is also held that it should be made unlawful to take them until they are "plate" size.

The area of oyster cultivation in Barnegat Bay could be greatly increased by opening an inlet to it from the Manasquan River, through which salt water could be introduced to the upper part of the bay; by this means from thirty to forty thousand acres of perfectly ideal bottom, that lacks only the salt water, could be made as productive as the southern part of these waters. The annual rental from these acres would mean a considerable addition to the State's revenue, and would soon pay the cost of making the sluiceway.

North winds blow large quantities of sea grasses through the inlet which then settles upon the beds and causes much damage to the oysters; much mischief to the beds is wrought by the passage of sailing craft which scrapes the bottoms where the waters are shallow, as is the case in most parts of the bay.

There are about fifty persons engaged in planting oysters in Barnegat Bay. These together marketed nine thousand seven hundred (9,700) bushels of prime oysters, and two thousand (2,000) bushels of cullings or seconds. The average prices obtained were one dollar ($1.00) per bushel for primes, and seventy-five cents for cullings. Fifty thousand (50,000) bushels of seed, also, which was sold to local planters and to others at Tuckerton and vicinity, for thirty-five cents a bushel, formed no inconsiderable part of the year's catch. The firms report having taken between them five hundred and forty thousand (540,000) clams, which sold for three dollars a thousand, or one thousand six hundred and twenty dollars ($1,620) for the lot.

The year's operations in Barnegat Bay would stand about as follows:

	Sold for.
Prime oysters taken, 9,700 bushels,	$9,700
Cullings, 2,000 bushels,	1,500
Seeds, 50,000 bushels,	1,750
Clams, 540,000 at $3 per thousand,	1,620

Evidently the work done by the State in shelling the bottoms, has been productive of a large increase in the supply of seed, for while there were nine thousand eight hundred (9,800) bushels planted, only eleven hundred and fifty (1,150) bushels were brought from outside. These came from Virginia and cost an average of thirty-five cents a bushel; the balance of the quantity planted was raised from shells or taken from the Cedar Creek natural beds.

The winter of 1901-02 is said to have been an unusually disastrous one for the oyster industry in Barnegat Bay, particularly in places where the water is shallowest. One planter states that three-quarters of his crop was destroyed by ice and snow; another gives fifteen hundred bushels as the loss sustained by him, and a third asserts, without giving particulars, that the months of December, January and February was the most disastrous period known to the oyster industry in Barnegat Bay in thirty years.

TUCKERTON AND VICINITY.

At Tuckerton, Manahawkin, West Creek and intermediate villages lives a large number of oyster planters who have beds of considerable extent opposite their homes, and also down in Great Bay below the islands, almost meeting the planters of Absecon, Bass River, and Port Republic. Most of the seed is taken from Cedar Creek, and the mouth of the Mullica River.

It was found impossible to ascertain with precision the number of planters, but the best local authority places it at three hundred and twenty, the greater part cultivating only small plots. The tongers number five hundred and fifteen.

Twenty years ago Ingersoll stated that two-thirds of all the men in these places were directly engaged in the oyster industry; their population then and now does not differ much, and it is safe to say that at least the same proportion still follow that pursuit.

Most of the men are married and probably an estimate of from two thousand five hundred to three thousand would not be in excess of the number of persons who derive their support from oyster culture.

Tuckerton has a population of about 1,800 inhabitants. It is said by those familiar with the subject that at least twelve hundred of these live by means of the oyster and clam fisheries with but little income from any other source. It is the one industry that sustains the town.

The bay bottom devoted to this work is certainly much more productive than an equal area of the sandy and pine covered land of the vicinity. Indeed, the only other industry carried on here, the manufacture of fish oil and fertilizers, draws the material used in its two establishments from the water.

During seed taking time, the beds are crowded with craft of all

kinds from schooners to yawls, and it is not uncommon for the first day's work to show from one hundred to one hundred and fifty bushels to the man on the best grounds; if the owners keep all this seed for themselves, two days is generally sufficient to load their boats when they go to their planting beds. If they prefer to sell to the larger planters, they can readily do so. The yield the second day is much poorer, and at the end of a week or ten days, the beds are scraped absolutely clean. The seed consists almost wholely of the year's growth, and being so small cannot easily be separated from the shells to which it is attached. There is therefore, necessarily but little given back to the water through such culling as is possible. On some parts of the bottom, however, the spawn grows upon the gravel and there are few shells.

Oysters in the waters of Tuckerton and Barnegat grow only moderately and require three or four years upon the beds to fit them for market, but large quantities are sold from Tuckerton to Atlantic City men who fatten them on the sand bars which makes them fit for market the same season.

The condition of the industry in and about the waters of Tuckerton and Great Bay was very good in 1901; the seed crop was unusually large and the oysters of a fine quality.

The figures of the product are as follows:

	Sold for.
Prime oysters, 37,325 bushels,	$36,295
Cullings, 68,111 bushels,	52,192
Clams, 10,205,000 (by count),	42,324

Average price per bushel for primes, 97 cents.
Average price per bushel for cullings, 77 cents.
Average price per thousand for clams, $4.15.

Number of bushels of seed oysters planted	128,100
Total cost of seed oysters,	$54,100

Average price per bushel, 42 cents.

The largest part of the seed was taken from the Mullica River and the Cedar Creek beds, eighty thousand bushels in all; the remainder was supplied from the beds of Long Island Sound, New York Bay and Virginia.

The condition of the oyster industry in and about the waters of Tuckerton is not entirely satisfactory this year (1902) owing to a variety of circumstances, chief among them being the destruction of about 25,000 bushels of oysters on the beds, by a great school of drum fish which entered the bay about May 25th and remained until the end of June.

DELAWARE BAY AND MAURICE RIVER COVE.

The oysters of Delaware Bay were highly prized by the first settlers, and there are frequent allusions to them in the narratives and letters of the early days. A letter to Governor Printz from his Chaplain, dated 1642, mentions "various kinds of shell fish as oysters, lobsters, sea and land turtles, cockles and mussels." Speaking of Delaware Bay, more particularly, he says:

"There are oyster banks, and an oyster strand all the way to Bompties Hook (now Bombay Hook) on both sides of the river; these oysters are so very large that the meat alone is of the size of our oysters, shells and all."

Maurice Cove in Cumberland county is the center of the present oyster industry in the Delaware Bay and River. The entire shore of Maurice Cove is bordered by extensive marshes, through which innumerable creeks find their way from the interior, and which contains many open places called "ponds." Through these creeks and ponds, ,in the tide ways and along the borders of the sedge plats and islands, oysters have always grown in great profusion.

In addition to this, the bottom of the bay, and of the Delaware River from Cape May Beach clear up to a little above Cohansey Point, a distance of not less than fifty miles, is everywhere spotted with oyster beds. The same is true of the opposite, or Delaware shore. These oyster beds are not confined to the shallow waters near shore, or to the sedge plats, but are apparently scattered over the whole bottom of the bay. Even the ship channel, ninety fathoms deep, contains them as has been shown by experimental dredging.

This was the condition in which Ingersoll found the oyster industry in the Delaware Bay in 1880. What it was at a much earlier date is shown by the following extracts taken from *Watson's Annals of Philadelphia,* published in 1843. Mr. Watson says:

"Having been at some pains to learn something of the present and past state of our oyster beds in the bay, I have arrived at sundry

conclusions, such as these; that our field of oysters, notwithstanding their constant delivery, are actually on the increase, and have been augmented in extent and quality for the last thirty or forty years. This fact, strange to the mind of many, is said to be imputable to the use of the dredging machine, which by dragging over a greater surface, clears the beds of impediments, and trails the oysters beyond their natural position and thus increases the boundaries of the field. These dredges are great iron rakes, attached to the vessel by chains, and which trail through the oyster beds while the vessel is moved over them by the force of the wind in her sails. In this way, many more oysters are dragged and loosened from the mud than the rake will take up, and thus are left free to propagate another future supply."

It is said to be a false kindness to oysters to let them alone, as they did in New York to their famous "blue points," by a protecting law, which served only to have them so covered by mud as to actually destroy them.

An old oysterman informs me as an instance of the increase of oyster beds, that he used to visit a little one thirty years ago, of one or two hundred feet long, and growing, known as the *new bed.*

There is a field of size, also beds of size, off Benj. Davis' Point and Maurice River, New Jersey, and off Mahants Point, Delaware side. Since the formation of the breakwater, lobsters and black fish have come there in quantities. It is discovered to be a fact, in all the ponds found in the sedge marshes lining the two shores of the Delaware, that in them are found the best oysters, and that in one of them called "the ditch" which is an artificial canal cut into the marsh, fine oysters are always to be fished out. It has been remarked by my correspondent and corroborated by others that although oysters are found in salt water, they will not bear removal to water that is saltier. Experiments have been made "by hanging a basket of bay oysters over the vessel's side exposed to the saltier water, and they have been found to die in twelve hours. Hence, the necessity of planting them in water less salt, or at least not saltier than their native beds. Those caught after a copious rain are said to be much finer than those taken from the same place before the rain. The oyster is of a tenacious nature, attaching itself to almost all substances with which it comes in contact—such as wood, iron, or stone. When found attached to glass bottles, they are always found much fatter for it."

This quotation although not wholely relevant, contains much that goes to show the importance of the oyster industry in that region nearly seventy years ago. Indeed it has become so valuable as to be the subject of much special legislation. One act taken from the revised statutes of 1856 is substantially as follows:

Section 1. Authorizes the Board of Chosen Freeholders of Cumberland county to occupy for twenty years, for the use hereinafter stated, Maurice River Cove within the following boundaries: Beginning at low water mark, directly opposite east point in the township of Maurice River, Cumberland county, and running thence a south course to the ship channel; thence by a straight line to low water mark, directly opposite Egg Island Point, in the township of Downe, in said county, and thence by low water mark the several courses and distances of the shore bordering on the said cove, and covering the mouths of the several streams that empty into said cove to the place of beginning.

But the natural oyster beds in Maurice River Cove or Delaware Bay known severally as the east point beds, Andrews ditch beds, the Pepper beds, and the Ballast beds, and the beds that fall bare at low tide, shall not be occupied for planting oysters, nor dredged upon, nor shall oysters be taken from the said beds, nor from any of the rivers and creeks of Cumberland county, for the purpose of planting (but all citizens of this State shall have free access to them to catch oysters for their own use), under heavy penalties for violation."

Section 2. Authorizes the Board of Chosen Freeholders to appoint one or more persons to stake off and make a survey and map of the land covered with water and the shores of Maurice River Cove, and directs that a copy of the map when made, be filed in the County Clerk's Office.

Directions are given to "lay out and cause to be marked by stakes such subdivisions of said cove not exceeding ten acres each, as shall seem best designed to promote the planting and growth of oysters. The free navigation of the cove is provided for, by prohibiting the placing of stakes where their presence might impede it, and individual owners or lessees are limited to ten acres each, and companies to not more than thirty acres.

The Commissioners after sub-dividing the cove are directed to lease the plots at public vendue to the highest bidder for periods not less than one year nor more than five years. Lessees must in all

cases be citizens of New Jersey and pay the sum bid, annually during the term of the lease.

The payment of this annual rent secures to the bidder the exclusive use of the designated plot for the purpose of planting oysters during the term of his lease. The penalty for trespassing upon or removing oysters from the leased lots without written permission of the owner is treble damages for the first offense, and for the second, a fine not exceeding $100, imprisonment for sixty days, or both.

The Commissioners are particularly enjoined to enforce the penalties against non-resident offenders. The residue of rents and penalties collected after paying all expenses incurred is applied to the public school fund.

Supplements to this act, subsequently adopted, provided that all vessels lawfully engaged in planting or catching oysters on the flats or grounds of Delaware Bay and Maurice River Cove, adjoining the counties of Cumberland and Cape May, shall be assessed annually $5 upon boats not exceeding five tons, and $1 per ton on all boats or vessels exceeding ten tons, the assessment to be paid by the master of the vessel to the collector of the oyster fund.

The appointment of a special officer to enforce the oyster law is provided for; this official is directed to open and occupy an office at Port Norris, where complaints of violations of the oyster laws may be made. This officer is given very wide power to make arrests of persons found stealing oysters on any part of the grounds covered by the law; persons convicted of such thefts were to pay $1.50 for every bushel of oysters found in their possession, and also a fine of $100 for every offense. The special officer has a right to call on any citizen, captain or commander of any steam or sailing vessel for assistance in making arrests under the law, and any one who refuses to aid him incurs a penalty of $50 fine.

Licenses certified by the collector of the oyster fund, to be issued to all captains of vessels who have paid the taxes and fees required, and each captain before taking out the license is required to take oath "that he will at all times diligently aid in the enforcement of the laws of New Jersey for the protection of clams and oysters, and promptly report to the special officer any knowledge that may come to him of a violation of said laws."

Captains refusing to take out a license or make oath to support the law, are debarred from the right to take or plant oysters in Delaware Bay or Maurice River Cove.

To give a legal status to the voluntary association of oyster growers, those of them operating in Maurice River Cove are authorized by law to meet on the first Tuesday of March at Port Norris, and having organized they are empowered to elect by ballot a special officer, and a collector to serve for one year at a salary to be fixed by the Association; they are also authorized to elect an Auditing Committee to examine and pass on the accounts of the oyster fund collector, and report upon them at each annual meeting. This meeting is also given authority by a two-thirds vote, to impose a tax of $1 per ton per annum on boats of over five tons, in addition to the tax heretofore imposed by the act. The continuance of this extra tax must be ratified each year by a two-thirds vote.

Whenever, at the end of a fiscal year, the oyster fund, after all expenses are paid, exceeds two thousand dollars, the collector shall pay the same to the State Treasurer for the support of the schools of the State.

Taking oysters from the beds of the Maurice River Cove or any planting ground in Delaware Bay, between sunrise and sunset, is forbidden under a penalty of fifty dollars fine, and every lawfully licensed boat engaged in either catching or planting is required to display its license number in black figures eighteen inches long in the middle of the main sail.

Persons who have been residents of the State for six months may make a written application to the clerk of the common pleas of the county in which he resides, for a certificate setting forth that the applicant is a resident and not engaged in planting oysters and clams, but desires to rake shell fish within the waters of this State, from the natural beds within the waters of Delaware Bay. He must also designate the boat he intends to make use of. The clerk, on satisfying himself of the truth of the applicant's statements, shall issue to him a certificate stating the facts as above, and on presentation of the same to the oyster fund collector of Cumberland county, that officer must issue to the applicant without any other charge than the customary fees, a license to gather oysters, clams, and other shell fish on the natural beds in Maurice River Cove and Delaware Bay, on the boat named in the license.

Section one of the Act of 1846, which forbids the taking of oysters or clams, or raking on any oyster beds in the State on any pretense whatever, between May 1 and September 1 of each year, under

penalty of fifty dollars fine, is not affected by the foregoing acts or supplements.

THE OYSTERMEN'S ASSOCIATION.

This association which has played up to the present time so important a part in matters relating to the oyster industry of Delaware Bay, was formed under the special license law of 1871.

Each year its board of directors fixes the rate of taxation upon vessels in the association, to furnish the funds deemed needful for its support.

The main object of the association and the one for which its funds are principally spent is the providing of watch boats and police crews which shall guard the beds in the cove and bay against thieves, and arrest all boats that do not show, by a number in the center of the main sail, that their owners have a license.

In 1880, Ingersoll states that two thousand dollars was collected by the oyster fund collector from two hundred and fifty-five registered and licensed boats, the rates being fifty cents per ton, custom house measurement.

The association issues a license in printed form and also requires the captain of each boat receiving one, to make oath that he will obey and help enforce the laws of the State for the protection of the oyster fisheries on all occasions. Many irresponsible boat owners do not observe the regulations of the association and prefer taking the chances of arrest, and forfeiture of whatever advantages there may be in living up to the rules, to doing so. The watch boat is, therefore, kept busy looking after home delinquents as well as theives from abroad.

The watch boat has a crew of from three to five men, but in an emergency, the captain may call upon anybody at hand to assist, and he is bound to obey.

The crews of oyster boats usually work on shares, one-third of the receipts as a general thing goes to the owners,and the crew divides the rest. If each man makes five hundred dollars a year by this arrangement he does very well. Crews that are hired, that is to say, those who do not work on shares, are paid wages from twenty to forty dollars a month and board.

Ingersoll, referring to the results of the protective laws in Delaware Bay and Maurice River Cove at this time (1880), says:

"As usual, when the oyster business has become of great dimensions and planting is carried on on a large scale, there are a number of persons who are, to a greater or less extent, deprived of real or imaginary benefits and privileges which they enjoyed under a more primitive condition of things.

From the enclosed river and ponds and also from the bay southward of Egg Island, large numbers of large sized and sweet oysters have always been taken and sent to market or peddled through the neighborhood. When planting beds were so greatly increased in Maurice River Cove, the shore people found that the diligent search for young oysters through the marshes and the persistent dredging during three-fourths of the year, were sensibly diminishing the supply of marketable oysters obtainable by the small open boats. Of these, there are fifty or more owned along shore. They are too small to come under the association's tax, do not belong to planters, but are owned by men who live near the shore and get the greater part of their living by tonging and hand dredging. These people owing to misfortune or improvidence, are too poor to plant; but can do well if they are allowed to catch all the year round in the southern part of the bay, where all the oysters taken are of marketable size. For the protection of this class, therefore, against any possible rapacity of more fortunate and powerful neighbors, the Legislature this year passed a law which gives general satisfaction. This makes it unlawful to "catch oysters from any of the natural beds in Delaware Bay, north of a line bearing southwest from Sow and Pigs Creek in the county of Cumberland, from the last day in June each year to the first day of April in the succeeding year, and no oysters shall be caught south of the said line for the purpose of planting at any season of the year, and persons offending against either of these provisions are guilty of a misdemeanor." Punishments, a fine of one hundred dollars, or imprisonment with forfeiture of the craft and all its furniture."

MAURICE COVE OYSTERS.

Maurice River Cove is by far the richest and most productive oyster area embraced by the waters of New Jersey. A large part of the oysters sold from there are of natural growth, and do not become improved by planting. Many of them, particularly those obtained off Egg Island, do not require to be freshened before being taken to

market. These fine wild oysters are dredged from an average depth of eight fathoms. Ingersoll says that "successful dredging has been done in all parts of the southern half of Delaware Bay, even in mid-channel where the water is five hundred feet deep."

Dredging for natural oysters in water of the average depth can only be done by the large boats fitted with windlesses and other apparatus, but large quantities of seed are furnished by men who use small boats and tong them. In some localities the seed is poor with thin shells and is replanted in enclosed ponds. From the Maurice River and northward better seed is found, and good natural growth oysters are tonged up and sold to wagoners who peddle them through the country at from fifty cents to one dollar a bushel.

Ingersoll mentions the case of one man in Mauricetown who worked alone in an open boat and is said to have sold between five and six thousand dollars worth of this stock in a single season.

The natural growth extends northward on the New Jersey shore of the bay at about Cohansey Point. Along the shore from there southward to Cape May, the beds are almost without a break, but out in the middle they grow in isolated patches. The northernmost beds produce only seed, and the protective law before quoted was made in the interest of the hundreds of families who gain their living by oystering along shore.

Ingersoll estimates that in 1880 there were three hundred registered boats engaged in planting on the New Jersey shore of Delaware Bay, and about fifty unregistered, under five tons. There were also several other large boats that worked in neglect or defiance of the registration laws. Most of these three hundred boats were of good model and excellent build; some being more than forty tons burden, and an average value for them of one thousand dollars, big and little would not be too high; this would give three hundred thousand dollars as the total worth of the oyster fleet working in the bay and Maurice Cove at that time.

Each of these three hundred vessels planted in the spring twenty deck loads of native seed; at four hundred bushels to the deck load, two million four hundred thousand bushels was the amount planted.

The planting operations and subsequent marketing of the crop gave employment in these three hundred vessels to fifteen hundred men, estimating an average of five to each craft. The planting and marketing occupied about ten months in each year. All these men were required by law to be citizens of New Jersey; they received an

average of twenty-five dollars a month and board, as wages. Fifteen hundred men at twenty-five dollars a month for ten months, gives the sum of three hundred and seventy-five thousand dollars annually expended by the owners of the Maurice Cove beds in 1880. There is also the board of the crew which, at the rate of forty dollars per month for each vessel, aggregates one hundred and twenty thousand dollars. The cost of repairs to the fleet, estimated at three hundred dollars a year for each vessel, which is low, gives ninety thousand dollars a year as running expenses.

Now as to the returns—in marketing the oysters, each of these three hundred boats made ten trips a season, and on each trip carried five hundred bushels. This gives one million five hundred thousand bushels as the total of oysters that were sent to market by water from Maurice Cove, and by rail, one hundred thousand bushels, or one million six hundred thousand bushels as the total product.

As to the value of the crop, Ingersoll states that an average of one dollar a bushel will hold good from the "Delaware Capes to Boston." All the West Jersey oysters that go to market are either "primes" (first quality) or "cullings" (second quality), and in the ratio of one of the former to two of the latter.

Taking the ordinary price of cullings at eighty cents, and of primes one dollar and fifty cents, gives an average value of one dollar and a very small fraction per bushel. This is the amount paid to the planters, and consequently distributed to a great extent at home in New Jersey.

The following table which summarizes the condition of the oyster industry in Maurice Cove in 1880, is taken from Ingersoll's work:

Number of vessels,	300
Value of same,	$300,000
Number of boats,	800
Number of men employed,	1,600
Amount paid in wages and board,	$495,000
Amount of seed planted—bushels,	2,400,000
Amount of crop raised—bushels,	1,600,000
Value of same,	$1,600,000
Amount of ground necessary—acres,	6,000
Probable actual value of ground,	$50,000

That at least eighty per cent. of the oyster product of New Jersey

was taken from these waters, is shown by the fact that all the other fisheries in the State, from Cape May to Newark Bay, produced the same year (1800) only 250,000 bushels of native oysters valued at $250,000, and 77,000 bushels of Chesapeake plants valued at $60,000.

Public interest in the industry has, therefore, quite naturally, been more largely centered on Delaware Bay and Maurice Cove, and their fields have received a much larger share of legislative attention than has been bestowed elsewhere. From 1880 to 1899, no less than fifteen supplements to existing oyster laws designed to foster and protect the industry in Delaware Bay and Maurice River Cove and applicable to these waters alone, were placed upon the statute books. But the results were not satisfactory. Designed as each of these acts were, to protect the planter in the possession of the property created by the application of his industry and the investment of his capital, each recurring season produced the same complaints of oyster beds raided in the night by boats manned by thieves, who dredge and carry away all there was of value to the owner.

The oyster association composed of planters, although in existence many years and backed by the authority of the State, was powerless to prevent these depredations. One or two guard boats were kept in service, the coast of their maintenance being defrayed out of the tax levied upon members of the association. These, however, were insufficient to properly patrol and protect the widely extended oyster grounds in the day time, and were simply no protection at all in the night. Boats not owned in New Jersey dredged the beds under cover of darkness with but little risk of interruption and carried away thousands of bushels of the best oysters.

Sometimes serious conflicts took place between the pirates and the owners and the guards, and much of the time of the courts was taken up in hearing and determining cases arising from the removal of boundary stakes and acts of trespass.

A remedy for this state of things was sought in legislative acts, for the most part, increasing the penalties for violating the laws and prohibiting the taking of oysters by anyone, even the lawful owner, between one hour after sunset, and one hour before sunrise, but no additional force being provided to promptly arrest and punish offenders, these enactments proved as impotent as their predecessors in suppressing the depredations of the raiders.

The inability of the Oyster Commission to remedy this condition

of affairs had become apparent to all interested in oyster planting, and a conviction that it could be adequately dealt with, and the long standing causes of complaint removed only by placing the industry under State control, grew up in the minds of many.

The result was the introduction of a bill having this end in view, at the session of the Legislature of 1899, by a member from Cumberland county, which, after much discussion and being changed in several respects by amendments, was passed, approved by the Governor, and became a law.

Oystermen in Delaware Bay and Maurice River Cove regard this act as the culminating triumph of their long struggle against the freebooters who, for many years back, have preyed upon their property without regard to the commandment which says, "Thou shalt not steal."

While the new law may be termed the planter's safeguard, it in no way interferes with the rights of the public to take oysters from the natural beds, these being specially exempt from its operations. The text of the act is, because of its great importance to the oyster interests of the State, and at the request of a large number of persons engaged in the industry, given in full at the end of this paper.

The act was approved March 24, 1899, and the commission provided therein was appointed by the Governor. That body met, organized, and appointed Thomas F. Austin, of Millville, as oyster superintendent.

The old association resisted the appointment of the commission, and in cases of tresspass brought before the courts, where convictions resulted and penalties were imposed, denied the constitutionality of the law and took appeals to the higher courts. This action was fruitless, however, as the courts affirmed the constitutionality of the law.

The commission lost no time after organization, in taking measures for vigorously carrying out the provisions of the law. The necessary steps were taken for leasing grounds, licensing boats, and properly patroling and policing the oyster grounds. Offenders against the law were promptly dealt with and their speedy trial, conviction, and sentence, convinced would-be violaters that their days of impunity were past.

Cases of trespass have greatly diminished in number, and there is now a fairly efficient degree of protection in these waters for those who embark their capital in oyster culture.

The oyster grounds cover about 16,000 acres, 11,851 of which are now planted under lease. The surveyor and consulting engineer lay out and mark the allotments under the direction of the Oyster Superintendent. The grounds are leased to the planters and each owner is required to have stakes put down to which is attached a metal marker, thus definitely identifying and defining his holdings.

The Commission keep six guard boats constantly patroling at all seasons, and during planting time an additional number is put on duty. These patrol boats keep a vigilant outlook for illegal dredges, and frequently round up the licensed boats to see that among the fleet the rough cull section of the law is being properly observed.

The principal points of shipment by water during the season are Maurice River, Bivalve and Greenwich Piers. By rail shipments are made over the West Jersey and Seashore Railroad, and the Central Railroad of New Jersey; special fast freight trains are run by these companies to carry the oysters to the markets in Philadelphia and New York.

During the close season for cove and bay oysters, shipments are made of salt oysters gathered from what are known as the shore beds, along the sounds and sedges of the shore; these are mostly hauled by wagons to Cape May Court House Station, which is the principal point for the shipment of these oysters during the months of July and August. Recently some attention is being paid to this part of the industry and efforts to cultivate and improve the quality of these oysters for the summer season at the shore and for other markets have been attended with some success.

The oyster tongers have an organization of their own, which issue licenses to members. These men operate upon the natural beds in the large number of creeks that empties their water into Delaware Bay and Maurice River Cove. Shipments of the tonger's product are made from Port Norris, Dividing Creek, Newport, Cedarville, and other small towns that are within reach of the railways.

The oyster industry here as elsewhere has been found by men engaged in it, to be very uncertain in its results. All seasons are by no means profitable; besides the natural enemies which prey upon them and frequently devestate entire beds, heavy storms occur which roll up mud in immense quantities, covering and smothering the oysters and destroying an entire season's work.

About twenty-five years ago there were in the Delaware Bay wa-

ters for one or another of these causes, several very bad seasons in succession; and the loss entailed, ruined a number of the most wealthy men in the business. Independent of these causes, there is much loss at times when, without apparent reason, oysters appear to become sick, poor in size, and loose their accustomed flavor. Whole beds are sometimes affected in this way, and some of them never recover their old time quality. When trouble of this kind arises, the planter is helpless, he can do nothing but await the passing away of the unknown something that for the time being has mullified his labor, and so the profits of one successful season may vanish in the failure of the next.

Oysters from this section of the State, when in prime condition are of high repute in the markets, and the prices obtained for them rule high. The season of 1901, however, was not a particularly profitable one, the oysters from some cause did not turn out so well as usual; the season was short, and the returns in consequence, were hardly up to the standard of recent years.

To offset these drawbacks, however, there was much more efficient protection to the beds under the new law than there had been formerly; planters suffered less from poaching, and on the whole, did fairly well.

The grounds in Maurice River Cove available for planting are, according to the report of the State Oyster Commission for 1901, about thirty thousand acres in extent. Of this vast area, not more than one-half has been taken up or located for planting purposes, although each year the number of leases made is largely increased.

North of the "southwest line" referred to in the act, which is the limit of planting grounds, there is an immense extent of bay bottom, probably as much as seventy thousand acres that is capable of being converted into the very best of breeding grounds by simply supplying the proper kind of culch in sufficient quantities. The natural beds are said to be about ten thousand acres in extent, and so scattered over the part of the cove and bay, specially reserved from lease for planting purposes, as to make their survey rather difficult. The quantity of seed taken from the natural beds has been steadily diminishing during recent years, although there has been a distinct improvement in the enforcement of the rough cull law since the passage of the act of 1899, which created the State Oyster Commission.

Planters have caught all the seed they could on the natural

grounds, and have besides been compelled to purchase from the Chesapeake and Connecticut beds upwards of $250,000 worth.

Maryland and Virginia both have had acts passed at the latest sessions of their respective Legislatures, which prohibits the export of oysters less than three inches in length. The question now arises where shall our planters secure needed seeds, there being no longer any great source of supply open except the sound, and that liable to be closed at any time.

A very satisfactory answer is suggested by the Oyster Commission's comment on the great enrichment of the natural beds which has resulted from a strict enforcement of the rough cull law for even so short a time as two years. "No such young growth has been known for years as is found the present season," say the Commission. Then why not extend the system of State supervision to the vast extent of unoccupied bottom, said to be nearly fifty thousand acres in extent, which is capable of being made first-class breeding ground by merely supplying a proper quantity of "culch."

The seed producing area of the bay and cove might thus be increased from ten thousand acres, the measure of the present natural beds, to sixty thousand acres, every foot of which in the judgment of experienced oystermen can be made by proper treatment to produce seed.

Private enterprise must do the work if it is done at all, and the individuals who undertake it should be given leases of plots to be cultivated by them, and also protected in their exclusive right to the product of the same, just as the planter's ownership of his beds during the term of his lease are now recognized and secured to him by law.

Such a policy could by no possible means injure anyone, but on the contrary, if adopted, the entire industry would be benefitted. In a few years we should have a growth of seed on these vast areas of now unproductive bottom, sufficient to supply all the oyster planting grounds of the State, and the already large sum of money that under present conditions must grow greater each year, that is now being sent outside for seed would be distributed among our own citizens.

The State Oyster Commission which is composed of gentlemen selected for their interest in and knowledge of the industry, suggests some such plan in their latest report, and pointed out at con-

siderable length the advantages to the oyster industry that might reasonably be expected to follow its adoption.

That the industry has steadily advanced in these waters, notwithstanding occasional setbacks from natural causes, and the everpresent trouble arising from the friction between planters and tongers, and that its proportions is now (1901) greater than at any previous time in its history, is shown by the following table, the data for which was obtained by the Bureau from the most reliable sources.

Number of registered vessels,	868
Value of same,	$1,473,224
Number of boats used as tenders,	868
Value of same,	$34,475
Value of all other apparatus,	$217,000
Other capital invested including value of shore property,	$584,000
Total capital invested,	$2,308,699
Oysters taken, primes, bushels,	1,658,690
Oysters taken, cullings, bushels,	1,421,780
Total value of crop,	$3,815,000
Amount of seed planted, bushels,	5,342,725
Total cost of seed,	$350,000
Number of acres planted,	12,000
Number of men employed on registered vessels,	3,881
Wages paid to crews of registered vessels,	$854,150
Number of men employed as floatmen and boatmen,	1,157
Wages paid to floatmen and boatmen,	$598,936
Wages paid to floatmen on shore in marketing,	$988
Wages paid to shoremen,	$206,004

In addition to the above there are 300 "tongers" who worked the bottoms which were sown with shells by the State, and the natural beds of rivers and creeks emptying into the bay and cove. These took an aggregate of 160,000 bushels of oysters which were sold for 35 cents per bushel or a total of $56,000, thus realizing about $186 each for their eleven weeks' work.

After the season closes, the tongers are usually employed by the dredgers from April 1st to June 15th, and are paid $40 per month, or $100 and board for their two and a half months' work. The time spent by these men at oystering is therefore six months, for which they receive from the sale of their catch and the wages paid them by the dredgers, $286.

A comparison of the principal items contained in the foregoing table with the one preceding it for 1880, shows the immense increase that has taken place in the industry in these waters during the past twenty-one years. The statistics for both periods were obtained from precisely the same territory, that is to say, Delaware Bay, Maurice River Cove, and the coast line to and including Atlantic City, with the various creeks and rivers emptying into these waters.

The accuracy of the figures for 1901 is vouched for by Mr. Thos. F. Austin, Superintendent, and Mr. R. L. Howell, Supervising Engineer of the New Jersey State Oyster Commissoin, to whom they were submitted; both these gentlemen, who, by reason of their public and private relation to the industry are among the best informed upon every detail relating to it, unite in saying that the aggregates given in the table are, to use their own expression, "conservative."

LOCAL OBSERVATION.

Letters from Oystermen Experienced in the Industry.

The Bureau has made an earnest effort, which we regret having to say met with but indifferent success, to get facts from the oystermen themselves relating to the industry all over the State.

The communications that follow are given as received, and in determining their value, the point of view from which they were written must be taken into consideration.

Perth Amboy.—"In reply to your request, I beg leave to submit the following as my views on the points to which you refer: We think that the Legislature should enact a law giving us a franchise for our oyster grounds, such as New York and Connecticut gives, and punish thieves with larger fines and longer terms of imprisonment. A license fee of say $2 or $3 a boat should be charged to those who work on the natural beds, and the grounds should be thoroughly replenished with shells for catching the spawn. No spat are visible this year as yet, and the probabilities are we shall have none. Raritan River seed oysters are now very scarce, and command at the present time, fifty cents per bushel, the tongers averaging a catch of about five bushels per day. Small oysters or spats should not be taken from the natural beds until they are six or nine months old, and taking shells from the beds and carrying them away should meet with a heavy penalty. Vessels anchoring upon

our oyster beds destroying them, as has been the case for the past two years, should be stopped."

KEYPORT.—"Replying to your request for an expression of opinion on the condition of the oyster industry at this place, I have to say that I am very glad to know that some interest even at this late day is being displayed by the State in this important industry at this point, and trust your report when made will result in a better understanding of the matter."

"The laws passed at the last session of the Legislature have already proved to be of great benefit to the planters, as is shown by the largely increased quantity of plants put down on the beds. There are, however, many changes yet to be made before conditions are entirely satisfactory. Principal among these is the adoption of the Connecticut policy of selling the oyster ground to the planters and giving each a deed for his plot, conveying absolute ownership. There should also be police protection of the beds at public expense, just as efficient as that which is given to property of land. There are other ways in which proper legislation would prove highly beneficial, but the wisdom of again appealing to the Legislature is questionable, at least until that body has made an investigation for itself. We do not want anything that would not be for the benefit of all."

BARNEGAT.—"In this town there are about fifty men who plant oysters in the bay and creeks. From forty-five to fifty thousand bushels of seed oysters were taken from the public grounds during the past open season. These were sold at an average price of thirty-five cents per bushel.

During the past ten years planters hereabouts have had to depend largely on southern seed from which we get unsatisfactory results, as the stock is inferior and must be sold in the market for lower prices than the native oysters. We all hope that this state of things will soon correct itself as a result of the law which provides for shelling the public grounds. Thousands of bushels of shells are now scattered over the natural beds and soon the supply of native seed will be largely increased."

TUCKERTON.—"The condition of the oyster industry in this town at present is not the best, owing to various difficulties that have developed during the past year. The most serious of these is the destructive raid of drum fish which began here about May 25th and continued until the latter part of June, and the unsought legislation

of the last session of the last Legislature. Had it not been for these causes last year's season would have been one of the most successful in the history of the industry at this place. In my opinion the oyster planters do not want State control of the oyster beds, but indeed, a law similar to that of 1894. There is much opposition here to the present law and efforts will, no doubt, be made by its opponents to secure its repeal at the next session of the Legislature. An association of planters has been formed here during the past month to oppose such prenicious legislation in the future.

