# NINTH ANNUAL REPORT 

OF THE

## BUREAU OF STATISTICS

## LABOR and INDUSTRIES

## NEW JERSEY,

POR THE YEAR ENDING OCTOBER 31st,

## 1886.

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## State of New Jersey, Office of Bureau of Statistics of Labor and Industries, Trenton, October 31st, 1886. $\}$

To His Excellency, Leon Abbett, Governor:
Sir-I have the honor to submit to the Senate and General Assembly, through you, the Ninth Annual Report of the Bureau of Statistics of Labor and Industries.

JAMES BISHOP,
Chief.

## INTRODUCTION.

In preparing the Ninth Annual Report of this Bureau, it has been our aim to confine the range of inquiry to subjects of a practical character, as may be seen from the bird's-eye view given in the contents. Part I. is but a continuation of former efforts to find out the real condition of the New Jersey wage-earners-what he earns and how he spends his income. The most important of these data come from the individual workingmen themselves, or from those who have charge of the industrial establishments in which they are employed, and are supplemented by the returns from a number of retail dealers, showing the selling prices of commodities in this State during this and previous years. Some interesting facts regarding workingmen's expenditures in this and other countries are also added. Tables Nos1 and 2 are made up from the individual replies of a comparatively small number of employes, and are not as good an indication of the average rate of wages in the respective employments as the returns tabulated in Table No. 5, the collated statistics from various establishments, exhibiting the number of hands employed, their weekly and yearly earnings, the number of hours of daily labor, movement of wages, number of days idle and the prices obtained for piece work.

Part II. is a summary of the remarks and suggestions by workingmen, regarding their own condition, and some views on the various phases of the labor question. Here will also be found information about the strikes occurring during the year in about two-thirds of the State-a record of the history of the most important and, probably, by far the larger number of labor disturbances. In all, fifty-four strikes have been reported. Of these, thirty-five were for an advance in wages, twenty-four ending successfully, seven failing and four being partially successful. Of the two strikes against a reduction in wages, one resulted favorably and the other unfavorably to the workmen. Of the remaining seventeen strikes, for different causes, two were compromised, four were successful and the balance failures.

Those who are interested in the agitation for a shorter work day and in the subject of technical education, will find many valuable suggestions and much information in the two chapters of Part III., one of which, on the "Common Schools and the Labor Question," is the paper read by Prof. Alexander Johnston, LL.D., of Princeton College, before the National Convention of Chiefs and Commissioners of
the United States Bureaus of Labor Statistics, held at Trenton last June. Prof. Johnston advocates a "common śchool technical training which shall prepare a boy for no trade in particular, and yet give him the rudiments of any or all of the trades for which his natural capacity fits him."

In Part IV. a census of our building and loan associations will be found. The statistics there tabulated, in connection with the reports from the various secretaries, give evidence that these valuable cooperative enterprises are becoming very popular in this State, especially among the wage-workers, who constitute two-thirds of the membership of the 156 societies in existence here in September last. The total number of shareholders was 37,730 , who owned $\$ 9,349,517$ in net assets. What progress we have made in distributive co-operation is shown in Part V.-a question which is also considered of the highest concern by the farmers of this country, and to its development the Grange movement has devoted much agitation.

The census for 1880 gives $4,008,907$ as the number of farms in the United States, of which $2,984,306$, or 74.44 per cent., were occupied by the owner, the balance being either worked upon shares or rented for a money rental. In New Jersey the same census reports 34,307 as the number of farms, of which 75.40 per cent. were occupied by the owner, 14.09 per cent. worked upon shares, and 10.51 per cent. rented for a money rental. The Grange movement was inaugurated by farmers more than twenty years ago for their own protection as well as for the purpose of elevation and improvement, and is so intimately related to the great labor movement now in progress that, at our special request, the chapter on the Patrons of Husbandry contained in Part VI. was prepared by Mr. Mortimer Whitehead, of Middlebush, N. J., Lecturer of the National Grange.

It has been our custom each year to record the progress made in the development of one or more of our leading industries. Attention this year was especially directed to the silk industry, which occupies the first rank among our manufactures-one-half of the silk goods made in the United States being the productions of New Jersey mills. The increased temperance agitation makes the subject of "the production and consumption of malt liquors" particularly interesting at this time, and for those seeking information this chapter of Part VII. will be exceedingly valuable. The industrial statistics of our five leading cities brought down to date will be found in Part VIII.

A digest of the labor legislation enacted during the sessions of the Legislature of 1886 and 1887 concludes the present report.

## PART I.

## EARNINGS, COST OF LIVING AND PRICES.

Table No. 1.-Collated Statistics from Individual Employes, Showing their Nativity, Occupations, Number of Hours of Daily Employment, Time Lost, Earnings of Self and Family, and Total Cost of Living of the Same During the Year.

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# State of New Jersey, Bureau of Statistios of Labor and Industries, Trenton, July 1st, 1886. 

## [BLANK NO. 3-FOR INDIVIDUAL EMPLOYES.]

This Bureau is now in the ninth year of its existence. It was established, primarily, in the interest of wage-earners of New Jersey, and at their solicitation; and its chief object has been, and will be, to collect information about their condition-financial, physical, intellectual and moral. It is unnecessary to dwell further on the benefits to be derived therefrom by the workingmen themselves, who know that, without such facts, all movements for social improvement are but leaps in the dark. We earnestly hope, therefore, that the information requested will be as cheerfully given in the future as it has been in the past. The principal data, of course, always will be wage statistics. But mere nominal wages are, by themselves, of little account, as the value of wages is their purchasing power. Hence, particular attention is called to the need of furnishing accurate details, in quantity and price, of the expenditures as well as receipts. Suggestions will always be welcome, but let the remarks be practical. Any facts concerning recent labor troubles in the neighborhood should be stated in detail. The names of those who fill out these blanks will be kept secret.
C. H. SIMMERMAN, Secretary.

1. Name in full
2. Place of birth
3. Residence-Post-office address.
4. Occupation
5. By whom and where employed
6. Subdivisiou of trade in which you are engaged
7. Do you work more than eight hours per day? $\qquad$ How many hours when on full time?
8. Your wages : For a full day's work............... ; or for a full week's work............... ; or for a

## full month's work

9. Number of days unemployed during the year, exclusive of legal holidays: Total.

How many of these from sickness?................ Inability to obtain work?................ Other causes?
10. Your total earnings, i. e., your actual income from July 1st, 1885, to July 1st, 1886
11. Total number in your family, yourself included

How many of the are
12 years?.............. How many between 12 and 18 ?. $\qquad$ Over 18 ?
12. Number engaged in working for wages.
13. Earnings of all others in your family, besides yourself, during the past year : Wife. Children $\qquad$ Others.
14. What was the total cost of living for yourself and family during the year ?............... How much of this was spent for rent?.............. For food?............... For clothing?............... For light and fuel?............... Society dues and life insurance?............... Every other outlay, in detail?
15. If possible, give the average weekly * quantity consumed and amount expended: For meat and fish................ Milk................ Butter............... Cheese................ Eggs
Bread (wheat, corn or rỳe)............... Vegetables............... Sugar, molasses and syrup
Tea and coffee............... Salt, spices, ice, pickles and sundries...............
16. Did you find yourself in debt at the end of the year?............... How much?
17. If not, have you saved anything? $\qquad$
18. Have your wages been increased during the year?............... How much? How much ?............... If
not, have they been reduced? $\qquad$ How much?
19. How many families, including your own, live in the same house in which you reside? $\qquad$ Total number of rooms in the house $\qquad$ The number of rooms occupied by your family
20. Remarks on any subject of interest to wage-earners, not only in relation to the general condition of yourself and your fellow-workmen and their families, but especially regarding the movement for a shorter day of work, and whether it is practicable in your trade, giving your reasons; also state whether any strikes have occurred in your neighborhood during the year, giving details, their cause and result.

[^0]
## PART I.

## EARNINGS COST OF LIVING AND PRICES.

> "Tell me what you eat," once observed a philosophical epicure, "and I will tell you what you are." And he was not far from the truth. Nor are those economists who vary that gastronomic epigram slightly-" Tell us how you live and we will tell you what wages you get." But by this they do not mean to indorse that extreme deduction from the so-called "iron law of wages," that the more a man saves the worse off he will be-the less wages he will receive in the end. Every-day experience teaches the contrary. What is meant is, that those who are farthest advanced in the social scale will secure the highest wages. They are the best paid because the best workers, and the best workers because the best fed, housed and clothed. In other words, their standard of living is the most important factor in gauging the condition of workingmen, and this must be determined not only by the nominal rate of wages, but by statistics of prices and of the various items in their expense accounts. It thus can be seen whether the wages received allow the laborer and his family to live in a comparatively decent and comfortable style.

> The Bureau has made several efforts in this direction, particularly in 1885, when a number of workingmen's " budgets" were collected and tabulated in our report. This year, the information obtained is more accurate and detailed ; but, nevertheless, it is far from complete, the budgets, to a large extent, being estimates. This is hardly surprising. Few, even of the better circumstanced people, keep any sort of memoranda of their outlay. To many workingmen, such a course suggests the idea of trying to stint their families in food and other necessaries of life. "Why," one correspondent protested, "I never ask my children how much they want to eat," and considered questions 14 and 15 of the "Individual Blank" "very foolish." The objection is very foolish, but, nevertheless, is made. Then, too, those
who find it difficult to make both ends meet are apt to resent too much inquisitiveness about their daily diet and other expenditures; and it is very disagreeable for them to contemplate, daily or weekly, just how little they are compelled to live on. For all that, it is our firm conviction that a man who keeps a correct account of his household debits and credits will be better off in the end-he will find a way to save something. "Beware of little expenses," observed 'Poor Richard'; "a small leak will sink a ship."

Notwithstanding these difficulties, and they are but samples, we succeeded in obtaining 330 very fair individual returns, representing a considerable variety of occupations. These have been tabulated in Table 1. Especial attention has there been paid to showing the earnings of individual employes, the number of hours of daily labor, the time unemployed during the year, the incomes of their families. and their total outlay. In Table 2 the budgets of 225 families, comprising 1,100 members, who expended $\$ 152 ; 000$ out of $\$ 175,000$ earned, are reproduced and exhibit the separate items of expenditures. The itemized weekly cost of food, and to some extent the quantity consumed, make up Table 3. Table 4 is a digest of the returns from retail dealers, who kindly furnished the range of prices. of commodities in their respective localities-the current rates at which the specified articles of food and fuel have been sold during: the year in small quantities.

The information given in these tables has been, as far as was considered judicious, summarized, and the result will be found below. The comparatively small number of individual returns, although they have been made by representative workingmen, in many cases will hardly warrant anything but general conclusions: for example, that a little less than one-quarter of workingmen's families found themselves in debt at the end of the year, but that over one-half would have been as bad off if the wages of the heads of the families. had not been supplemented by the earnings of some of the other members. The least satisfactory in this respect were the common laborers, rubber, cotton, wool and silk workers, and the best situated the glass blowers. It must be borne in mind, however, that the "surplus" is in some cases largely reduced and the "deficiency" created by the "Insurance and Society dues" item. Nearly all the glass blowers are American-born, and so are, to a great extent, the miscellaneous workmen in the glass factories as well as in the iron and shoe
industries. Among the cotton and woolen workers there is a considerable sprinkling of the foreign-born element; the silk mills employes are mostly Swiss, German and French, and the rubber workers and laborers Irish.

A good proportion of the glass blowers own their own houses, but outside of these and the iron workers house-ownership seems to be rare. This and the house-room occupied by the different classes of workers is shown by the following summary of Table 2:

RENT AND ROOMS.

Glass blowers.
Glass workers, miscellaneous
Iron workers.
Carpenters
Shoemakers.
Cotton and woolen mills operatives.
Silk mills operatives.
Laborers.
Miscellaneous, not classified.

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 49 | 21 | 28 | 43 | 11.9 | 1.6 | 7.5 |
| 29 |  | 29 |  | 12.5 | 1.7 | 7.1 |
| 37 | 7 | 30 | 19 | 10.8 | 1.7 | 6.7 |
| 13 | 1 | 12 | 8 | 15.5 | 2.5 | 6.8 |
| 21 | 2 | 19 | 9 | 10.1 | 1.4 | 7.0 |
| 20 | 1 | 19 | 5 | 12.4 | 1.9 | 6.5 |
| 19 |  |  |  | 11.1 | 2.9 | 3.9 |
| 18 | 1 | 17 | 6 | 11.6 | 2.2 | 5.4 |
| 16 | 1 | 15 | 6 | 12.4 | 2.1 | 5.9 |

The following summary of the "relative percentages of expenditures" goes to prove the substantial correctness of Engel's economic law, that the struggle for existence is the struggle for food, and that the outlay for subsistence approximates one-half of the workingman's total expenses-the poorer the family the larger, relatively, is this percentage. Considerable space was devoted to this subject in our previous report, and the results reached do not differ materially from those presented there.