"Experienced oystermen here believe that with proper legislation there is a bright prospect ahead for the oyster industry, but not under the present law."

TUCKERTON.—"The oyster industry at this place suffered very severely in the early part of the spring from a swarm of drum fish; they made their appearance in the bay of Tuckerton about the last week in May, and notwithstanding every means known to oystermen were used to kill or drive them away, the fish remained in great numbers until well along in July.

"A moderate estimate of the quantity of oysters destroyed by them while here, places it at 30,000 bushels, worth from $25,000 to $30,000. This fish has jaws and teeth so strong that smashing an oyster shell is quite easy to them. They devour the oyster shells and all. Large numbers of them were caught with gill nets, but their meat, although good for food, when sold brought only a small fraction of the value they destroyed. Large numbers of them were killed and the remainder driven away by the use of dynamite.

"Planters generally look with favor on the Ocean County Oyster Act, which provides for leasing the grounds, and gives State protection through the patrol system."

MAURICE RIVER COVE.—"You ask my views on the condition of the oyster industry in this place, and how its future is likely to be affected by the new law placing it under State control.

"Of course, if every oysterman interested in the industry in these waters were asked the same question, you would receive a variety of answers not all of which would be in the nature of unqualified commendation of the law, but it is perfectly safe to say that a large majority of the planters heartily approve the act of 1899, and regard it as a very great improvement on the old order of things that prevailed under the management of the Oyster Commission of the days gone by. The proof of what I say is in the indisputable fact that

there are now much larger areas planted with oysters, and although thefts still occur, as they always will, no matter how vigiliant the authorities may be, for in every community there are men who have a natural predilection for gathering to themselves the property of others; still they are much fewer than under the old regime, and there has been a greater proportion of arrests, followed promptly by punishment, than ever before. It is as yet too early to forecast the ultimate influence of the law on the oyster industry; conditions change, and quite likely there may have to be some supplementary legislation based on experience, but it is a start in the right direction, and I with many others, hope to see the principal of State control extended rather than limited.

"The area of bottom in Delaware Bay and Maurice River Cove at present entirely barren of oyster life, but naturally capable of sustaining it in teeming abundance, is at least six times greater in extent than that under cultivation. If the State would lease, or better still, sell plots outright in this immense field, hundreds of intelligent planters stand ready to put their capital and labor into it, and within a few years New Jersey would lead all other States in oyster production.'

ENEMIES AND PERILS OF THE OYSTER.

The raid of drum fish on the oyster beds of Tuckerton Bay and vicinity in unusually large numbers this year, and the consequent great destruction of oysters by them has awakened much interest in these maurauding monsters, and curiosity as to how their attack is made. This is described by Prof. Lockwood in terms as follows:

"'There are several species of fish which are destructive to the young oyster, and some of these seem wanton in their destructiveness, killing many more than they eat. Could we hit on just the right time, I would say let us visit one of these orderly communities in oysterdom known as a bed or planting ground, or more properly a plantation. Supposing then the right time to be chosen, we are seated in a boat, and, gliding through the phosphorescent sheen, soon near the oyster bed. It is a moonlight night, about the close of summer. Hark, what singular sound is that? Boom! Boom! Boom! Almost sepulchral, and, strange to say, it comes up from beneath the waters. The oystermen whose capital lies invested here, hears it with sad forebodings of loss which they cannot well sustain.

It is one of a school of visitors who come with marauding purpose. The fishermen call it the big drum. This drum fish is known among naturalists by the name *Pagonias Chromis.* The acknowledged beat of this scamp is the gulf stream, from Cape Cod to Florida; and, a terrible fellow is this Pagonias, for he is recorded as having attained the great weight of eighty pounds. One of twenty-five pounds would be an oridinary affair.

"Their mouths are furnished with pavements of hard teeth, a little rounding on the top, and set together exactly as are the cobble stones of the old city highways. The function of these dental pavements is to crunch the young oysters, which, after being crushed, are thus swallowed shells and all.

"Happily, these terrible visits do not often occur in New Jersey. I think it was in 1851 that a school of drums destroyed at Keyport $10,000 worth of oysters just as the crop was ready for market.

"One planter at Keyport lost his whole summer's work—material and labor—in a single September week, through an attack of drums. A City Island planter reported a loss of $10,000 in one season, a few years ago."

Ingersoll says: "When drums are absent various other carniverous fishes prey upon oysters, such as the tantog, sheepshead, toadfish, members of the cod family (if any of them ever get near a bed, which is rarely at present) and the skates or rays. Of all these the sting-ray or 'stingaree' of the fisherman, is the chief. He is always present and steadily at work along the whole coast. Lying flat on the bottom, he works his triangular flippers until he has washed away the sand from about the oyster he wishes to seize, if it is at all concealed, and then crushes it between his powerful jaws. Even clams do not escape his sagacity in capture and strength of mastication, but are devoured in great numbers.

"A dredge can hardly be hauled from New Jersey to Cape Cod without bringing up one or more of these enemies of the hard working oysterman.

"The sea star is another and perhaps the most insidious and destructive of all the enemies of the oyster. Professor Lockwood mentions two of the species that frequent our coast; these are known to naturalists as the *Asterias Arenicola* and *Asterias Vulgaris.* As the latter favors a more northern latitude, it is the former that is known chiefly to us. Lockwood thus describes the way in which the sea attacks the oyster: 'Its method of destroying the oys-

ter is described as being done with the hard collar or ring which surrounds the oral opening at the center of the rays. Grasping the thin nib by clasping the rays upon it, the star breaks it off in little crumbling bits by pinching it with the collapsing ring. An entrance effected, it everts its stomach sack, pushing it between the valves. The inner membrane which lines the stomach is the digestive surface, and this is brought against the flesh of the oyster. There evidently is an absorbing effect. The sea star will, if not disturbed, keep on squeezing itself in until its rays are brought back to back, and its whole body is forced into the bivalve, and it becomes thoroughly gorged.' "

Where the star gets control the destruction of oysters is very great. It is estimated that the value annually destroyed by them on the Long Island Sound beds, where they resort in far greater numbers than anywhere on the Jersey shore, is not less than $200,000. It has been observed that they increase steadily in number where the oyster cultivation is carried on for any length of time.

Old oystermen regard the sea star or the "five finger" as he is commonly called, as the most fearful enemy of their traffic. Wherever they appear in numbers, the oysters are served only by the most strenuous work on the part of the oystermen, who are often kept busy day and night removing them from beds.

A report of the Connecticut Shell Commission issued in 1883, thus refers to the ravages of the sea star:

"It is not infrequent that losses fall upon the grower as sudden and unexpected as they are ruinous. Thousands of bushels of oysters in one patch have been destroyed in a week by star fish. A well known firm lost twenty thousand dollars worth of oysters in one bed—ate up by these marauders. Another firm has in like manner in the last two years, lost one hundred thousand dollars worth in the same neighborhood, off Charles Island. These creatures seem to move in bunches or balls, and when they reach a bed, they unfold and proceed in every direction to eat up the crop. The more intelligent oystermen claim that with proper dredging these bunches may be discovered, and the star fish caught before they spread out to feed.

One of the best informed growers in the state struck an immense bunch a few days ago, while hunting for them on his grounds, and in a short time gathered seventy-five bushels of stars."

There are several varieties of crabs that are terribly destructive to the young oysters especially. At least four of these, the "Lady

Crab," the "Spotted Crab," the "Sea Spider," and the common edible crab, which Lockwood says, is the worst of all. From its habits and numbers, this crab is the most dangerous of its tribe.

It lives in any kind of sea water, and can stand the nearly fresh water of the creeks and can therefore go wherever the oyster is found, which the other crabs cannot do.

Another and a very curious danger to oysters arises from the "squid spawn" which are commonly called "sea grapes" from their globular form. These often grow on the oyster so thickly during the summer season that when the beds are agitated by strong winds or disturbed by raking, great quantities of the oysters come to the surface buoyed up by the parasitic grapes, and are floated away.

In the spawning season, sea anemonies devour large numbers of eggs and the minute larval fry. They do no particular injury to the mother oyster, but settle on her shell and with their long tenticles gather and absorb the invisble oyster germs as they are ejected by her.

The boring sponge is mentioned by Lockwood as another parasite that does much harm to the oyster, but its ravages are more serious in waters further north than in ours. Without mouth or apparent tool of any kind for such work, the boring sponge will often so completely riddle the shell of the oyster with minute perforations as to cause it to go to pieces as if it were rotten. It seems to be the lime of the shell and not the meat of the oyster that it is after, for it fastens as often on dead or empty shells as on living ones.

"Naturalists regard these boring sponges as serving a useful purpose in marine economy, for by devouring and disintegrating shells they help to prevent the formation of reefs in the mouths of rivers, and in the sea, besides returning the disintegrated carbonate of lime to the waters in condition for solution again."

The large spiral shelled snails, called variously along the coast conches, winkles, or periwinkles, are also given to preying upon oyster beds, and at times work much destruction.

The drill, or snail borer is another creature to which the destruction of much oyster property annually is credited. It makes its home in the tide-pool and weedy borders of rocky shallows, although mussels grow in the same waters until the banks are almost hidden by them, it is said that they are never attacked by the drill, nor does he appear to pay attention to any other mollusk except the oyster.

The drill is particularly plentiful about the waters of Staten Island Sound and Raritan Bay, and oystermen of Perth Amboy and Keyport report serious losses during the seasons of 1901 and 1902 through them, which is described in another part of this paper. They are seldom found above an inch in length, and have a very pretty shell. That nature has wonderfully endowed this creature with the means of effectually preying upon the oyster, is proved by the neatness of its destructive work. Its attack is made by first securing a firm hold upon the upper shell of the oyster with the fleshy disk or foot which is thrust from the wide opening of its shell next, the part of the drill's anatomy called by conchologists, the dental band which is provided with teeth at the end, is brought to bear on the desired spot, and made to rotate nearly a full circle and reverse, this movement being continued until after long labor, a perforation of the oyster shell is effected. The hole thus made is very small in diameter, scarcely large enough to permit the finest thread being passed through, perfectly round, and neatly countersunk on the top. Through this small aperture the drill inserts its sucking tube and thus at his leisure feeds upon the oyster.

The black mussel is, through its manner of growth, another of the oyster's enemies, and one not to be despised. It is perfectly immobile and is therefore as powerless to attack as the oyster itself; but its growth is very rapid and it is mature in one year. With its peculiar strong threads it attaches itself to an object and large masses of them thus become firmly knitted together. When they settle on an oyster bed the oysters soon become so enmeshed in this strong web that they cannot open, and so, being unable to feed, must die.

The oyster beds about the waters of Staten Island, Perth Amboy, and Keyport have been seriously affected by mussels during some time back. Some of the best beds in Prince's Bay were entirely destroyed by them years ago.

In addition to the animate enemies of the oyster, there is a great and constantly going on destruction of them from other causes. The elements are often responsible for no small part of this. Great storms will sweep the oysters all off the beds, bury them under the drifting wreck torn from the shores. Great floods sometimes destroy beds at the mouth of rivers by keeping the water wholly fresh for a period long enough to kill the oysters, or by smothering them under great quantities of silt which is brought down with the torrent of water. The presence of mud or sand in the delicate

breathing apparatus of the oysters is sure to suffocate it. The mud and sediment which is gradually deposited on the bottom of streams that flow out and in slowly, is among the worst enemies of the oyster. In time it grows in depth so as to completely cover and kill them.

The accumulation of the smallest quantity of sediment around a young oyster will tend to impede its respiration, and in that way destroy it. When the infant oyster attaches himself finally and for good to some object from which he can never thereafter move, he is said to measure at the utmost one-eighteenth of an inch, and as it must breath in the same way its parents did, it will be readily seen how easily the little thing may be smothered by a very small accumulation of mud. So great is the friction or infant oyster life from this and other causes, that a high scientific authority, Mobius, estimates that each oyster which is born has $\frac{1}{1,145,000}$ of a chance to survive and reach adult age.

Ground ice is an enemy from whose visitations New Jersey oyster beds have not suffered much, although some losses were sustained by planters along the shore of Maurice Cove in the winter of 1901.

It appears that during a long continued period of extreme cold, the shallow waters over the beds freeze to the bottom, and often congeal the mud to a depth below the strata of oysters. This, of course, kills them on the bed, unless a thaw accompanied by an unusual rise of the tide should take place, in which case the ice, when it breaks up, carries off large numbers of oysters that had become embedded in its bottom surface. An unusually severe winter always kills oysters in great quantities.

Taking everything here referred to as detrimental, it will be seen that the business of the oyster producer is one of great risk. Often thousands of bushels of seed stowed in the hold of a vessel is lost in transit, by delay through adverse storms or foggy weather. The oyster, young or old, cannot long endure the heat under closed hatches for more than a few days.

But the worst of all is that such part of the planter's property as has escaped all these elemental dangers is further depleted by the oyster thief. A Perth Amboy planter informed the Bureau's agent that himself and others engaged in the industry at that place, suffered annually a loss of about fifteen per cent. through the depreda-

tions of thieves, notwithstanding a guard boat to patrol the beds is maintained by them.

Another grievance of which Perth Amboy oystermen bitterly complain, is the carelessness, or worse, of the freighters, steam and sail, who take coal from the docks at that place. Instead of anchoring on the mud flats these craft regularly place themselves over the oyster beds which lie in the northern side of the channel running between them and the coal docks. In this position they wait from twelve to one hundred hours for their turn to go to the chutes for cargo.

At every low tide these large and heavy boats settle down on the beds, smashing thousands of oysters; during the time they remain here, the anchor chains swing around on the bottom with every change of tide, and it often happens that when wanted, tugs are sent out to drag a boat from the oysterbed to the dock. This feat is never accomplished without the loss to the planters of many bushels of oysters.

Among the many planters who have suffered from this cause, one informs the Bureau that of fifteen hundred bushels planted by him in 1901, twelve hundred were destroyed on the beds in this way. Naturally, the oystermen are very indignant because of these losses, and all the more so because the state of things which produces them could be so easily changed without injury to anyone.

If the harbor-master, who imposes a fine on vessel captains for anchoring in the channel, would take the slight trouble necessary to show them the location of the oyster beds and request, or even insist, for he might legally do so, that vessels select an anchorage outside of their limits, there would be much less loss to the oystermen from this irritating cause in the future.

FOOD OF THE OYSTER.

The food of the mollusk, as is well known, consists entirely of microscopic beings and fragments of organic matter. Along with the food, a large quantity of indigestible dirt or inorganic matter is taken into the intestine, together with the refuse or waste from the body. This material when examined is found to consist largely of the cases or covers in which water diatoms, a microscopic plant which moves about in the water were once enclosed. When found in the intestine, these have usually had their contents dissolved out by the action of the digestive juice of the stomach.

Besides the diatoms, the larvae or embryo of many minute animals and creatures inhabitating the same waters constitute very desirable food for the oyster. These abound in the soft mud which in a limited quantity, must cover the beds, but not so deep as to prevent the nib of the oyster from being above it.

There is no doubt but that the reason why oysters fatten more rapidly, that is, feed more liberally in the comparatively shallow headwaters is that in such places there being but little movement to the waters, the temperature is higher and more uniform than in the open bays and rivers, and therefore more favorable to the propogation of minute forms of life which constitute its food.

CHAPTER 194. LAWS OF 1899.

An Act for the better regulation and control of the taking, planting and cultivating of oysters on lands lying under the tidal waters of the Delaware Bay and Maurice River Cove, in the State of New Jersey.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. All oyster grounds, lands and beds included within lands of the State of New Jersey, under the tidal waters of the Delaware Bay and Maurice River Cove, shall be under the exclusive regulation and control of a State Oyster Commission, which shall consist of three members, who shall be appointed by the Governor of this State; the commissioners first appointed shall hold office respectively for one, two and three years, and until the appointment of their respective successors; all commissioners subsequently appointed shall be appointed for a term of three years, and shall continue to hold office until the appointment of their successors; the said commissioners shall be citizens of this State, and shall be directly interested or engaged in the taking, planting and cultivating of oysters in Delaware Bay and Maurice River Cove; before entering upon the duties of his office each commissioner shall file with the Secretary of State an oath that he will faithfully discharge the duties of his office, ,and that he is directly interested or engaged in the business of taking, planting and cultivating oysters in Delaware Bay and Maurice River Cove, which oath may be taken before any person authorized to take

oaths or affirmations in this State; each Commissioner shall receive an annual salary of three hundred and fifty dollars, payable quarterly; two members of the State Oyster Commission shall constitute a quorum at any meeting thereof, and any official act shall be valid which has been authorized by a majority of the commissioners at a regular meeting; they shall keep a record of all their official acts and proceedings, and shall annually report to the Legislature, which report shall include a detailed statement of all expenditures of money made or authorized to be made by them under the provisions of this act; before entering upon the duties of their office the said commissioners shall severally enter into bond to the State in the sum of two thousand dollars with good and sufficient surety, conditioned for the faithful performance of their duties, which bond shall first be approved as to sufficiency by the law judge of the said county of Cumberland; said bond shall be renewed annually.

2. The State Oyster Commission shall appoint a person to be known as the Oyster Superintendent, to hold office during the pleasure of the State Oyster Commission, and shall determine the amount of his compensation or salary, which shall not exceed twelve hundred dollars per annum, and which shall be paid in equal monthly payments; before entering upon the duties of his office the Oyster Superintendent shall give bond to the State in the sum of five thousand dollars, with good and sufficient surety, conditioned for the faithful performance of his duties, which bond shall be first approved as to sufficiency by the law judge of the said county of Cumberland; said bond shall be renewed annually; it shall be the duty of the State Oyster Commission to regulate and define the duties of the Oyster Superintendent, other than those duties specifically defined in this act.

3. The State Oyster Commission shall have power, and it shall be their duty to enforce the provisions of this act, and the provisions of all other acts regulating the taking, planting or cultivating of oysters in Delaware Bay or Maurice River Cove, in this State, in force and not repealed by this act; and in furtherance and not in limitation of the above provisions they shall have power to employ such surveyors, guards and other employees as they may deem necessary; and to provide guard-boats and a sufficient number of men to protect all oyster beds and grounds in the Delaware Bay and Maurice River Cove, in this State, and to incur such expenses as they may consider proper to fully carry out the provisions of this and the

said other acts, and for the preservation and improvement of the said oyster beds or grounds.

4. The State Oyster Commission shall establish and maintain an office within the county of Cumberland, at some place convenient to persons engaged in the oyster industry, which office shall also be the office of the Oyster Superintendent; stated meetings of the State Oyster Commission shall be held at their office at least once a month.

5. The State Oyster Commission shall have power, and are hereby directed as hereinafter provided, to lease to applicants therefor any of the lands of the State under the tidal waters of the Delaware Bay and Maurice River Cove south of the line running direct from the mouth of Straight Creek to Cross Ledge Light House, and commonly known as the "southwest line," as established by an act approved April third, one thousand eight hundred and ninety-three, entitled "A supplement to an act entitled 'A further supplement to an act entitled 'An act for the better enforcement in Maurice River Cove and Delaware Bay of the act entitled "An act for the preservation of clams and oysters,'" approved April fourteenth, one thousand eight hundred and forty-six, and the supplements thereto approved March eighth, one thousand eight hundred and eighty-two, which further supplement was approved February twentieth, one thousand eight hundred and eighty-six, to be exclusively used and enjoyed by such lessees for the taking, planting and cultivating of oysters; provided, however, that no lease or leases shall be granted to any person who shall not be at the time of granting of said lease or leases and shall not have been for 12 months next preceding, a citizen and actual resident of this State; provided, nevertheless, that any person not a citizen or resident of this State, already holding and using ground or grounds south of said "southwest line" in the Delaware Bay and Maurice River Cove, and having oysters planted thereon, under any usage, custom or existing law of this State, may apply for and receive a lease or leases for said ground or grounds so held at the time of the adoption of this act.

6. Leases may be granted for terms not exceeding thirty years at an annual rental not less than twenty-five cents per acre or fraction thereof of the lands so leased; the rental for the first year of any lease shall be paid at the time the lease is granted, and the yearly rental for each succeeding year of said lease shall be paid within

thirty days after the beginning of said year; failure to pay said rentals at the time or times herein directed shall, as hereinafter provided, cause the lease or leases of the person or persons so failing to pay said rentals to become forfeited, and the right of said person or persons to the oyster ground or grounds to cease; and the State Oyster Commission shall cause the said lease or leases upon which said rent is due and unpaid as aforesaid to be canceled upon the books of the State Oyster Commission, and said forfeited ground or grounds may be thereafter leased to any resident of this State as above provided; but before said lease or leases shall be canceled and the right of any person or persons to the oyster ground or grounds held thereunder shall be forfeited as above mentioned, the State Oyster Commission shall cause notice to be personally served upon said lessee or lessees, directing him, her, or them to appear before said commission, at their office, within thirty days from the service of said notice, and show cause, if any there be, why said lease or leases should not be canceled, and why the right of said lessee or lessees to longer hold said oyster ground or grounds thereunder should not be forfeited; and if such lessee or lessees so appear and show sufficient cause why said rental has not been paid, and why said right to said ground or grounds should not be forfeited, and at the same time tender the money due for said rental, and pay the costs of the service of said notice, the State Oyster Commission shall direct the Oyster Superintendent to accept said moneys, and the rights of said person or persons shall not be forfeited because of said failure; and in case of the failure of said lessee or lessees to so appear and show cause as aforesaid, the said lease or leases shall be canceled as above provided and the right of said person or persons to longer hold said leased ground or grounds shall be declared by the State Oyster Commission to be forfeited; and the State Oyster Commission shall in such case fix a sufficient time within which the oysters upon said forfeited grounds shall be removed by the person or persons owning said oysters, and shall cause notice of the time so fixed to be personally served upon said person or persons, and the said ground or grounds shall not be leased to any other person until after the expiration of the time so fixed.

7. Any person or persons now having ground or grounds staked up in Delaware Bay and Maurice River Cove, south of the said "southwest line," under any present law, usage or custom, shall be first entitled to apply for and receive a lease or leases for such

ground or grounds; provided application therefor, in writing, be filed at the office of the State Oyster Commission within sixty days after this act shall take effect, in default of which application the commission shall have power thereafter to lease such ground or grounds to any resident of this State, as above provided; and at the expiration of the term of any lease the same shall be renewed on like favorable terms to the original lessee or lessees; provided such lessee or lessees apply therefor within 60 days from the expiration of the term of such lease, and if application for any lease or renewal thereof for ground or grounds named in this section is not filed within the time limited, the State Oyster Commission shall fix the time within which the oysters upon said ground or grounds shall be removed by the person or person owning said oysters, and shall cause notice of said time so fixed to be at once personally served upon said person or persons, and the said ground or grounds shall not be leased to others until after the expiration of the time so fixed.

8. The State Oyster Commission shall, from time to time, as applications are made for leases, cause the lands leased under tidal waters south of the said "southwest line" to be measured, and the metes and bounds thereof ascertained and located by ranges, monument or other means, so that the limits of the lands embraced within such leases may be accurately fixed and easily located; the State Oyster Commission shall cause such leased lands to be mapped, and the said maps to be filed in the office of the State Oyster Commission, and shall also cause the leases so made to be recorded in books kept in the office of the State Oyster Commission for that purpose.

9. It shall not be lawful to make any leases embracing the whole or any part of the following named oyster beds and creeks, namely, Elder Point beds, Dividing Creek beds, Oranoaken beds, Pepper beds, and the beds in Stow Creek, Cohansey Creek, Back Creek, Cedar Creek, Nantuxent Creek, Dare's Creek, Paggett's Creek, Sow and Pigs Creek, Beaton's Creek, Fishing Creek, Straight Creek, Oranoaken Creek, Dividing Creek, Maurice River, West Creek, East Creek, and Dennis' Creek, or any other commonly-known natural oyster bed in Delaware Bay or Maurice River Cove, or in any creek or river emptying into said bay or cove.

10. The Oyster Superintendent shall issue a license, duly certified by himself, to each and every captain of a boat or vessel entitled by law to engage in the business of catching, planting and growing oysters in the said Delaware Bay and Maurice River Cove, that shall

pay the license fee fixed therefor by the State Oyster Commission; and no boat shall dredge for or catch oysters or carry on the oyster business in the Delaware Bay or Maurice River Cove, in this State, without first obtaining a license for that purpose from the said Oyster Superintendent, and paying to him therefor the license fee fixed by the said commission, which fee the State Oyster Commission are authorized to fix at any sum not exceeding two dollars per ton on the tonnage measurement of such boat or vessel; no license shall be issued for a period longer than one year; all licenses shall be numbered and recorded in a book kept for that purpose in the office of the State Oyster Commission; each boat or vessel licensed shall at all times while engaged in operating under such license, wear in plain view upon the middle of the main sail, one-third of the way from the head thereof, the number of said license in black figures at least fifteen inches in length; and upon the failure or neglect of any boat or vessel so licensed to wear said number as above required, such boat or vessel so neglecting or failing shall forfeit said license; provided, however, that a period of twenty days shall be given, after the issuing of said license, for such boat or vessel to comply with the above requirement.

11. The State Oyster Commission, before issuing any lease to any person as provided for in this act, shall cause the person applying for said lease to make and file with them an oath that he is a citizen and actual resident of this State, and has been for twelve months next preceding such application, or that at the time of the adoption of this act the applicant was holding and using, and has since continuously held and used, for the purpose of taking, planting and cultivating oysters, the lands for which the application for said lease is made; and the Oyster Superintendent, before issuing any license to any boat or vessel as provided for in this act, shall cause the master or captain of said boat or vessel to make and file with him an oath that said boat or vessel is wholly owned by citizens and actual residents of this State, and who have been such for twelve months next preceding, or that at the time of the adoption of this act said boat or vessel was duly licensed, under laws existing at that time, to carry on the business of catching, planting and growing oysters in the Delaware Bay and Maurice River Cove, in this State; such oaths may be made and taken by and before the several members of the State Oyster Commission and the said Oyster Superin-

tendent; and the State Oyster Commission shall have power to revoke any lease or license issued by reason of any false oath.

12. All unexpired licenses issued to boats or vessels by the collector of the oyster fund of the Maurice River Cove and Delaware Bay Oyster Association previous to the time when this act shall take effect, shall remain in full force and virtue for the unexpired terms thereof, and shall have the same force and effect as licenses isued by the Oyster Superintendent.

13. The collector of the oyster fund of the Maurice River Cove and Delaware Bay Oyster Association is hereby required, within fifteen days after this act shall take effect, to prepare and deliver to the said Oyster Superintendent a written or printed statement showing the names of all boats or vessels previously licensed by him, whose licenses shall not then have expired; which statemnt shall also show the numbers of the said licenses of the respective boats or vessels.

14. All moneys due for ground rentals, license fees, or otherwise made collectible under the provisions of this act shall be received and collected by the Oyster Superintendent for the sole use of the State of New Jersey, as public moneys belonging to the State, and shall be accounted for and paid over as such in manner hereinafter provided.

15. The Oyster Superintendent shall keep an account of all fees and moneys received by him, pursuant to the provisions of this act, for the use of the State, and shall, on or before the tenth day of each month, make a full itemized statement and return, verified by oath, to the Comptroller of all moneys collected or received as aforesaid, upon blanks containing a form of the said statement and oath, to be furnished to the Oyster Superintendent by the Comptroller, and the said statements shall be filed in the office of the Comptroller, there to remain as public records; said statements shall be audited forthwith by said Comptroller, and on or before the fifteenth day of each month the said Oyster Superintendent shall pay over the amount of such moneys received to the State Treasurer; he shall also make detailed monthly reports, verified by oath, to the State Oyster Commission of all moneys collected or received by him; all bills incurred by the State Oyster Commission in carrying out the provisions of this act shall be certified by the State Oyster Commission to the State Comptroller, monthly, for payment, and he shall draw his warrant on the State Treasurer therefor; provided, however,

such expenditures shall not exceed the amount received from the Oyster Superintendent, as above provided.

16. No oysters shall be dredged for, caught or taken from any of the lands of the State under the tidal waters of the Delaware Bay, north of the said "southwest line," except from and including the first day of April to and including the fifteenth day of June of each year; it shall be unlawful to dredge for, catch or take oysters from any of the lands of the State under tidal waters of the Delaware Bay and Maurice River Cove, south of the said "southwest line," at any time except from September first to June fifteenth inclusive, of each year.

17. No oysters shall be dredged for, caught or taken from any of the lands of the State, under tidal waters of the Delaware Bay and Maurice River Cove, south of the said "southwest line," that are not held by virtue of a lease or leases issued by the State Oyster Commission; but nothing in this section or in the section immediately preceding shall apply to any of the creeks or rivers hereinbefore mentioned, nor shall be construed to prohibit the taking at any time of oysters with rakes or forks on what is commonly known as the Cape shore, in Cape May county.

18. All oysters, oyster shells and other material dredged, tonged, or in any manner raised or taken from any of the beds and grounds north of said "southwest line," or from any natural oyster beds or grounds where oysters naturally spawn and grow under the waters of Delaware Bay and Maurice River Cove, in this State, shall be immediately culled, and all shells and other material, except oysters, shall be immediately thrown back upon the beds or grounds from which the same shall have been taken, so that the shells and other refuse material so caught and taken, remaining on board the boat or vessel, shall not be more than fifteen per centum of the whole quantity of the oysters, shells and other refuse material on board said boat or vessel.

19. The State Oyster Commission shall have power to adopt ordinances to regulate the taking, catching and cultivating of oysters in the Delaware Bay and Maurice River Cove, in this State, not inconsistent with the provisions of this act or with the provisions of any other law of this State regulating the taking, planting or cultivating of oysters in said bay or cove in force and not repealed by this act, and to in like manner amend, alter or repeal such ordinances; all ordinances so adopted or amended shall be published

at least once a week for four successive weeks in one newspaper printed and published in the county of Salem, and in one newspaper printed and published in the county of Cumberland, and in one newspaper printed and published in the county of Cape May, and shall take effect on a date to be expressed in the ordinance, which date shall be subsequent to the expiration of time of publication as herein provided.

20. Any person or persons who shall hereafter dredge upon or throw, take or cast his oyster dredge, or any other instrument used for the purpose of catching oysters, upon any oyster bed or ground duly marked, buoyed or staked up within the waters of this State, belonging to any other person, without the permission of the lessee or lessees thereof, shall be deemed guilty of a misdemeanor and of a violation of the provisions of this act.

21. The members of the State Oyster Commission, the Oyster Superintendent and the several captains or masters of guard-boats are hereby empowered, and it shall be their duty, on view, without special warrant issued for that purpose, to arrest any person engaged in the violation of any of the provisions of this act or the provisions of any ordinance duly adopted by the State Oyster Commission, or the provisions of any other law of this State regulating the taking, planting or cultivating of oysters in the Delaware Bay or Maurice River Cove, in force and not repealed by this act.

22. It shall be the duty of the State Oyster Commission to revoke the license of any boat or vessel, the owner, captain, master or person in charge of which shall violate or cause or permit to be violated any of the provisions of this act or the provisions of any ordinance duly adopted by the said commission or the provisions of any other law of this State regulating the taking, planting or cultivating of oysters in the Delaware Bay or Maurice River Cove, in force and not repealed by this act; and said commission shall have power to refuse thereafter to allow any license to be issued to such boat or vessel for such period of time as the commission may fix and determine.

23. Nothing in this act shall be in anywise construed to authorize or allow any person or persons, boat or vessel, to engage or be employed in the business of taking, planting or cultivating oysters in the Delaware Bay or Maurice River Cove, or in any creek or river tributary thereto, in this State, who or which are prohibited from

engaging or being employed in said business, by laws of this State in force at the time of the adoption of this act.

24. Nothing in this act shall be interpreted to strengthen, confirm, or verify the title of any person to any lands lying under the tidal waters of the Delaware Bay north of the line running direct from the mouth of Straight Creek to the Cross Ledge Light House, and commonly known and established by law as the "southwest line."

25. Any person or persons violating any of the provisions of this act, or any ordinance duly adopted by the State Oyster Commission, or the provisions of any other law of this State regulating the taking, planting or cultivating of oysters in the Delaware Bay or Maurice River Cove, in force and not repealed by this act, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding one thousand dollars, or imprisonment in State prison not exceeding five years, or both, at the discretion of the court.

26. All acts and parts of acts, general or special, inconsistent with the provisions of this act, are hereby repealed, and this act shall take effect June sixteenth, one thousand eight hundred and ninety-nine.

Approved March 24, 1899.

Diseases and Disease Tendencies of Occupations.

The Hat Industry.

(Continued from Report of 1901.)

Under the title "Diseases of Occupations" in the report of last year, there were returns from twelve establishments engaged in the manufacture of men's hats. In all, 1,096 hands were employed in these factories, and the results of the inquiry into the diseases engendering conditions surrounding these workmen were given in the answers returned to the series of questions contained in the blank used by the Bureau in making the inquiry.

The answers were given as received, it having been found impossible to reduce them to tabular form without obscuring to some extent the meaning they were intended to convey.

After the close of last year's work, and too late for incorporation in it, six reports were received from firms engaged in the same industry. The information contained in these statements which is in substantial accord with that furnished by the establishments whose reports appeared in last year's presentation, is as follows:

The number of operatives employed in these six establishments is 770. No deaths or fatal accidents are reported as having occurred among them during the year 1900. Answering the question, "What, if any, are the diseases peculiar to your industry?" Three firms in whose establishments 275 men are employed, state that there are none known to them; one employing 120 men states that "mecurial poisoning in the department of the factory in which a solution of quick silver is used, was quite common at one time," but that now, "that danger is very much reduced, if not entirely removed by superior ventilation."

A manufacturer of hatter's furs employing 25 men gives "spine disease" as one of the diseases peculiar to the industry, and states that it is confined to the dyeing branch of the work.

Another firm making soft hats, and employing 350 men gives "mecurial poisoning" as the principal disease from which its workmen suffer, but states that it can be guarded against by proper ventilation of the workroom and temperate living on the part of the workmen. Two firms employing respectively 350 and 25 men, state that the principal ill health producing factors in the industry are "dust and the carrot applied to fur for the purpose of shrinking it," and "the dye stuff and quicksilver."

"Hat forming" is the only branch of the industry reported as being considered unhealthy, and only one firm, but that a large one employing 350 men, so report it; the other five state that no branch of the trade is particularly unhealthy for the workmen employed.

Three of the firms have kept no record of what has caused absence from work on the part of employees, and hence cannot say how many were away through sickness during the year covered by the inquiry. The remaining three firms all controlling small establishments in which an aggregate of only 50 men are employed, report having had between them nine men who were idle from sickness for periods varying from one to six weeks.

All state that they are not aware of any special liability to accident in either of the branches of the hatting industry, and that if any does exist, it is very slight, being only that which is incidental to all work in which machinery and belting of a not particularly dangerous charactcer is employed.

In answer to questions as to the nationalties to which the workmen belong, it appears that a majority are of the non-English speaking races—Hebrews, Italians and Austrians are the most numerous, many of these being immigrants who came here at comparatively recent dates.

The smaller establishments report that intemperance among employes is rare, while the large ones state it is common among their workmen and causes much trouble and inconvenience to the business as well as being a fruitful source of ill health to the workmen themselves.

All report that during recent years important improvements tending to diminish the disease and accident liability of the industry have been made, particularly in the matter of ventilation and the introduction of exhaust fans for carrying dust from the work rooms.

The Jewelry Industry.

Continuing the inquiry into the health conditions, or the diseases peculiar to occupations as explained above, the jewelry, shoe, woolen mill and cotton mill industries are presented as this year's contribution to the subject.

The number of jewelry manufacturing establishments from which reports have been obtained is sixty-five, all located in the city of Newark. The goods made are of a kind covering the entire range of articles classed as jewelry, whether the material be of gold or silver, and also silverware of every description.