RELATIVE PERCENTAGE OF EXPENDITURES.

|  |  |  | $\begin{aligned} & 50 \\ & \text { 흘 } \\ & \text { 응 } \end{aligned}$ |  | $\begin{aligned} & \dot{0} \\ & \text { E } \\ & \text { E } \\ & \text { E } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Glass blowers........ | 47.50 | 13.60 | 19.45 | 5.47 | 13.98 | 100 | \$1,052 00 |
| Glass blowers, miscellaneous.......... | 49.05 | 16.03 | 19.39 | 5.97 | 9.56 | 100 | ${ }^{743} 00$ |
| Iron workers................................ | 49.62 | 17.41 | 18.14 | 6.76 | 8.07 | 100 | 76500 |
| Carpenters.. | 49.54 44.84 | 21.13 18.88 | 15.93 19.34 | 5.62 7.02 | 7.78 9.92 | 100 | 65800 |
| Shilk workers................................................... | 44.84 54.92 | 18.88 | 19.34 <br> 14.41 | 7.02 4.84 | 9.92 10.34 | 100 | 70700 550 |
| Cotton and wool workers................... | 47.83 | 18.52 | 19.05 | 6.17 | 8.43 | 100 | 62000 |
| Laborers.................................... | 55.68 | 15.95 | 15.57 | 5.88 | 6.92 | 100 | 58300 |
| Miscellaneous ............................. | 48.52 | 18.81 | 15.41 | 6.89 | 10.37 | 100 | 62800 |

SUMMARY. TABLE No. 2.-WORKINGMEN'S BUDGETS.


This should be used in connection with the summary of " Workingmen's Budgets," on page 8, which gives a bird's-eye view of the general condition of the different classes of workingmen, showing, as it does, the cost of living of an average family, the earnings of its head and its total income, and the surplus or deficiency remaining. Yet deductions from these "averages" are, after all, unsatisfactory. With never so many budgets, a comparison of the expenditures of different families, of the same number of individual members, would lead to unreliable conclusions, especially as to the cost of subsistence. Even a contrast of the condition of the same family for a number of years would be misleading, unless due weight was given to the make-up of the family and to the effect of succeeding years on each member thereof. Resort must, therefore, be had to individuals, not families. But that is where the trouble comes in. Dr. Ernst Engel, the celebrated German statistician, a few years ago, made certain calculations, basing them on the information collected by the Massachusetts Labor Bureau. In his little brochure, "Rechnungsbuch der Hausfrau," he divided the family into units-a child under 10 years was to be considered one unit, and between 10 and 15 years, 1.25 units ; a male adult over 15 years, two, and a female of like age, 1.50 units. Lately, he has somewhat improved on these figures, but acknowledges that he is not even yet satisfied with their correctness :*

| Age. | Male. |  | Female. |  |
| :---: | :---: | :---: | :---: | :---: |
| Under five years.. | 1.5 | Units. | 1.0 | Units. |
| Five to ten years.. | 1.8 | " | 1.2 | " |
| Ten to fifteen years.. | 2.3 | " | 1.5 | 16 |
| Fifteen to twenty years.. | 2.8 | " | 1.8 | " |
| Twenty to twenty-five years. | 3.3 | " | 2.2 | " |

In the report for 1886 the Massachusetts Labor Bureau, accepting the "standard rations," assumed by Prof. Voit and the Munich School of Physiological Chemists, arrives at the following "estimated relative quantities of potential energy in nutrients required by persons of different classes:"
Laboring man, at moderate work ..... 10
Woman, at ordinary work. ..... 8
Child, fifteen to six years old. ..... 7
Child, six to two years old ..... 5
Child under two years old. ..... $2 \frac{1}{2}$

[^1]Making use of these schemes as far as practicable, we have tried tocalculate the daily food bill of an adult from the data given in Table 3 , a summary of which is:

WEEKLY FOOD BILL PER FAMILY.

| Items. |  |  |  |  |  |  | ¢ ¢ 发 H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Meat and fish | \$1 61 | \$1 18 | \$140 | \$1 36 | \$1 12 | \$1 68 | \$175 |
| Milk.......... | \$1 30 | 19 | 32 | 341 | 31 | 47 | 26 |
| Butter | 89 | 63 | 57 | 77 | 69 | 77 | 78 |
| Cheese | 19 | 16 | 23 | 19 | - 17 | 22 | 16 |
| Eggs... | 48 | 38 | 39 | 42 | 37 | 45 | 29 |
| Total animal foo | S3 47 | 8254 | \$2 91 | S3.07 | \$2 66 | \$8 59 | \$3 34 |
| Bread, flour, etc........ | 120 | 99 | 80 | 97 | 102 | 99 | - 107 |
| Vegetables, fruit | 110 | 89 | 107 | 76 | 70 | 88 | - 100 |
| Sugar, molasses, etc.......................... | 77 | 61 | 69 | 63 | 60 | 57 | 60 |
| Tea, coffee, etc............................... | 45 | 38 | 32 | 32 | 31 | 34 | 48 |
| Salt, spices, ice and sundries............. | 77 | 56 | 53 | 57 | 64 | 60 | 47 |
| Total weekly | \$7 76 | \$5 97 | \$6 32 | \$6 32 | 8593 | \$6 97 | \$696 |
| Total daily.... | 111 | 86 | 90 | 90 | 85 | 99 | 99 |
| Size of family............................. $\{$ | 5.21 | 4.54 | 4.58 | 4.50 | 5.14 | 5.50 | 5.81 |
| Equal to adults (estimated).............. $\{\mid$ | 4.2 | 3.6 | 3.5 | 3.55 | 3.93 | 4.2 | 4.63 |

DAILY FOOD BILL PER MALE $\triangle D U L T$ *

| Items. |  |  |  |  |  |  | ¢ ¢ O. \# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Meat and | \$0 066 | \$0 055 | \$0 066 | S0 065 | \$0 049 | \$0 067 | \$0 066 |
| Milk....... | 012 | C09 | 014 | 016 | 013 | 018 | 009 |
| Butter. | 036 | 031 | 029 | 037 | 030 | 031 | 029 |
| Cheese | 007 | 008 | 011 | 009 | 007 | 008 | 006 |
| Eggs.............................................. | 019 | 018 | 018 | 019 | 016 | 018 | 011 |
| Total animal food. | \$0 140 | S0 121 | \$0 138 | \$0 146 | S0 115 | §0 142 | \$0 121 |
| Bread, flour, etc.............................. | 049 | 048 | 037 | 047 | 044 | 038 | 038 |
| Vegetables, fruit.............................. | 044 | 042 | 050 | 036 | 030 | 036 | 037 |
| Sugar, molasses, etc ......................... | 031 | 029 | 028 | 030 | 029 | 023 | 023 |
| Tea, coffee, etc............................... | 018 | 018 | 016 | 015 | 013 | 013 | 018 |
| Salt, spices, ice and sundries............. | 031 | 025 | 024 | 028 | 027 | 024 | 018 |
| Total. | S0 313 | 80283 | \$0 293 | \$0 302 | \$0 258 | \$0 276 | \$0 255 |

[^2]

If nothing is "thrown off" for females, and it seems to us that Engel's estimate of one-third hardly holds good for the average American working woman, our figures would be materially reduced. The average adult in a glass blower's family would use for his daily food only $26 \frac{1}{2}$ cents; miscellaneous glass worker, 24 cents ; carpenfer, $25 \frac{1}{2}$ cents ; iron worker (including machinist, moulder, core maker, blacksmith), $25 \frac{1}{3}$ cents ; textile mills operative, $23 \frac{1}{2}$ cents; shoe factory operative, 22 cents; and a common laborer, $21 \frac{1}{3}$ cents. Allowing for the different standards of living among the various classes of working people, this is not far out of the way of the conclusions of Mr. Edward Atkinson, who has devoted much attention to the "food question," and has published some valuable information on the subject.* He has lately summed up, in a magazine article, the results of his investigation of the " average daily ration, or cost and quantity of the daily supply of food materials of adults who are occupied in the work of every-day life as artisans, mechanics, factory operatives and laborers." $\dagger$ Mr. Atkinson states that this daily average in the New England factory boarding-houses, of which the occupants are mostly adult women, is 24 cents, and that a fair average cost of food for men and women engaged in the manufacturing and mechanical arts appears to be 25 cents, varying in some measure, in respect to the proportions, under different conditions.
Cents.
Meat (including poultry and fish, a half to one pound, according to kind and quantity), at an average cost of. ..... 10
Milk (half to one pint), butter (one to one and a half ounces), and a scrap of cheese. ..... 5
Eggs (one every other day) at 12 cents a dozen ..... $\frac{1}{2}$
Total cost of animal food. ..... 15 $\frac{1}{2}$
Bread (about three-fourths of a pound). ..... $2 \frac{1}{2}$
Vegetables (green and dry). ..... 2-2 ${ }^{\frac{1}{2}}$
Sugar and syrup. ..... 2
Tea and coffee. ..... 1
Fruit (green and dry) ..... $\frac{1}{2}$
Salt, spices, ice and sundries ..... $1_{2}^{1}-1$
Average cost of a daily ration. ..... 25

[^3]Taking this as a basis, Mr. Atkinson estimates the probable price of food and drink consumed in the United States for one year at $\$ 5,000,000,000$ :

| Meat, fish and poultry. | \$825,000,000 |
| :---: | :---: |
| Milk, butter and cheese.. | 912,500,000 |
| Eggs. | 91,250,000 |
| Animal food. | \$2,828,750,000 |
| Bread | 456,250,000 |
| Vegetables. | 456,250,000 |
| Sugar and syrup | 365,000,000 |
| Tea and coffee. | 182,500,000 |
| Fruit (green and dry). | 91,250,000 |
| Salt, spices, ice and sundries.. | 182,500,000 |
|  | \$4,562,500,000 |
| Deduct possible excess on sugar, tea, coffee and dairy products. | 262,500,000 |
| Total food | \$4,300,000,000 |
| Add spirits and fermented liquors.. | 750,000,000 |

He admits that these figures are greatly in excess of ordinary computations, few persons ever daring to estimate the entire dairy product at over two-thirds of this sum. But such calculations do not take into account the great cost of the retail distribution of food. For instance, take the single item of bread, which is given in the foregoing estimate at $\$ 456,250,000$. There are few retail stores where a pound loaf can be obtained for less than 5 cents, at which rate Mr. Atkinson's figures would be increased to $\$ 700,000,000$. He, therefore, concludes that if our food bill is not in quantity what this standard calls for, the reason is that the average dietary is not up to the standard. And, as a matter of fact, great numbers of people can barely obtain their daily bread; their standard of living is far below that of the inmates of our charitable and reformatory institutions. "There is want in the midst of plenty. Why is this? Is it not because we waste enough in ignorant buying and in bad cooking to sustain another nation as numerous, and because no common attention has yet been given to what may be called the 'Art of Nutrition?' "*

Happily, this is being remedied, and within the past few years a great deal of information has been gathered on this subject. Prof. Atwater's address on "The Chemistry and Economy of Foods" be-

[^4]fore the National Convention of Labor Bureau Chiefs, reproduced in our report for 1885, gave the results of the later research in the science of food and nutrition. Col. Wright, in his Labor Bureau Report for 1886 (Mass.), already referred to, adds many interesting and important facts, and in the 1883 report of the U. S. Fish Commissioners, published in 1885, twelve exceedingly valuable tables of analyses and diagrams are given,* showing the nutritive value of fish and invertebrates. $\dagger$

Many dietaries have also been analyzed and published. In 1885 the Ohio Bureau of Labor Statistics calculated the average daily cost. of the daily rations of the $(6,256)$ inmates of the charitable and reformatory institutions of that State for one year. $\ddagger$ The total daily cost per inmate was 17.20 cents, divided as follows:
Cents.
Meat (including fish and poultry) ..... 6.40
Milk, butter and cheese ..... 3.30
Egge. .....  30
Animal food ..... 10.00
Sugar, syrap, salt, spices, and other groceries (including beans and lard) ..... 2.50
Bread ..... 2.10
Vegetables and fruit (green and dry) ..... 2.00
Tea and coffee ..... 60
Total per day ..... 17.20

In New Jersey 'State Prison, the average daily cost of subsistence, in 1885 , was 9.85 cents. The average number of inmates was 863 .

In Massachusetts§ the analyses of seven dietaries, || for 191 persons, show the average cost of food material at 25 cents per man daily :

[^5]AVBRAGE COST OF FOOD MATERIAL AT 25 OENTS PER MAN DAILY.


Or the quantities of food consumed, calculated in equivalent weights and measures.*

|  |  |  |  |  | \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | lbs. | Ibs. | 1.48s | 1bs.97 | $\xrightarrow{\text { lbs }}$ |
| Glass blower. | ${ }_{1.36}$ | 1.64 |  | 4.17 | 7.17 |
| Boarding-house.............. | . 99 | 1.55 | 2.54 | 2.65 | 5.19 |
| Boarding-house.......... ................................................................................ | . 71 | 1.91 | ${ }_{2.27}^{1.62}$ | 3.48 2.66 | 5.10 4.93 |
| Average ................................................................. | . 88 | 1.29 | 2.17 | 3.02 | 5.19 |

The same report gives analyses of dietaries of ten French Canadian families, mostly operatives, containing forty-three members. The average cost and quantity of food materials per man per day was calculated to be 24 cents, or-meat, etc. ( .81 lb.$), 11$ cents; dairy products, etc. ( .70 lb .), 5 cents ; total animal food ( 1.51 lbs. ), 16 cents ; vegetables ( 3.44 lbs ), 8 cents ; total ( 4.95 lbs ), 24 cents.