Among the factories are some of the largest and best equipped plants engaged in these lines of work to be found anuywhere in the country. In such establishments as is to be expected, every modern device known to sanitary science for protecting the health of operatives and guarding them as far as possible against the occurrence of accidents is provided. Substantially the same may be said regarding the great number of smaller factories, at least in the matter of air purification by the use of exhaust fans; all establishments in which gold or silver is used as material of manufacture, being now equipped with these machines. The exhaust fan serves the important purpose of taking from the air in the workroom every particle of flating gold or silver produced by the operation of polishing, or by other processes necessary for working the metals into finished shapes.

It thus fortunately happens that this device which has done so much for the health of workmen indoors, is also of the greatest utility in saving to the employer valuable material that was, before its introduction, regarded as practically irrecoverable.

Taking the questions on the inquiry blank in their regular order, the facts developed by the investigation are given just as received; the factory owners being in every instance, where other authority is not specifically stated, responsible for all statements.

The date of establishment of the various firms ranges from the year 1825 to 1901. Previous to 1840, only two of the establishments

under consideration were in operation; one was started in 1825, and the other in 1838; the latter has been continuously under the management of the decendents of the original founders up to the present time.

The growth of the industry by decades since 1840 is shown in the following table:

NUMBER OF ESTABLISHMENTS IN OPERATION.

Previous to 1840,	2
Number started between 1840 and 1850,	5
Number started between 1850 and 1860,	2
Number started between 1860 and 1870,	5
Number started between 1870 and 1880,	9
Number started between 1880 and 1890,	12
Number started between 1890 and 1900,	26
After 1900,	4
Total number in operation 1840,	2
Total number in operation 1850,	7
Total number in operation 1860,	9
Total number in operation 1870,	14
Total number in operation 1880,	23
Total number in operation 1890,	35
Total number in operation 1900,	61
Total number in operation at present,	65

Twenty-nine of these establishments employ less than twenty-five workmen; fifteen employ twenty-five, but under fifty; eight employ fifty, but under seventy-five; three employ seventy-five, but under one hundred; four employ one hundred, but under two hundred; the remaining two establishments employ respectively two hundred and fifty, and three hundred persons.

The aggregate average number employed in all establishments during the year 1901 was 2,721.

Taking up the questions which have a direct bearing upon the purpose of the inquiry, viz., the disease engendering features peculiar to the occupation—if there be any, and the workmen's liability to accidental injury while performing his duties; it is shown that twenty-eight of the establishments keep no record of deaths occuring among employes, thirty state that no deaths occurred during the year

covered by the inquiry and only seven firms report deaths among their working force, these numbering only one to each establishment. The total average number employed in the seven factories reporting these deaths was six hundred and forty-two, and the death rate as reported, is represented by the extraordinarily low figure of only one per cent. Small as this may appear, there is no reason to doubt its substantial correctness; as factory owners even where their operatives are much more numerous than were those of the seven jewelry establishments under consideration, generally know of the death of an employe, and seldom fail to make a record of it.

In all the sixty-five establishments, there had not occurred one fatal accident during the year. In answer to the question "What, if any, are the diseases peculiar to your industry," only three firms specify any form of disease as being within their knowledge. These are as reported, "marked deterioration of eye sight," "consumption," and "acid poisoning."

The branches of the industry regarded as unhealthy are said to be "Coloring," "Gilding" and "Polishing." In the first and second named branches, acids of a powerful kind are used, the fumes of which when inhaled are very dangerous and distressing to the workman. Polishing, the third branch referred to as unhealthy, is so or not, or at least its degree of unhealthiness depends on what is done in the polishing room toward insuring ventilation. There are but few jewelry manufacturers whose workrooms are not provided with exhaust fans of the kind referred to in the beginning of this paper. It is greatly to the credit of the manufacturer's humanity, that this almost epoch making invention was first introduced into workshops to carry away the dust inseparable from some operations, and that its subsequent use for extracting the fine particles of precious metal from the air in which it was mingled with other dust created by work was an afterthought. For the simple purpose of carrying the dust out of the workroom, the blower was so arranged that the dust sucked in was carried by a discharge pipe either high over the roof of the building or along the ground to a distance far enough removed to prevent any part of it returning. The fan is still used in this way in places in which gold or silver are not the materials of manufacture. Where they are, the discharge pipe is connected with an air tight iron box, which in its turn is joined by piping to two other similar boxes, each of which is placed on a level sufficiently below the one preceding it, to permit the water from the first to slowly

trickle into the second, and from thence to the third box. The water containing the dust has thus three precipitations, which has been found sufficient to allow all the gold and silver particles it may contain, to sink to the bottom of either of the three receptacles, from which the deposit is taken periodically and sent to the smelters, where absolutely all the precious metals is recovered. Some idea of the great saving of material effected by the exhaust fan as applied now in the jewelry trade, may be obtained from the fact that for years the agents of smelters have been exploring the ancient sites of jewelry factories in the city of Newark, looking for the cesspools into which the waste water of these workshops was turned, before the sewers were built. It is said that many such places when discovered, yielded rich returns to the enterprising smelters. One is reported to have had eight thousand dollars worth of pure gold taken from the black deposit which filled the place formerly occupied by the cesspool.

The principal ill health producing factors in the industry are stated variously by those firms who answer the question. Dust from polishing seems to be regarded as chief among them, and is so reported by twelve firms, or nearly twenty per cent. of the total number under consideration. Other factors that produce ill health, are, as reported, "fumes arising from acids in use;" "coloring and gilding;" "separating gold from base metals in refining;" as acids are extensively used in the two last named operations, the resultant fumes may be regarded as the most serious element of unhealthfulness peculiar to them.

Several firms refer to the sedentary character of the jeweler's occupation, his necessarily close application to work in more or less impure atmospheres with body bent over much of the time, in a position that prevents free respiration. One firm whose works are situated within a few hundred feet of the Passaic River, gives the polluted condition of that stream and the stench which is a natural result of its foulness, as the principal ill health producing factor having any relation to its business or surroundings. Twelve firms report that none of their employees were absent from work on account of sickness during the year covered by the inquiry. Nineteen firms report absentees on account of sickness and give the number. These are given in the following table:

Firm Number.	Total Number. Employed by Firm.	Number Absent on Account of Sickness During 1900.	Percentage of Total Number Employed who were Sick Some Time in 1900.
1	325	7	2.1
3	160	4	2.5
6	75	12	16.
7	68	6	8.8
9	55	10	18.
10	50	5	10.
11	50	6	12.
12	50	2	4.
14	46	2	4.3
19	25	1	4.
21	24	3	12.5
24	20	1	5.
28	18	1	5.5
30	12	1	8.3
31	10	1	10.
32	9	3	33.3
33	8	1	12.4
36	11	3	27.3
37	14	1	7.1

Thirty-four firms are unable to report the number absent from work on account of sickness, no record being kept of the reasons given by workmen for non-attendance.

The branches of the industry in which liability to accident is greatest, is pronounced by all to be the machine shop and press room, the dangerous factors of course, being the presses of various kinds, both power and drop, in which the dies for striking up articles manufactured are placed. Most of the firms reporting agree that with the exercise of care on the part of the operatives, no accidents should occur, even in these comparatively hazardous departments of the industry.

To the question, "Is intemperance common or rare among employees?" six firms employing an aggregate of two hundred and forty-one persons, answer emphatically that it is common. The fifty-nine other firms included in the inquiry, who employ between them two thousand four hundred and eighty workmen, answer with equal positiveness that intemperance among employees is rare; some going so far as to say that a workman, no matter how valuable he

might be, would not be retained in service one hour after it became known that he was addicted to the excessive use of intoxicating liquor.

All but a few of the firms report having adopted in their factories every modern device that has appeared during recent years, the use of which tends to diminish the liability of workmen to disease or accident as incidents of their employment.

Some of the improvements particularized are as follows: "Exhaust fans for carrying off dust;" "driven wells to secure pure drinking water;" "ventilating flues;" "the most absolutely perfect sanitary plumbing;" "distilled water for drinking;" "interior of workrooms whitewashed frequently;" "safety devices for covering machinery in motion;" "devices for stopping machinery quickly in case of accident." Notwithstanding these precautions there are still many accidents of a comparatively minor character reported by workmen from a large number of the factories; these consist mainly of injuries to the hands, sustained by men who work on presses and are, probably, in most instances the result of that species of carelessness which sometimes grow upon workingmen through long familiarity with danger, coupled with immunity from accident.

The greater number of the large factories are well built modern structures, properly ventilated and lighted and having in use all the approved devices for guarding against accident. Indeed, in such shops there is comparatively little that is menacing in the position of machinery or shafting, because the structures were erected with a view to their safe installation. It is not so however, in the quarters occupied by some smaller concerns. These in many instances are situated in single floors of buildings that are comparatively old and were not in the first place intended for factories. In some shops of this character, the very best and most effective protection is not provided against accidents; floor shafting is more or less exposed, as are also fast running belts which the safety of operatives requires should be enclosed.

Taking the results of the inquiry as a whole, it does not appear that the jewelry trade offers any greater menace to health than do other factory or sedentary occupations in which, notwithstanding the best thought and care given to the subject of ventilation and sanitation, there is still in the fact that so large a part of the workman's time is spent indoors, an ever present influence that is inimical to robust health.

The jewelry workman, almost without exception, performs his labor in a sitting posture and uses only his hands and eyes. The lightness of the work precludes the possibility of muscular exercise; the bent position of the body while leaning over the bench, has a tendency to check free respiration and prevent the natural expansion of the lungs.

The jewelers' work in all its branches, is particularly trying to the eyes, and it not infrequently happens that defective sight compels men to abandon the trade, who are in every other respect capable and competent to follow it for years to come.

No accurate report could be obtained on the nationalities of the workmen, but it may be safely stated that fully one-half of the number employed in the business are foreigners, Germans being the most numerous.

Shoe Factory Operatives.

This inquiry into the conditions affecting the health of operatives employed in the shoe industry is limited to seven establishments situated in either Cumberland or Burlington county.

The factory buildings are all of brick, two or more stories high, with large windows and other features of construction designed to provide the best possible ventilation and sanitation; the comfort and convenience of employes are taken into account by the management, and everything consistent with obtaining practical results is done to protect their health.

In three of the buildings the closets are separated from the main wash rooms, being enclosed in towers constructed at angles of the main buildings; vestibules with double doors completely isolates them from the workrooms, and effectually guards the health of the operatives from a danger, but too common in many factories in which large numbers of persons are employed. These closets are kept scrupulously clean, and at short intervals are treated with the most approved disinfectants. It may therefore be truthfully said that whatever menace to health there may be in the occupation of making shoes is traceable to the necessary peculiarities of the work and the character of the materials handled; no part of it, at least in the establishments under consideration, is chargeable to faulty construction of the buildings in which the work is done.

In shoe factories the best possible light is one of the essentials to good work. The work benches are therefore placed so that the operatives face the windows, with the light shining fully in their faces. A merely casual observation of the operatives shows that the effect of this is injurious to a high degree. Many of them have a strained appearance of the eyes, and a contraction of the pupils, accompanied by a semi-closing of the lids from the effects of the strong light thrown directly in their faces.

Several of the operatives, male and female, who were questioned on the subject, declared that they were constantly troubled with pain

in the eyes, which, toward the end of the day's work became very acute; some of them stated that as a rule they put in the evenings at home after work without a light, giving up reading or sewing that their eyes might be rested for the next day's work.

Many workers in leather suffer from painful and sometimes dangerous forms of skin diseases, caused by the chemicals and other compounds used in dyeing the skins.

Lasters suffer also from diseases of the stomach and liver, caused by pressure upon these organs through the position in which the last must be held while the upper is being stitched over it. This work carried on day after day and year after year with the continuous pressure upon the muscles of the abdomen, disarranges and causes the stomach to become weak and leaves it in a condition to become the seat of many troublesome attacks which to a certain extent prostrate the workman while they last, and causes him to lose time from work which, as a rule, he can but illy afford.

As will be seen by reference to the tables of sickness and consequent loss of time, the principal diseases affecting operatives in shoe factories are those attacking the throat, lungs, liver, kidneys and stomach. These diseases are caused originally, or their development in cases where one or more of them existed before the operative worked in a shoe factory, were hastened by close confinement during long hours of labor, breathing vitiated air laiden with the dust from particles of leather with which the work rooms during business hours are always filled.

As previously stated, the arrangements for ventilation of the buildings are good, but they are not used so as to produce the best results, because the operatives, apparently ignorant of its importance, will not take time to give them attention. Hence, the air in the crowded workrooms, with ventilators and windows tightly closed. becomes foul and poisonous, and of course, seriously affects the health of the occupants.

Diseases of the kidneys and bladder appear most frequently among those who work at sewing machines, or at bench work which requires a sitting position all day.

The accidents noted were in the main confined to workmen engaged at the die presses on which the soles and other parts of the shoe are cut out. Operatives working at these machines must from the nature of the work keep their fingers very near the cutter; an instants relaxation of care as to the position of the hands may result

in severely crushed or even severed fingers, which will render the operative incapable of work in many cases for weeks after. Sometimes the injuries are so severe that amputation is necessary, followed by a long period of illness, or it may be death, as is noted in a case in Table No. 2, where one death from blood poisoning, the outcome of a crushed hand, is recorded.

As in many in-door occupations where there is imperfect ventilation and where the hours are long and the labor performed in cramped and unnatural positions of the body, the operatives exhibit marked indications of anemia, and are frequently afflicted with abscesses of various kinds; while in that condition, an attack of sickness causes immediate and severe complications.

Leather dust containing dyes is a fruitful source of lung trouble to shoe operatives; the air in the workrooms is laden with it, and every inhaled breath helps to clog the air passages and the lungs. Conditions in this respect might be greatly improved by the introduction of the suction fan or blower, the use of which in factories where dust producing operations are carried on, has done so much to improve health conditions.

The tables which follow are based upon information gathered from the records of vital statistics, from physicians practicing in the localities where the factories are situated, and from operatives employed in them.

Although obtained from scattered sources, the information is substantially correct and reliable. It will be observed from an examination of the tables, that while the cases of sickness are numerous, the percentage of deaths is remarkably low.

TABLE NO. 1.

Days Work Lost Through Sickness in Shoe Industry.

SEVEN FACTORIES—1,000 HANDS.

	Number Sick.	*Days Lost.*
Less than one week,	55	165
1 week and less than two weeks,	30	210
2 weeks and less than three weeks,	22	198
3 weeks and less than one month,	16	320
1 month and less than two months,	12	480

2 months and less than three months,	9	720
3 months and less than four months,	5	500
4 months and less than five months,	3	375
5 months and less than six months,	2	960
Totals,	154	3,928

TABLE NO. 2.

Cause of Sickness in Shoe Industry.

SEVEN FACTORIES IN 1901—1,000 HANDS.

	Male.	*Female.*
Disease of lungs,	8	15
Disease of throat,	5	7
Disease of kidneys,	3	7
Disease of liver,	10	8
Disease of stomach,	6	9
Disease of heart,	3	6
Disease of bowels,	11	18
Disease of bladder,	2	4
Paralysis,	2	0
Apoplexy,	2	1
Lumbago,	6	0
Bilious fever,	3	5
Cramps,	1	3
Tetanus from vaccination,	0	1
Accidents,	7	0
Totals,	69	85

TABLE NO. 3.

Number of Deaths and Causes for the Same.

SEVEN FACTORIES IN 1901—1,000 HANDS.

	Male.	*Female.*
Disease of lungs,	7	10
Disease of throat,	3	4

Disease of kidneys,	2	4
Disease of liver,	1	3
Disease of stomach,	4	1
Disease of heart,	1	3
Disease of bladder,	3	2
Disease of bowels,	1	2
Paralysis,	2	0
Apoplexy,	2	1
Stone in bladder,	1	0
Bilious fever,	2	2
Tetanus from vaccination,	0	1
Blood poison from accident,	1	0
Cramp colic,	0	1
Peritonitus,	0	1
Totals,	30	36

Cotton and Woolen Operatives.

The data contained in the following tables were obtained from nine cotton and three woolen mills; as like conditions prevail in both industries, no distinction is made in the tables between the operatives engaged in either class of work.

The mill buildings are, without exception, of substantial construction, and although not strictly speaking modern, all are fairly well lighted and ventilated, but it must be said that in the latter respect there is still in some of them much room for improvement. A free use of some of the scientific ventilating appliances could, with an outlay of money, small in comparison with the importance of the result aimed at, be made to greatly purify and improve the air of the workrooms.

The sanitary arrangements in all the mills are faultless. Closets which are so placed as to guard against their being offensive, are at all times kept in a condition of scrupulous cleanliness. The mills and yards are free of rubbish and due precautions are taken to guard against the accumulation, within the buildings or without, of matter that might in any way be deterimental to the health of those employed. Notwithstanding all this, the weak, physical condition of the operatives, especially the females, is very noticeable.

Such arrangements as are provided for ventilation are partly neglected, the air in the work rooms is often oppressively hot and always filled with the fibrous atoms of wool and cotton, which the occupants are constantly inhaling, thus clogging the air passages and causing diseases of the throat and lungs. These surroundings in which the greater part of the operative's time is spent, produces a chronic condition of bodily feebleness, with frequent attacks of more or less serious sickness, absence from work, and consequent loss of wages.

The long hours of labor, frequently ten or twelve, and the foul air of the workroom is most marked in its effects upon the female operative. In addition to throat and lung diseases, which are al-

most equally prevalent among both sexes, the sufferings of female operatives from causes peculiar to the sex, is very greatly aggravated by the conditions under which they work.

A physician of high standing, whose practice is largely among the operatives of these mills is authority for the statement that a large majority of female mill workers are sufferers from some one or more of the organic complaints brought on or intensified by the conditions under which they work. If no such disease existed before entering the mill it was almost sure to develop soon after beginning work; if it did exist before, it was aggravated to a degree that made them easy victims of consumption.

The long hours of labor, being constantly standing, the foul air of the workroom, and more than all, the ceaseless vibration of the floor from the motion of the great mass of machinery are the prime factors in producing these diseases.

Corroborative of the view it may be noted that in one of the largest of these cotton mills the vibration of the floors was so great, particularly in the weaving and spinning rooms as to threaten the stability of the building. A large two-story brick building was erected to take its place and strengthened in every possible way. The foundations were of unusual width and thickness; the floors laid of heavy material and supported by brick piers wherever the wide spread of the joists indicated the need of such additional support, and while the noise of the one thousand looms was still very great, there was a reduction of vibration of the floors to a minimum, and a very marked and decided improvement was soon noted in the health conditions of the women and girls employed therein.

Some of these employees were questioned as to the condition of their health since their removal from the old weaving room, which was upon the second floor, to the first floor of this immense, strongly built, light, airy, and abundantly ventilated building, which is in the main free from the jar and vibration which so seriously affected them in the former rooms, and they declared that they had greatly improved in health and could perform their labor with much less fatigue and exhaustion. Physicians practising among these people say that they have taken note of the improvement.

In the preparation of these papers on the diseases of the shoe and the cotton and woolen industries, the Bureau is greatly indebted to Drs. Sawyer, Cunningham and Foote, of Vineland; Drs. Smith and Newell, of Millville; Dr. Thompson, of Bridgeton, and to the Re-

corders of Vital Statistics and Managers and Superintendents of Mills for information freely and cheerfully given.

The subjoined tables show the amount of sickness prevailing among these operatives in 1901, the days lost through sickness, the causes thereof, and the mortality during the year, made up as accurately as possible from the sources of information open to this inquiry.

COTTON MILLS.

TABLE NO. 1.

DAYS WORK LOST FROM SICKNESS IN FIVE MILLS IN 1901—1,500 HANDS.

	Number Sick.	*Days Lost.*
Less than one week,	176	342
1 week and less than two weeks,	38	304
2 weeks and less than three weeks,	23	345
3 weeks and less than four weeks,	16	336
1 month and less than 2 months,	12	432
2 months and less than 3 months,	8	520
3 months and less than 4 months,	6	560
4 months and less than 5 months,	4	468
5 months and less than 6 months,	2	284
6 months and less than one year,	1	171
	286	3,762

TABLE NO. 2.

CAUSES OF SICKNESS IN FIVE MILLS IN 1901—1,500 HANDS.

	Male.	*Female.*
Disease of lungs,	10	12
Disease of throat,	9	8
Disease of head,	7	16
Disease of kidneys,	10	15
Disease of liver,	12	20
Disease of heart,	4	6
Disease of stomach,	9	14

Disease of bowels,	8	7
Disease of urinary organs,	6	10
Female diseases,	0	32
Fever, scarlet,	2	6
Fever, typhoid,	2	8
Fever, bilious,	5	8
Fever, malarial,	2	5
La grippe,	4	8
Small pox,	2	4
Accidents,	4	6
Diphtheria,	1	4
	97	189

Of the total number, 286, eighty-seven were minors.

TABLE NO. 3.

NUMBER OF DEATHS AND CAUSES THEREOF IN FIVE MILLS IN 1901 1,500 HANDS.

	Male	*Female.*
Disease of lungs,	5	7
Disease of throat,	6	4
Disease of kidneys,	5	8
Disease of liver,	2	5
Disease of heart,	2	3
Disease of stomach,	5	7
Disease of bowels,	4	3
Fever, typhoid,	1	2
Fever, scarlet,	1	3
Fever, bilious,	1	0
Fever, malarial,	0	2
Small pox,	1	1
Tetanus, vaccination,	0	1
Diphtheria,	1	3
Fistula,	1	0
Paralysis,	1	0
Tumor,	0	1
	36	50

Of the total number, 86, sixteen were minors.

WOOLEN MILLS.

TABLE NO. 1.

NUMBER OF DAYS LOST FROM SICKNESS IN 1901—THREE FACTORIES—500 HANDS.

	Number Sick.	*Days Lost.*
Less than one week,	20	60
1 week and less than 2 weeks,	12	96
2 weeks and less than 3 weeks,	9	126
3 weeks and less than 4 weeks,	5	105
1 month and less than two months,	3	129
2 months and less than 3 months	4	260
3 months and less than 4 months,	2	224
5 months and less than 6 months,	0	170
	56	1,170

TABLE NO. 2.

CAUSES OF SICKNESS IN 1901—FIVE FACTORIES—500 HANDS.

	Male.	*Female.*
Disease of lungs,	3	5
Disease of throat,	1	2
Disease of kidneys,	2	3
Disease of stomach,	3	3
Disease of liver,	4	5
Disease of bowels,	2	1
Disease of urinary organs,	1	3
Fever, typhoid,	1	0
Fever, bilious,	2	1
Fever, scarlet,	0	3
Fever, gastric,	2	0
Asthma,	1	0
Peritonitis,	0	2
Varioloid,	0	1
Erysipelas,	1	0
Rupture of bladder,	1	0
Accidents,	1	2
	25	31

TABLE NO. 3.

Number of Deaths and Causes Thereof in Three Factories—1901—500 Hands.

	Male	*Female.*
Disease of lungs,	1	3
Disease of throat,	1	2
Disease of kidneys,	0	1
Disease of stomach,	0	1
Disease of Liver,	2	0
Disease of bowels,	0	2
Fever, typhoid,	1	0
Fever, gastric,	0	1
Fever, bilious,	1	0
Peritonitis,	0	1
Rupture of bladder,	1	0
	7	11

PART IV.

Co-Operative Societies Organized Under the Act of 1884.

Labor Chronology.

Decisions of Courts Affecting the Interest of Labor

Co-Operative Societies.

ORGANIZED UNDER THE ACT OF 1884.

The Legislature of 1884 passed an act designed to facilitate the organization of co-operative societies by workingmen, and to give such organizations substantially all the powers conferred on corporate bodies under the general corporation act. This statute which bears the title—"An act to provide for the formation and regulation of co-operative societies of workingmen," was the result of a wide public interest in the subject awakened by the agitation of the Sovereigns of Industry and the Patrons of Husbandry in the early seventies, and later by the Knights of Labor.

The propaganda of the Patrons of Husbandry was carried on among the farmers, and that of the Sovereigns of Industry among the workmen in cities and towns. Both organizations adopted and advocated the co-operative form of organization as the one best calculated to give effect to the ideas for which they stood. The Patrons limited their membership to those who followed agricultural pursuits or who were connected with agriculture in some tangible way. The Sovereigns of Industry adopted a much broader policy; it sought to bring men and women together without reference to their callings or pursuits, and endeavored to weld them into a strong organization, not on trade lines or as producers, but on their universal relation and common interests as consumers. They affirmed that each grade of society was pressing heavily on the one below it and the burden of supporting all was imposed upon those who worked for wages.

Accordingly, the propaganda of the order consisted largely of denunciation of all middlemen, whether employees or store keepers, as a class whose exactions kept the wage worker in a condition of hopeless poverty notwithstanding the great and growing wealth of the world. The burdens thus imposed were to be relieved by and

through the use of their purchasing power applied wherever opportunity offered, until the moral and social wisdom and the increased wealth of the masses ultimated in universal co-operation. The movement met with a remarkable degree of success, although the order itself was short lived. Councils and co-operative stores were established in many towns throughout the country and large numbers of people became interested.

This was particularly the case in New Jersey, where the membership was large. Stores sprang up in every section of the State, a widespread interest was diffused and many were convinced that in co-operation the remedy for all social inequalities has been found. A few years after the passing of the Sovereigns of Industry, and before the enthusiasm aroused by it had greatly diminished, the order of the Knights of Labor came upon the scene with a program of co-operation far more extensive than that of their predecessors, and a form of organization better adapted to doing effective work.

At a general convention of the Knights held in 1880 at Pittsburg, the General Master Workman of the order in his address declared that the "remedy for the redress of wrongs complained of by labor does not lie in the suicidal strike, but in thorough, effective organization, which operating through a widespread system of co-operation, will in time banish forever the system of wage slavery." "It is to co-operation then, as the lever of labor's emancipation, that the eyes of workingmen and women are directed."

A formidable revival of interest in the subject began at this time and kept pace with the wonderful growth of the Knights of Labor. Local and district assemblies of the order were formed in all the cities and towns of the State, and in a majority of them the idea always sought to be kept in the minds of members, indicated co-operation, both in production and distribution as the permanent work to which they should devote themselves.

Many co-operative stores were started with a view to displacing the middleman and not a few manufacturing ventures were projected with the more ambitious purpose of displacing the "boss" and making a beginning toward changing the workman's relations to his employment by abolishing the wage system.

In most of the manufacturing States the movement was encouraged and helped along by legislation specially designed to facilitate the formation of co-operative societies, and conferring powers

on them adequate to carrying out their legitimate purposes in the broadest sense.

The New Jersey statute to which reference has been made is one of the most liberal in this respect. All the essential privileges conferred by the General Corporation Act without its restrictive and intricate features, may be enjoyed by societies organized under it without payment of fees or taxes in any form.

The co-operative societies started in the early seventies by the Sovereigns of Industry and the Patrons of Husbandry, and there were many of them in New Jersey, were not corporate bodies, but simply partnership, the individual members of which were, under the law, liable for all debts contracted. This naturally discouraged persons who possessed property from becoming members, and with few exceptions, the stores started by them were short lived.

It was not, therefore, until the statute of 1884 was enacted that a way was opened to test the capacity of workingmen for organizing and managing large business enterprises under approved modern forms. The results thus far shown, afford little or no encouragment to friends of the co-operative principle, and the limited use made of the opportunities afforded by this most liberal statute, would justify the conclusion that at least as yet the great body of workmen are not interested in it.

From the time the act went into operation, up to the present year, certificates of incorporation for fifty societies have been filed in the office of Bureau of Statistics and approved by the Chief as required by the law.

Nine of these were organized for manufacturing purposes, and forty-one for carrying on distributive or retail stores. Of the nine manufacturing ventures, seven were organized between 1884 and 1890, and from reports made to this bureau in 1895, it appears that not one of these ever began business; the other two were incorporated in 1902. Of the forty-one distributive societies, thirty-three had been incorporated previous to 1895, and eight since that time. Of the thirty-three, eight dissolved before a start was made, and twenty-five succeeded in opening stores, ten of the number being still in operation in 1895; these were, The Sovereign's Co-operative Association, Dover; Peoples' Co-operative Society, Phillipsburg; Fruit Growers' Union and Co-operative Society, Hammonton; Trenton Co-operative Society, Trenton; Phillipsburg Co-operative Association No. 1, Phillipsburg; Workingmen's Co-operative Society,

Paterson; Equity Co-operative Exchange of Vineland; and Rahway Co-operative Society, Rahway. These societies are required by the terms of their incorporation to file a report anually in the Bureau of Statistics showing their transactions for the year. With the single exception of the Vineland Fruit Growers' Union which has reported regularly since its incorporation, not one of them has done so, nor has the repeated efforts made by the bureau to learn something about them, met with any success, except in two instances; one, a co-operative manufactory of rugs located in Milmay reported having been compelled to dissolve through dissensions among the members, and the other the Sovereign's Co-operative Association of Dover which was organized in 1874 and incorporated under the act of 1884, had in 1895, transferred the ownership of its business to a few of the principal stockholders, the society disbanding after an unbroken existence of twenty-one years as a co-operative body. Under these circumstances, it may be regarded as certain that the others have also passed away.

Since 1901, five societies have been organized; these are —"Lithuanian Co-operative Association" to buy and sell groceries, meats, and household goods in the city of Newark; capital $3,000; "The Bronx Co-operatives Society" to manufacture and deal in goods of various kinds in the cities of Newark and New York; capital $10,000! "New York Industrial Co-operative Society," to buy and sell goods in the hat, shoe and dry goods trades; capital $25,000; "The Newark Co-operative Society," to buy and sell goods and merchandise of various kinds and to manufacture the same in the city of Newark; capital $20,000, and "The New Brunswick Co-operative Company" to buy and sell, trade and deal in all kinds of goods and articles of household and personal use; capital $5,000.

Reports will not be due from these five societies until a year hence, and until then it is impossible to determine how many of the number will have gone the way of their predecessors.

It is strange that so little should remain of a movement that a generation ago seemed to inspire such high hopes of far reaching results. The sole survivor of the long list of co-operative enterprises that came into being during nearly thirty years back, is the small group of farmers and fruit growers in Vineland, for their society is the only one that we certainly know to be in existence; they alone of the many who have tried co-operation appear to have been able to make it pay.

But it would be a mistake to conclude that because of these many failures co-operation is a failure. Its purpose is a high and moral one and those interested in the social and industrial elevation of the workingmen will in the event of failure to realize their ideals by other means, turn to it again.

Labor Chronology.

ATLANTIC COUNTY.

March.

Mays Landing—

Martin Moore, an employe of the Atlantic Brick Company at Mays Landing had an arm and hand badly torn and bruised in the cogs of a pressing machine. Nearly all his hand had to be amputated.

Thomas Seaman, an employe of the American Coal and Ice Company at Mays Landing, had several ribs broken and received other painful bruises through an accident while at work.

May.

Atlantic City—

The bricklayers, plasterers, and tin and sheet-iron workers of Atlantic City, through their respective unions made a demand on their employers for an increase of wages from forty-three and two-thirds cents to fifty cents an hour. After a short delay, in no case exceeding six hours, the employers signed an agreement conceding the new wage scale. Some of the contractors sought to exact from the bricklayers and masons, a pledge to work for those contractors only who are members of the Builders' Exchange, but in return for some minor concessions made by the men, the idea was abandoned.

The Hod Carriers' Union of Atlantic City served notice upon the builders and contractors, that on and after June second, the members of that organization would demand thirty cents an hour. The communication addressed to the builders is couched in firm but respectful terms; in it the hod carriers say—"We have been your humble servants for twenty years at a very small rate of wages, and we feel that we should be paid more for our labor, we therefore, beg your consideration and hope you will comply with our request."

Richard Allen, colored, 23 years old, while at work in Atlantic City fell from the second story of a building; one rib was broken.

John Ladin, a machinist of Atlantic City, had his left leg so badly crushed through falling from a moving train, that the limb had to be amputated below the knee.

July.

Atlantic City—

A joint conference of committees representing the Glass Manufacturers' Association and the Glass Bottle Blowers' Union, was held in Odd Fellows Hall, Atlantic City on July 21st. The purpose of the joint meeting was to fix the schedule of prices to be paid to the blowers during the blast of 1902-1903. Daily meetings were held, and the scale agreed on was substantially as adopted by the Green Bottle Blowers' Association, which held its convention in Atlantic City on the 15th.

Representatives of the American Flint Glass Workers' Association requested the manufacturers to grant them an increase of ten per cent. and a reduction of their hours from fifty-five to fifty per week. The manufacturers refused to agree to either of these changes.

The Master Carpenters and Journeymen of Atlantic City have reached an agreement under which it is expected the question of wages will be compromised on the basis of $3 per day of eight hours. The men demand $3.20, and the employers offer $2.80 per day.

The American Boiler Makers' Association held a three days' convention at the Royal Palace Hotel, Atlantic City, for the discussion of matters of interest and importance to the trade.

September.

Atlantic City—

Members of the Carpenters' Union of Atlantic City have gone on strike to secure a wage scale of $2.80 per day, and recognition of the union. Several employers have agreed to the terms of the men.

The Atlantic City Movable Sidewalk Company has been incorporated with a capital of $1,000,000. The Peoples Gas Company was also organized with a capital of $150,000.

BERGEN COUNTY.

February.

East Rutherford—

The Old Colony Clock Company has purchased the plant of the Colonial Clock Company at East Rutherford, and will manufacture fine clocks. The capital is $60,000.

March.

Hackensack—

A new local union of plumbers has been formed at Hackensack.

April.

Lodi—

Three hundred silk dyers helpers employed at the Boettger Piece Dye Works and seven hundred helpers of the Alexander Dye Works both establishments at Lodi, struck for an increase in wages. The strike was determined on at a mass meeting held in Passaic the night previous. The dyers in the Alexander Mill, 142 in number, refused to go out and the manager sent to the sheriff at Hackensack for guards to protect the mill; sixty deputy sheriffs were sworn in for that purpose. The dyers next morning refused to go to work having been frightened by threats of the strikers.

May.

Lodi—

The employes of the Alexander Dye Works and those of the Boettger Piece Dye Works, two of the largest establishments of their kind in the state, made a demand on these firms for an increase of wages which was refused. The increase sought was for the laborers or unskilled workmen, and the advance asked was from one dollar and a quarter a day to two dollars a day.

A strike of the men and women concerned quickly followed the refusal to grant the increase, which in a short time extended to every dye house in Bergen and Passaic counties. Much serious rioting occurred during its progress, the culminating incident of violence being a raid by the strykers and their sympathizers upon the large silk mills of Paterson, to compel them to suspend work until the increased wages demanded by the dyers was conceded by their employers.

Windows were smashed, and the workmen violently driven from their places in several mills before the outbreak was brought under control. A suspension of work in many of the mills followed this attack, partly to repair the damages wrought by the mob, but mostly because a fresh outbreak of rioting was feared if work was resumed.

The city authorities requested the Governor's assistance to preserve the peace, and a regiment of the National Guard was promptly ordered to Paterson. The presence of the troops restored confidence and order and within a few days, the mills that closed were in full operation again. The strike of the dyers collapsed soon after, and the men and women who left the dye houses returned, some of them having gained an advance in wages, but in amount very much below what they had demanded.

The strikers of Boettger's Dye Works severely beat a fireman employed by that firm. Women took an active part in the assault; some pistols shots were exchanged, but the fireman's injuries were inflicted by stones and clubs.

One hundred and fifty deputy sheriffs were sworn in to guard

against violence by the strikers. On the morning of May the fifth, the deputies drove a band of strikers that appeared to be inclined to mischief, over the Saddle River Bridge. No resistance was made. The Mayor of Lodi held a conference with the owners of the dye works with a view to influencing some settlement sufficiently satisfactory to end the strike.

The dye works were guarded by seventy-five deputies. Nearly two hundred men returned to work without having received any concessions. Much indignation and resentment against those who resumed work was shown by the strikers, who claimed that an officer of the American Federation of Labor sent here to look after the strike, had orders from headquarters to prevent any from returning to work until all were satisfied to do so.

The proprietors of the Alexander Dye Works who pay $7.50 a week for fifty-nine hours, were said to be willing to pay the same amount for fifty-five hours, provided all of their employes returned to work. The strikers were unable to reach an agreement on this proposition.