In his report to the U. S. State Department, Consul J. S. Potter, at Crefeld, Germany, in June, 1885, submitted the following data, which he considered a fair average for the woolen mill operatives of that district:

[^6]
## ACTUAL LIVING EXPENSES OF A MILL OPERATIVE.

statement showing elements of cost in the actual living expenses of a mill operative with a family composed of two adults and five children.
Items of expense and cost. ..... Per week.Miscellaneous.
Rent of rooms ..... $\$ 069$
Government and church taxes ..... 3
Fuel ..... 14
Petroleum, three quarts, at $41 / 2$ cents. ..... 14
Soap, two pounds, at 5 cents. ..... 10
Physicians' fees. ..... 6
Food.
Wheat flour, ten pounds, at $41 / 2$ cents. ..... $421 / 2$
Yeast ..... 7
Baker for baking bread. ..... 7
Black bread, fourteen pounds, at 2 cents. ..... 28
Butter, one pound, at 24 cents ..... 24
Coffee, burnt in the berry, three-fourths pound, at 31 cents. ..... 23
Sugar, one half pound, at 8 cents ..... 4
Milk, ten quarts, at 4 cents. ..... 40
Potatoes, twenty-four pounds, at three-fourths cent. ..... 19
Cow beef, three pounds, at 14 cents. ..... 42
Salt pork, two pounds, at $161 / 2$ cents. ..... 33
Lard, one and one-half pounds, at $161 / 2$ cents ..... $243 / 4$
Eggs, fourteen, at $11 / 2$ cents each ..... 21
Vegetables-beans, peas, cabbage, etc. ..... 50
Beer, eight pints, at 3 cents ..... 24
Vinegar, salt, pepper, etc. ..... 12
Clothing.
Shoes for man, six pairs wooden, at 20 cents, $\$ 1.20$; and two pairs leather, at $\$ 2.10$. ..... 10
One pair house-shoes for wife. ..... 4
Three pairs working overalls, at 50 cents ..... 3
Two cotton shirts, at 75 cents ..... 3
Three pairs drawers, at 50 cents ..... 3
Three pairs socks, at 36 cents. ..... 2
One pair fustian pants. ..... 3
Outer clothing for children ..... 17
Shoes for five children ..... 27
Cotton cloth for children's underclothing ..... 5
Woolen yarn for stockings ..... 5
Total. ..... $\$ 5991 / 4$

Average cost per week for clothing for the family, 88 cents; for each persons, $121 / 2$ cents ; cost per week for food alone, $\$ 1.01$. Average cost per week per person for food, 57 cents, or about 14 cents per adult daily. The total annual expenditures of this family were $\$ 312$.

## Consul George W. Roosevelt, at Bordeaux, in the same month reported the following:

ELEMENTS OF COST IN THE ACTUAL LIVING EXPENSES OF A WORKINGMAN EARNING \$186.36 PER YEAR, WITH A FAMILY COMPOSED OF TWO ADULTS AND FIVE CHILDREN.
Items of expense and cost. Per week.
Miscellaneous.
Rent of rooms or house. ..... $\$ 112$
Government and church taxes. ..... 30
Petroleum, two quarts, at $71 / 2$ cents. ..... 15
Physician's fee for family ..... * 8
Food.
Bread, forty-nine pounds, at 3 cents. ..... 147
Coffee (ground), one pound, at 39 cents ..... 39
Sugar, one pound, at 11 cents. ..... 11
Milk, twelve quarts, at 4 cents. ..... 48
Potatoes, twenty pounds, at 2 cents. ..... 40
Cow beef, two pounds, at 24 cents. ..... 48
Salt pork, one pound, at 20 cents. ..... 20.
Lard, one-half pound, at 16 cents. ..... 8
Eggs, two dozen, at 24 cents. ..... 48
Vegetables-beans, peas, cabbage, etc. ..... 60
Wine, twelve quarts, at 8 cents. ..... 96
Vinegar, salt and pepper. ..... 10
Soap, two pounds, at 7 cents ..... 14
Clothing.
Shoes for man:
Three pairs wooden, at 80 cents. ..... 18
One pair leather, at $\$ 2.60$ ..... 5
Suit of clothes for man, at $\$ 3$ ..... 53
Shoes for wife:
Wooden, two pairs, at 30 cents. ..... ${ }^{1180}$
Leather, one pair, at $\$ 1.56$.Two dresses for wife.9 앙
Working overalls, two pairs, at 52 cents. ..... 2
Cotton shirts, six, at 61 cents ..... 7
Two pairs drawers, at 52 cents. ..... 2
Six pairs socks, at 15 cents. ..... 13
Outerclothing for five children. ..... 71
Shoes for five children. ..... 38
Underclothing for five children. ..... 28
Woolen yarn, for stockings, two pounds. ..... 1188
Total. \$9 $311_{108}^{500}$
Total per year. ..... 48422
Average cost per week for clothing for family, $81.77 \frac{180}{100}$. Average cost per week for clothing for each person, $25_{10}^{3}$ cents. Average cost per week of food alone, 85.89. Average cost per week per person for food, 84 cents, or a little less than 20 cents daily per adult.

Some interesting facts showing the comparative retail prices $\dagger$ paid in Philadelphia, in 1886 and 1878, were recently published in the Philadelphia Press. The general conclusion reached is that the same amount of money will go further in obtaining necessaries at present

[^7]than it would at the period mentioned. The following comparative table was given to prove this statement:

| 1878. | 1886. |
| :---: | :---: |
| Sugar, granulated.......................... 9394c. per lb. | $6 \frac{1}{2} \mathrm{c}$. per lb. |
| Sugar, lower grades......................... $8 \frac{3}{4} \mathrm{c}$. per lb . | $5 \frac{3}{4} \mathrm{c}$. per lb . |
| Soap, Babbitt's............................... عc. per lb. | 6c. per lb. |
| Soap, olein................................... \&c. per lb. | 7c. per lb. |
| Hominy..................................... 5c. per qt. | 4c. per qt. |
| Beans... .....................................14c. per qt. | 10c. per qt. |
| Cheese........................................15c. per lb. | 15c. per lb. |
| Hams ........................................ $12 \frac{1}{2} \mathrm{c}$. per lb. | 13c. per lb. |
| Bacon .......................................10c. per lb. | 10c. per lb. |
| Oatmeal...................................... 7c. per lb. | 5c. per lb. |
| Flour, fine family ........................... 5c. per lb. | 4c. per lb. |
| Flour, fine family ........................... \$10 per bbl. | \$6 per bbl. |
| Mackerel, No. 1.............................16c. per lb. | 22c. per lb. |
| Molasses, best............................... 80 c . per gal. | 60c. per gal. |
| Canned tomatoes...........................10c. per can. | 10c. per can. |
| Chocolate....................................45c. per lb. | 40c. per lb. |
| Rice..........................................10c. per lb. | 8c. per lb. |

"In the case of tea and coffee the price now paid is practically the same as in 1878 , but the quality is stated to be 25 per cent. better. All kinds of spices are 20 to 25 per cent. lower than in 1878. All kinds of vegetables and garden produce are stated to be lower by 20 per cent. than they were in 1878. The great development of the Western dressed meat traffic, of recent years, has had the tendency of reducing prices for this class of supplies. All kinds of miscellaneous groceries, such as coal oil, candles, dried fruits ond canned goods, are stated to have declined in price from 10 to 25 per cent. The above figures, showing such a decline in the necessaries of life, are rather significant in view of the fact that the year 1878 was a year of great reduction in values; and if it were not for the general cheapening tendency in all branches of trade, the prices now ruling would naturally be expected to at least equal those of 1878. The great reductions made, however, even in view of this fact, go to show that the margins of profit in these lines of trade are being materally contracted."

## In Volume 20 of the Tenth United States Census Reports (1880)

 are given several hundred statements from retail dealers, showing the prices of the necessaries of life in different parts of the country, for 1880 and preceding years, down to 1851 . As these will be valuable for the purpose of comparison, we reproduce the reports from our State:DRY GOODS-PRIOES IN CAMDEN.*

| Articles. | 1880. | 1879. | 1878. | 1875. | 1870. | 1866. | 1864. | 1860. | 1855. | 1851. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N. Y. Mills shirtings, brown, $4 \times 4$, standard quality. | \$0 10 | $\$ 010$ | \$0 09 | \$0 12 | \$0 18 | \$0 28 | \$0 75 | \$0 11 | \$0 09 | 8008 |
| N. Y. Mills shirtings, bleached, | so 10 |  |  |  | 27 | 48 | 80 | 18 | 18 | 16 |
| $4 \times 4$, standard quality......... |  |  |  | 18 | 27 | 48 | 80 |  |  |  |
| Sheetings, brown, $9 \times 8$, stand- | $11{ }^{1}$ | $1 \frac{1}{4}$ | 101 | 131 | $20 \frac{1}{4}$ | $31 \frac{1}{2}$ | $84 \frac{3}{8}$ | 123 | $10 \frac{1}{2}$ |  |
| ard quality Sheetings, bleached, $9 \times 8$, |  |  |  |  | $30 \frac{3}{8}$ |  | 90 | $20 \frac{1}{4}$ | $20 \frac{1}{4}$ | 18 |
| standard quality.. | 8 | 8 | 8 | 11 | $14{ }^{8}$ | 25 | 45 | 11 | 11 | $12 \frac{1}{2}$ |

* About July 1st.

DRY GOODS-PRICES IN CAMDEN $\dagger$


Mousselines de laine
$\dagger$ From September to March.
DRY GOODS-PRICES IN NEW BRUNSWICK.

| Articles. | 1880. | 1879. | 1878. | 1875. | 1870. | 1866. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shirtings, brown, $4 \times 4$, standard quality | 8009$12 \frac{1}{2}$282818229 | S0 08 | 0912228281518 | \$0 10183142202210 |  | S0 22 |
| Shirtings, brown, $4 \times 4$, |  |  |  |  |  | 75 |
| Sheetings, brown, $9 \times 4$, standard quality |  |  |  |  |  | 110 |
| Sheetings, bleached, $9 \times 4$, standard qua |  |  |  |  |  | 31 |
| Cotton flannel, medium quality. |  |  |  |  |  | 60 |
| Tickings, good quality |  |  |  |  |  | 22 |

Tickings, good quality
Prints, Merrimack

GROCERIES-PRICES IN JERSEY CITY. $\ddagger$

| Articles. | 1880. | 1879. | 1878. | 1875. | 1870. | 1866. | 1864. | 1860. | 1855. | 1851. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tea, Oolong or other good black, | S0 50 | \&0 50 | \$0 50 | \$0 50 | §0 75 | \$1 00 | \$0 75 | \$0 50 | \$0 50 | \$0 50 |
| per lb........................... |  |  |  | 42 |  |  |  | 20 | 18 | 16 |
|  | 35 | 35 10 | 36 10 | 10 | 13 | 24 | 20 |  | 8 |  |
| Sugar, good brown, per lb.......... |  |  |  |  |  |  |  |  | $\stackrel{9}{37 \frac{1}{2}}$ | 35 |
| Sugar, yellow C, per | 72 | 70 | 80 |  | 110 | 140 | 160 | 60 | 50 | 50 |
| Molasses, New Syrup, per gal........................ | 72 | 75 8 | 90 | 110 8 | 120 | 1 | - 10 | 10 | 10 |  |
| Soap, common, | 10 | 10 | 10 | 10 | 12 | 14 | 16 | 10 | 10 | $10$ |

$\ddagger$ About June 1st.

## MEATS-PRICES IN CAMDEN.

| Articles. | 1880. | 1879. | 1878. | 1875. | 1870. | 1866. | 1864. | 1860. | 1855. | 1851. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beef, fresh, roasting pieces........ | \$0 16 | \$0 22 |  | \$0 23 \$0 | 8025 |  |  | 8014 | \$0 14 |  |
| Beef, fresh, soup pieces............. |  | 10 | 10 | 10 | 12 |  | 14 | 8 | 8 | ${ }^{6 \frac{1}{4}}$ |
| Beef, fresh, rump steaks........... | 16 | 22 | 22 | 23 | 25 | 30 | 25 | 12 | $12 \frac{1}{2}$ |  |
| Beef, corned........................ | 10 | 10 | 10 10 | 12 | $\frac{12}{12}$ | 18 | 114 | 8 | 7 | $6-8$ |
| Veal, hind quarters(by the side). | 12 | 12 | 12 | 12 | 121 | 14 | 14 | 10 | 8 | 7 |
| Veal cutlets. | 20 | 20 | 20 | 23 | 25 | 25 | 25 | 14 | 12 | 10 |
| Mutton, fore quarters............... | 8 | 9 | 9 | 10 | 10 | 12 | 11 | 7 | 6 | 6 |
| Mutton, leg.. | 12 | 14 | 14 | 16 | 18 | 22 | 16 | 9 | 8 | 8 |
| Mutton chops........................ | 16 | 16 | 16 | 18 | 18 | 25 | 18 | 12 | 12 | 11 |

MEATS-FRIOES IN ELIZABETH.*

| Articles. | 1880. | 1879. | 1878. | 1875. | 1870. | 1866. | 1864. | 1860. | 1855. | 1851. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beef, fresh, roasting pieces........ | \$0 22 | \$0 22 | \$0 22 | \$0 25 | \$0 33 |  |  | \$0 18 |  | \$0 123 ${ }^{2}$ |
| Beef, fresh, soup pieces............ | 8 | 8 |  | 8 | 12 | 12 | S | 6 | 5 |  |
| Beef, corned............ | 16 | 16 | 16 | 20 | 20 | 24 | 16 | 12 | 10 | 5 |
| Veal, fore quarters.. | 16 | 16 | 16 | 15 | 23 | 23 | 15 | 12 | 10 | 8 |
| Veal, hind quarters | 20 | 20 | 20 | 20 | 28 | 28 | $2)$ | 13 | 12 | 10 |
| Veal cutlets...... | 28 | 28 | 28 | 30 | 33 | 33 | 25 | 18 | 16 | 122 |
| Mutton, fore quarters.............. | 16 | 16 | 18 | 20 | 20 | 20 | 18 | 13 | 10 | 8 |
| Mutton, leg ... | 20 | 20 | 20 | 22 | 25 | 20 | 22 | 16 | 14 | 10 |
| Mutton chops | 28 | 23 | 23 | 28 | 28 | 25 | 25 | 18 | 16 | 122 |
| Pork, fresh .... | 12 | 12 | 12 | 18 | 25 | 25 | 25 | 12 | 13 | 10 |
| Pork, corned or salted. | 12 | 12 | 12 | 15 | 20 | 20 | 20 | 10 | 10 | 8 |
| Pork, sausage........... .............. | 13 | 13 | 12 | 18 | 25 | 25 | 25 | 12 | 15 | $12 \frac{1}{2}$ |

*June 1st, except for pork (Dec. 1st).