The Boettgers strikers, who receive $6.00 per week insist on the same pay as is given by the Alexander Works.

There were serious riots at the dye shops on the 7th, which the deputies were unable to cope with. Calling on the militia talked of, if the disorderly actions of the strikers continue.

The Sheriff of Bergen County issued orders to his deputies to arrest all disorderly persons found in the streets, and all vagrants or persons who acted suspiciously.

An attempt to open the Alexander Dye Works on the morning of the 5th failed. One hundred and fifty deputies were present to afford protection, but none of the employes returned. Copies of the riot act were posted on the walls about the factories.

The strike of the dyers helpers ended on the 12th. The works of both the Alexander Company and Boettger Company were in full blast, all hands having returned to work. An estimate of the financial loss through the strike places that which was directly sustained by both the companies involved at about $30,000. Besides this amount, thousands of dollars worth of goods left in the vats when the strike began were almost entirely ruined by being left standing too long. The cost of maintaining the deputies and special police is put at $5,000 to the county. The strikers about nine hundred in number lost two and one half weeks wages.

June.

Little Ferry—

The iron workers employed building the bridges for the Bergen Turnpike Trolley Company at Little Ferry went out on strike because their foreman was a non-union man.

Hackensack—

Some strikers at the Hackensack Silk Mills gathered in a crowd and held back several young women employed in the mill. A force of special officers dispersed them.

Kingsland—

A man employed at the paper mills at Kingsland had his hand badly injured by being caught in a cog wheel.

July.

Little Ferry—

A man employed at the Mehrhof Brick Yards at Little Ferry was overcome by the heat and taken to the hospital.

Shady Side—

The Hudson River Chemical Works at Shady Side were badly damaged by fire. The loss is about $4,000.

East Rutherford—

The Fuchs & Lang Company, a large concern engaged in litograph work and the manufacture of litographic supplies in New York have made arrangements to establish their works in East Rutherford.

August.

Fort Lee—

All the employes at Abbot's Piano Action Factory, Fort Lee, went on strike because one of their number had been discharged by a member of the firm.

Hackensack—

The boiler makers employed by the East Jersey Water Company, Hackensack, and working on the meadows in water that was knee deep, struck for an advance from $3.00 to $3.20 per day of eight hours. An offer of $3.33 per day of nine hours was made to them, and accepted.

Lodi—

Suit has been brought for $20,000 damages by George Jowoski of Lodi against the Alexander Dye Works for the loss of his arm which was torn off by machinery in the factory.

September.

Hackensack—

The strike at Abbott's Piano Factory at Hackensack has been settled, the men having returned to work unconditionally.

Bogota—

The Bogota Paper Mill has been nearly destroyed by fire. Loss $150,000. The factory gave employment to one hundred skilled workmen.

Rutherford—

Two large buildings are being erected at Rutherford for a rubber plant.

Fort Lee—

Henry Mallon was badly injured while blasting for a well at Fort Lee.

BURLINGTON COUNTY.

February.

Burlington City—

The Gray Manufacturing Company recently incorporated, has started a plant in Burlington for the manufacture of bicycles, automobiles, and machinery.

A silk mill is to be established at Pearl and Tatham streets in Burlington.

March.

Mount Holly—

The Bowker Shoe Manufacturing Company was incorporated at Mount Holly. Capital invested $30,000. One hundred persons will be employed.

April.

Medford—

Fifty boys in the day shifts at the Star Glass Works at Medford, struck for an increase from $3 to $4 per week in wages. The boys returned to work at the old rate.

Mount Holly—

The Peoples Electric Company has incorporated at Mount Holly to manufacture and sell electricity. Capital stock $100,000.

Bordentown—

The roof of the Eagle Shirt Factory at Bordentown was blown off by a storm.

May.

Hainsport—

While pouring molten iron at the Hainsport Foundry, Samuel Nutter, an employe, was burned by the upsetting of the ladle.

Burlington—

The workmen of the United Cast Iron Pipe Company at Burlington demanded an increase in wages.

Mount Holly—

The Stackhouse & Watson Company with an authorized capital of $25,000, will engage in a printing and publishing business at Mount Holly.

June.

Bordentown—

A fire occurred in the packing department of the Ironside Pottery at White Hill. Owing to a scarcity of water, the fire was not put out until about $10,000 damages had been done to the works.

Delanco—

The Franklin Button Company of Delanco was incorporated at Mount Holly. Capital $75,000.

July.

Burlington—

The shoe workers of the city of Burlington, nearly one thousand in number, went out on strike on the sixth because the firms had posted a notice in the different shops which read as follows—"This factory will re-open July 7th with non-union employes, and those accepting positions will be recognized only as such." The strikers were willing to return to work if the obnoxious notices were removed, there being no

other grievance, and after a week's idleness, the firms agreed to this being done.

The Italian laborers were severely injured by a cave in on Broad St., Burlington, where they were digging a trench for the Gas Company.

Bordentown—

Wesley Marshall, aged 14 years, had his right hand badly crushed by the machinery of the Springfield Worsted Mills, Bordentown.

August.

Mount Holly—

9 The operatives of the Lumberton Shoe Factory, Mount Holly, struck because of a reduction in the price of work done by the first lasters.

September.

Burlington—

10 The employes of G. W. Lewis & Company, shoe manufacturers at Burlington, have struck for an increase of wages. The firm claims that rates paid at present by them are higher than those prevailing elsewhere.

The Develin Manufacturing Company, a new corporation, has given out contracts for the erection of three large buildings at Burlington. These are to cost $100,000 and be completed in one hundred working days.

Charles Simons, a workman at the Budd Shoe Factory, had a hand caught between the rollers and knife of a splitting machine on which he was employed. Four fingers were split their entire length.

Lumberton—

11 The employes of the Consolidated Shoe Shops at Lumberton, fourteen in number, struck against a reduction of wages. After one week's idleness a conference was held and a satisfactory scale of prices agreed upon.

Beverly—

Wright's Confectionery Factory at Beverly is to be converted into a knitting mill under the management of George C. McIlvane.

Bordentown—

Henry H. Dill, a mason, slipped from a scaffold while at work and fell to the ground. He was very severely injured.

CAMDEN COUNTY.

February.

Camden—

The employes of the Haas Baking Company stopped work because their foreman had been discharged.

The Nonpariel Cork Mfg. Company has purchased the plant of the Keystone Chemical Company at Camden and will move their works there from Bridgeport, Connecticut. The company employs four hundred persons.

A new ship building plant will be established on the tract of land lately occupied by the Tway Machine Company and the Morris & Mathias plant. The ship building company has leased these properties and will soon begin operations. Several hundred persons will be employed.

The West Jersey Tube Works at Camden will begin soon to manufacture sheet iron; at least one hundred and fifty men will be employed.

Gloucester—

Lydia Lozoras had her right hand mangled by machinery in the Argo Mills.

March.

Camden—

The officers of a large coke company are considering the purchase of a tract of land in Camden for manufacturing purposes.

The Tway Machine Company are negotiating for land on which to erect a new machine shop.

The American Cigar Company's new factory is completed and will be opened April first. One thousand persons will be employed.

The Bacon Paint and Varnish Preservation Company was incorporated at Camden. Capital $25,000.

The Atlas Smelting and Refining Company was incorporated at Camden. Capital $10,000.

The Bell Ice Manufacturing Company was incorporated at Camden. Capital could not be ascertained.

April.

Camden—

The Master Builders' have formed an association to resist the demands of the journeymen in the building trades; the carpenters struck for 35 cents per hour and a half holiday on Saturday, all the year round. The strike was settled by concessions on both sides. Wages were increased in several other branches of the building trades. 12

The new plant of the American Cigar Company was opened and operations begun on April first. One thousand four hundred persons, mostly girls, are employed.

The following new companies were incorporated at Camden. The Tway Steel Forging and Machine Company, capital $100,000; the Sanitary Dust Pan Company, capital could not be ascertained.

Anton Nork, a laborer, was injured while at work in the Camden Iron Works.

Philip Quigley, E. J. Schaffer, and Daniel Steel, were severely injured while at work in the New York Shipbuilding Company's Yard at Camden, and Michael Fry was killed in the same plant by a heavy scaffold board that fell upon him.

The large bakery of Haas & Company at Camden was partly destroyed by fire; loss about $40,000. The vacant factory building of the American Cigar Company adjoining the bakery was damaged to the extent of $5,000.

Thirty-seven local trade unions of Camden have formed a general central union to agitate for an eight hour day, and increase of wages.

May.

Camden—

13 The strike of rug weavers which began in the Kensington district, Philadelphia, caused the works of the Fries-Breslin Company on Ferry Ave., Camden, to shut down. The employes, over 500 in number, decided to go out in sympathy with Kensington strikers. The rug weavers demand an increase in wages of ten per cent. It is claimed by the company that the increase cannot be given owing to the present low price of rugs. The manufacturers have made an attempt to arrive at a uniform wage scale which would result in a considerable increase in wages paid for some parts of the work, but the weavers rejected the concession.

The conference that resulted in the tender of a uniform wage scale was attended by representatives of all the leading high grade rug manufacturers in the country. The uniform rate of wages was based on the highest scale paid by any of the firms, with a slight increase.

To the employes of the Fries-Breslin and the John Bromley Companies, the increase, it is said, amounted to about four per cent. To the other concerns, the increase would amount to from eighteen to forty per cent. On their part, the weavers' union claim that the scale if put into operation would not favorably affect the wages of the men employed here.

Delegates of the striking rug weavers of Camden and Kensington, held a meeting in Philadelphia to discuss the interests of the weavers, and devise means of bringing the trouble to an end.

A fire broke out in the mould loft and pattern shop of the J. H. Mathis Shipyard, Camden, destroying the building and much other property. The estimated loss is about $3,000.

The Board of Education of Camden adopted a resolution providing that hereafter all printing done for the Board of whatever kind or nature shall bear the imprint of the International Typographical Union label, and the officers and employes of the Board are instructed not to contract for or accept any other. All newspapers publishing official notices, reports or other proceedings of the Board, shall also use the union label.

The York Manufacturing Company secured an order from the court of Chancery enjoining the sale of property owned by the West Jersey Ice Manufacturing Company. A receiver is asked for the company, as well as a declaration of insolvency from the Court.

The plant of the R. H. & B. C. Reeves Oil Cloth Company is to be sold by the receiver, former Judge Armstrong. The plant has been closed several months, and was placed in the hands of a receiver at the instance of a number of creditors.

The Street Committee of the City Council of Camden voted to recommend the vacation of several streets to facilitate a large extension of their works which the Farr & Bailey Company desire to make.

June.

Camden—

The rivet heating boys at the New York Ship Building Yard, Camden, went on strike, practically tying up the plate department of the big plant and throwing about two hundred men out of employment for the time being. The boys wanted an eight hour day, and more pay. 14

The strike of the Fries-Breslin Company's employes at Camden, who went on strike in the early part of May, still continues. Many of the strikers have obtained employment in some of the various industries of the city.

The United States Radiator Company, which has a large plant at Dunkirk, N. Y., is said to be desirous of locating in Camden, if suitable arrangements can be made. The concern needs about ten acres to erect its plant on, and will employ upwards of three hundred men.

The mill building at Seventh and Pearl Streets, Camden, has been leased for a soap factory and the work of putting in the necessary machinery is now being done.

The new steel and iron company of Camden was organized to manufacture steel and iron. Capital $100,000.

July.

Camden—

A new scale of prices was submitted by the rug manufacturers of Camden, which they claim was an advance on the old rates paid of from six to twenty per cent. for certain kinds of product, was rejected by the employes of all except the John Bromley & Sons' mills, who resumed work. 15 (A

The plant of the Fries-Breslin Company, rug manufacturers of Camden, resumed work July 21, after an idleness of several weeks on account of the general strike of rug weavers. Later, on the 29th, the strikers at other mills accepted the employer's new wage scale and returned to work in a body.

A new soap manufacturing plant is to be located at Seventh and Pearl streets, Camden. Upwards of 100 hands will be employed.

The Penn Chair Company was organized in Camden to manufacture household furniture. Capital $100,000.

The American Cigar Company, which recently located one of its plants in Camden, objected to a tax assessment on its property, alleging that the City Council had guaranteed them exemption from taxes for ten years in consideration of their locating their works in Camden.

The H. Kleber & Batter Company was organized in Camden to make and deal in pianos, organs, and other musical instruments.

Caleb Ross, aged 14 years, an employe of Merritt & Company's Machine Works, Camden, had his right hand badly crushed by being caught in the machinery.

August.

Camden—

The striking weavers of the Fries-Breslin Company at Camden, returned to work, agreeing to accept the terms offered by their employers. Recognition of the union was the chief matter in dispute.

The R. H. Comey Dye Works at Camden is to be increased in size by the construction of a new building 40x80 feet.

The journeymen painters of Camden have organized as a branch of the Brotherhood of Painters, Paperhangers and Decorators of America.

The dye works of the Browning Company at Camden were damaged by fire to the amount of $50,000. One hundred workmen are temporarily thrown out of employment.

Florence—

Henry Mason, an employe at R. D. Wood & Co.'s Foundry at Florence was killed while at work, by a casting falling upon him.

September.

Camden—

Counsel for the George Jonas Glass Company applied to Vice Chancellor Gray at Camden for a permanent injunction against the Glass Bottle Blowers' Association, restraining it from interfering in any way with the company's employes. The injunction was denied.

The South Jersey Gas, Electric and Traction Company has given out contracts for its new buildings at Camden.

The Globe Window Glass Company was organized at Camden. Capital stock $250,000.

Waterford—

The window glass workers at Waterford have been given an increase of three per cent. above the scale of last year. The new list goes into effect October first.

Joseph P. Weatherly, proprietor of the Camden Machine Works, died at his home in Camden.

West Collingswood—

The new plant of the Quay Forge & Machine Works at this place, is nearing completion.

CAPE MAY COUNTY.

April.

Tuckahoe—

A shirt factory has been started at Tuckahoe.

May.

Cape May City—

The electric lighting plant here has been sold to a syndicate of capitalists. The plant is to be enlarged, and electricity will be supplied for power.

CUMBERLAND COUNTY.

February.

Bridgeton—

There were strikes in the glass industry at Bridgeton, Millville, Vineland, Atco and Minatola. The blowers demand on all double strength work, ten per cent., fifteen per cent. on single strength, and ten per cent. increase in the wages of cutters. These increases were refused by the manufacturers at first but matters were soon settled satisfactorily to the blowers, most of whom soon returned to work. A number of men went West for employment, where on account of a reduction in prices, the glass trade is very busy.

The Cumberland Glass Company has decided to increase its plant for window glass making. This will make the largest window glass factory in the East.

March.

Bridgeton—

Several conferences have been held among the men employed in the glass houses; in the Moore-Jonas works at Bridgeton, the blowers organized and the company discharged the union officers. A strike sentiment was developed in the works, and also in the George Jonas works at Minatola. The executive board of the Green Bottle Blowers' Association came to Bridgeton to seek a conference with the Moore-Jonas Company.

A Philadelphia firm have decided to move their works to Bridgeton. The new concern will manufacture roofing materials.

Edward Housand, a window glass worker, lost an eye through the breaking of a glass roller in the shop in which he was employed at Bridgeton.

Philip Meyer, an electrician, met with an accident while at work in the Farracute Machine Works, which resulted in a broken leg.

Millville—

The Ritter Furniture Company has made arrangements to move its plant from Philadelphia to Millville.

Vineland—

Tony Dippolito, a boy 12 years of age, fell into a tank of boiling water at the Vineland Window Glass Works and was very badly scalded.

April.

Bridgeton—

The union workmen employed in the Moore-Jonas Glass plant at Bridgeton quit work; the same action was taken at the George Jonas Glass House at Minatola. The point at issue between the blowers and the two firms is the recognition of the union and the payment of the union scale of prices. The strikers appointed a committee to wait upon the Governor of the state, and request him to order a rigid investigation into the manner in which the Child Labor Law is being enforced in glass factories.

The National Union pays the striking glass workers a certain sum per week for their support pending the settlement of the strike.

Carpenters at Bridgeton have struck for $2.50 a day of nine hours. The strike was successful.

A strike of short duration occured in the Acme Gas Fixture Company at Bridgeton; the trouble was amicably adjusted.

Parties intending to start a silk mill have spent several days in Bridgeton looking after a satisfactory site.

The Eastlake Glass Bottle Works at Bridgeton started up after a month of idleness.

Swedesboro—

The Swedesboro Glass Works were partly destroyed by fire; all the tools of the workmen were lost. Eighty men were employed. Steps have been taken to re-build the plant as rapidly as possible.

Millville—

Ground has been broken at Millville for the Menke Pottery Plant, which will be a large one, employing 300 persons.

Horace Woolford employed in the Cumberland Glass Works, fell into a tank of vitriol while dipping glass, and was very badly burned.

Cedarville—

The old saw mill at Cedarville was destroyed by fire.

Minatola—

The George Jonas Glass Company have served notice of eviction on such of their striking employes as occupy company houses. Thirteen cases of this kind were decided against the company by a justice of the peace, before whom they were tried.

May.

Minatola—

Two non-union workmen who were employed at the Minatola Glass Works, while on the way to work, were stopped on the road by men said to be strikers and were turned back homeward. This is the first instance of anything like violence since the glass workers' strike began.

A large force of strikers or persons in sympathy with them, stopped several trucks which were conveying to the village, the household goods of a non-union workman employed by the George Jonas Glass Company. Special officers finally released the teams and the goods were taken into the town.

The union glass blowers caused the arrest of J. P. Sims, a justice of the peace in Minatola, on a charge of conspiracy, and assault and battery. Warrants were also said to have been procured for the arrest of D. C. Applegate, manager of the Jonas Glass Works. The charges grew out of the action of Mr. Sims in arresting some men who were charged with attempting to forcibly prevent a non-union man from moving into the village to work for the George Jonas Glass Company.

Bridgeton—

A large parade of union glass blowers was held in Bridgeton on the evening of May first; fully two thousand men were in line. These assembled in the Criterion Theatre later in the evening and were addressed by Mr. D. F. Hayes, President of the Bottle Blowers' National

Union, and Mr. C. H. Litchman. Both gentlemen extolled labor organization and enlarged on its advantages to workmen.

Plans are under way, which it is believed, will make the projected silk mill for Bridgeton, a certainty. The plant when ready will employ about three hundred persons.

The Cumberland Glass Company, Bridgeton, is having a new tank furnace building erected for its plant, replacing the one that was recently burned.

A representative of the William Brookfield Glass Company of Brooklyn, N. Y., visited Bridgeton to negotiate for a site for the works, which will be moved there.

Fire destroyed the main factory of the Cumberland Glass Works on May 7th. Several of the bottle furnaces were ruined. The loss was about $20,000. Two hundred and fifty men are temporarily thrown out of work.

June.

Minatola—

The George Jonas Glass Company are seeking to evict occupants of their houses in Minatola who were former employes, but are now on strike. The company wishes to recover the dwellings for the use of their present employes.

Glassboro—

The usual two months' summer vacation of glassworkers at Glassboro which by long continued custom begins with the close of the blast June 30th, find the large army of workmen in fairly good circumstances, having had a prosperous season of steady employment. The only exceptions are the workmen at Minatola and some in Bridgeton whe e strikes to unionize the George Jonas, and the Moore-Jonas plants have been going on for several weeks.

July.

Bridgeton—

Cox & Son's Company of Bridgeton, machinists and boilermakers, are about to build a large extension to their plant. It will cost $20,000.

A temporary injunction has been issued by Vice Chancellor Gray restraining members of the Glass Bottle Blowers' Association of the United States and Canada, from congregating near the company's plant, or interfering in any way with employes of the George Jonas Glass Company.

The American Grass Product Company has leased the old Cohansey Glass Plant at Bridgeton, and contracted for four thousand tons of salt hay at $5 a ton to be delivered at its works. The hay will be baled up at the Cohansey Works and shipped to the company's factory in

Brooklyn, N. Y., where it will be worked into floor matting, twine, and bed mattresses.

August.

Minatola—

The George Jonas Glass Company has started its plant at Minatola and is operating nearly full with non-union men.

George Jonas, the Minatola glass manufacturer, and D. C. Applegate, his manager, were held by Justice of the Peace Aspinwall on a charge of intercepting telegrams addressed to officers of the Glass Bottle Blowers' Association.

Alfred DeMair, Italian interpreter for the glass workers' union at Minatola, and Louis Adams, a striker, were arrested for disorderly conduct.

September.

Bridgeton—

Ground has been purchased by Bridgeton capitalists on which buildings for pressed glass ware factory will be erected. Work will begin at once. The principal product will be insulators for electrical work.

The large mills of the Eastlake Woolen Company at Bridgeton were totally destroyed by fire. The industry, which employed one hundred and fifty persons was one of the most important in the city. It is said to be the intention of the managers to rebuild the works on the old site.

Thomas N. Simmerman, a laborer, was severely bruised and internally injured by the falling of a pole he was helping to erect at Bridgeton.

ESSEX COUNTY.

February.

Newark—

A conference was held between the Master Plumbers' Association and the Journeymen Plumbers' Union for the purpose of arranging satisfastory working conditions for the year. The Master Plumbers insisted on a reasonable notice of an intention to strike, so that they might have an opportunity to get their material to a secure place before the cessation of work. This proposition, the journeymen refused to agree to, and the Master Plumbers therefore announced that shops would be closed until the workmen came to terms on this point.

The Linemen's Union decided on a general strike for $3 per day.

Owing to the good prospects of a busy season, the building trades

generally have formulated new demands on employers for increased wages.

Plans for several new factory buildings were filed with the Building Inspector during the month; there were also many plans submitted for enlargements and improvements of old plants.

The Commercial Construction Company and the Burn & Ingraham Company were incorporated in Essex County to establish construction plants in Newark.

The condition of the Journeymen Bakers of Newark was up for discussion in the Essex Trades Council. A delegate explained their not being represented by stating that these workmen were employed in the bakeries eighteen hours per day and could find no time to attend meetings.

The Trades Council requested the Electrical Workers' Union of Newark to waive their claim to jurisdiction over Elizabeth, and allow the formation of a local union there.

The Boot and Shoe Workers' Union of Newark which had been dropped by the Trades Council, requested to be reinstated.

A fire occured at the Trunk & Bag Factory of R. Neuman & Co., Newark. About 200 persons will be temporarilly idle. The loss was about $75,000.

March.

Newark—

report 20

A serious disagreement has arisen between the master plumbers of Newark and their journeymen regarding the terms under which work shall be done for the season. Wages and hours are not in question. The masters insist on sufficient notice being given them by the journeymen, of an intention to strike on sympathetic or other grounds, to permit the removal of their material to a place of safety before work ceases. This the men refused to agree to, and a lockout followed. The helpers and apprentices generally, followed the men. The trouble was still unsettled at the end of the month.

A local union of the International Brotherhood of Electrical Workers of Newark has issued an appeal to the public in behalf of the striking linemen, who demand $3 for an eight hour day.

The employes of the retail butcher shops of Newark have started a movement to force the closing of business on Sunday. An association numbering 300 men was organized to keep up the agitation. It is claimed that more than one half the number of butcher shops in the city are kept open until noon on Sunday.

The Newark Dash Company was incorporated at Newark. The new company will open a factory and manufacture dash boards and fenders. for carriages. Capital $100,000.

The Storm Manufacturing Company, who will make elevators and dumb waiters, was incorporated in Newark. Capital $75,000.

Newark capitalists have purchased the plant at Binghampton, N.

Y, of the Deposit Iron Company and will remove it to Newark. About 200 hands will be employed.

A plant to make ice by the plate system has been established in Newark by local capitalists.

V. J. Hedden and Sons of Newark, have organized as a corporation with a capital of $500,000,

The North Jersey Street Railway Company has built a new power plant at Newark.

The Uniform Steel Casting Company has decided to remove its plant from Newark to Rahway.

Burnett Daley and Frederick Stahl, painters, were seriously injured by falling from a scaffold in Newark.

James Durker, a mason, was severely injured by a brick wall falling upon him while at work.

An explosion of naptha at the leather factory of Blanchard Bros. & Lane, Newark, severely injured William Freeman and Frederick Thum, both workmen employed in the place.

John Cousins, a workman, was badly injured in the Grant & Williams Scrap Iron Foundry, by the falling of a large iron frame.

The varnish factory of Albert C. Courter, Newark, was damaged by fire. Loss $2,500.

The large factory building occupied by the American Refining and Crucible Company; the Calcutta Mfg. Company, and the Crystal Lead and Chemical Company at Newark was destroyed by fire. Loss $50,000. Several hundred men have lost their employment.

Small fire which resulted in slight damage occured in the works of the Excelsior Baking Powder Company, the Newark Rivet Company, and the Central Stamping Company, all at Newark.

A new local union of the United Brotherhood of Carpenters and Joiners was organized at Newark.

The Essex County Retail Butchers have organized an association which will unite for mutual improvement with other county organizations of the trade.

The Steam Fitters of Newark have formed an association.

The master builders of Newark have formed a league for mutual assistance and protection in matters affecting their business interests.

The harness makers of Newark have formed a union of their trade.

A receiver has been appointed for the business formerly conducted by the firm of Joseph Baldwin & Company at Newark.

Edward Weston of the Weston Electrical Instrument Company has erected a fine club house with large swimming tank and restaurant for the Company's employes at the Waverly factory.

The Essex County Trades Council at its regular meeting passed a vote endorsing the Chinese Exclusion Bill which is before Congress.

Belleville—

Sixty women employed in the water bag department of the Hardiman Rubber Works at Belleville went out on strike because of a regula-

tion of the company which charged them with spoiled work. The trouble was amicably settled by the firm.

Montclair—

Strikes have broken out in the building trades at Montclair and Bloomfield in consequence of demands by the workmen for higher wages which the employers generally refused to pay. About 600 carpenters, bricklayers, lathers, and painters are idle.

The Cuyahoga Wire and Fence Company filed its incorporation papers and will build its factory in Montclair. Capital $125,000.

John Dartie and Joseph Bogie, workmen, were badly injured at Montclair by a dynamite explosion in a quarry in which they were employed.

The master masons of Montclair have formed an association which they have had incorporated.

Orange—

A federated trades council has been organized at Orange.

The Bartenders' Union has asked to be affiliated with the Federated Trades Council of Orange.

The Remington Metallic Cartridge Company was incorporated in Orange and will probably establish its plant there. Capital $250,000.

Millburn—

The Diamond Mills Paper Company, of Millburn, has been enjoined from draining its refuse into the Rahway River. The company has suspended the manufacture of colored paper in consequence of the injunction.

April.

Newark—

The strike or lockout of journeymen plumbers at Newark still continues. The schedule of wages and hours has been satisfactorily adjusted and the only point on which the master and journeymen plumbers disagree is the master's contention that due notice be given of an intention to strike. The shops are open to the men who accept this condition. Some arrests were made on account of interference by the strikers. The new wage scale gives the journeymen $3.50 for a work day of eight hours; an increase of fifty cents per day. Forty master plumbers turned in as journeymen to help one of their number complete a time contract.

The members of the Newark branch of the International Marble and Slate Workers Union asked their employers for an increase of wages from $3 to $3.50 per day. Several of the employers conceded the advance at once, and the others yielded later.

22

The Longshoremen's Union demanded sixty cents per hour for loading lumber, which was refused. The men went out on strike.

The walking delegate of the plumbers was arrested on charges growing out of the strike of that trade at Newark.

Three employes of the Empire Steel Works were arrested and fined for assaulting fellow workmen who refused to go on strike.

The following new manufacturing concerns have been incorporated at Newark and will carry on business operations there:

The Eagle Baking Company. Capital stock $100,000.

W. J. Lynch & Company, to do a printing business. Capital stock $10,000.

Premo-Hall Manufacturing Company, to make metal and wood novelties. Capital stock $10,000.

Playola Manufacturing Company to make musical instruments. Capital stock $125,000.

Standard Metal Manufacturing Company. Capital stock $100,000.

The Ammonia Cyanide Company to manufacture alkalies and chemicals. Capital stock $500,000.

The partnership of Schwartzkopf, Weiss & Schwartzkopf, to manufacture jewelry. Capital $75,000.

The William H. Gordon Company to manufacture boots and shoes. Capital stock $250,000.

The J. C. Graft Terraplastic Manufacturing Company, to manufacture dentists articles. Capital stock $100,000.

The additions to the power house of the North Jersey Traction Company at Newark are to be 100x225 feet, with a new stack which will be 250 feet high.

The Hall Specialty and Novelty Company of Newark has gone into the hands of the receivers to be wound up.

New factories are being erected at Newark for the Frederick Schill Company, M. H. Haussking and J. Fried.

James Black, a lineman, was seriously injured by shock while at work on a pole in Newark.

George Churchwell and Robert Kent, painters, were seriously injured by the fall of a scaffold on which they were working at Newark.

Joseph B. McIlravey was stricken with paralysis while at work in the Atha & Illingworth Steel Works at Newark.

James Gleno, a workman in the Solomon tannery at Newark, was killed by falling on a revolving pully wheel.

James Blake, a lineman, was badly burned at Newark, while fixing an electric wire.

Henry Mahon, a machinist, employed by the Thatcher Furnace Company of Newark was caught in the shafting and killed.

John Higgins, a machinist, employed by the Lambert Hoisting Engine Company of Newark, was injured while working at a lathe.

The storeroom of the Wheeler & Wilson Sewing Machine Company at Newark was destroyed by fire.

The buildings of the Charles Cooper Chemical Works at Newark were damaged by fire.

The Cigar Makers' International Union of Newark have obtained a judgment for $500 against the Acme Cigar Company of Red Lyon, Pa., for using counterfeit union labels.

A new union of brass workers has been formed at Newark under the auspices of the International Union.

The jewelry workers of Newark are moving toward forming a strong union of their trade.

The Allied Printing Trades' Council have elected officers for the ensuing twelve months.

The retail butchers employes are making strenuous efforts to close the butcher shops on Sunday.

Reports from the various trades to the Essex Trades' Council, show an unprecedented activity in all occupations for organization.

The carpenters employed by the North Jersey Street Railway Company asked for and received an advance of twenty-five cents a day in their wages.

During the month of April, the following named manufacturers of Newark were removed by death—Isaac Champenois, for fifty years a manufacturer of jewelry; Joseph Hensler, brewer; Owen McCabe, boiler maker; Joseph Grover Ward, senior member of the jewelry firm of Durand & Co.

Montclair and Bloomfield—

The strikes of the various building trades of Montclair and of Bloomfield for a new wage schedule has been settled through concessions made by both sides; the men secure an advance of wages to go into effect May first.

The plumbers of Montclair and Bloomfield are on strike for substantially the same reasons as the Newark plumbers, refusal to give reasonable notice of an intention to strike.

The carpenter shop of E. F. Dodd at Montclair was destroyed by fire. Loss $2,500.

Orange—

The delegates of the Amalgamated Society of Wood Workers were expelled from the Building Trades' Council of Orange because members of that society had gone to work on jobs on which strikes were pending.

The stationary engineers of Orange have organized a union.

The Federated Trades' Council of Orange has elected officers, and the organization is now fairly under way.

Delegates of the Orange Musical Union have been admitted to the Federated Trades Council.

The horseshoers of the Oranges have organized a union.

The retail butchers employes of Orange have organized a union for the same purpose as the Newark men—to secure the closing of shops on Sunday.

Millburn—

The Diamond Paper Manufacturing Company of Millburn has taken an appeal from the decision of the Vice-Chancellor restraining it from emptying refuse into the Rahway River.

Watchung—

The idle factory building at Watchung has been rented by Henry Texier for a knitting mill.

Arlington—

Raphael Caparello, a workman, was injured internally through an accident at the plant of the Arlington Manufacturing Company.

May.

Newark—

The New Jersey Brewers' Association and representatives of five unions of brewery employes have reached an agreement whereby certain classes of workmen will receive a permanent increase of wages. Firemen who work twelve hours a day to be paid $19 per week; those whose working day is eight hours will receive $16 a week, one dollar more than their present rate of pay. The case of the engineers and coopers is still under consideration; the engineers are paid from $18 to $21 a week. It is said that they desire uniform rate of $21. The coopers who now receive $3 a day have no fault to find with their wages, but want their working time for the week cut down one hour, with a half holiday on Saturday. The New Jersey Brewers' Association is made up of firms in Newark, Paterson and Elizabeth, but does not embrace all the brewing concerns in those cities.

Journeymen plumbers of Newark, who have been on strike since the latter part of March have come to an agreement with the bosses which secures to the men practically all that was contended for. The agreement provides that the standard wages for all journeymen plumbers and gas fitters shall be $3.50 a day of eight hours. Apprenticeships are to be for five years and no more than two apprentices are allowed for every two journeymen. No other than journeymen plumbers and apprentices who have served three years are to be allowed to do plumbing. The agreement runs to April first, 1904.

The stone cutters of Newark are to be paid weekly hereafter, instead of every two weeks as was the custom. A majority of the stone cutters are getting $4.50 a day for eight hours' work, but there are a number who receive $5 for the same time.

About forty-five men signed the roll of a new organization to be known as the Tar, Felt and Waterproof Workers' Union of Newark. The meeting was held in McGuire's Hall at Newark and Warren streets

and presided over by the secretary of the National Building Trades' Council of America.

Louis Kuskey, 20 years old, while at work in the factory of Peter Lowentrant, Newark, was caught in the fly wheel of the main machinery and received injuries from which he may die. The young man was walking by the wheel when his apron was drawn into it by the current of air caused by the rapid revolutions.

John Fischer, 20 years old, was badly injured at the Balbach Smelting Works, Newark, by a heavy iron plate falling on his leg.

Royal Gibson, a painter, while at work on a building at Broad and Chestnut streets, Newark, fell to the ground, a distance of about twenty-five feet and received injuries which may prove fatal. The accident was caused by the breaking of a scaffold.

A barrel of quicklime which had been watered, exploded, and severely burned Peter McCormick, a carpenter of Newark.

Chancellor Magie has appointed Algeron T. Sweeney, receiver of the American Gear and Vehicle Company, Newark. The application was made by counsel for the President of the Company and was unopposed. The company was organized under the New Jersey Laws of 1900; it has a capital of $350,000, which was subsequently increased to $600,000. The assets are represented to be $32,000, of which $24,000 consists of real estate encumbered with a mortgage of $14,000 and the liabilities $15,000.

Richard C. Jackson was appointed by the Chancellor receiver for the Rubel Paper and Lithograph Company of Nutley. The receiver is to carry on the business until orders on the books of the company amounting to about $6,000 are filled.

The Longstreet, Morton & Mitchell Cracker Baking Company of Newark, was placed under the control of Henry S. Terhune of Long Branch as receiver. The petitioner was a member of the firm who alleged that the concern was insolvent.

The Patton Sun Proof Paint Company has secured land fronting on the Passaic River, on which it is proposed to erect a large factory to supply the eastern market with their product.

The Lustral Leather Company filed articles of incorporation at the County Clerk's office, Newark. The capital is placed at $50,000.

The Essex Gas Stove Company of Newark was incorporated with $50,000 capital.

Bloomfield—

The strike of the journeymen plumbers of Bloomfield and Montclair has been settled and the men have returned to work. The workmen agree to not go on a sympathetic strike, or to quit work for any reason, without first notifying the bosses in person, so that an opportunity may be given to arrange matters and protect material that may be on the job. The bosses conceded a minimum wage rate of $3 per day, which formerly was the maximum.

Montclair—

Nineteen employing plumbers of Bloomfield, Montclair and Caldwell formed a new organization to be known as the Independent Practical Boss Plumbers Association.

Orange—

The bosses considered the demand of the Sheet Metal Workers' Union of Orange for a minumum wage rate of $3 per day, and have decided to give not more than $2.50. Both sides are desirous of settling the matter without any trouble.

A large local branch of the International Union of Stationary and Steam Engineers was organized at Orange.

June.

Newark—

The Essex Trades' Council of Newark gave notice that unless certain demands made for an increase of wages were complied with, the cigarmakers would begin a strike.