## MEATS-PRICES IN NEW BRUNSWICK.

| Articles. | 1880. | 1879. | 1878. | 1875. | 1871. | 1866. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beef, fresh, roasting pieces | 18 |  |  |  | 24 |  |
| Beef, fresh, soup pieces. | 10 |  |  |  | 12 |  |
| Beef, fresh, rump steaks | 14 |  |  |  | 20 |  |
| Beef, corned. | $12 \frac{1}{2}$ |  |  |  | 16 |  |
| Veal, fore quarters. | 12 |  |  |  | 12 |  |
| Veal, hind quarters. | 14 |  |  |  | 14 |  |
| Mutton, fore quarters. | 12 |  |  | ......... | 12 |  |
| Mutton, leg....... | 16 | ........ |  |  | 22 |  |
| Mutton chops.. | 16 |  |  |  | 15 |  |
| Pork, fresh. | 12 |  |  |  | 16 |  |
| Pork, corned or salted | 10 |  |  |  | 12 |  |
| Pork, bacon............ | 12 |  |  |  | 14 |  |
| Pork, hams, smoked. | 121 |  |  |  | 16 |  |
| Pork, shoulders.. | 9 |  |  |  | 10 |  |
| Pork, sausages. | 12 |  |  |  | 16 |  |
| Lard............. | 12 |  |  |  | 14 |  |

FLOUR, PROVISIONS, ETC.-PRICES IN JERSEY OITY.*

| Articles. | 1880. | 1879. | 1878. | 1875. | 1870. | 1866. | 1864. | 1860. | 1855. | 1851. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Flour, wheat, superfine, per barrel. |  |  |  |  |  |  |  | \$8 00 | \$8 00 | \$600 |
| Flour, wheat, extra family, per barrel. | \$8 00 | \$8 00 | \$8 00 | \$9 00 | \$10 50 | \$15 00 | $\$ 1200$ 22 | 15 | 14 | 14 |
| Pork, hams, smoked, per pound | 16 15 | 15 12 12 | 14 | 20 | 24 | 25 25 | 18 10 |  | 10 | 8 |
| Lard, per pound...................... | 10 | 10 | 10 | 9 | -10 18 | 12 | 170 | 8 16 | 15 | 0 |
| Mackerel, pickled, per pound... | 16 | 16 | 16 | 18 38 | 18 38 | 45 | 45 | 25 | 28 | 25 |
| Butter, per pound.................... | 30 | 30 | 30 16 | 16 | - 18 | 25 | 22 | 16 | 14 | 12 |
| Cheese, per pound.................... | 18 125 | 180 | 16 125 | 125 | 125 | 150 | 150 | 110 | 150 | 75 |
| Potatoes, per bushel................. | 125 | 10 | 12 | 12 | 12 | 14 | 14 | 6 | 7 |  |
| Rice, per pound...................... | 10 | 10 | 10 | 10 | 10 | 12 | 10 | 10 | 10 | 10 |
| Beans, per quart....................................... | 10 | 10 | 10 | 10 | 12 | 10 | 12 | 16 | 18 | 18 |
| Milk, per quart................................ | 20 | 18 | 16 | 18 | - 18 | 20 | 20 | 16 |  | 18 |

*In June.
The following is a summary of the information tabulated in Table 5 , which embodies the collated statistics obtained, to a great extent, from the proprietors of industrial establishments employing 15,000 workmen. In collating the original returns, which are given below, employes have been divided into classes, with a range of weekly wages not exceeding two dollars. The summary will show the average yearly and weekly wages paid, the average number of weeks the establishments were in operation and the average number of hours of daily employment. Read in connection with the summary of Table 1, which comprises statistics of the earnings and general condition of 330 representative workmen, it will give a fair idea of the amount of lost time due to personal causes, such as sickness of the employe. This necessarily varies in different trades and establishments, but the average seems to be not less than 5 per cent., which materially reduces a worker's annual earnings. For instance, the average of individual glass blowers, Table 1, was: Bottle, $\$ 1,038$; flint, $\$ 1,086$, and window, $\$ 756$. Table 5 averages the returns from establishments at: $\$ 1,165, \$ 1,226$ and $\$ 704$ respectively.

These tables of collated statistics give evidence that the increased activity in trade has made itself felt in a rise in wages. It secured more steady employment for the hands and also increased the remuneration of labor directly. The general tendency of wages has been upwards, and from 5 to 20 per cent. The improvement has been especially noticeable in the textile and iron industries. The window glass workers, on the other hand, have not fared so well, and in this trade there has been a considerable decrease in earnings owing to a direct cutting down of wages in these glass factories, which were only in operation a portion of the usual blast. In the bottle factories the coming year will also witness a decrease in wages.
SUMMARY OF TABLE No. 5.-ESTABLISHMENTS.GLASS BLOWERS (BOTTLE AND VIAL).
Number reporting ..... 494
Average number of weeks employed ..... 42.17
Number of hours of daily employment ..... 8 to 9
Average yearly earnings ..... $\$ 1,16516$
Average weekly wages ..... 2763
One received $\$ 69.18$ weekly; one, $\$ 45$. Twenty-eight averaged $\$ 35.21$; sixty,$\$ 32.65$; one hundred and fifty-nine, $\$ 30$; thirty-nine, $\$ 28$; thirty-one, $\$ 26.32$; eighty-one, $\$ 24.76$; thirty-nine, $\$ 220$; twenty-six, $\$ 20$; twenty-six, $\$ 18.11$, and three, $\$ 17$.
glass blowers (flint).
Number reporting ..... 158
Average number of weeks employed ..... 44.4
Number of hours of daily employment. ..... 9
Average yearly earnings. ..... $\$ 1,22635$
Average weekly wages. ..... 2801
Nine averaged $\$ 36.31$ weekly; fifteen, $\$ 33.43$; seventy four, $\$ 29.32$; thirty nine,$\$ 25.16$, and twenty-one, $\$ 21.51$.
GLASS BLOWERS (WINDOW)
Number reporting ..... 167
Average number of weeks employed ..... 33
Number of hours of daily employment. ..... *9 to $9 \frac{1}{2}$
Average yearly earnings. ..... $\$ 70422$
Average weekly wages ..... 2134
Two averaged $\$ 27.60$ weekly; fuarteen, $\$ 25.70$; sixty-two, $\$ 22.76$; eighty-six,$\$ 20.13$, and three, $\$ 18.73$.
WINDOW GLASS GATHERERS.
Number reporting ..... 170
Average number of weeks employed. ..... 33
Number of hours of daily employment. ..... 9
Average yearly earnings. ..... $\$ 49071$
Average weekly wages ..... 1487
Thirty-two averaged $\$ 17.52$ weekly; cne hundred and nineteen, $\$ 11.50$, and nine-teen, $\$ 12.69$.
WINDOW GLASS CUTTERS.
Number reporting ..... 84
Average number of weeks employed. ..... 33
Number of hours of daily employment ..... 10
Average yearly earnings. ..... $\$ 70224$
Average weekly wages. ..... 2128
Five averaged $\$ 23.47$ weekly ; forty-two, $\$ 21.87$, and thirty seven, $\$ 19.90$.