A number of men employed in the Roover Nameplate Stamping Machine Works of Newark quit work because of aleged ill usage by a newly appointed foreman.

The Meritt, Johnson & Hannock Company, Newark, was organized to manufacture hats. Capital $100,000.

The Bimbler-Van Wagenen Company is erecting a three story cold storage plant on Plane St., Newark, to cost $40,000.

The Auto-Vehicle Company filed its articles of incorporation in the office of the Clerk of Essex County. Capital $15,000.

George Snellen, 17 years old, fell from the third story to the cellar of a building in Newark, on which he was employed, and received injuries that are likely to prove fatal.

August Fullrood, 30 years old, who is employed by the Woodside Tanning Company as an operator on a leather shaving machine had his hand so badly lacerated by being caught in the machine, that in order to save his life, the hand had to be amputated midway between the wrist and the elbow.

An explosion said to have been caused by the action of hot air upon peculiarly composed dust, occured at the works of the Westinghouse Electrical Works at Orange and Plane Sts., Newark. No one was injured.

A convention of the State Branch of the Journeymen Bakers' Union was held at No. 28 Cross St., Newark. Delegates from all the large cities of the State were present. Much complaint was made that the Bakeshop Law of the State is not properly enforced anywhere.

Orange—

Bootblacks of Orange organized a union and received a charter from the American Federation of Labor.

The assistant engineer at Berg's Hat Factory, Orange, was killed by the explosion of a gasoline tank.

The Berg Hat Factory at Orange, which is one of the largest plants of its kind in the United States, was almost entirely destroyed by fire. Seven hundred men have temporarily lost their employment. The loss is estimated at $225,000.

Millburn—

Announcement was made that the Burt Manufacturing Company, makers of celluloid novelties at Millburn, have decided to remove their plant to Bridgeport, Connecticut. The loss of this industry is much regretted in Millburn.

Belleville—

John Bernedson, a machinist, was injured at the works of the Eck Dynamo and Motor Company, Belleville, by a falling elevator.

July.

Newark—

The strike of machinists and tool makers employed in the Roover Name-Plate Department of the Domestic Sewing Machine Company at Newark, which began June 24th, ended on July 2d, by the strikers returning to work. The cause of the strike was an obnoxious foreman, whose dismissal was demanded by the men. The company refused to comply, and the foreman remains.

About 300 members of the Newark branch of the United Garment Workers of America, who went on strike for increased wages returned to their employment after an absence of a few days, their employers having agreed to the new schedule. About 500 men are still idle.

Vice Chancellor Emery granted an order requiring Journeymen Plumbers' Union No. 24, and William E. Ryan, its business agent of Newark, to show cause why they shall not be restrained from interfering with the business of Chas. F. McGuire, a master plumber. The trouble arose from the employers refusal to discharge an apprentice at the demand of the union.

The Newark Rubber and Specialty Company filed articles of incorporation at the County Clerk's office. The capital is $100,000 and the principal office is located at No. 36 Lawrence Street, Newark.

The Patton Paint Company which has its main factories in Milwaukee has closed contracts for the erection of a large factory at the foot of Chester Avenue, Newark, to supply the eastern branch of their trade.

The F. A. Willette Lumber Company filed articles of incorporation at the County Clerk's office. The authorized capital is $100,000.

The plant of the Orange Brewing Company at Prince and Hill Streets, Newark is complete and ready for business. The erection of the brewery was begun July 1, 1901. The main building is 200x270 feet, and about 150 feet high.

The Maulbetsch & Whittemore Company organized at Newark to manufacture satchels. Capital $50,000.

The Essex Company organized at Newark to manufacture paints and varnishes, repair, electric wires, build street railways, and do other things. Capital $150,000.

A conference was held at Newark by representatives of painters' union from several cities to devise plans for a State organization of the trade.

Steps have been taken to bring about the amalgamation of Harrison, East Newark, and Kearny trade's unions with the United Building Trades Council of Essex County.

The Amalgamated Leather Workers' Union of America, an organization composed of delegates from unions of the various trades in the production of leather, held its second annual convention at Essex Hall, Newark, on July 5th. Including in the various trades represented are the light leather workers, buffers, glazers, stakers, tackers, finishers, setters, and leather handlers.

John Foley, 55 years old, fell from a scaffold while at work on a new house at South Seventh St., Newark, and received injuries that are likely to prove fatal.

Salvatore De Rosa, an Italian laborer, while at work excavating for the cellar of the new addition to the post office, Newark, was struck by a beam which fell from a rear window and instantly killed.

Abraham Keller, 30 years old, a carpenter at work on a building at Jones St., Newark, fell from the scaffold and sustained injuriers which, the physicians say, may result in death.

Andrew J. Tuttle, 41 years old, a carpenter, fell from the third story of a building on which he was employed at New York Avenue and Adam Street, Newark, and received injuries from which he may die. Several ribs were broken, and his legs and arms fractured.

William Clark, head of the Clark Thread Company, whose mills in Newark and Kearny employ more than 3,000 persons, died in England on July 6th. The body will be brought to Newark and interred in Mount Pleasant Cemetery.

Orange—

The Perforated Music Roll Company has been organized in Orange. The company will manufacture musical apparatus and devices of many kinds. Capital stock $400,000. One hundred thousand dollars preferred, and $300,000 common.

East Orange—

The Seeley, Van Dyke Company has been organized at East Orange to manufacture chemicals and pharmaceutical specialties. Capital $10,000.

August.

Newark—

The Arms Pocketbook and Leather Novelty Company filed articles of incorporation in the office of the County Clerk. The company will manufacture and sell articles of wood, leather, metal, silk, rubber, etc. The authorized capital is $75,000.

The Specialty Manufacturing Company became incorporated by filing its papers with the County Clerk. The company will manufacture metal planes, and other like articles. The authorized capital is $50,000.

The Patton Sun Proof Paint Company is having a large mill erected, which will cover 400 feet of the Passaic River front of Newark. When completed about 350 persons will be employed in the paint mill.

By a new arrangement with their employers, job printers in Newark who are members of the union, will hereafter receive $18 instead of $17 a week, and in the shops using the linotype machines, the weekly wage rate will be $19.

Vice Chancellor Stevens reserved decision on the application of Chas. F. McGuire, a master plumber, for an injunction restraining Plumbers' Local Union, No. 24, of Newark, from interfering with, or calling out workmen employed in his shop. The Vice Chancellor expressed the opinion that the questions involved, were of much importance and requested counsel for both sides to assist him by furnishing lists of precedents, quoted in their respective arguments.

Charles Benton was seriously injured in the Clark Thread Factory at Newark by being caught in the belting of a machine on which he was employed.

John Brosko, employed as a metal worker on a new building in Newark, lost his footing and fell from the roof to the street, a distance of 70 feet. He was very severely injured.

Frederick Woods, Henry Cast and Louis Meini, the latter a laborer and the others masons, were injured while working on a new building, by the falling of a scaffold.

Orange—

The members of the Orange Hatters' Union, who are enlisted in the National Guard, have been notified that they must give up their membership in the union or in military companies to which they belong, and hereafter members of the union will not be permitted to enlist. The reason for this attitude of the union toward the military is said to be that the members of the local companies wear hats which were made by a non union firm.

An assistant foreman and three journeymen employed in the factory of Eugene E. Connett & Company, have been fined $500 each by their union for the offence known as "padronism," by which is meant receiving money from men in consideration of giving them employment. The action of the local union was disapproved by the National President on the grounds that the accused men had not been given a fair trial.

September.

Newark—

An interesting fire and water test of a fire-proof concrete floor reinforced by steel, was made at the plant of the Hay Foundry and Iron Works at Newark. For four hours, the floor was exposed to a heat which averaged 1,800 degrees. A brick building 14x20 feet was erected in the yard of the foundry plant to make the test. The patented floor was the roof of the building. Ten cords of wood and shavings saturated with oil was consumed inside the structure. The floor stood the test well.

The new power house for the North Jersey Street Railway Company will be erected on the Passaic River front opposite Canal street. The building will be one story high, constructed of brick and steel, and will cost $113,000.

Vice Chancellor Emery has appointed a receiver for the American Oil Products Company of Newark. The application was made by counsel representing the Standard Oil Company. The company involved was organized in 1899 with a capital of $250,000.

The following named companies were incorporated in Newark during the month of September: The Newark Edge Tool and Iron Company, capital $100,000; will manufacture a line of edge tools.

The Newark Sanitary Reduction Company will manufacture grease fertilizers and any products incident to that business. Capital $100,000.

The Barclay Corset Company, capital $25,000.

The Barnett Equipment Company. Capital $100,000.

The Glendale Manufacturing Company, will manufacture soap. Capital $15,000.

Two hundred and fifty new members were received into Local Union, No. 2, of the International Jewelry Workers, and one hundred and eighteen applications for membership were received to be acted on at the next meeting.

The demands of the journeymen jewelers for shorter hours and other changes were considered at a conference of the principal manufacturers. It was agreed that for the present no concessions should be made, but the subject should be considered later.

A clash occured between union and non-union workmen at the new building of the Newark Banking Company. Some men employed by the bank official direct were erecting the iron wire cages for the several tellers, and were ordered by the walking delegate to quit work. The foreman was notified to discharge these men and employ union men in

their places, or the union workmen on the job would be called out. The walking delegate was expelled from the building.

The Essex Trades' Council has taken a stand against indiscriminate boycotting of stores in Newark, and hereafter will not resort to that extreme measure until the arbitration board of the council has exhausted all pacific means of settlement.

The Amalgamated Society of Carpenters is about to organize three new branches; one at Newark, and the other two in Paterson and Montclair respectively. The Montclair local will start with a membership of one hundred and three.

There are now nineteen local unions under the control of the Essex Trades' Council; the latest one to come in being No. 151 of the journeymen horseshoers.

Amalgamated Meat Cutters' Union No. 210 of Newark, has adopted a form of contract which provides for eleven hours work on all days except Saturday. Saturday the day's work will be sixteen hours; Sunday there is to be no work. The boss butchers will have to sign the contract to get the union display card, which will show it to be a union shop.

The contractors in charge of the D. L. & W. elevation in Newark hired some non-union hod carriers, and the union hod carriers, bricklayers, carpenters, and stone masons quit work. The non-union men were discharged, and work was resumed.

The plant of the American Lock Washer Company at Newark was completely destroyed by fire. Loss estimated at $50,000.

A small fire occured in the Peter Lynch Tannery at Newark; the damage was slight.

The contract for the new Court House has been awarded by the Essex County Commission. The amount of the contract is $952,366.

The following named workmen were injured while pursuing their several employments in the city of Newark: James Angelo, an Italian laborer, employed on the Pennsylvania Railroad track elevation, had his right ankle broken while shifting a derrick.

Frank Mosher was severely injured by the collapse of a building on which he was at work.

James Perroti was severely burned while at work in the Newark Licorice Works.

James Joyce, 48 years old, a workman on the Pennsylvania Railroad track elevation was struck by a train and had his left leg and arm fractured.

Arthur J. Hogan, a lineman employed by the New York and New Jersey Telephone Company, was so badly burned by a current of electricity that he is likely to die from its effects. William Maxwell, an employe of the same company fell from a pole and received painful injuries.

Orange—

The members of Local No. 17, United Hatters of North Amer-

ica, at a meeting in Orange, attended by eight hundred members, exonerated five of its members who were charged with a practice known in the trade as "padronism" which is exacting money from workmen in the shops.

The Perforated Music Roll Company of Orange, which manufactures music rolls for the pianola and other automatic musical devices is refitting and increasing the capacity of its plant. The work will be finished in about two months, and one hundred additional persons will be employed.

Millburn—

A number of painters employed on work in Millburn struck because employer refused them the eight hour day.

Short Hills—

Carpenters employed on some work at Short Hills struck because of the employment of two non-union men. The strikers who were being paid twenty-five cents a day above the union rate, were discharged.

GLOUCESTER COUNTY.

February.

Gloucester City—

Robert Madera, a machinist, was severely burned in the face while at work in the Wellsbach Light Works.

John O. Hines was caught in belting and seriously hurt at the works of the Gloucester Manufacturing Company, where he was employed.

Burnwood Wilkinson had two fingers cut off while at work in a box factory.

May.

Mullica Hill—

George Lane, a painter, while at work at Mullica Hill, fell from a swinging scaffold and injured his back.

Swedesboro—

The frame work for a new glass factory at Swedesboro is raised. The new structure is to replace one destroyed some months ago and will be much larger.

June.

Hammonton.

Fifteen smoothers and polishers employed in the cut glass factory of William Skinner & Son, Hammonton, struck because of the firm having dispensed with the help known in the trade as "acid boys." The men claimed that the change greatly hampered them in their work.

Delanco—

The Franklin Button Company was organized at Delanco with an authorized capital of $25,000.

August.

Glassboro—

Samuel Nicholson, a carpenter of Glassboro, was severely injured while working on a building, by several pieces of lumber falling upon him.

September.

Clayton—

The Clayton Board of Trade is trying to interest capitalists with a view to locating a factory there for the manufacture of overalls.

HUDSON COUNTY.

February.

Jersey City—

The union painters of Jersey City have requested the Board of Public Wofks to cease employing laborers to do painting and to pay the union wage rate to regular journeymen. Both requests were granted by the Board.

Two hundred and fifty men employed by the Griffin Iron Company at Jersey City refused to work on Washington's Birthday, but resumed their regular duties next day.

The Central Labor Union of Hudson County is preparing to start a Labor Employment Bureau.

Patrick Simon, aged 32 years, was crushed by the elevator at the Automobile Works at Jersey City.

William Collins, a lineman, was killed by a fall from a pole in Jersey City.

Bayonne—

An immense lumber mill and yard will shortly be started at Bayonne by E. A. Quimby of Newark.

Plans have been filed for extensive additions to several manufacturing plants at Bayonne.

Arlington—

The plant of the Arlington Mfg. Company was badly damaged by fire. One hundred and fifty persons, mostly girls, are temporarily out of work. The loss is about $10,000.

Harrison—

George Gennix, age 16 years, had his hand crushed by machinery in the J. K. Osborne Mfg. Company's works at Harrison.

Patrick Connell, aged 30 years, was badly burned by molten metal at the Benjamin Atha Steel Works at Harrison.

March.

Jersey City—

Thirty-five diamond cutters and polishers employed by Adolph Becker at Jersey City struck for an increase in wages. They had been cutting and polishing diamonds for from $1.80 to $2 per caret, and wanted an increase in these rates of twenty cents. A friendly talk between the workmen and their employer resulted in the strike being declared off. 26

Three union bridge builders who took part in an attack on non-union workmen who had taken the places of strikers on a structure in course of erection at the Greenville district, were arrested and fined $5 each for disorderly conduct.

The non-union workmen who had taken the places of the strikers on the Greenville P. R. R. bridge, struck for an increase of wages, explaining in justification of their action that they were obliged to keep up a continuous fight with the union men, as well as perform the work they were engaged for on the bridge. These men were engaged to work ten hours per day for $2.50. They demanded $3 per day for eight hours' work. 27

The American Phoenix Company has been organized in Jersey City to manufacture an instrument called the Am-O-Phone. Capital $10,000.

The Medicura Soap Company filed articles of incorporation at Jersey City. The company will manufacture a medicated toilet soap. Authorized capital $1,000,000, divided into 10,000 shares of a par value of $100 each.

The Sheet Metal Workers of Hudson County have adopted a new wage schedule to take effect May 1st. The wages fixed on is $3 50 per day instead of $3, the present rate, and a half holiday on Saturdays during the summer months, will be demanded.

The Barnes Manufacturing Company has given notice that hereafter all the workmen in its employ will be given annually, a share of the profits.

Goetz Bros., cigar and tobacco manufacturers, have sued the Goldman Tobacco Company of Reading, Pa., for infringement of label on their goods.

The wage rates and hours of labor of the different unions allied with the United Building Trades' Council of Hudson County, all to become operatives either in April or May, are as follows: Carpenters, 3.28 a day, with half-holiday; plumbers, $3.50 a day; plasterers will continue their present wage rate of $4 a day with half holiday; mason's laborers, $2.75 a day for attending masons; and $3 a day from lumpers of plastering jobs; the metal and sheet iron workers will continue their present rate of $3 a day, and only ask a half holiday during the summer months; the tar, felt and waterproof roofers, $3 a day for skilled labor, and $2.75 for helpers; lathers, $2.25 a thousand laths at piece work, and $4 a day for time work; painters, $3 a day; stone masons, $3.50, and electrical workers, $3.50 a day with a slight increase for certain lines of work.

Hoboken—

An appeal was made by the Grocery Clerks' Union of Hoboken to the United Building Trades' Council of Hudson County for help in their efforts to secure the closing of grocery stores at 7 P. M. The Council promised its assistance.

The machine shops of Frederick A. Verdon and the J. & I. McCarthy dry docks have been moved from Hoboken to Staten Island. It is said that the boiler and machine shops of the W. & A. Fletcher Company at Hoboken will soon follow.

West Hoboken—

The long-standing disagreement between the Hudson County Building Trades' Council and the Consumers' Brewing Company has been settled, and an amicable adjustment of all outstanding differences reached to the satisfaction of both parties. The original trouble was the employment of non-union labor by the brewing company when erecting its plant.

Bayonne—

The J. M. Guffey Petroleum Company, a Texas corporation, has purchased a twenty-five acre plot in Bayonne, on which it is said a large oil refinery wil be erected.

New machinery is being rapidly put in position at the large silk mill in Bayonne; when all is ready, the works will be started with a force of from 200 to 300 employes.

The Oxford Copper Company of Bayonne has assumed the management of the Canadian Copper Company's business at Sudbury, Canada.

Harrison—

The drivers of the Fairle & Wilson Coal Company of Harrison went out on strike against a change in the system of paying wages which they believed would reduce their pay. The strike lasted less than a day, the company agreeing to continue the established wage rates.

Thomas Field, twenty-nine years old, an employe of the Atha Steel Works at Harrison was severely injured by being struck by a steam hammer.

The dress suit case makers employed at the Headley-Farmer Company's factory at Harrison, struck against a reduction in wages. The men had been averaging $12 a week. No settlement was effected, and the strikers were discharged.

Two stores houses of the Atha Steel Works at Harrison were destroyed by fire. Loss about $20,000.

The Central Labor Union demanded the union label should be placed on all printing and merchandize purchased by county authorities of Hudson county. A committee of the union was appointed to wait upon the Freeholders to ask that this be done, and that all public printing be done in the county.

April.

Jersey City—

The machinists and benchmen employed in the twelve moulding and saw mills of Hudson County have gone on strike for an increase of wages. The men asked for a uniform wage rate of $2.50 for an eight hour day. The points at issue were settled at several conferences between the employers and workmen.

The journeymen plumbers of Jersey City have adopted an amended schedule of wages to go into effect June first. The changes provide that juniors handling tools shall be paid $2 per day; that traveling expenses one mile or more be allowed where men must report at the shop, and that there be no work on Saturday afternoon unless absolutely necessary.

The C. K. Manufacturing Company filed articles of incorporation at Jersey City. The company will make electric motors. Capital invested $50,000.

The Earnshaw Manufacturing Company was incorporated at Jersey City; steam generators will be manufactured. Capital, $100,000.

The Union Railway Power and Electric Company was incorporated at Jersey City. Capital stock 100,000.

The Speed and Stop Indicator Manufacturing Company was incorporated at Jersey City, and will build a large plant there. Capital stock, $225,000.

The Kent Machine Company was incorporated at Jersey City. The company will build general machinery. Authorized capital, $200,000.

The Thomas F. Smith Company was incorporated at Jersey City, where it will carry on a boat building business. Capital invested $10,000.

The J. K. Tomlinson Manufacturing Company was incorporated at Jersey City. Capital invested, $40,000. The company will make feed water heaters, and the factory will be in Jersey City.

The Dixon Crucible Company is erecting two new factory buildings as an addition to its large works in Jersey City. The new structures will cost upwards of $35,000.

The suit for $25,000 damages by Joseph Ferrigan against the Fagan Iron Works at Jersey City, for injuries which he received while at work in the factory, resulted in a verdict for $125.

The barbers of Jersey City are meeting in a movement to bring all workmen at the trade, into one union.

The Building Material Drivers of Jersey City have organized a union which will be under the control of the Hudson County Trades Council.

The Hudson County Building Trades Council reports that it has received assurance that its schedule of increased wages and reduced hours has met with a favorable reception from the employers.

Bayonne—

The wage scale which the Allied Building Trades Council of Hudson County adopted in March which was to become operative in all parts of the country in April or May, caused several strikes in Bayonne where the employers generally refused to recognize it. The trouble, however, was settled without much time being lost, both sides making some concessions.

A six story building of the Pacific Coast Borax Company at Bayonne was destroyed by fire. Estimated loss, $150, 000.

Harrison—

The Fritz & Wiedman Brewing Company filed its incorporation papers with the County Clerk of Hudson. The capital is $30,000, and the plant will be erected at Harrison.

Albert Robbins, a painter, was seriously injured by falling from a scaffold at Harrison.

Edward Hilbert had his right hand badly crushed while working at a splitting machine in the Headley & Farmer Factory at Harrison.

Arlington—

Ernest Zeim, employed as a plumber in Arlington, was badly burned while melting resin.

Bernard Bannon had three ribs broken by a fall from a scaffold while working on a large chimney that was being built for the Celluloid Works at Arlington.

Hoboken—

Pietro Savano, employed in the Clinton Point Stone Works at Hoboken, was killed by a blast.

Kearny—

Michael Delaney, employed in building a new slaughter house for Swift & Company at Kearny, fell from a scaffold and broke his neck. He died in the hospital.

Shadyside—

The General Chemical Works at Shadyside were partly destroyed by fire. The loss was from $200,000 to $300,000. About 500 workmen are without employment.

May.

Jersey City—

A number of machinists and three helpers went on strike at the American Cigar Company's factory, Washington and First Streets, Jersey City. The demand was for sixty hours pay and fifty-five and a half hours work per week, which was refused by the company. 31

The machinists and benchmen employed in the moulding and saw mills of Jersey City, West Hoboken, Bayonne and Homestead have begun a strike for an eight hour day and a wage of $2.50 per day. Nearly 2,000 men are said to be out. The great activity in building has made business very good in these factories. 32

About 200 men, members of the Amalgamated Sheet Workers of Jersey City, inaugurated a strike for an increase of wages from $3 to $3.50 a day. A majority of the employers whose men had taken part in the movement conceded the demands and in most instances little or no time was lost. 33

A number of men employed by the Hudson County Gas Company, Jersey City, struck because their foreman had been removed to another station. 34

The Hoboken District Council of Painters announced that every boss painter in the county has agreed to the new schedule of wages.

A movement has been started in Hudson County by employers in the various branches of building trades looking to the formation of an organization on the lines of the Building Trades Council for mutual protection in case of strikes. The master carpenters and plumbers have taken the lead and it is expected that the employing masons, lathers, tinsmiths, painters, and others will soon follow.

An organization of custom shoe makers was formed in Jersey City, the principal object of which is to abolish Sunday work in the trade. Ninety-two members signed the roll, and a petition was drawn up ad-

dressed to the Common Council calling for the closing of shoemakers' shops all day on Sunday.

The delegates of the United Building Trades Council adopted resotions in favor of the employment of local workmen on two public school buildings which are about to be erected in Jersey City. A record of the Council's action was sent to the Mayor and the President of the Board of Education. The reasons for the Council's interference was that New York mechanics are employed by the contractors almost exclusively.

The Standard Glue Works is the title of a new company organized at Jersey City to manufacture glue. Capital $1,000,000.

Jeremiah V. Baker met with an accident in the works of the Amercan Bridge Company at Jersey City, where he is employed, which resulted in a fracture of the arm and hip.

Fire destroyed the paint shop of the repair station of the Erie Railroad in Jersey City. About thirty passenger coaches and freight cars that were undergoing repairs were consumed.

Hoboken—

35 One hundred and forty bridge builders employed on the three new steel piers of the North German Lloyd Steamship Company at Hoboken, stopped work, demanding shorter hours and a half holiday Saturday. Before stopping work, a demand for these concessions was made and refused.

36 Two hundred wagon helpers employed by the United States Express Company at Hoboken, struck in a body against the system of shifting them about in the course of their work. The strike lasted only a few hours, the company officials agreeing to abolish the practice complained of.

Job Surface, a carpenter, while at work on a building at John Street and Summit Ave., Hoboken, fell two stories to the sidewalk. One of his legs was broken.

J. W. Burgett, a carpenter, employed at Tietjen & Langs Dry Docks, Hoboken, inflicted a very dangerous wound on his foot by a misdirected blow of an adz. While awaiting the arrival of a surgeon who had been summoned by telephone, he was saved from bleeding to death by his fellow workmen who improvised bandages with their handkerchiefs, and checked the flow of blood.

West Hoboken—

The Consumers' Cigar Company of New Jersey, with a capital of $100,000 was organized at West Hoboken.

Bayonne—

The Journeymen Plumbers' Union of Bayonne submitted the following demands, which were refused by the bosses: (1) Only one ap-

prentice to each shop. (2) The journeymen to be paid all travelling expenses for work they may perform one mile or more from their shops, and the employer to pay all their expenses on work outside of Hudson County. (3) That all juniors who have been handling tools one year receive not less than $2.00 a day, and at the end of another year receive the standard rate of wages, which is three dollars a day.

The Standard Oil Company has purchased a large tract of land with a view to extending their plant at Constable Hook. The work will be increased about one-third, and a large additional force of men will be employed.

The J. M. Griffin Petroleum Company made application to the State Board of Riparian Commissioners for a grant of 600 feet of land under water in the Kill von Kull, at the foot of Ingham Avenue, Bayonne. The company will build an extensive plant on the shore front.

A large silk mill employing 175 hands has been started on Avenue E, between 17th and 18th Streets, Bayonne. When all the machinery is in place, many additional hands will be employed.

Kearny—

A number of boys employed in the machine department of the Marshall Thread Mill, Kearny, went on strike to enforce their demand for a ten per cent. advance in wages. 37

Marshall & Company, linen thread and twine manufacturers of Kearny have increased the wages of their five hundred operatives. The increase ranges from 6 to 10 per cent. The class of labor that will be most benefited are the hands in the spinning and preparing departments; these are women and girls numbering about three hundred and fifty.

Frederick Slagiel, an electrician, fell from a ladder in the new slaughter house being erected for Swift and Company at Kearny, and was severely injured. Two other workmen received injuries in the same building, which resulted in death; one from the breaking of a derrick and the other through falling from a ladder.

West New York—

The Palisade Silk Company is the title of a new corporation formed to operate the property locally known as the "Silk Mill" in West New York. The capital of the new concern is $100,000.

Harrison—

The strike of the spring winders at the Hartshorn Shade Roller factory at Harrison was settled and the men returned to work after about one week's idleness. 38

June.

Union Hill—

37 All the silk mills in Union Hill, North Bergen, West New York, West Hoboken, excepting the Simon Mill in the first named place, were closed about June 18th, because the employes or a large majority of them, had quit work in sympathy with the silk dyer's helpers of Lodi and Paterson, who were on strike for an increase of wages. The mill owners closed their mills rather than incur the risk of having their works attacked by mobs of strikers as was done in Paterson. Nearly five thousand weavers and other silk mill operatives were thus thrown into idleness. There were frequent parades of large numbers of strikers, but no violence.

Five days after the mills were closed, they were reopened but in most cases with a very inadequate force. No disorder attended this move of the mill proprietors, but a very large number of the hands refused to go to work until the dyer's helpers strike in Paterson had been settled. The police of West Hoboken were called out to guard against any possible outbreak of violence, but the strikers while refusing to return to work, conducted themselves in a perfectly orderly manner while in the vicinity of the mills.

About 4 P. M. on June 19th, a large crowd of men and women headed by a drum and fife corps, marched through the streets of Union Hill, taking the direction of the Simon Mills. They were met by the Chief of Police about one block from the works and ordered to disperse. The police charged the mob, who resisted stoutly using stones and sticks but they were at length scattered by streams of water directed upon them by a body of firemen who had joined the police.

The avowed purpose of the mob was to close every mill and factory in Union Hill and West Hoboken. Guards were stationed inside and outside of the Simon Mill, to protect the working people and the property. Several of the rioters were arrested and held for the Grand Jury; they were all either Italians or Armenians.

George Jost while working on a building on Fourth Street, Union Hill, was nearly blinded and otherwise severely injured by a bag of lime which was being raised to the floor above, falling upon his head.

Jersey City—

40 The boiler makers who were at work erecting two large oil tanks at Jersey City, were called out on strike by their walking delegate. Higher pay was demanded.

Representatives of the Painters District Councils of Essex, Union, and Hudson Counties are making arrangements for the organization of a State Association of Painters, Decorators and Paper Hangers.

The members of Coopers Union No. 40 of Jersey City, struck in sympathy with members of Coopers Union No. 120 of Nashua, N. H., employed by the same firm at that place. The men returned to work after being idle about one and one-half hours.

The grocery clerks of Jersey City have an organization in process of formation. The object is to reduce the number of working hours.

The Central Labor Union of Hudson County adopted resolutions binding all members of local unions affiliated with them, to abstain from buying butcher's meats on Sunday. This action was taken to assist the Jersey City butchers in bringing about the closing of all shops on Sundays.

The following new organizations were added to the membership of the Hudson County Central Labor Union—Butcher's Union No. 209 of Jersey City; Machinist's Lodge No. 304 of Jersey City; Steam Engineers No. 119 of Hudson County; and the Steam Fitters of Jersey City.

The custom tailors of Jersey City requested the national body of the American Federation of Labor to organize a union of their craft.

The Brass Workers' Union have denounced several shops in lower Jersey City for employing non-union labor.

The long standing trouble between Operative Plasterers' Local No. 29, which is affiliated with the United Building Trades Council, and the Plasterers attached to Local No. 13, Bricklayers, Masons and Plasterers National Union was settled by the enrollment of all plasterers in the first named organization.

Jacob Jacobson, an employe of the Lederle Fat Rendering Establishment in Jersey City was burned by falling into a vat containing boiling fat. His injuries are so severe that he is not expected to recover.

Pinne, Casse & Lackey of Jersey City are about to erect a four story brick factory. The new building will cost $20,000 and will adjoin the company's present plant.

L. O. Kovan & Bro. has started work on a two story extension to their present plant at the junction of Mountain Road and Paterson Plank Road, Jersey City. The firm manufactures range boilers.

The Pacific Zinc Works at Communipaw Avenue and the Canal, Jersey City are to be closed. The zinc company having become merged with the New Jersey Copper Company, it was found advisable to discontinue the Jersey City works.

Jersey City Heights—

The large bottling plant of Heller & Company, Baldwin Avenue, Jersey City Heights was destroyed by fire. The loss was $10,000.

The Painters' District Council at their meeting at Jersey City Heights decided to petition the local health boards of Hudson County requesting the passage of an ordinance compelling the removal of all old paper and a thorough washing of walls before new paper is put on any room. The penalty for disobeying the ordinance to be from $5 to $50.

West Hoboken—

A strike of the workmen employed on two double houses at Jane

near Spring Street, West Hoboken, occurred because the contractor had employed a non-union lather.

The strike of gas fitters of the Hudson County Gas Company, West Hoboken, after having lasted two weeks was declared off. A compromise was effected by which the men received an advance of 25 cents a day.

About one thousand silk workers of North Hudson met in West Hoboken and formed an organization.

Hoboken—

The Sohmer Piano Company has begun the erection of what will be the largest factory building in Hoboken. The site is at Sixteenth Street and Willow Avenue and the building will be 75x200 feet, and five stories high.

Carteret—

Six union painters employed upon a building in Carteret went on strike because the contractor employed three non-union men.

Marion—

Some tool makers employed by the Hydro-Carbon Burner Company at Marion asked for a nine hour instead of the present ten hour day. Some trouble ensued which resulted in several of the men leaving the works.

July.

Jersey City—

A conference was held between representatives of the American Federation of Labor and the Silk Weavers of North Hudson on the proposition to organize the silk workers under the Federation. It was found that the Textile Workers' International Union claims jurisdiction over all persons engaged in the manufacture of cotton, jute, flax and silk; and that consequently, to become affiliated with the American Federation of Labor, the silk workers must first obtain a charter from the first named body.

The Organized Horseshoers of Hudson County have requested the members of all trade unions in Jersey City to urge their grocerymen, butchers, milkmen and others to have their horses shod only in shops that employ members of the Journeymen Horseshoers' International Union.

The boss barbers of Jersey City have formed an organization to work against the movement for closing the shops all day Sundays.

A new union of journeymen barbers was organized at Nortons Hall, Jersey City. The plan is to push along the movement for Sunday closing.

The United Building Trades Council of Hudson County, at a meeting held at Council Hall, Jersey City, on July 3d, voted two hundred and fifty dollars to aid the striking coal miners.

Local Union No. 630 of the Retail Clerks' International Association, Jersey City was instituted with twenty-nine members at a meeting held on July 2d. The purpose of the organization is to help toward securing the general closing of stores on Sunday.

A conference was held by representatives of the United Building Trades Council of Hudson County, and the Building Trades League of Essex for the purpose of reaching an agreement under which the working cards of members of either body will be recognized in the territory of both organizations.

John Ross, 16 years old, an employe of the Galvanizing Works at Washington and Morgan Sts., Jersey City, had his arm caught in the belt of a machine on which he was working and was painfully injured.

An oil shed belonging to and closely adjoining the buildings of the Standard Watch Factory, Jersey City, took fire and after much difficulty was extinguished without the main buildings having sustained any damage.

The Clark Construction Company was organized at Jersey City on July 10th. Capital $1,250,000.

The Berg Automobile Company was organized at Jersey City to construct automobile vehicles of all descriptions. Capital $400,000.

The Warp Twistings-in Machine Company was organized at Jersey City on July 18th. The company will manufacture machinery for textile goods. Capital $2,500,000.

Vice Chancellor Stevens has signed an order directing that the plant and property of the Automobile Company of America, located at Jersey City, be sold by the receiver of the corporation.

The American Lead Pencil Company has installed a new five hundred horse power engine in its factory at Jersey City.

Hoboken—

Cigar Makers' Union No. 8, of Hoboken, at its quarterly meeting adopted a new scale which raised the prices from fifty cents to one dollar on all grades of cigars. It was agreed that should the new scale receive the approval of the other local unions of the trade in the city, an effort would be made to put it in force.

Patrick Waters, an ironworker, employed at the Tietgen & Langs Company Dry Dock at Hoboken, lost his footing and fell upon the edge of an iron plate sustaining severe injuries.

Union Hill—

The plumbers' local union of Union Hill have sent a letter to the Board of Council requesting that all contracts for work performed by the town, be given to union workmen only.

A movement to unite brewery workmen of Hudson County in a central body was started at a meeting of representatives of the different breweries held at Labor Lyceum, Union Hill.

Secaucus—

The iron workers engaged in building a bridge across the Hackensack River at Secaucus connecting Bergen and Hudson Counties, struck because of there being a number of non-union men employed on the job with them. Work on the bridge was brought to a standstill. Several belligerent encounters occurred between the union and non-union men, and the sheriff of Hudson county sent deputies to preserve order.

North Bergen—

44 The stiking silk mill operatives held a meeting at North Bergen, and raised a fund of $2,000 among themselves for distribution among their fellow workmen who were in need.

Kearny—

Joseph Gray, 32 years old, an employe of the Nairn Linoleum Company was severely burned by an explosion of benzine, which occurred in the factory at Kearny.

August.

Jersey City—

45 Fifteen men in the employ of the J. P. Reilly Repair & Supply Company, Jersey City, struck for an advance in wages and a reduction of hours.

The strike of silk weavers of Hudson County ended in their unconditional surrender. All the mills have resumed work and are running as before. In the Poidebard Mill, a large number of new looms had been put in, so that while the strikers all returned to work, those who had been employed during the strike were retained.

A general strike of blacksmiths of Jersey City and of other towns
46 in Hudson County in conjunction with men of New York City has been declared. An increase of ten per cent. in wages is demanded for all blacksmiths now receiving over $3.50 per day; a minimum wage rate of $3.50 a day is part of the demands.

47 Forty iron workers employed on a new building being erected for the American Sugar Refining Company at Jersey City struck against the employment of non-union labor on the structure.

The press feeders of the Jersey City Printing Company struck for higher wages. A sufficient number of non-union feeders were secured in New York and Philadelphia and brought to Jersey City to take their places.

A large concern in New York which manufactures nails and staples is negotiating for two acres of ground in Jersey City on which to erect a plant. If successful, the works will be moved from New York to the new building. The firm employs 300 men and contemplates making a large increase in the number.

The large hog slaughter house of the Central Stock Yards Company of Jersey City, situated on the Hackensack River was destroyed by fire. The loss is about two hundred thousand dollars. Among other property consumed was eighteen freight cars.

A boiler weighing twenty tons while being swung into position in the mills of the Jersey City Paper Company, fell demolishing the tressels and otherwise injuring the building.

Charles Patterson, a workman engaged in hoisting lumber at the Bremen Pier, Jersey City, was killed by a large piece of timber falling upon his head and fracturing his skull.

Leo Noskaki, twenty-one years old, was severely injured while at work in the Jersey City Metal Works, by a pot of muriatic acid falling and spilling its contents on his head and shoulders.

Arrangements have been completed and agreed upon by which the Building Trades Councils of Essex and Hudson Counties are to define their respective jurisdictions over the territory of the two counties. West Hudson, consisting of Harrison, Kearny, Arlington, and East Newark, is given up to the jurisdiction of Essex; all territory east of the Hackensack River will be controlled by the Hudson County organization.

Painters' local union No. 36, of Jersey City, has established a sick fund for its members.

Green House Workers' Union No. 10,205, under the jurisdiction of the American Federation of Labor, has been organized at Jersey City. The union starts with 32 members.

About one hundred plumber's apprentices organized an auxilliary to Plumbers' Local Union No. 14 of Jersey City.

Hoboken—

The cutters of the Standard Fashion Company's pattern factory at Hoboken struck to secure a reduction in the quantity of work per week required from each. The firm conceded the point at issue and the strikers resumed work. 4/8

Lightning which struck a wire close to Lehmann's Pocket Book Factory at Ferry street and Willow avenue, Hoboken, set fire to the building. The blaze was extinguished without having done much damage.

John Edholm, a ship carpenter, while at work at Tietjen & Langs Dry Dock in Hoboken, fell through a hatchway and broke his shoulder.

West Hoboken—

Three striking silk weavers were charged before a justice of the peace, with creating a disturbance in front of the Poidebard Mill, and were found guilty and fined, one of them $25, and the others $5 each.

Joseph Jugelie of New York, a silk weaver, while on his way to work at Poidebard Mill, was attacked by some strikers and severely beaten. The police arrested three of his assailants.

Bayonne—

The people of Bayonne were greatly excited over the rumor that the Standard Oil Company was contemplating the removal of its great plant from that place to Philadelphia. The reported intention to leave Bayonne has grown out of the adverse decision rendered by the War Department on the Company's application for an extension of wharf privileges.

Bergen Point—

An automobile factory is to be erected on the Newark Bay shore of Bergen Point.

Harrison—

William Duffey was painfully burned about the arms and face by an explosion in the torpedo factory of Wolf and Company at Harrison.

Weehawkin—

John Dougherty while at work on a barge at the dry dock, Weehawkin, fell into the hold and was severely injured.

Union Hill—

The barns and stables of Givernaud Brothers, silk mill owners at Union Hill, were seriously damaged by a fire, which it was suspected, had been started by the striking weavers who had refused to go back to work with the others when the strike closed.

September.

Jersey City—

The New York Standard Watch Company whose factory is in the Lafayette district of Jersey City has purchased more land adjoining its works for the purpose of increasing its facilities.

The Daimler Manufacturing Company now located at Astoria, L. I., are negotiating for the purchase of plot of land in Jersey City, on which to erect a new plant. If successful, the Astoria establishment will be moved there. The company makes automobiles.

A force of fifty men will soon be at work constructing a new dry dock at the foot of Warren street, Jersey City.

The A. B. See Elevator Company has contracted for the erection of an extensive plant in the Lafayette district of Jersey City. The buildings which will be of brick will cost about $70,000. A spur of the Lehigh Valley Railroad will run to the works.

An order has been signed by Vice Chancellor Emery directing the receiver of the Automobile Company of America to convey to R. D. Currier of New York all the machinery, buildings and equipment in accordance with the terms of the recent public sale of the property held at Jersey City. The plant is located in the Marion district of Jersey City, and formerly employed two hundred men.

The south wall of the chair factory of J. Partridge & Sons in the Lafayette section of Jersey City, fell to the ground. Several employes narrowly escaped with their lives.

George Francis, an employe of the New Jersey Car Spring and Rubber Company at Jersey City, while at work had a foot badly crushed by a heavy weight falling on it.

The Jersey City Printing Company which has been contending against a strike of the union feeders for several weeks, has instituted proceedings in the Court of Chancery to prevent the strikers from posting pickets and preventing others from taking their places.

An organization to be known as the Team Drivers' Union has been started in Jersey City. Fifteen members signed the roll. It is expected that in one week the membership will grow to seventy-five.

The Hudson Council and the Essex League of Building Trades Journeymen have agreed to recognize each others membership cards and permit the members of either body to work in both jurisdictions.

Metal Workers' Union No. 62, and the Piano Workers' Union, both of Jersey City, have connected themselves with the Central Labor Union.

The International Rubber Company was incorporated at Jersey City. Capital $100,000. The company will establish a large plant on Provost Street, Jersey City.

Hoboken—

The members of Piano Makers' Union of Hudson County have secured a nine hour day and an increase in wages of ten per cent.

The papermakers employed in the various mills of Hoboken have organized and received a charter from the National Union of the trade.

Hans Ansen, while at work in the ship yard of Joseph Pohlens at Hoboken, cut a deep and dangerous gash in his foot with a broad axe.

Isaac Grossman, a painter, fell from a scaffold on the third story of a house on which he was working in Hoboken.

J. Forbes & Company, manufacturers of fine machinery, are contemplating making a large addition to their works at Hoboken. The firm finds itself unable with its present facilities to handle all the business that comes to it.

F. A. Verdon has moved his machine works from Hoboken to Staten Island.

Hoboken members of the International Blacksmiths' Union on strike for nearly three weeks, have decided to arbitrate their difficulties with the employers. The men want an increase of ten per cent. in wages.

Bayonne—

The pilots and engineers of the Port Richmond and Bergen Point Ferry have asked for an increase of wages, which was refused by the company.

Henry Schwinger, an employe of the Tidewater Oil Company at Bayonne, had his right eye burned through getting some acid in it.

Michael Lynch, an employe of the Babcock & Wilcox Boiler Company at Bayonne, had the index finger of his right hand cut off by the cog wheels of a drill press on which he was working.

Kearny—

Thomas Elliot, a workman employed at the fat rendering plant of the Newark Beef Company was very seriously scalded by the boiling over of a large vat of tallow.

Union Hill—

David McKenzie was dangerously hurt by a falling derrick about which he was working.

Harrison—

The Marine Engine and Machine Company of Harrison has filed a certificate with the secretary of state increasing its capital from $500,000 to $2,000,000.

HUNTERDON COUNTY.

February.

Clinton—

The shirt factory at Clinton recently passed into the control of new managers. Work has been resumed there after a long suspension. About eighty persons are employed.

Lambertville—

James Britton had his skull fractured while working at machinery in the Spoke Manufacturing Company's plant at Lambertville. Sidney Winn had a finger severed from his hand in the same establishment.

March.

Lambertville—

49 The turners at the Lambertville Spoke Works struck for an increase of wages. They had been earning from $7 to $8.50 per week. An agreement was reached without the loss of much time.

Ground has been broken at Lambertville for a hairpin factory which will employ 100 persons.

Frank Bice had a hand mutilated by a circular saw while at work in the Lambertville Spoke Works.

Changewater.

The new woolen mill at Changewater owned by A. F. Skerry started operations with sixty employes.

Bloomsbury—

The Convertible Car Company of New York are to establish a large plant at Bloomsbury. Citizens of the place have subscribed for $10,000 of the company's $250,000 capital stock.

Hampden—

The Hampden Shoddy Mills were destroyed by fire. About thirty persons were employed. The loss is $4,000.

Pleasantville—

The Fiefield Brothers Fertilization plant at Pleasantville, employing fifty persons, was destroyed by fire. $50,000 loss.

May.

Flemington—

The Flemington Improvement Company was organized to locate manufacturing establishments in that place. The capital of the company is $25,000.

Charles L. Dean, an employe of the Mallory Manufacturing Company of Flemington, had his hand badly lacerated while operating an emery wheel.

Bloomsbury—

The Convertable Car Company of New York has begun the erection of a large plant in Bloomsbury. The principal building will be 110x600 feet in dimensions. The Lehigh Valley Railroad and the Central Railroad of New Jersey will lay tracks to the plants.

Lebanon—

The Soverign Foundry and Manufacturing Company was organized at Lebanon. Capital $125,000.

June.

Lambertville—

The work of installing the machinery for the manufacture of wire novelties in the large mill recently erected in Lambertville is now being pushed with all possible speed.

A scaffold upon which Cornelius A. Horne, a tinsmith, and Jonathan Naylor, a slater, both of Lambertville, were working fell, and both men dropped a distance of twenty feet to the street and received painful injuries.

Flemington—

Ground will be broken in a short time for a new cut glass factory near the station of the Lehigh Valley Railroad in Flemington. The starting of the industry here has been brought about by the efforts of the Board of Trade.

High Bridge—

Forty union molders employed at High Bridge quit work because one of their number had been discharged for insubordination.

July.

High Bridge—

Alexander Sturgeon, a workman at the Taylor Iron & Steel Plant at High Bridge, had two toes severed from his foot by a piece of steel which flew from a drop hammer.

August.

Lambertville—

There is a strong sentiment in Lambertville favorable to the public ownership of the electric lighting plant which at present supplies the town. The plant can be bought for $40,000.

Flemington—

The Empire Cut Glass Company of New York has decided to increase the size of its factory at Flemington, which is now being erected, making it much larger than originally planned.

September.

Lambertville—

The girls employed in the Hairpin Factory which has recently gone into operation here, are dissatisfied with the wages paid, and have gone on strike.

Flemington—

The Empire Cut Glass Company are erecting an addition of 25x50 feet to their factory at Flemington.

A large addition has been built to the Wolf Milling plant at Flemington.

Bloomsbury—

The work of erecting buildings for the Convertible Car Company is steadily progressing at Bloomsbury.

Glen Gardner—

A large factory is to be established at Glen Gardner by a Philadelphia firm, for the manufacture of a patented milk separator.

The Hunterdon Electric Light and Power Company has been organized at Glen Gardner to furnish light for the town.

MERCER COUNTY.

February.

Trenton—

The members of the Trenton unions of Bricklayers and Plasterers demanded of their employers an eight hour day at fifty cents per hour, and a Saturday half holiday.

The Strauss Yarn Mill was installed in the building in Trenton formerly occupied by Rothschilds Shirt Factory. The new venture begins with thirty employes. The force will soon be very largely increased. The machinery is mostly of English make. The plant will not be in full operation before June.

Rothschilds new shirt factory on State street, Trenton, started with about forty employes. The machines are driven by electric motors.

The Fitzgibbon & Crisp Carriage & Wagon Company of Trenton has been absorbed by a combination of carriage manufacturers, which includes about a dozen firms. The old name will be retained. The capital stock of the local company is $125,000. The establishment is the largest of its kind in the state.

The Trenton Lamp Works has been sold to Fonderville & Vanderstein for $60,000. The sale was confirmed by the Courts.

A fire which caused a short suspension of work occurred at the plant of the Trenton Oilcloth and Linoleum Company. Loss about $2,000.

March.

Trenton—

The pottery unions are preparing to demand increased wages. Present contracts expire in June.

The employes of the Trenton Malleable Company asked for an increase of wages on certain lines of work; their request was granted. One hundred and twenty men were benefited.

The Coachmen's Union of Trenton is endeavoring to stop Sunday funerals.

The union painters of Trenton have asked for and secured a new wage schedule of $2.50 a day, which goes into effect April first.

The union paper hangers of Trenton have submitted a request to their employers for $3.25 per day of nine hours, to go into effect April first.

The bricklayers and plasterers of Trenton have made a demand on their employers for fifty cents an hour and an eight hour day with a Saturday half holiday. The carpenters also asked for increased wages and a decrease of hours.

Builders say that the demands of the journeymen if granted, would increase the cost of building almost 14 per cent.

The Providential Tile Works Company of Trenton have changed their pay day.

The following named companies were incorporated at Trenton during the month of March: The Enterprise Cigar Company, capital $25,000; The Dyson Lawshee Rubber Company, capital $50,000; Trenton Heat & Power Company, capital $500,000; Hudson Porcelain Company, capital $2,000.

Hirschorn, Mack & Company have purchased a site for a four story factory building at Trenton for a cigar manufactory which will shortly be erected. The firm will employ about 1,200 persons.

The American Cigar Company's factory at Trenton is nearing completion. When finished 1,000 persons will be employed.

A new worsted yarn mill has been started at Trenton with 30 employes.

The Japanese Silk Garment Company of Trenton have ordered 100 new sewing machines to be installed April first. Electric power will be used.

The John A. Roebling's Sons Company has purchased land on which to make improvements in their works.

The Monument Pottery Company is adding a four story building to its plant at Trenton, which will cost $70,000.

The Wilson Woolen Mills at Trenton were sold to A. H. Ryan for $30,300. Work has been resumed on white worsted warp and wool filling. The mill now employs 765 persons.

Angelo Agabiti, a laborer, in the Roeblings mills at Trenton, had both legs crushed by falling bundles of wire.

Henry Bush, Jr., had a hand crushed in machinery in the Roebling mills.

Clark Fisher had his right hand badly lacerated at the Eagle Anvil Works, Trenton.

George W. Ayres has brought suit against the Trenton Oilcloth Company for damages for the loss of an arm while working in their employ, at a circular saw.

The master masons and carpenters of Trenton have united in an agreement to enforce certain rules and prices in the making of contracts; bidders hereafter will be required to give bonds as security instead of certified checks. An attachment has been filed against the Automobile Company at Trenton Junction to secure a judgment of $5,000. The suit on which judgment was obtained was brought by a company that supplied machinery to the Automobile Company, which has not yet put its plant into operation.

A new design for a union label for printers to be used by photo-engravers and workers on metals, has been registered at the office of the Secretary of State at Trenton.

Trenton brick manufacturers have opened their yards this year at an earlier date then usual because of the demand for their stock.

The executive board of the State Federation of Labor has instructed the President, Mr. Moffat, to appoint representatives in each county to visit the local unions and instruct them on matters relating to the federation.

The sanitary pressers of Trenton report that their union is growing in membership.

The pavers of Trenton have adopted a new wage scale.

Many tin workers of Trenton have changed from the nine to an eight hour day.

April.

Trenton—

Fifty-two sanitary pressers employed at the Keystone Pottery at Trenton went out on strike because of a dispute with the company as to whether the pressers or the firm should pay for damaged ware and for extra work, the claims of the men were allowed, and work was resumed. 51

The union moulders of Trenton have secured the wage rate which they demanded, $2.75 per day, and have withdrawn the request for a nine hour day.

The machinists of the Reeves Engine Company at Trenton have refused to submit to a new work day schedule of ten hours per day instead of nine hours as before.

The Master Masons' Association has agreed to pay bricklayers and masons fifty cents per hour for an eight hour day.

The following named companies were incorporated at Trenton during the month of April, and will conduct their manufacturing in that city. The Munger Automobile Company to make non-collapsible tires, capital stock $300,000. The company will employ 100 men.

The Enterprise Cigar Company to manufacture cigars, capital stock $25,000.

The Capitol Art Metal Company, capital stock $50,000.

The John A. Roebling Company is said to be about to establish a branch plant near St. Louis, Mo.

The Hudnot Hominy Company of Trenton has been taken into the Combination of the American Hominy Company. The local capitalization is $3,750,000.

The Japanese Silk Garment Company of Trenton has added fifty new machines to its plant and employs sixty additional persons.

The Morgan Steam Laundry Company of Trenton has closed up its business.

The Royal Rubber Company of Trenton has dissolved.

The sale of the Samuel K. Wilson Worsted Mills at Trenton has been set aside by the Court, and a new sale ordered.

Frank Kesselly, a workman, was crushed between a belt and shatting in the F. A. Straus & Company Shirt Factory at Trenton.

Stanowitz, Jannivtovher, a laborer, had a hand crushed while at work in the Malleable Iron Works at Trenton.

The plant of the William Woodhouse Chain Works at Trenton was burned out. Loss about $16,000. One hundred men had been employed there.

The slate roofers of Trenton have organized a union and joined the American Federation of Labor.

The carriage and wagon makers of Trenton have formed a union under a charter from the International Union of the Trade.

The Trenton bakers have organized a union to secure a reduction in their hours of labor.

Hand type printers of Trenton have secured an advance in wages of one dollar per week.

The eight hour day went into effect for tin and sheet metal workers, and for painters and paper hangers on April first.

Hightstown—

The Hightstown Board of Trade are endeavoring to obtain $10,000 by local subscription for the erection of a building for the Hightstown Smyrna Rug Company.

May.

Trenton—

52 Twenty-five operators of the South Trenton Shirt Manufacturing Company declared a strike because, as alleged, two men who had been active in forming a union of the employes had been discharged.

A difficulty which was speedily adjusted occurred at the Anchor Pottery, Trenton, between the proprietor of the plant and the kilnmen, over the employment of an additional saggerman.

The masons and hod carriers of Trenton have been granted a new schedule which provides a substantial increase in wages, and also gives both classes of workmen the Saturday half-holiday.

The Brewers' Union, Trenton, submitted a new contract to their employers which was to have gone into effect on May first. A little time was required to satisfactorily adjust some differences of opinion, but

both parties having made concessions, the agreement which holds good for a year, was signed.

A meeting of pottery warehouse women and packers was held at the Central Labor Rooms, Trenton, to form a pottery school. It was decided to form separate branches for men and women.

The carriage and wagon makers of Trenton have organized a union.

About twenty stationary and hoisting engineers of Trenton makes up the membership of a newly organized union of that calling.

John Longmuir of Trenton, was killed by accidently falling upon a circulaw saw, while at work.

Levi Blizzard, a Trenton painter, was badly injured by falling from a scaffold upon which he was working in Morrisville.

Frank E. Miller, an electrician of Trenton, fell a distance of twenty feet while stringing wires for the American Bridge Company. His left leg was badly fractured.

Julius Phillipo, a laborer employed at the Roebling's mills, Trenton, was badly injured at that plant by being crushed between a heavy truck and a wall.

The Trenton Potteries Company is having a new kiln shed erected at the Equitable Pottery; it will cost nearly $8,000.

The Fidelity Pottery Company was organized in Trenton; its object is to manufacture pottery ware. Capital $75,000.

Anderson Manufacturing Company of Trenton was organized; the product will be pottery ware. Capital $100,000.

The John A. Roebling's Sons Company have voluntarily given an increase of wages to all its employes, which averages nearly ten per cent.

Bordentown—

It is expected that one result of the litigation over the Bordentown Rug Factory will be its removal to Trenton, if a proper place can be found for it in that city.

June.

Trenton—

A large number of Trenton carpenters went out on strike to enforce the demand they had made more than two months ago for a Saturday half-holiday with pay for full time, at the rate of $15 per week. Several conferences subsequently held resulted in an agreement which conceded the main points contended for by the carpenters. 33

The shirt factory on Decatur St., Trenton, resumed work after a short strike, the matter in dispute having been adjusted in a friendly way.

The journeymen shoers of Trenton have made a demand on the bosses for an increase of wages. The employers say that no increase can

be given unless the prices for shoeing horses is very materially advanced above the rates now being charged.

Fifty young women clerks met in the Y. M. C. A. Hall, Trenton, and formed an organization to secure shorter hours of labor in the stores.

Ground will be broken in Trenton about the middle of July for the erection of the large works of the Jordan L. Mott Iron Company, who will move their entire plant from Mott Haven, N. Y., when the new buildings are finished. It is said that the new shops will cost upwards of $1,000,000, and that about 2,500 men will be employed.

A canning factory will be moved from Morrisville, Pa., to the old saw mill at the foot of Peace Street, Trenton.

The straw sheds of the Willets Pottery, Trenton, were destroyed by fire. Loss about $500.

July.

Trenton—

54 The employes of Goldberg & Rosenthal, manufacturers of pantaloons, Trenton, went on strike for increase of wages. The men refused to return to work unless their demands were complied with, and the factory was closed.

The operative potters of Trenton are endeavoring to form an organization of the packers and warehouse men, so as to prevent the employment of boys who do the work of men at much lower wages.

The manufacturing and operative potters are considering a new schedule of prices for kilnmen's work. Western potters are taking part in the conference.

Work on the new Court House at Trenton was stopped for a time by a strike of hod carriers.

Seventeen cable splicers and their helpers employed by the Standard
55 Underground Cable Company at Trenton struck because the company refused to allow them $1.00 per day for "travelling expenses."

The Perfection Blind and Lock Stitch Sewing Machine Company was chartered in Trenton with a capital of $1,000,000.

The John A. Roebling's Sons Company has secured the vacation of a portion of Woolverton Avenue, Trenton, by the Common Council and will proceed to erect two large buildings, each 200 feet long, as an addition to their already immense plant.

The newly formed Eureka Rubber Company has purchased a large plot of ground on which its plant will be erected. The work will be located on East State Street, Trenton, adjoining the factory of the Trenton Oilcloth and Linoleum Company.

Peter Zeegawitz, an employe of the John A. Roebling Company was killed by the explosion of an air compressor.

A fire which originated in a small shed where oil was stored destroyed two large buildings of the John A. Roebling's Sons Company's plant at Trenton. After the fire, work was commenced without delay

on the removal of the debris, the intention of the company being to immediately re-erect the buildings.

Vice Chancellor Emery signed an order on the 23d directing the Trenton Potteries Company to show cause why the company should not be restrained from exchanging certificates of preferred stock and issuing funding certificates for arrears of a cumalative dividend.

Richard R. Whitehead, president and treasurer of the Whitehead Brothers Rubber Company, died on July 25th.

James P. Stephens, who was for forty years identified with the pottery trade, died at his home in Trenton on July 9th.

Crosswicks—

Walter Jesmer, a negro laborer, fell into a clay pit at Braislins Brick Yards at Crosswicks, and sustained a fracture of the skull.

August.

Trenton—

About 200 girls employed by the American Cigar Company in its factory at Trenton, struck because their demand for a full hour for lunch and a half holiday on Saturday was not conceded by the firm. Most of the girls returned to work on the old terms. 56

The firm of Rosenthal & Goldberg, manufacturers of pantaloons, began injunction proceedings against their striking employes to restrain them from interfering with new workmen employed to take the strikers places. The Vice Chancellor continued the case to September 16, to give the strikers an opportunity to make a proper defense. In the meanwhile, the Court made an order commanding them to desist from interfering with the present employes of the shop.

The hod carriers employed on the new Court House at Trenton after a strike of nearly three weeks duration returned to work, a satisfactory settlement having been arranged at a conference between them and the Master Builders' Association. 57

The Union Rubber Company of Trenton filed articles of incorporation at the office of the County Clerk. The object of the company is to deal in India Rubber and gums. Capital $10,000.

The Adams Electric and Construction Company has purchased a building on Chancery Street, Trenton, and will soon put in machinery to manufacture the Backus Ceiling and Desk Fans.

The Capitol Art Metal Company has secured a new brick building in which the business of manufacturing gas and electric fittings of an artistic nature will be carried on.

John Gulvark was fatally burned by falling into a vat of vitrol and boiling water at the works of the Trenton Iron Company.

John Costigan, an employe of the South Jersey Gas Company, received painful injuries through having stepped into a bed of hot tar.

Joseph L. Bucher, an employe of the American Lamp and Brass

Company of Trenton, had one of his hands cut off while working on a lathe.

John Catiluki had his head severely gashed and his arm fractured by falling brick at the yard of the Trenton Brick Company, where he is employed.

The pottery packers and warehousemen of Trenton held a meeting in the headquarters of the operative potters for the purpose of forming an organization.

The master plumbers of Trenton have formed an organization composed entirely of employers.

The saggermen of the Trenton potteries have, after several efforts to that end, finally succeeded in forming an organization.

The garment workers of Trenton have formed a union to be known as Trenton Union No. 75, United Garment Workers, of America. It is the intention of the new union to back up the strike of the pantaloon makers of the Rosenthal & Goldberg factory.

A cyclone of great force struck Trenton on the afternoon of the 10th and damaged property to the extent of $200,000. The Crescent Pottery, one of the plants of the Trenton Potteries Company, was badly wrecked, entailing a loss of $50,000.

September.

Trenton—

The plant of the American Steel Company at Trenton is to be greatly enlarged. A new bridge shop 50x130 feet is to be added to the one now in operation and the product of structural steel will be increased from 3,000 tons, the present output, to 5,000 tons. The number of men at present employed is 1,000, when the enlargements are completed, 200 additional hands will be employed.

The Eureka Rubber Company are erecting a series of large buildings opposite the plant of the Trenton Oilcloth and Linoleum Company at Trenton. When finished, this will be one of the most substantial and best equipped rubber manufacturing plants in New Jersey. It is expected that the buildings will be ready for work about January first, 1903. The company will manufacture mechanical rubber goods and enameled carriage cloth.

A new building of brick is being erected for the Empire Rubber Company at Trenton.

The Building Inspector of Trenton has issued a permit to the Jordon L. Mott Company for the erection of foundry buildings which will occupy 37,840 square feet of land. The buildings will be of brick, 474 feet long, 80 feet wide, and one story high.

A new company with a capital of $100,000 will take over and carry on the sash and blind works at Trenton heretofore operated by W. S. Connor. The change will take place on October first.

The Modern Rubber Company's building at Hamilton Township was destroyed by fire. Loss $10,000.

John Smith, a laborer, had an eye injured through being struck by a piece of steel, while at work in the Trenton Malleable Iron Works.

Joseph Lawlor, an employe of the Straus Woolen Mill at Trenton, had a hand very badly crushed by being caught in the gearing of a machine.

Elmer Armstrong had the thumb of his left hand cut off while at work in the Stokes Rubber Mill.

John Smith had a hand severely gashed by a piece of broken ware while at work in the Willets Pottery.

Joseph Malesky, a laborer employed at the Maddock Pottery, had his arm severely injured while at work.

Charles McDermott, a rigger's helper, was drowned by a fall from a derrick while working on the Pennsylvania Railroad Bridge over the Deleware River at Trenton.

David Craig, a laborer, had a hand badly lacerated by machinery at Lawrence township.

Edward Provost, a lineman, employed by the Bell Telephone Company at Trenton, had a leg broken by a pole falling upon him.

Frank Burns, an employe of the Whitehead Rubber Company received an injury to his leg while at work.

The master horseshoers are contemplating introducing a bill in the next Legislature compelling all horse shoers to pass an examination.

The freight and baggage handlers have organized a branch of the National Brotherhood of that order at Trenton.

Two hundred employes of the United and Globe Rubber Works have had their wages increased five per cent. by the voluntary action of the company.

Vice Chancellor Stevenson made an order directing the Spiral Riveted Tube Company to show cause why a receiver should not be appointed for the business on the grounds of insolvency.

Greenwich—

Ethel Opdyke, while at work in a canning factory at Greenwich, had one of her arms caught in the machinery and very severely injured; the muscles were torn loose.

MIDDLESEX COUNTY.

February.

New Brunswick—

The firm of Lyman Cronk & Son has been dissolved and an incorporated company under the name of the Cronk Manufacturing Company has taken its place. The new company is composed of the old firm and its employes. The company makes sashes, blinds, and doors at its factory in New Brunswick. Capital stock $100,000.

The stockholders of the Dickens Manufacturing Company of New Brunswick have applied to the courts for the appointment of a receiver because of financial embarrassment. The plant was closed. The company manufactured bicycle pumps, lawn sprinklers, and other metal goods. The capital stock is $40,000. A new company is said to be negotiating for the purchase of the plant.

Perth Amboy—

The union carpenters of Perth Amboy have demanded $3 for a day of eight hours; this, if secured, will be an increase of fifty cents a day.

The ship carpenters, joiners, and caulkers of Perth Amboy and vicinity are taking the necessary steps to form a union in order to secure more wages and shorter hours.

The Bricklayers and Masons' Union of Perth Amboy have notified employers that on and after May 1st., their wages must be 50 cents per hour. They are now receiving forty-five cents.

The old tea house on Front Street, Perth Amboy, has been rented by a New York firm for a shirt factory. The building will be enlarged and a large number of girls will be employed. The same company has a shirt factory at Keyport.

March.

New Brunswick—

58 Section gangs employed on the Pennsylvania Railroad at New Brunswick struck for an increase of wages and were given an advance of one cent per hour.

59 Workmen in the Janeway & Company Wall Paper factory at New Brunswick struck for the return of the old wage rate of $8 and $9. The demand was granted.

The Transparent Compressible Tube Company was organized at New Brunswick. The capital stock is placed at $100,000. A plant is to be established here which will employ from 50 to 100 persons.

The Electrical and Chemical Company of New York have leased the plant of the Dickens Manufacturing Company at New Brunswick and will manufacture gas lighters.

Contracts have been signed for the erection of a new mill for the Johnson & Johnson Company of New Brunswick.

New capital has been put into the Milltown Undia Rubber Company for resumption of operations.

The Rubber Goods Company at New Brunswick has decided to shut down on April first. The factory leased by the American Rubber Company is to be shared with an Automobile concern, which is a new industry.

The Empire Foundry Company of New Brunswick has begun the erection of a large addition to its plant.

Plans have been drawn for a new factory for the National Water Tube Boiler Company at New Brunswick.

The new factory for the New Brunswick Refrigerating Company is nearing completion.

Edward K. Allen, Jr., had his left hand crushed while at work in the Waldom Machine Shops at New Brunswick.

John Messler, a workman employed by the Johnson & Johnson Company had his left hand crushed while at work in the plaster department.

A fire which caused about $300 damage occurred in the factory of J. D. Watson at New Brunswick.

Janeway & Company's Wall Paper plant at New Brunswick is being run until 9 P. M.

Workmen's tools to the value of $500 have been stolen from the Empire Foundry at New Brunswick.

Perth Amboy—

The copper smelting industry at Pertth Amboy, Carteret, and Raritan is very busy after the tie-up of months. A very large output and shipments are reported by all the companies.

Carteret—

The De La Mar Company at Carteret is erecting large buildings to be in readiness for next season's work.

April.

New Brunswick—

Many of the building trades have asked for and secured advances of wages without strikes.

The Transparent Celluloise Products Company has been organized at New Brunswick. Capital stock, $100,000.

The Folger Manufacturing Company has erected a factory at New Brunswick to manufacture billiard cue tips.

An extension to the factory of Aloys Bonhi at New Brunswick is being built.

The Milltown Rubber Company has been declared bankrupt, and a receiver has been appointed. The liabilities are $250,000, and the assets $60,000.

The Craig Manufacturing Company has resumed work in the part of its building which was not destroyed by the recent fire. The company will soon begin work on a larger building.

The Hirschorn-Mack Company, cigar manufacturers, are erecting a large factory at New Brunswick on a new site; the company is negotiating for the lease of the Raritan Shoe factory building for use until the new factory is finished.

John Markos, a laborer, was killed by being caught in a revolving shaft at the Ostrander Brick Company's works at New Brunswick.

George Oberholzer, an officer of the Prospect Boiler Company at

New Brunswick, was badly injured by the falling of some heavy machinery.

An Italian laborer in the brickyard of Petit & Company, New Brunswick, had his leg broken through an accident while at work.

The Norfolk & New Brunswick Hosiery Company sued Mrs. Anna Arnold on contract and obtained a judgment of $9,556 against her.

Milltown—

The International Wheel, Tire & Rubber Company are negotiating for the purchase of the plant of the Meyer Rubber Company at Milltown.

The bakery of Charles Herman of Milltown was destroyed by fire. Loss, $3,000.

Perth Amboy—

George Rogers, aged 16, had both hands crushed between rollers at the plant of the Standard Underground Cable Company at Perth Amboy.

Jamesburg—

The American Household Hardware Company was incorporated at New Brunswick and will start its plant at Jamesburg. Capital, $100,000.

May.

New Brunswick—

The Ashley & Bailey Company are said to be about to open a branch of their silk mills in New Brunswick.

The Johnson & Johnson Company has purchased a large tract of land adjoining their works in New Brunswick, and as soon as the necessary steps are taken by the City Council to close the public street, which at present runs through the property, the company will erect a large addition to their cotton mill.

The National Water Tube Boiler Company, New Brunswick, are erecting a large factory on the line of the Pennsylvania Railroad near the round house. The buildings, two in number, are of brick, 80x244 and 50x244 feet and one story high.

A body styling itself the Trades and Labor Federation of New Brunswick was organized at a meeting held in Norton Hall. It was arranged to hold a picnic and labor demonstration on June 26th.

Perth Amboy—

The Reliance Clay Manufacturing Company was organized at Perth Amboy to manufacture and sell fire clay for steel works. Capital, $100,000.

One hundred and fifty carpenters at Perth Amboy quit work be-

cause their demand for an advance of fifty cents a day in wages was refused.

Milltown—

The Meyer Rubber plant at Milltown, which was closed nearly six years ago, has been sold to the International Wheel and Tire Company. The new business will start with about 200 hands.

Dunellen—

The Leverine & Garrigues Company was organized at Dunellen for the purpose of manufacturing structural steel and iron. Capital stock, $250,000.

Bound Brook—

The Linoleum Water Proof Cloth Company of Bound Brook has increased its capital from $25,000 to $100,000.

June.

New Brunswick—

The wallpaper printers and color mixers employed in the mill of the Janeway & Company and Janeway & Carpenter Companies, New Brunswick, went out on strike because the employers refused to sign the scale of prices which is usually done at this time of the year. The scale amounts to a practical guarantee of steady employment for a specified time at the scale prices.

A branch of the Hawthorne Silk Company's works will be opened in the old Washington Street Rubber Factory, New Brunswick. The company will occupy about 16,000 square feet of floor space.

The City Council having agreed to close upper Neilson Street, New Brunswick, and give the Johnson & Johnson Company the use of the strip of land thus vacated, a much larger building than was at first projected will be erected by the firm as an addition to their cotton mills. The new building, when completed, will afford accommodation for an additional force of two hundred hands.

Contracts for the sale of 12 acres of land along the line of the Pennsylvania Railroad, opposite the old round house, New Brunswick, have been closed by the local agents of a firm who intend to erect large works for the manufacture of structural steel and iron.

Articles of incorporation of the Dash & Fender Machine Company were filed at the office of the County Clerk. Capital, $1,000,000. The company will manufacture dash and fender sewing and other special machines.

Perth Amboy—

Joseph Papp, an employe of the Raritan Hollow & Porous Brick

Company, Perth Amboy, while putting a belt on some machinery, had his arm caught in the belt, and the bone between the wrist and elbow severely fractured.

Sayreville—

Miss Annie Lochs of Sayreville, through her attorney, has brought suit against the firm of Herman, Aukman & Company for $50,000. The suit is for injuries sustained by the plaintiff while she was employed by the defendants in their handkerchief factory at South River. While operating a sewing machine her hair was caught in the shafting and wound around it so that her scalp was pulled entirely off, exposing the skull bone. Her arm and shoulder were broken before the machinery could be stopped.

July.

New Brunswick—

The union cigar makers of New Brunswick stopped work on the 5th, their demands for increased wages not having been complied with. The cigar makers asked for an average increase of one dollar a thousand for all cigars made. The employers offered half of this, which was refused.

The striking wallpaper color mixers and printers of New Brunswick not having yet adjusted the differences between themselves and their employers, were considering the expediency of organizing a new wallpaper company to be operated by the strikers on the co-operative plan. Later on, this project having fallen through, the strikers returned to work in both the mills from which they had gone out.

A number of employes in the spinning room of the Norfolk & New Brunswick Hosiery Mills, New Brunswick, quit work because their request for an increase of wages was refused by the firm.

The Raritan Structural Steel Company, a new corporation which is about to begin the erection of a large plant near Millstone Junction, held its first meeting in New Brunswick and elected officers.

Contracts have been signed for the erection of a new plant for the National Water Tube Boiler Company. The buildings will be erected in New Brunswick.

The Kilbourn Knitting Machine Company, New Brunswick, has been merged with the Middlesex Knitting Company. New officers were elected, and the capital has been largely increased.

The musicians, printing pressmen and barbers of New Brunswick have each formed a union.

James McMurty, an inspector in the Johnson & Johnson Works, New Brunswick, fell from a stepladder and was badly hurt.

Perth Amboy—

The Wheeler Condenser Company, Perth Amboy, have reduced their hours of labor from ten to nine.

The De Lamar Company have started a new copper refinery at Perth Amboy.

Amboy—

The Standard Fireproofing Company of Perth Amboy has re-organised as the Standard Vitrified Conduit Company. It is said that the plant will be increased to three times its present size.

The great Lewisohn plant for refining copper, situated on the Raritan River near Perth Amboy, produces from 10,000,000 to 12,000,000 pounds of refined copper per month.

Sylan Beach—

The Canada Company are to have a new steel plant erected at Sylvan Beach.

August.

New Brunswick—

Twenty laborers employed digging a trench for a gas main at New Brunswick struck for a small advance in wages which, after twenty minutes' idleness, was given them.

The National Musical String Company of New Brunswick have awarded contracts to builders for the erection of an extension to their plant on Georges Road, along the line of the Raritan River Railroad.

The Brunswick Refrigerating Company has taken possession of its new factory on Neilson Street, New Brunswick. The new works when in full operation will be the most perfectly equipped of their kind in the city.

The firm of Johnson & Johnson have contracted for the erection of another building as an extension of their large plant at New Brunswick. The new structure will be of the saw-tooth roof order, which insures good light in the interior. The dimensions are 167x125 feet.

The Janeway buildings at New Brunswick have been transferred to the Structural Iron Company, who will shortly begin work there. The main building is 200x100 feet.

Milltown—

The plant of the Milltown Rubber Company, which was sold in June, has not been opened by an independent rubber company as was expected. It is now said that the plant was bought in the interest of the United States Rubber Company for the purpose of preventing the establishment of a rival manufactory there.

Perth Amboy—

An explosion occurred at the Copper Works, Perth Amboy, caused by a laborer's carelessness in dumping molten slag into the water.

September.

New Brunswick—

Forty employes of the Empire Foundry Company at New Brunswick quit work because their request for a uniform wage rate of $2.75 per day for day work and machine moulding, and 20 per cent. increase in piece work prices had been refused. The men returned to work after a few days' idleness, pending a settlement by arbitration.

The International Wheel and Rubber Company is now installing new machinery in the building formerly used by the New Brunswick Rubber Company, and will soon begin manufacturing there. The new company is an independent one, not connected with the trust, and has a capital of $3,000,000.

Hirschorn, Mack & Company's new factory at New Brunswick for the manufacture of cigars is approaching completion. This company now employs 1,100 girls here, and has a branch at Perth Amboy.

De Luca Carmello and John Carr, laborers, were seriously injured while at work on the new Pennsylvania Railroad bridge over the Raritan River at New Brunswick.

Alfred Buzzee, a telephone lineman, was killed through the falling of a telegraph pole to the top of which he was strapped for safety, while at work.

Perth Amboy—

A foreman blacksmith, employed at the Guggenheim Works at Perth Amboy, resigned because interference from the union prevented his doing his duty.

Leroy Bloodgood, an employe of the Copper Works, was seriously injured while at work.

MONMOUTH COUNTY.

February.

Long Branch—

The union masons of Long Branch and Asbury Park demanded an eight-hour day, which was given them by the bosses.

The teamsters employed in ordinary grading at Long Branch have formed a union to increase their wages.

March.

Asbury Park—

The union masons at Asbury Park asked for an eight-hour day. It was given them without trouble.

Long Branch—

Frank Galon, a workman, employed at the Long Branch Gas Works, was seriously injured while at work.

The teamsters of Long Branch have organized a union and secured an advance in wages.

April.

Freehold—

A large pickle factory is projected at Freehold. The investors require as a condition of starting that farmers enter into a contract to supply enough tomatoes and small cucumbers to provide raw material.

Long Branch—

Joseph M. Turner, manager of the Monmouth Carpet Cleaning Works at Long Branch, had a hand badly injured by an electric motor.

Asbury Park—

The journeymen plumbers of Asbury Park have organized a union.

May.

Long Branch—

Fourteen union workmen employed on a cottage being built on Norwood Avenue, Long Branch, quit work because a non-union plumber was employed, and refused to work until he was discharged. Of the fourteen men who struck eleven were carpenters and three painters. 66

Riverton—

George W. Bishop, a carpenter living at Bridgeboro, while working at Riverton, fell from a scaffold on which he was working and broke two of his ribs.

Manasquan—

The Shore Gas Company was organized to illuminate Manasquan and other points along the coast. Capital, $10,000.

July.

Long Branch—

Members of Bricklayers and Masons' Union No. 22, Long Branch, have struck for $3.50 a day and eight hours work. Their wages had been $3 for eight hours. 67

Keyport—

George Brown had the fingers of the right hand crushed in a lathe at the cutlery factory at Keyport.

August.

Red Bank—

A new muslin underwear factory has been opened at Red Bank, which employs 100 girls. If help enough can be secured, the factory will be located here permanently.

September.

Long Branch—

The Edwards Lumber & Coal Company are erecting a new engine and boiler room and otherwise enlarging its plant at Long Branch.

The Long Branch Builders and Traders' Exchange is the name of a new organization founded at Long Branch. The membersship is limited to men interested in building operations.

John King of Long Branch, a lineman, was killed while on an electric light pole, by coming in contact with a live wire.

James H. White, a tinsmith, fell from a roof on which he was working at Long Branch, and was severely injured.

John Hines fell from the roof of a building on which he was working and was so severely injured that he died soon after.

Eatontown—

The Monmouth Construction Company of Eatontown has filed articles of incorporation at Freehold. The company will construct and erect bridges and buildings.

MORRIS COUNTY.

March.

Morristown—

About two hundred carpenters of Morristown asked for an eight-hour day and obtained it after a short strike. Wages, $2.50 per day.

Dover—

New machinery has been placed in the Singleton Silk Mills at Dover, and in the Port Oram Mill at Port Oram.

April.

Morristown—

The hours of labor and wage rates agreed upon between the boss carpenters and the journeymen of Morristown, that is, eight hours and $2.50 per day, is being paid generally to the carpenters in the other towns of Morris County.

May.

Peapack—

Theodore Crater, a carpenter, was seriously injured as a result of falling from a platform while at work on the Blair mansion, Peapack.

Boonton—

Business men of Boonton and officials of the D. L. & W. R.R. are making efforts to induce the proprietors of a large lace manufactory, whose mills are now in Nottingham, England, to move their entire plant to Boonton.

Morristown—

The Unique Folding Box Company was organized in Morristown. Capital, $25,000.

June.

Dover—

The Hunter Excelsior Company was organized at Dover to manufacture excelsior, wood wool, etc. Capital, $50,000.

September.

Morristown—

The journeymen plumbers of Morristown have struck for $3 per day and a reduction of working hours.

Dover—

A new factory has been started at Dover to manufacture cloth and flannel caps.

The Berkshire Iron Company has been incorporated at Dover to acquire mining rights in Morris County.

The McKiernan Drill Works at Dover are to be enlarged. A new foundry will be erected.

The New Jersey Drill Company has been incorporated at Dover to manufacture mining machinery and other mechanical appliances. Capital, $100,000.

OCEAN COUNTY.

February.

New Egypt—

The firm of Harris & Harrington, manufacturers of fancy hall clocks at New Egypt, have made an assignment for the benefit of their creditors.

PASSAIC COUNTY.

February.

Paterson—

Increase of wages and changes in the hours of labor have been demanded by several of the building trades unions of Paterson and Passaic. The new schedules are as follows: Carpenters, a uniform wage rate of 37½ cents per hour, an increase of fifty cents a day; masons, want an increase to fifty cents per hour; building laborers, thirty cents per hour; plumbers, $3.50 per day; tinners, $3 per day, an increase for them of fifty cents.

The broad silk weavers of Pelgram & Meyers Mills at Paterson demand that the standard width of broad silk be 21 inches, with an increase in price of half a cent for every two inches over the standard.

The union workmen in the Dale Silk Mill at Paterson have struck to compel the firm to recognize the shop union. Fifty weavers were employed.

The great fire at Paterson did not destroy or even injure any of the factory buildings as, fortunately, it did not reach the manufacturing district. The general disorganization of all business interests that followed it, however, caused much trouble and some loss to the manufacturers and workmen of the mill section.

The work of rebuilding the burned district in Paterson has created a demand for all the workmen of the building trades that can be obtained. Mechanics in these lines are coming into the city in large numbers and all secure employment immediately upon their arrival. The building trades will be very active here for at least one year to come.

Amos Shore, a blacksmith employed at the Rogers Locomotive Works, Paterson, was accidentally killed.

Robert Shaw, a lad employed in the Enamiline Works at Paterson, had his hand crushed in the cogs of a wheel while he was at work in the factory.

March.

Paterson—

The Court of Errors and Appeals has given its opinion in the case of Frank & Dungan's striking silk weavers, who were adjudged to be in contempt of the order of Vice Chancellor Pitney restraining the strikers from "picketing" the mills and otherwise annoying the firm in the conduct of its business. Eight strikers had been sentenced by the Vice Chancellor to pay fines ranging from $25 to $50. The court sustained the authority of the Vice Chancellor to punish for contempt and the sentences were affirmed. 70

Three strikers of the M. J. Green Silk Mill were arrested for having taken part in a "serenade" and other riotous demonstrations against workmen employed by the firm.

Some Italian laborers employed in the foundry of the Rogers Locomotive Works struck for an advance of fifteen cents a day in their wages. One workman who refused to go out with the others was severely beaten. The strikers subsequently made an attack on the office, but were driven away. 71

The Union Plumbers, Tinsmiths and Sheet Iron Workers of Paterson have united in a demand for an increase of fifty cents a day in their wages. The bosses refused, and the men quit work throughout the city.

The brewers and drivers of the Hinchliffe Brewing Company of Paterson quit work because of dissatisfaction with the head stable man who, it is claimed, is a non-union man. 72

Seven silk finishers employed at the Cedar Cliffe Mill at Haledon quit work because their demand of $1 a week increase of wages was refused. 73

Local Union No. 213, Brotherhood of Painters and Paper Hangers of America, have submitted a request to their employers for an increase in wages to take effect March 31. They asked for thirty-five cents an hour and an eight-hour workday.

The Paterson Splint and Support Company was incorporated at Paterson. Capital stock, $20,000. The company will manufacture machinery for making surgical jaw splints and supports.

The Riley Engine Company, composed of citizens of Paterson, filed articles of incorporation at the office of the County Clerk. A new steam engine without links or excentrics in reversing gear will be manufactured by the company. The engine has many other novel features and is said to be the most simple, durable and economical in operation yet produced.

W. C. Norwood and C. K. Berdan succeeded the Norwood Wallpaper Company, which had been dissolved, and resumed manufacturing.

A certificate of dissolution of the Liberty Silk Company of Paterson has been filed

John Collins and James Black, workmen employed in the Passaic Rolling Mill at Paterson, were crushed to death by the fall of a forty-ton boiler.

John T. Conklin and John McGill were crushed by a falling elevator in the American Locomotive Works at Paterson. Both men were taken to the hospital. Conklin's condition was considered very bad.

William Fitzpatrick was fatally injured while at work in the Rogers Locomotive Works at Paterson.

The meat cutters employed in the butcher shops of Paterson have formed an organization to increase wages and reduce hours of labor.

The Master Builders of Paterson have offered carpenters 35 cents an hour.

The Columbia Ribbon Company at Paterson have voluntarily given an increase of ten per cent. in wages to its operatives.

Suits begun in the District Court by two workmen to recover wages due them, were decided in their favor.

The United Trades and Labor Council of Paterson has decided to give support to the striking linemen.

The building trades unions of Paterson have largely increased in membership, and all are steadily employed.

A new home for the Working Girls' Society of Paterson has been opened, and classes of various kinds for mental and physical improvement have been begun.

Passaic—

74 A strike occurred in the Gera Mill at Passaic in which 135 girls and seven men were involved. The girls had been working by the day, but the management decided to put them on piece work when engaged on the stock of wool that had been wet and otherwise damaged by the floods that had recently overspread the mill district of Passaic. The strike was amicably settled.

75 Some folders employed at the Passaic Print Works went on strike, but soon returned under an arrangement that was mutually satisfactory.

The Passaic mill owners believe there is reason to anticipate a movement among their foreign-born operatives that may result in a general strike for more wages. Complaint is made by this class of workmen that they are not paid as well as the native operatives, and April 1st is spoken of as the time when a demand will be made at several of the largest mills for an increase.

The great freshet in Passaic and Paterson caused heavy damages to mill property in both these cities. The Dundee Chemical Company, the Gera, Campbell-Morrell, Passaic Print Works, Waterhouse Woolen Mill, Algonquin Woolen Mill, Parchment Paper Company, Prescott Enameling Company, Garfield Woolen Company, Heyden Chemical Works, Okonite Company, Alexander Dye Works, American Cigar Company, New York Belting and Packing Company, and the Pitkin and Holdsworth Mills were all more or less seriously damaged and had to close down for repairs. Thousands of men and women were thrown out of work.

A fire occurred in the Campbell & Morrell Mills at Passaic. About $10,000 damage was done.

A new union of Polock workmen, with a membership of 2,000, was organized in the Dundee district of Passaic. Unions of Hungarian and Italian workmen were organized later. All have placed themselves under the jurisdiction of the American Federation of Labor.

Several meetings of mill operatives have been held in Passaic, the purpose being to unionize all mills in the city. Addresses were delivered by labor organizers from Pennsylvania.

Slight fires occurred in the Waterhouse and the Auger & Simon dye houses at Passaic. The damages were insignificant.

April.

Paterson—

Ninety-five per cent. of the dyeing of silk is done in the dye houses of Paterson and Passaic, in Passaic County. The strike of the dye house helpers not only brought the 3,400 men employed in the eighteen dyeing establishments of Paterson and its environs to a condition of idleness, but the far more important branches of silk manufacture in which more than 20,000 persons are employed in Paterson alone, were seriously affected by it. The demand on the part of the dyers' helpers was for an increase of $2 a week in their wages. The strike from beginning to end was characterized by mob violence and much damage was done to property. A number of arrests of strikers were made. The State Board of Arbitration formally offered its services, which were accepted by the strikers. The action of the board, however, produced no results. 76

One hundred ribbon weavers employed by the Helvetia Silk Company at Paterson demanded an advance in wages of ten per cent., and threatened to strike. The trouble was amicably adjusted.

Fifty weavers of the Pelgram & Meyer Company at Paterson demanded and obtained a uniform wage scale.

Thirteen decker hands at the Adams Silk Mill, Paterson, asked an advance of fifty cents a week in wages, which was refused. A strike advance of fifty cents a week in wages, which was refusel. A strike followed. 77

Twenty-one boys employed as ribbon blockers in the Brandes Mill at South Paterson struck to have the time system of work abolished. They returned to work. 78

The weavers in the ribbon department of the Johnson & Cowdin Silk Mill at Riverside, Paterson, demanded the full price list of 1895 on German looms, and twenty per cent. below the price list on double deckers and high speed looms. The request was taken under consideration by the company. There are 200 persons employed in the ribbon department.

The union painters of Paterson and vicinity, about 250 in number, submitted a new schedule of wages and hours of work to their employers, and on their refusing to agree to it, went on strike. An agreement was subsequently reached by which the schedule in modified form 79

was adopted by both sides, with the understanding that it should hold good for one year; all disputes as to its terms, to be settled by arbitration.

80 Thirty laborers employed at the Rogers Locomotive Works struck for an advance in wages of 25 cents a day. The increase was refused.

The strike of employes of the Hinchliffe Brewing Company at Paterson was amicably settled.

The weavers of the William Strange Company of Paterson requested the price list of 1895 on German looms, less 15 per cent., also a special price list on double deckers and high speed looms. The request was granted by the company. About 125 weavers were affected.

The ribbon weavers of the Meading Silk Company asked for and obtained an advance in the scale ranging within 30 per cent. of the manufacturers' prices of 1895. The concession was obtained through an amicable conference between the weavers and the company. Weavers are to be paid 25 cents an hour for all day work.

About 600 carpenters, mostly employed at rebuilding the district of Paterson destroyed by fire, asked for an increase from $2.50 to $3 per day, which was agreed to. The advance in wages goes into effect May 1st.

The journeymen bakers of Paterson submitted a demand to their employers for a work day of ten hours and 25 cents per hour for all overtime.

The silk-throwing plant of A. V. Rockwell at Matawan, N. Y., has been purchased by J. H. Lynch and others of Paterson.

Franz Ulrich, manufacturer of reeds and harness at Paterson, has begun the erection of a large factory building. The firm employs 100 persons.

The Lincoln Silk Mill at Paterson was partly unroofed by a storm and considerable damage done to the stock by rain.

The Barbour Flax Spinning Company of Paterson employing upwards of 1,000 persons voluntarily increased the wages of employes from five to ten per cent.

A union of bricklayers and masons of Paterson and vicinity, to be run on independent lines has been formed. Workmen not belonging to the so-called regular unions are admitted to it. The organization seems to be a union of non-union bricklayers and masons, and is the third of its kind.

Passaic—

The Wonhammagor Engineering Company has purchased two acres of land in Passaic on which to erect a large plant to make steel railway cars and trucks, and probably in the future, locomotives.

The National Match Company has been incorporated at Passaic. Authorized capital, $100,000.

The Prescott Automobile Company has been incorporated at Passaic and will establish a plant there.

Cedar Grove—

Three buildings of the Velvet Dyeing Plant of Francis J. Marley at Cedar Grove, near Little Falls, were destroyed by fire. The loss on buildings, machinery and stock, about $54,000. Two hundred persons are thrown out of employment.

May.

Passaic—

About 200 men and boys employed at the Passaic Print Works demanded an advance in wages, and failing to receive an immediate and satisfactory response, went out on strike. The next morning they appeared in force at the mill entrance and by force prevented the other employes, mostly women, from entering the mill for the purpose of working. Much disorder ensued and the police were summoned to disperse the strikers and protect those who wanted to continue at work. The crowd about the mill, which had grown large, refused to leave and resisted the efforts of the officers to drive them away. Eight strikers were arrested, four of whom were recognized as leaders. They were all arraigned before Judge Bowker and on the evidence presented, four of them were fined $10 each and the others $15 each. The fines were paid by a representative of the union and the men released.

The Union Hod Carriers of Passaic struck for thirty cents an hour or $2.40 for a work day of eight hours. A compromise agreement was arrived at by the bosses and representatives of the men under which an eight-hour day was conceded, as was also double pay for overtime, but 27 1-2 cents an hour instead of 30 cents was fixed as the standard wages.

George Frenzel, a workman employed on a building being erected on Jefferson Street, fell to the street, the scaffold on which he worked having broken.

The B. G. Valger Manufacturing Company was organized in Passaic to manufacture stamps, dies and other articles. Capital, $100,000.

Paterson—

Members of the Hod Carriers' Union demanded an increase of wages to 30 cents an hour and eight hours for a day's work. After a conference among the bosses an agreement was reached to fix the hod carriers' wages at $2.20 per day of eight hours. This proposal, when reported to the strikers, was promptly rejected. The action of the hod carriers caused building to almost entirely cease for the time being, as the bricklayers and masons would not work with non-union laborers, should the contractors succeed in getting a sufficient number of them.

All the Union Journeymen Bakers of Paterson, who had some time before united in a demand on their employers for shorter hours and a recognition of their union to the extent of using its label on the products of bakeries in which they are employed, went out on strike

to enforce these concessions, which the bosses had refused to make. About 98 journeymen went out when the strike began, but within one day more than half of the number were back at work, their employers having agreed to everything demanded.

The wage and time schedule which the bakers insist on is: For foremen, second hands, third hands, no less than $15, $12 and $10 respectively, and ten hours work per day for all. Within a few days all but a few of the bosses had given in to the terms of the union, and all would do so on every condition except placing the label on bread, if the union would waive that requirement.

84 A number of women employed as weavers in the Essex Mill went on strike because an increase of wages which they had demanded was refused.

85 Some weavers employed at the Ashley & Bailey Mill struck because a member of their union had been discharged by the superintendent.

86 The striking linemen of the New York and New Jersey Telephone Company returned to work, having given up their fight for increased wages.

The case of the men convicted of contempt of court by Vice Chancellor Pitney and sentenced to a term of imprisonment, is being prepared to be brought before the Supreme Court of the United States for final review. The case was brought before the State Court of Errors and Appeals, where the right of the Court of Chancery to inflict punishment by imprisonment for contempt was sustained.

There is a movement on foot in Paterson among the skilled machinists to form a strong organization through which better wages may be secured. The average wages of machinists is said to be not more than $2 per day.

A union of silk dyers and finishers, embracing men of all the various nationalities working at the trade was formed. It will include all the workmen in the dye houses of Passaic County and those of Lodi, also.

The moulders employed at the Rogers Locomotive Works received an increase of wages.

The increase in wages demanded by the plumbers was conceded, as was also the demands of the brewery employes and the moulders. All the workmen of these occupations who were on strike returned to work.

The ribbon weavers employed by the Meading Company had their prices advanced 15 per cent. by the voluntary action of the company.

The boss carpenters have yielded to all the demands of the journeymen and signed the new wage schedule. The strike of the trade is declared off.

The weavers of the Pelgram & Meyer Company were given an increase of five per cent. in wages.

William Hogan, an employe of the Rogers Locomotive Works, had his leg crushed by a heavy connecting rod falling upon that limb from a truck.

The Cook Company of Paterson was incorporated to manufacture machinery and tools of various kinds.

The Berlin Adjustable Bust Form Corset Company of Paterson was incorporated to manufacture corsets. Capital, $25,000.

A part of the roof of the hammer shop at the Cook Works was destroyed by fire.

Haledon—

The silk tapestry mill of J. B. Reywayner at Halendon was broken into by robbers and upwards of $3,000 worth of goods stolen.

June.

Paterson—

The strike of the silk dyers' helpers, which began in Lodi, Bergen County, soon extended to Paterson, which became for the time it continued thereafter until it finally died out, the principal scene of the contest.

After the excitement of the first outbreak had subsided, in a degree, the dyers' helpers, who inaugurated the strike, realized that their only prospect of success lay in persuading the other silk workers of all classes that their interests were also involved in the outcome of the struggle.

Meetings of the dyers' helpers were held and resolutions calling for a general strike of the trade, including all branches and every mill, were passed. Without allowing time for deliberation on the proposal of a general tie-up, the strikers, at a meeting held at Belmont Park in Halendon, took the matter into their own hands and, having voted that work should cease in the mills until a settlement of their claims was agreed on, proceeded in a body, under the leadership of an avowed anarchist, to put their mandate in execution without delay. The first place to feel the wrath of the mob was the mill of the Columbia Ribbon Company, which is situated about 300 feet from the entrance to the park on Rip Van Winkle Avenue. Nearly 200 hands, men and women, were employed there, and the mob, rushing tumultuously into the mill yard, was the first intimation they received of the coming trouble. The crowd immediately started to bombard the place with stones and tried to force an entrance into the building, but the doors had been hurriedly shut and locked. Windows were smashed in the front and sides of the mill, on both the first and second stories. Every pane in the office was broken, whole sashes in some of them being entirely destroyed. The assault on the building was accompanied with howling demands that the frightened operatives should immediately cease work and come out, and fierce threats of what would follow their failure to do so.

The entire office force had to seek refuge in other parts of the building to escape the rain of stones that were hurled through the windows. The president of the company ordered the engines to be stopped and the hands to quit work and go out, fearing that otherwise the mill would be torn down.

When the employes filed out of the mill and it was seen that all had left, the march of the mob was resumed, the direction taken leading to Robertson's mill, where it was proposed to repeat the same tactics. Mr. Robertson, however, to forestall this, had ordered the power shut off and told the employes to go out. When the mob got to the mill, all were out, so no injury was done to the buildings. The rioters then surged along toward the Cedar Cliff Silk Mill, but a report of what was coming having reached there in time, work was suspended and the hands were found leaving the mill when the mob arrived. The sight satisfied them, and the only damage done was one stone thrown through the office wondow. The Bamford Mill was next attacked with even more violence than was shown at the Columbia Works. Mill after mill was visited, but at all of them work had been suspended, the proprietors taking that course as the only one possible under the circumstances.

The ordinary police force of the city was not sufficient to cope with rioting on such an extensive scale, and the places in danger of attack were so numerous that an efficient force could not be got together in time to check the outbreak before it had grown to large proportions and destroyed much property. The police, however, assisted by the city firemen and a large number of special officers, all under the personal command of the Mayor of Paterson, soon succeeded in checking the riots and finally stamped them out entirely. Several members of the police force were wounded, as were also a number of the rioters in the encounters which took place between them. A dozen or more prisoners were taken, who had made themselves conspicuous as leaders, five of whom were sent to the State prison for one year.

The widespread character of the disturbances and the angry spirit shown by the mobs, made the mill owners timid about exposing their property by attempting to resume work without the protection of a force strong enough to suppress disorder if it should again break out. The mill owners and other manufacturers, acting together, requested the Governor of the State to order to Paterson a sufficient force of the National Guard to insure the mill owners and their operatives full protection when work was resumed.

The Governor promptly responded by ordering a regiment of infantry and a troop of cavalry to the city. After their arrival there was no further outbreak of any kind. The mill operatives, feeling assured that they could return to work without danger of having to suffer personal violence, were soon all back in their places, the various unions of the trade having voted against a general strike.

The dyers' helpers, convinced that there was no prospect of their strike being supported by the silk workers, and that without such support it could not succeed, soon after made terms with their former employers and returned to work after eight weeks' idleness, during which time they had caused more trouble and expense to the silk trade, mill owners and operatives alike, and also to the city of Paterson, than had resulted from any previous labor disturbance in that town

87 The introduction of a new system of time-keeping displeased about

fifty blacksmiths and their helpers, who went out on strike against it.

The journeymen bakers of Paterson have made substantial progress toward having their demands for shorter hours and the use of the union label on bread, generally agreed to by the boss bakers. Four master bakers signed the agreement during the month of June.

Rudolph Seigers, a hod carrier, was severely injured by the collapse of a scaffold on which he was working.

Three painters who were at work painting an iron tank in the Weidmann Dye Works were severely injured by fire which was communicated to their clothing from a lamp which one of them accidently upset.

Inquiries as to the site and water supply is being made in Paterson by the representative of the New York and Pennsylvania Paper Company, who, when a satisfactory location is found, will erect a large plant in which upwards of 800 persons will be employed.

The Transferring Design Company has been organized in Paterson with a capital of $125,000. The company will manufacture embroidery designs for art printing.

The Meyer Throwing Company has been organized to handle silk products at Paterson. Capital, $15,000.

Peter Bailey of the silk firm of Ashley & Bailey died while undergoing an operation in St. John's Hospital. Mr. Bailey was one of the founders of the silk industry of Paterson. He and his partner, Mr. Ashley, began business in a small room in Straight Street, Paterson, in 1893. They had only two looms and each of them worked one. At the time of Mr. Bailey's death the firm had large mills at Coatsville and Columbia, Penn., and at Hagerstown, Md.

Passaic—

About 25 carpenters went on strike in Passaic for an eight-hour work day and 35 cents an hour. They formerly worked nine hours a day and received 32 cents.

The motormen and conductors of the Paterson, Passaic and Rutherford Trolly System have formed an organization. The object is to assist in securing from the company a more favorable time schedule.

July.

Paterson—

The Typographical Union of Paterson has withdrawn several of its members from the office of an evening paper in that city because the proprietors refused to unionize the establishment.

The boiler shops of the Rogers Locomotive Works at Paterson was idle for a few hours because of several boys employed at heating rivets having struck for an increase in wages. The company gave the boys what they asked. The riveters in the same place demanded $10 a hundred for setting rivets, instead of $8, which they had been receiving. The company consented to the increase.

Four striking dyers' helpers were arrested while loitering around the Auger & Simon and the Weidmann's Dye Houses, and on being searched all were found to be armed. One of the men in addition to a clasp knife with a long blade, had on his person a 38-calibre revolver fully loaded. All four were sent to jail for 30 days.

The plant of the Passaic Rolling Mill Company will, it is said, pass under control of a new corporation in a few months. The establishment, under its new management, will be enlarged to about two and one half-times its present size.

The Thomas Wrigley Machine Shop at the corner of Vine and Essex Streets, Paterson, was totally destroyed by fire.

The Phoenix Silk Manufacturing Company of Paterson is building a large annex to its Adelade Mill at Allentown, Pa.

The "Totowa Silk Company" will be known as the "Corbett, Remhardt & Company" after August 1st.

The strike of the dyers came to what may be regarded as its end about the middle of July, although a comparatively small number of men in Paterson still held out for the demands as formulated at the beginning of the strike in April. All the dye houses, great and small, were overrun with applications from their old employes for reinstatement. At all of them some of the old men were allowed to return, but many were turned away with the information that their places had been filled.

Passaic—

A large cotton mill is to be erected in Passaic by a New York manufacturing corporation, whose present factory is in that city.

August.

Paterson—

89 Twenty bobbin makers employed in the Van Riper Mill at Paterson quit work because they were refused an advance of $1 a week in wages.

The McNab & Harlan Manufacturing Company are about to increase the size of their plant at Paterson by the erection of two large buildings. The company manufactures brass goods and employ at present 500 hands. More workmen will be employed when the addition to the plant is finished.

A new company has been organized to acquire and operate the plant of the Passaic Rolling Mill at Paterson. The intention is to modernize the works and bring them up to date in every respect. The new company will be capitalized at $5,000,000. The improvements proposed will cost half a million dollars.

The Paterson Electric Supply Company and the Walter Beveridge Company, who make the same line of goods, have consolidated.

A certificate of incorporation of the Hill Silk Manufacturing Company has been filed with the County Clerk at Paterson. The company will manufacture silk goods. Capital invested, $15,000.

The Paterson Silk Mill that is about to move to Raritan is said to be that of M. J. Green, a manufacturer of broad silks, who operated a plant of about 60 looms in the Dale Mill.

Michael Donnelly, a workman employed on a building in Paterson, slipped and fell from a scaffold to the ground, sustaining severe internal injuries.

The plant of the Federal Match Company at Paterson was damaged by a fire which originated in the drying room.

The mills of the Helvetia Silk Company at Paterson were partly flooded by a heavy rainstorm which caused a rise in the Passaic River. About $1,000 worth of silk was ruined.

September.

Paterson—

Work on the new buildings for the Rogers Locomotive Works at Paterson is progressing rapidly, the new erecting shop being nearest to completion. When the new sections are finished the capacity of the plant will be about doubled. Upwards of $300,000 is being spent on the improvements.

Two million dollars has been paid into the Citizen's Trust Company as trustees for the Passaic Steel Company, a corporation that has been formed to take over the plant and business of the Passaic Rolling Mill. A like sum in bond will be issued for the enlargement of the works. The new company intends to bring the production up to 100,000 tons of steel a year.

The doublers and hard silk winders at the Ramsey & Gore Mills, Paterson, quit work because of being required to do more work than usual without additional pay. The strikers were principally girls and bobbin boys. 90

The housesmiths employed on the building of Schauer & Company at Paterson were called out because the contractors had violated a rule of the union, which prohibited material to be used by housesmiths being handled by workmen of other trades. The contractor made explanations satisfactory to the walking delegate, and work was resumed.

A fire which broke out in the silk mill at No. 53 Washington Street, Paterson, after the employes had gone to their homes, resulted in a quantity of skein silk being damaged.

A fire broke out in the piano factory of the Looschen Company at Paterson, but was extinguished before much damage had been done.

A new labor union to be known as the Wood, Wire and Metal Lathers' Union, No. 143, has been organized in Paterson.

The Master Plumbers' Association of Paterson has adopted a rule, which is now in force, forbidding its members to take sub-contracts for plumbing work under penalty of a heavy fine. The Master Plumbers will hereafter make estimates and do work for owners direct.

John Hand, for many years the head of the silk company of John Hand & Sons, Paterson, died after a long illness.

Daniel Winters, employed at the Rogers Locomotive Works, Paterson, had his ankle fractured through an accident while at work.

John Taddy, an employe of the North Jersey Water Company, was fatally injured while working at a concrete mixer.

Robert Dun, an employe at the Rogers Locomotive Works, was badly injured by the fall of a heavy piece of iron.

Edward Denbleyker was fatally injured at the McLean Mills, Paterson, while helping to unload a car.

Felix Rogers, an employe at the Weidman Dye House, lost the sight of one eye through acid being accidently splashed into it while at work.

Frederick Villinger, employed at the Hazelton Boiler Works, at Paterson, had his hand mangled by machinery while at work.

Bamford Brothers, silk manufacturers, have instituted suit against the city of Paterson for $2,500 damages, caused by rioters during the recent disturbances among the silk workers.

Passaic—

The Passaic City Brown Stone Company is in financial difficulties, caused, the manager says, by too costly machinery and labor troubles. Work has been suspended.

The Hoboken Ribbon Company has been incorporated at Passaic. Capital, $20,000. The company will manufacture silk ribbons.

The Helio Match Company, which has a plant in Passaic employing forty persons, is about to move the works to Delaware.

Clifton—

The American Fluff Rug Company, recently incorporated, are about to erect a large factory building of brick at Clifton. The company will manufacture rugs from old carpets.

Bloomingdale—

The Caroline Products Company has been incorporated and will carry on a saw mill at Bloomingdale. Capital, $50,000.

SALEM COUNTY.

March.

Alloway—

A knitting mill is to be located at Alloway and will employ about forty persons.

Salem—

The Salem Glass Works have increased to $75 the prize to boys attending night school regularly.

April.

Alloway—

The Alloway Knitting Company was incorporated with a capital of $100,000 and will establish a plant at Alloway.

Salem—

John Moreley, a painter, fell from a scaffold at Salem and was injured.

May.

Salem—

The Salem Electric Company, the new owners of the electric lighting plant, will shortly improve the facilities of the company so as to be able to furnish light or power, both day and night.

August.

Salem—

The Stiles Freas-Smith Company, manufacturers of wrappers at Salem, have leased the Hall property at Elmer and will move all their property to that place. About 100 machines will be operated.

September.

Quinton—

The Quinton Glass Company has filed articles of incorporation in the Salem County Clerk's office. Capital could not be ascertained.

Henry Lambert, proprietor of two of the largest canneries in Salem County, committed suicide while in a condition of mental worry brought on by the difficulty of obtaining a sufficient supply of tomatoes to meet orders he had accepted in advance.

Elmer—

Reports from South Jersey canneries indicate that the pack of peas, beans and asparagus will be the largest known in years.

SOMERSET COUNTY.

March.

Bound Brook—

Four large buildings of the Somerset Chemical Company, near Bound Brook, were destroyed by fire. Loss, $40,000.

July.

Scotch Plains—

Residents of Scotch Plains expect that a large manufacturing concern from Albany, N. Y., will soon remove there and erect a stove foundry that will give employment to over 1,000 men.

Plainfield—

The Watchung Silk Mills of Plainfield, one of the few mills that was not obliged to shut down on account of the silk dyers' helpers' strike, is now receiving a sufficient supply of silk to keep all its mills running.

Surveys are being made for a new machine tool plant to be located in the west end of Plainfield. The firm of Maxwell, Manning & Moore are said to be back of the new concern.

August.

Raritan—

One of the largest of the Paterson silk firms will shortly begin the erection of a mill at Raritan. Land for a building site has been donated and a fund of $10,000 to still further aid the industry has been subscribed by residents of the town. It is the intention of the silk firm to move its entire plant from Paterson to the new mill.

Bound Brook—

91 Eighty men employed by the American Bridge and Construction Company at Bound Brook struck in sympathy with other employes in New Jersey, Pennsylvania and New York, who were endeavoring to compel the company to pay more wages. The Bound Brook men were receiving $4.05.

September.

Bound Brook—

The Weston Piano Company has purchased land at East Bound Brook and have given out contracts for the erection of a factory building 40x150 feet and two stories high.

SUSSEX COUNTY.

February.

Sussex (formerly Deckertown)—

The closing of a large shoe factory has made many vacant houses in Sussex. The employes generally have moved to Newton in search

of employment. The people of Sussex would gladly welcome a new industry to settle in the borough.

Newton—

William H. Jones was seriously injured by an iron bar falling on him in a slate quarry.

March.

Newton—

William H. Jones, an employe of the Newton State Quarry, was hit in the stomach by a heavy crowbar while at work, and seriously injured.

April.

Franklin Furnace—

E. W. Holly and Robert Morgan, who were engaged in dumping cars of coal at the furnace, were thrown from the trestle by the trap door of one of the cars giving way. Holly was only slightly bruised, but Morgan was so severely injured that he died soon after.

Newton—

The Newton Board of Trade received a notice from the Newton Shoe Company stating that unless the residents of the town subscribed $15,000 to the stock of the concern, the factory would be closed and the company go into liquidation. The board appointed a committee to solicit subscriptions.

May.

Newton—

A union of carpenters was formed at Newton. Twenty-three members signed the roll.

The Layton Franklinite and Zinc Mining Company was organized at Newton. Object, mining. Capital, $100,000.

The Newton Board of Trade are helping to procure subscriptions to the capital stock of the Newton Shoe Company. The money is required to extend the plant.

June.

Newton—

The Newton Shoe Company will close its factory after the orders on hand have been filled and will take no new ones. The liquidation of the business will follow the closing of the shops.

Changewater—

The Hopatcong Woolen Mill at Changewater is soon to be so enlarged as to greatly increase its capacity, and the working force will be more than doubled.

August.

Newton—

Contracts have been made for the erection of a new creamery at Newton for the Newark Milk and Cream Company.

September.

Oxford—

The Empire Steel & Iron Company has given a contract to erect a large brick building at Oxford, which will be part of the new compressed air plant that furnishes power for the mines.

Sussex—

The new silk mill at Sussex Borough will be in operation Oct. 1st.

McAfee—

Henry Kniffen, an employe of the New Jersey Lime Company at McAfee, was seriously hurt while running a car down the steep grade to the kilns. He lost control of the car and was obliged to jump off as the only way to save his ife.

UNION COUNTY.

February.

Elizabeth—

A New York firm of umbrella manufacturers has leased the factory buildings lately occupied by Louis Bergen & Company, manufacturers of colors at Elizabeth. The new industry began operations with 100 employes.

The De La Vergne Refrigerating Machine Company of New York has purchased a site at Elizabeth for a new plant which will be erected soon. The buildings will cost $90,000 and have a capacity of 100 tons of ice per day. The plant will be finished about June 1st.

John Cirilto, a machinist, had his leg broken through an accident while at work in a machine shop at Elizabeth.

The Union County Trades Council delegates to Essex Trades Council were instructed to ask assistance from that body to procure a charter for the Elizabeth Brewery Workers.

The delegates of the Bakers' Union to Union County Trades Council, reported that all bake shops in Elizabeth were now unionized.

Plainfield—

The Pond Tool Company at Plainfield has finished large additions to its plant. The main shops are greatly increased in size and new pattern shops and lofts have been built.

March.

Elizabeth—

The master builders of Elizabeth were notified by the journeymen of the various building trades that an advance in wages of from 10 to 20 per cent would be demanded.

A new cigar factory has been opened at Elizabeth by a New York company. Five hundred persons will be employed.

Work has been begun in part at the new shops of the Central Railroad at Elizabeth.

The S. L. Moore's Sons' Company Machine Shops at Elizabeth were damaged by fire. Loss about $40,000. Nearly 400 men are temporarily idle.

Peter Lesnik and Michael Hyderek, both workmen at the Graselli Chemical Works, were badly burned by sulphuric acid.

Plainfield—

The American Pulverite Company was incorporated at Plainfield and will start a factory there. Capital could not be ascertained.

Rahway—

King & Andelfinger is the title of a new firm formed in Rahway to manufacture liniment.

The Rogers Company, manufacturers of silverware, have leased Spicer & Hubbard's mill at Rahway and started business there.

The Uniform Steel Company which removed from Newark has started its plant at Rahway.

April.

Elizabeth—

Seventy-five helpers at the Lewis Nixon Ship Yard, Elizabeth, struck for $1.50 and an eight-hour day.

A gang of Italian laborers employed by the New York and New Jersey Telephone Company at Elizabeth struck for $1.50 per day. Complaint was also made of the impositions practised on them by a boarding boss.

The building trades journeymen have received the advances in wages demanded by them.

The American Wearing Body Varnish Company are going to erect a factory at Elizabeth.

Julius Althoff, a baker, fell dead from heart disease while mixing dough in an Elizabeth bakery.

Michael Janika, a workman, had both legs badly crushed by the fall of a heavy casting in the New Jersey Central Car Repair Shops.

Michael Sinder had a leg badly crushed by the fall of a casting in the Crescent Iron Works at Elizabeth.

John Turner was injured while working on a hammer in the Ball & Wood Engine Works at Elizabeth.

Frank Minerd contracted blood poisoning from handling copper wire in the Electric Light Company's plant at Elizabeth.

A slight fire occurred in the Frank R. Smith Lime Flour Company's plant at Elizabeth.

The Worthington Pump Company at Elizabeth has voluntarily reduced the working hours of its 600 employes from ten to nine hours per day.

Plainfield—

Silas Winans was kiled by being caught in a fly wheel in a factory at Plainfield.

The plant of the Craig Manufacturing Company at Plainfield was damaged by fire. Loss, $1,000.

The roof of the Conroy Wagon Manufacturing Company at Plainfield was destroyed by fire.

The Master Mechanics' Association of Plainfield has acceded to the demands of the building trades journeymen for an increase of wages. This action was taken in the interest of peace.

The Plainfield Board of Trade received an inquiry as to whether labor can be obtained there for a plant to manufacture women's underwear.

The Watchung Silk Company is moving its mills from the present site in Plainfield to a new structure at North Plainfield. The new mill is equipped with two kinds of power and is modern in every respect.

Garwood—

The American Copper Extraction Company at Garwood has been fined for emptying sulphuric acid into the Rahway River.

The main building of the American Copper Extraction Company at Garwood was partly destroyed by fire. Loss about $25,000.

The Reliable Coat and Apron Company of Garwood has been incorporated with a capital of $50,000.

Summit—

The journeymen of the building trades at Summit have gained an eight-hour day with increased wages.

The tinning establishment of Klocksin & Senior was damaged by fire.

Westfield—

The American Copper Extraction Company is to rebuild its burned works at Westfield.

Waverly—

Some carpenters employed by the Weston Electrical Instrument Company at Waverly demanded an advance in wages to $3 per day and quit work.

May.

Elizabeth—

All the lead burners in the various chemical factories along Staten Island Sound, from Elizabethport to Carteret, struck for an increase of wages and a reduction of the hours of labor. Four dollars a day for nine hours was demanded. They were getting $3.50 for ten hours' work. The manufacturers refused the demand.

Several machinists employed at the S. L. Moore's Sons' Shop, Elizabeth, went on strike to enforce some demands which they had made relating to wages and hours of labor.

A number of coppersmiths employed at the Crescent Ship Yard, Elizabeth, demanded an increase of fifty cents a day in their wages, and quit work pending a decision regarding the matter by the Company. The men work nine hours and receive $3.00 per day. 93

One hundred hod carriers of Elizabeth embarked in a strike for thirty cents an hour. A compromise was made on the basis of 27½ cents, or $2.20 a day for eight hours. The strike lasted only one day. 94

Practically all the painters in Elizabeth went on strike April first to enforce their demand for a minimum wage rate of $3.00 a day of eight hours. They had been receiving $2.75 for nine hours. All through the month of May the strike was still on. Some of the bosses had conceded the demands of the men, but a large majority refused to do so. 95

The Curtis Machine Company was organized at Elizabeth. The firm will make gasolene, electric and other motors for automobiles.

The Multo-Photo-Scope Company, Elizabeth, was organized for the purpose of manufacturing a moving picture apparatus. Capital $10,000.

The various trade unions of Elizabeth have started a movement to make the rooms of the Union County Trades Assembly, the headquarters and meeting place for all trade organizations in the city.

At Elizabeth, nearly the entire plant of the Swan & Finch Oil Works of the Standard Oil Company has been destroyed by fire. The loss was estimated at $200,000.

Plainfield—

Two firms of painters of Plainfield compromised with their striking employes, giving them $2.75 a day. The men resumed work.

The plumbers of Plainfield demanded an advance of fifty cents a day and the carpenters twenty-five cents; failing to get it, the union men of both trades went on strike. The painters, paper hangers, tinners and other building trades journeymen joined the movement and all building operations in the city have been brought to a standstill.

Members of the Coremakers' Union employed at the Pond Tool Works, Painfield, went on strike but returned to work after three days idleness, the points at issue having been satisfactorily adjusted.

Some very large buildings are being erected as additions to the Scott Printing Press Works at Plainfield. One building will be 200 feet long, 60 feet high, and three stories high.

Bound Brook—

The iron workers on the New Jersey Central Bridge over the Middlebrook struck for fifty cents an hour. Much embarassment was caused to railroad traffic.

The union carpenters at Bound Brook employed on a building on Belvidere avenue quit work because the plumbing contractor put a non-union man to work on the job. Similar trouble was experienced at another in course of erection in West Seventh street, where the carpenters struck because several non-union plumbers were put to work. They returned to work when the plumbers were discharged. The local carpenters have made it a rule to refuse to work on any job where non-union labor is employed.

Garwood—

The building of the Anchor Fence Post Company at Garwood is complete. The machinery is being moved in and work will be begun on full time within a week.

New Market—

Levering & Garrison have commenced the erection of a large foundry near New Market on the Lehigh Valley Railroad. When completed the works will employ about 150 hands.

Scotch Plains—

An explosion caused by careless handling of a lamp, occurred in a metal shop at Scotch Plains, and resulted in the death of Robert Jahn, and his son, Herman.

June.

Elizabeth—

The machinists employed in the Crescent Ship Yard, Elizabeth, had a misunderstanding with their foreman and stopped work, but only

for a part of the day. The affair was connected with the strike of the machinists in the S. L. Moore Foundry, which had begun.

P. Miska was severely injured at the S. L. Moore Sons Company's works, Elizabeth, by a heavy iron grating which fell upon and crushed his foot.

The power in the Construction Shops of the Central Railroad of New Jersey at Elizabethport will be distributed to the various buildings of the plant from a central station. The electric and pneumatic systems will be used.

A fire in the polishing department of the Singer Manufacturing Company's works did damage to the amount of about $1,000. The company has a fire brigade composed of its own employes which dealt successfully with the fire.

Plainfield—

The plumbers of Plainfield who, for a period of seven weeks were on strike for an increase in their wages of fifty cents a day, finally accepted the comprise offered by the employers—twenty-five cents advance. 101

The Burdick Manufacturing Company was organized at Plainfield to manufacture doors, sashes, etc. Capital $25,000.

Rahway—

The firm of F. B. Burns & Co., Rahway has started a lace factory on the premises formerly occupied by the Acetyline Gas Machine Company on Broad street. The new firm will turn out a very fine grade of lace work and while employing at present only fifty persons, mostly women, will when fully started, employ a much larger number.

The Uniform Steel Company will begin to operate its new plant at Rahway. The families of many of the workmen to be employed there are moving in town.

The building formerly occupied as a brewery by the Geyer Brothers on St. George Avenue, Rahway, was entirely destroyed by fire.

Summit—.

A delegation of the Lodi dyer's helpers visited Summit and induced many of the employes in the Summit Silk Mill to cease work in sympathy with them. Apparently these men quit work under some kind of pressure for a delegation of them went to the striker's headquarters at Paterson to secure, if possible, permission to return to work.

Roselle—

The Simpson Manufacturing Company was incorporated at Roselle to carry on the business of manufacturing sanitary appliances. Capital $100,000.

July.

Elizabeth—

102 Nearly two hundred employes of the Crescent Ship Yard, Elizabeth, went on strike July 2, because a man was employed who did not belong to the local union. The workman had a card from an out of town union which the local men refuse to recognize. The men returned to work in a few hours; the man having left of his own accord.

The striking machinists of the S. L. Moore Iron Foundry, Elizabeth, are still out; the men have now been idle about ten weeks.

The cylinder head of one of the large engines of the Singer Works at Elizabeth was blown out, and nearly 1,000 men had to suspend work for three days until the damage was repaired.

The Bowker Fertilizing Company has been absorbed by the American Agricultural Company. No change will be made in the Elizabeth works.

Westfield—

The Asbestos Slab Manufacturing Company filed articles of incorporation at the County Clerk's Office. Capital, all paid in, $40,000. The principal office of the company will be at Westfield.

Summit—

The Summit Silk Mill employes, seven hundred in number, who struck in sympathy with the Paterson strikers, returned to work after 103 one week's idleness.

Rahway—

Representatives of a firm of dress skirt manufacturers of New York are seeking a satisfactory location for a factory at Rahway. It will be settled there if sufficient help can be obtained to run the works.

North Plainfield—

The Lincoln Chamois and Leather Company of North Plainfield was organized to deal in hides, skins and leather. Capital $50,000.

August.

Elizabeth—

104 The strike of machinists at the Crescent Iron Works, Elizabethport, which began May first, was settled satisfactorily to the men and the firm.

The moulders and coremakers employed at the Worthington Pump 105 Works, Elizabethport struck against a change by the superintendent in the working time of the day shift. They all returned to work the next day. The differences were settled by arbitration.

The employes of Beckton, Dickinson & Company of Elizabeth, makers of surgical instruments, demanded that their schedule of working hours be reduced from sixty to fifty-four per week without any reduction in wages. On being notified of the firm's refusal to consider the matter, the workmen, about forty in number, went out on strike. 106

The masons employed on a new residence being erected on Westminster avenue, Elizabeth, because the steam fitting contractor conducts a neutral shop and does not favor union men, went out on strike. 107

The plants of the Crescent Ship Yard and of the S. L. Moore's Sons Foundry, both of Elizabethport, have been absorbed by the United States Ship Building Company, which is capitalized at $45,000,000. A mortgage covering all the plants of the new company and amounting to $10,000,000, was recorded at Elizabeth on the 13th. The new arrangement promises to largely increase work at the two Elizabethport plants.

John Kostick, 19 years old, had his skull fractured at the John Stephenson Car Company's works where he was employed. The injury was caused by a piece of heavy piping which was driven against the man's head by a broken belt which slipped from its pully.

James Hastings, an employe of the Singer Company at Elizabeth, had his hand caught in a lathe on which he was working. A painful lasceration was the result.

A cold storage dock belonging to the Browne-Scrymser Company on South Front St., Elizabeth, was injured by fire.

Tremly—

Michael Barnack, a workman employed at the Graselli Chemical Works at Tremly, was seriously injured by inhaling sulphuric acid gas while working in a storage tank.

Plainfield—

The employes of the Columbia Tool Works at Elizabeth, made a demand on the management for a reduction of the hours of labor to nine per day. The working hours as established are fifty-nine and a half per week. The firm has refused to comply and a strike is threatened.

September.

Elizabeth—

Employes of the Columbia Tool Works who had been on strike, returned to work. All but four of the men were allowed to resume their employment. 108

Thirty-two riveters employed at the Crescent Ship Yard struck because they alleged, through the mismanagement of the foreman, theiearnings were reduced from $3.41 to $2.77 per day. 109

Peter Cassedy, a laborer, employed at the Worthington Pump

Works was severely injured by a moulding flask which fell from the crane and struck him on the chest.

Michael Faughman, a mason, received a fracture of the skull while at work on the new Union County Court House at Elizabeth. The injury was caused by a brick falling from a scaffold above him.

Verona Mason, a young woman employed in the ironing department of the American Steam Laundry had a hand caught between the heated ironing rollers and was severely burned and bruised.

Plainfield—

One hundred men are now employed on the new Pedrick and Ayres Factory at Plainfield, and work is being pushed as rapidly as possible.

The Trinity Syndicate is the name of a new corporation formed at Plainfield. The business to be carried on is lithographing, engraving and die making. Capital $125,000.

The Pond Tool Company are now occupying the new buildings which were erected recently as extensions to its plant. The additions consist of one building three hundred feet long for the main shop, a two story pattern shop, one hundred and fifty feet long, a tool room, one hundred by thirty feet, and about three hundred feet in the foundry.

John Abbott, a machinist employed at Levering & Garrigues' plant, had a hand badly lacerated by being caught in the machinery.

Charles Dunham ,an employe of the Safe Works at Plainfield, had a leg caught in a machine and badly bruised. William Schenck, a workman employed in the same place, suffered a severe injury to a hand which was caught in a gear.

Carteret—

A fire broke out in the storage building of the Carteret Chemical Company's works at Carteret, which resulted in the entire destruction of that part of the plant. The works of the Wheeler Condensing Company were also injured.

Rahway—

The Marcke Chemical Company who are erecting large works at Rahway are said to be making arrangements or putting up several more buildings as part of the plant.

Lincoln—

S. B. Kelso & Company, piano manufacturers of New York, have purchased a large tract of land between Lincoln and Bound Brook, and have given out contracts for the erection of a large factory.

WARREN COUNTY.

March.

Spruce Run—

James W. Apgar had a hand lacerated by a circular saw on which he was working in a mill at Spruce Run.

Canister—

Clara Cortright, an employe in a factory at Canister, had three fingers crushed in a machine.

Phillipsburg—

The plant of the Phillipsburg Stove Manufacturing Company has been leased to a New York firm who will manufacture machinery and stoves.

April.

Hackettstown—

A receiver has been appointed for the Carteret Steel Company at Hackettstown, and an application has been filed for the dissolution of the Company.

Belvidere—

Noble Wallace, a colored man, was killed in the plant of the Martins Creek Portland Cement Company, near Belvidere, while working in the quarry.

The Crane Felt Works at Belvidere was shut down in consequence of a large fly wheel having bursted. No one was injured.

The iron plant of Joseph M. Rosebery containing much valuable machinery was destroyed by a forest fire.

Port Murry—

Charles Mayberry employed at the National Fireproofing Company at Port Murry lost several fingers while operating a brick saw.

Oxford—

Jensen Bros., iron workers at Oxford, have made a voluntary increase in the wages of their one hundred employes. The puddlers are paid twenty-five cents more per ton, and the other employes, ten per cent. increase.

May.

Oxford—

The Basic Iron Ore Company of Oxford is the title of a new enterprise organized in Oxford. Capital $50,000.

July.

Stewartsville—

The Edison Portland Cement Company's plant at Stewartsville is completed and ready to begin the manufacture of cement. The buildings included in the works covers a space one half a mile long and a quarter of a mile wide, and has thus far cost upwards of a million and a half dollars. About 600 men have been at work for two years constructing the plant. The machinery is calulated for a product of 10,000 barrels of cement a day. The system is an entirely new one, designed entirely by Mr. Thomas A. Edison.

August.

Oxford—

A well known Paterson silk firm through its representative, has made a thorough examination of the old Jansen Cut Nail Mill, once the principal industry of Oxford, to determine its adaptability to the purposes of a silk mill. If found to be satisfactory and an agreement on price can be reached with the present owners, the property will be purchased and fitted up as a silk mill.

Washington—

The old Van Doren grist mill just west of Washington has been sold with all its land property and water rights to the United States Milk Flour Food Company of New York. The necessary machinery will be placed in position within a few weeks and the manufacture of milk flour tablets will be commenced. The industry, it is expected, will employ 50 persons.

September.

Phillipsburg—

Residents of Phillipsburg believe that the large works of the Ingersoll-Sergeant Drill Company now located at Easton, Pennsylvania, will be moved to their town within a year, and that it is the intention of the company to double the size of the plant. The company makes air compressers and general mining machinery. About 1,600 men are employed at present.

A Pittsburg firm is looking for a site at Phillipsburg for a large steel plant.

Irvin Painter, 17 years old, was caught by a revolving shaft at the Vulcanite Cement Works and killed before the machinery could be stopped.

Sterling—

The weavers employed by the Sterling Silk Manufacturing Company have gone on strike, because of a refusal to recognize their union. The closing of the mill which is the only industry of any magnitude carried on in the village, has caused much distress. The company threaten to remove their works elsewhere if the weavers do not return soon.

New Village—

The new Edison Cement Plant at this place is nearly finished. The buildings which are of steel entirely, will be equipped with machinery all of which is invented by Mr. Edison. Three hundred men will be employed and the output of cement will be from three to five thousand barrels per day.

Belvidere—

A large plant will be erected and equipped with the latest labor saving machinery, by a New York company at Belvidere, for the manufacturing of cement.

Port Murry—

Theo. Castner, a workman employed in the Port Murry plant of the National Fire Proof Company, was seriously injured by the faling of a roof on which he was making repairs.

Lower Hibernia—

Stephen Nojack, a workman employed in the Glendon Mine, was killed by a cave in.

Manufacturing Plants that Have Been Moved from New Jersey to Other States During the Year 1901.—The Reasons Assigned for Going.

Brushes.

The Enterprise Brush Company. "The main reason for moving our plant back to New York City was on account of insufficient and inefficient help.

Glen Gardner is a village located in a farming community that has had no factory industry in thirty years. The help required was mostly young people, between fourteen and twenty years of age; this class was limited in number and hard to discipline to the necessity of steady every day work—they being indifferent to our needs and their own welfare.

The village did not afford help enough to build up a growing business and our capital was not large enough to fight it out until more people could be induced to stay there. It is difficult to induce people accustomed to a city life to remain permanently in a small village. These were the difficulties that prevented our creating a successful business."

Dynamite.

United States Dynamite Company. "Our factory at Toms River, N. J., has been dismantled and the property sold. We no longer manufacture dynamite, but procure it from another concern."

Hot Air Furnaces.

The Graff Furnace Company. "We did not own our foundry property at Elizabeth and the owners wished to use it for other purposes. In looking for a new location, we were offered better inducements in Pennsylvania than elsewhere, and consequently, went there."

Elastic Gores for Shoes.

Hub Gore Company. "Our works in New Jersey were moved to the company's plant at Brockton, Mass., for purposes of consolidation."

Silk—Broad and Ribbon.

Lambert & Platt. "We moved our establishment from New Jersey because of advantages offered in Pennsylvania."

Rubber Goods.

Dunlop Tire Company. "Left the State to have works nearer to the center of our trade, and thus save freights on material and goods."

Typewriters.

Underwood Typewriters Company. Works moved to Connecticut. No reason assigned for the change.

Manufacturing Plants that Have Gone Into the Hands of Receivers, 1901.

Steel and Iron.

Carteret Steel and Iron Company.

Iron Ore.

Carteret Steel and Iron Company.

Shirts.

Stanhope Shirt Company.

Silk—Broad and Ribbon.

Pioneer Silk Company.

Manufacturing Establishments Destroyed by Fire, 190 .

Paper.

E. H. Davey Company, Bloomfield.
Abbey Brothers, Newark.
Nutley Paper Mill, Nutley.

Chemicals.

Mutual Chemical Company, Jersey City.

Cotton Dyeing.

George Schutt, Little Falls.

Silk—Broad and Ribbon.

Wm. R. Holden, Paterson.

Hats.

Mason Manufacturing Company, Newark.
A. Fischman Hat Company, Newark.

Manufacturing Establishments Permanently Closed, 1901.

Stoves and Ranges.

Phillipsburg Stove Compnay, Phillipsburg.

Hats.

M. Mercy Manufacturing Company, Newark.

Knit Goods.

Holt Manufacturing Company, Camden.

Leather.

M. Seidenbach, Newark.
Ruben Trier Leather Company, Newark.

Lamps.

Trenton Lamp Company, Trenton.

Machine Tools.

Newark Machine Tool Company, Harrison.

Lounges.

Eastern Metalic Cushion Company, Trenton.

Shoes.

Ewald Brothers, Deckertown.
E. F. Lambert, Riverside.

Shirts.

Koblinzer & Dazian, Jamesburg and Manasquan.

Silk—Broad and Ribbon.

Smith, Seard Silk Company, Paterson.
Gallant Brothers, Paterson.
Barbour Silk Company, Paterson.

Silk Dyeing.

R. J. Berdan & Company, Paterson.
Close & Burke Silk Dyeing Company, Paterson.

Soap and Perfumes.

Oakley Soap & Perfumery Company, Jersey City.

Steam Pipe Packing.

Jackson Park Felt Works, Little Falls.

Shoe Lasts.

Montgomery Last Company, Newark.

Whiting.

Knappman Whiting Company, Carteret.

Felt.

S. Sindle, Little Falls.

Saws.

American Saw Company (New Jersey plant), Trenton.

Artificial Flowers.

A. H. Alexander, West Hoboken.

Bicycle Pumps.

The Dickens Manufacturing Company, New Brunswick.

Chemicals.

Keystone Chemical Company, Camden.

Cotton Goods.

Werden Manufacturing Company, Glassboro.

Linseed Oil.

T. J. Prester & Company, Newark.

Pottery.

Egyptian Pottery Company (Expiration of Charter), Trenton.

Printing.

Newark Lithograph Company, Newark.

Harness.

Butler & Ward, Newark.

Dental Tools.

American Dental Manufacturing Company, Jamesburg.

Decisions of the Courts on Cases Affecting the Interests of Labor, 1902.

Decisions of the Courts on Cases Affecting the Interests of Labor.

JOHN H. GWYNNE *v.* FRANK G. HITCHNER AND E. FRANK YERKES, PARTNERS AS HITCHNER & YERKES.

Supreme Court of New Jersey, February 25, 1901.

Opinion by VAN SYCKEL, J., *37 Vroom 97.*

(Syllabus by the Court).

The plaintiff was employed for four and a half months as a color mixer by the defendants in the manufacture of wall paper. He agreed to do his work in a workmanlike manner and to the satisfaction of the defendants. *Held,* that the defendants had a right to judge for themselves whether his work was satisfactory, and that it should not have been left to the jury to determine whether they ought to have been satisfied.

GERNAND *v.* SMITH.

(Supreme Court of New Jersey, June 10, 1901).

Injury to Employee.—Defective Appliances.

In this case the weight of the evidence so greatly preponderates against the verdict that a new trial must be granted.

(Syllabus by the Court).

Action by John Gernand against Theodore Smith. Judgment for plaintiff, and defendant moved for a new trial. Granted.

Argued February term, 1901, before Depue, C. J., and Collins, Hendrickson and Dixon, JJ.

49 Atlantic Reporter 427.

DIXON, J. On January 31, 1898, the plaintiff, a man 69 years of age, who had been employed in the defendant's blacksmith shop for 30 years, was injured in the shop by the breaking of a tool called a "swedge," and brought this suit to recover damages. The jury rendered a verdict in his favor, which the defendant now seeks to set aside as unwarranted by the evidence. The swedge is a lagre implement, shaped somewhat like a pair of sugar tongs; the ends being solid cubes of iron about four inches in size, and having in each of the adjacent faces a groove, in which a bar of heated iron, being placed, may be compressed by forcing the cubes into close contact. In using it, one of the cubes is laid perfectly flat upon an anvil, and is kept there by a workman holding the handles of the swedge; and then a bar of iron, having a diameter slightly larger than the groove, is set in the groove, and a steam hammer comes down upon the upper cube with such force as by repeated blows to compress the bar into the cylinder formed by the grooves.

When injured, the plaintiff was holding the handles of the swedge, and, after the hammer had struck two or more blows, it was stopped a moment, and then it delivered another blow, and a handle of the swedge broke, the fragment out of it flying up against the plaintiff's right cheek and eye.

The lawful success of the plaintiff depends, of course, upon his proving that the swedge broke because of a defect in it not obvious to him, but discoverable by such inspection as reasonable prudence required of the master.

The only evidence of a defect in the tool was furnished by the testimony of the plaintiff himself, who swore that when he was struck he fell down, and then picked up the broken piece of the iron handle, saw blood upon it, and saw also a black spot on one of the fractured ends, which led him to believe the handle must have been previously cracked; but his eye at once swelled up (his left eye was already blind) and the pain was so severe that he could not tell whether the spot was on the top or side of the end, or what was the appearance of the metal on the rest of the end. Manifestly, this testimony is entitled to very little weight, when we con-

sider the plaintiff's condition, and the probability that the black spot may have been a particle of dirt from the floor of the smithy.

Against this evidence is the testimony of four witnesses who swore that they examined both ends of the fragment soon after the accident, and they were clean and bright and without sign of flaw. Moreover, the plaintiff, who had been a blacksmith for 50 years, said that the proper mode of testing such a tool was to strike it with a hammer, and "if it is sound it has a clear voice, and if it is damaged it has a hollow voice;" and several witnesses testified that, when the swedge was taken from the shelf for use, it was thrown upon the top of the furnace to get the frost out of it, so as to render it less brittle, then was thrown down upon the floor (this being the customary test), and then was placed upon the anvil, where it was struck at least twice by the steam hammer; and in none of these operations did it give any indication of unsoundness.

This testimony of perfect strength in the tool overwhelms the opposing evidence. It was further proved that if the swedge was not held firmly flat upon the anvil, the blow of the steam hammer would jar it so violently as to render a fracture not unlikely. In view of the plaintiff's age, an unfortunate lack of steadiness in his grasp of the swedge is by far the more probable way to account for this sad occurrence.

The weight of evidence so greatly preponderates against the verdict that a new trial should be granted.

WILLIAM CARRINGTON, WHO SUES, ETC., PLAINTIFF IN ERROR, *v.* CHRISTIAN I. MUELLER ET AL., DEFENDANTS IN ERROR.

Argued June 22, 1900—Decided November 19, 1900.

Court of Errors and Appeals.

Opinion by GARRISON, J., *36 Vroom 244.*

1. Minor servants are held to assume, by their contract of employment, those ordinary risks of their service that are obvious to them, or that have been pointed out to them in a manner suited to their youth and inexperience.

2. In order to charge a master with negligence in permitting the use by a minor servant of a machine, the ordinary danger of which was obvious, something more must be shown than the fact that the machine, by its unusual and unaccountable behavior upon a single occasion, injured the plaintiff in a way that was not obvious; something in the nature of a *scienter* must be proved from which it may be inferred that the master, by the exercise of reasonable caution, could have apprehended such an occurrence.

ERNEST HESSE *v.* THE NATIONAL CASKET COMPANY.

Court of Errors and Appeals of New Jersey, July 2, 1901.

Opinion by GUMMERE, J., *37 Vroom 652.*

(Syllabus by the Court).

An employee, although a minor, in accepting service, assumes the risk of such dangers connected with his employment as are obvious to him, and cannot hold his employer responsible for injuries resulting therefrom, notwithstanding the latter has failed to point out such dangers to him.

ERIE R. CO. *v.* SALISBURY.

Court of Errors and Appeals of New Jersey, Sept. 30, 1901.

Opinion by VAN SYCKEL, J., *50 Atlantic Reporter 117.*

Railroad—Push car—Third person—Loan—Negligence—Person crossing track—Injury—Company's liability.

(Syllabus by the Court).

The railroad company placed a push car in the hands of the foreman of a gang of men to be used in traveling upon its road for the

purpose of burning waste railroad ties. The foreman loaned it to an Italian to take away some of the ties for his own use. While the Italian was running it on the railroad track, the plaintiff, by his negligence, was injured while crossing the track. *Held,* that it was the duty of the foreman to use the push car with reasonable care to prevent injury to any one lawfully on the track, and to keep it under his own supervision until it was returned to the company, and that for the performance of that duty to the public the company was bound. The failure of the foreman to perform it was the failure of the company.

BENNETT *v.* MILLVILLE IMP. CO.

Court of Errors and Appeals of New Jersey, March 3, 1902.

Opinion by GARRETSON, J., *51 Atlantic Reporter 706.*

Action against corporation—Corporate existence—Proof—Acts of president—Contract of employment—Evidence.

1. When a defendant corporation, in an action upon contract, files a plea, verified by the president, of the general issue and payment, with a notice of set-off, under which it claims recovery from the plaintiff, this admits the corporate existence of the defendant, and that existence is not in issue in the case. In such case the plaintiff is not required to prove such corporate existence prior to proving the making of the contract sued on.

2. A corporation is bound by the acts of its president within the apparent scope of his authority which it authorizes, acquiesces in, or accepts the benefit of.

3. A paper writing in form of a contract of employment, but unexecuted, submitted by the president of a corporation to one proposed to be employed by the corporation, is competent evidence upon the question of the terms of an employment afterward orally consummated.

The payment to an employe of a corporation, as compensation for services, of a percentage of the profits of the business, is no more than wages or salary of an employe, and not a division of the "ac-

cumulated profits," to which stockholders are entitled, under section 47 of the corporation act, but an expense of the business, which must be deducted from receipts before the "accumulated profits" can be ascertained.

FREUDENBERGER *v.* L. STERNBERG & CO.

Court of Errors and Appeals of New Jersey, March 3, 1902.

Opinion by COLLINS, J., *51 Atlantic Reporter 699.*

Contract of employment—Termination—Right to commissions—Expenses.

The manager of a sales branch of a manufacturing and merchandising business was on January 2, 1897, employed, indefinitely as to time, at a weekly salary and a "commission of three per cent. on cash receipts, less all expenses," of the branch, "to be computed yearly, payable after three months' notice; three months' notice to be given by either party before termination of the employment." The employment was terminated in October, 1897, without previous notice, under circumstances that, for the purposes of this case, must be held to imply the mutual assent of the parties; and the salary of the manager to that time was paid. In a suit brought by the manager against the employer in February, 1898, the plaintiff recovered verdict and judgment for commission on the daily cash receipts, less the daily expenses, of the branch, up to the termination of the employment. On writ of error of the defendant, *held*:

1. That the termination of the employment by mutual assent did not forfeit the right to commission.

2. That the commission could properly be ascertained only by deducting from the cash receipts of the whole year 1897, the expenses of that year, and reckoning the agreed percentage of the proportionate part of the residue represented by the manager's time of service during the year.

3. That cost of merchandise was not to be included in expenses.

4. That the commission earned was not payable, except on three months' notice after January 1, 1898, and that therefore the suit was prematurely brought.

CHRISTENSEN *v.* LAMBERT.

Court of Errors and Appeals of New Jersey, March 12, 1902.

Opinion by ADAMS, J., *51 Atlantic Reporter 702.*

Injury to servant—Assumption of risk—Instructions.

1. A servant assumes the usual and obvious risks of his employment, and also risks consequent upon special dangers known to him, or which he could discover by the use of ordinary care. The negligence of the master is not one of these risks.

2. When a trial judge has laid down, in correct general terms, a ruling principle, it is not error to refuse a request asking for a specific application of that principle to a hypothetical case, or to a statement including only part of the material facts.

MECHANIC'S LIEN.

CAMPBELL ET AL., *v.* JOHN W. TAYLOR MFG. CO.

Court of Errors and Appeals of New Jersey, March 3, 1902.

Opinion by GARRETSON, J., *51 Atlantic Reporter 723.*

Mechanic's lien—Fixed Machinery—Commencement of building.

(Syllabus by the Court).

1. The eighth section of the Mechanic's Lien law defines "fixed machinery for manufacturing purposes" to be a building, and machines furnished to become parts of such a building are materials for which a lien may be filed under that law.

2. The bringing of such machines upon the premises is the commencement of the building, by the twenty-eighth section of the same law.