[^8]
## WINDOW GLAES FLATTENERS.

Number reporting43
Average number of weeks employed ..... 33
Number of hours of daily employment ..... 11 ..... 11
Average yearly earnings ..... $\$ 72303$
Average weekly wages ..... 2191Five averaged $\$ 23$ weekly, and thirty eight, $\$ 21.83$.
MISOELLANEOUS WORKMEN IN BOTTLE AND VIAL GLASS FACTORIES.
Apprentices.
Number reporting ..... 199
Average number of weeks employed ..... 42.17 ..... 42.17
Number of hours of daily employment
Number of hours of daily employment ..... 9 ..... 9
Average yearly earnings. ..... $\$ 50730$
Average weekly wages
Six averaged $\$ 16$ weekly; sixty-one, $\$ 15$; thirty-one, $\$ 12.50$; twenty-four, $\$ 12$;fifteen, $\$ 11$; twenty-three, $\$ 10$; nineteen, $\$ 9$; twelve, $\$ 8.25$; four, $\$ 7$, and four, $\$ 4$.
Tending Boys.
Number reporting ..... 808 ..... 9
Average number of weeks employed
Average number of weeks employed ..... 42.17 ..... 42.17
Number of hours of daily employment. ..... $\$ 17795$
Average yearly earnings422
Average weekly wages.
Thirty-two averaged $\$ 7.50$ wetkly ; twelve, $\$ 7$; thirty seven, $\$ 6.50$; seventy-seven,$\$ 6$; twenty, $\$ 5.50$; ninety nine, $\$ 5$, one hundred and forty, $\$ 4$; eighty-seven, $\$ 3.50$,and three hundred and four, $\$ 3$.
Packers.
76
Number reporting. ..... 42.17
Average number of weeks employed...
Number of hours of daily employment ..... 10
Average yearly earnings. ..... $\$ 400.03$ ..... 951
Average weekly wagesOne received $\$ 18$ weekly; three averaged $\$ 13.50$; fourteen, $\$ 10.50$; sixteen, $\$ 10$;twenty-four, $\$ 9$; eight, $\$ 8.40$, and ten, $\$ 7.50$.
Mould Makers.
25
Number reporting ..... 50.3
Average number of weeks employed ..... 10
Average jearly earnings ..... $\$ 73036$
Average weekly wages ..... 1452
One received $\$ 20$ weekly ; four averageand five, $\$ 8$.

## Master Shearers.

Number reporting ..... 19
Average number of weeks employed ..... 42.17
Number of hours of daily employment. ..... 14
Average yearly earnings ..... $\$ 89015$
Average weekly wages. ..... 2000
One received $\$ 25$ weekly. Four averaged $\$ 20.75$; fourteen, $\$ 18$.
Shearers.
Number reporting ..... 62
Average number of weeks employed ..... 42.17
Number of hours of daily employment. ..... 10 to 14
Average yearly earnings. ..... $\$ 42423$
Average weekly wages. ..... 1006
One received $\$ 17.52$ weekly; six averaged $\$ 15$; eight, $\$ 12.11$; sixteen, $\$ 10.45$;twelve, $\$ 10$; sixteen, $\$ 9$; two, $\$ 8$, and one, $\$ 7.50$.
Oven Takers-off.
Number reportỉng. ..... 56
Average number of weeks employed ..... 42.17
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 30489$
Average weekly wages. ..... 723
Three averaged $\$ 11.52$ weekly; thirty-eight, $\$ 7.50$; six, $\$ 7$, and nine, $\$ 6$.
Masons.
Number reporting. ..... 18
Average number of weeks employed. ..... 50.5
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 90900$
Average weekly wages. ..... 1800
Batch Makers.
Number reporting. ..... 33
Average number of weeks employed. ..... 42.17
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 43056$
Average weekly wages. ..... 1021
One received $\$ 17.32$ weekly; four averaged $\$ 14.39$; three, $\$ 13.31$; four, $\$ 10.50$;three, $\$ 10$; seven, $\$ 9$; five, $\$ 8.40$, and six, $\$ 7 . E 0$.
MISCELLANEOUS WORKMEN IN WINDOW GLASS FACTORIES.
Master Shearers.
Number reporting. ..... 19
Average number of weeks employed. ..... 33.3
Number of hours of daily employment. ..... 15
Average yearly earnings. ..... $\$ 72194$
Average weekly wages ..... 2168
Two averaged $\$ 22.50$ weekly; five, $\$ 22$, and twelve, $\$ 21.41$.
Flatteners' Helpers (Boys).
Number reporting ..... 19
Average number of weeks employed ..... 32.3
Number of hours of daily employment. ..... 11
Average yearly earnings. ..... $\$ 26680$
Average weekly wages ..... 826
Two averaged $\$ 8.52$ weekly; four, $\$ 8.41$, and thirteen, $\$ 3.17$.
Second Hands (Boys).
Number reporting ..... 152
Average number of weeks emploped ..... 32.2
Number of hours of daily employment ..... 9 to $9 \frac{1}{2}$
Average yearly earnings. ..... $\$ 9660$
Average weekly wages ..... 300
Roller Boys.
Number reporting ..... 19
Average number of weeks employed ..... 32.2
Number of hours of daily employment ..... 9 to 10
Average yearly earnings ..... $\$ 12397$
Average weekly wages ..... 385
Twelve averaged $\$ 4.11$ weekly, and seven, $\$ 3.40$.
Pot Makers.
Number reporting ..... 12
Average number of weeks employed ..... 52
Number of hours of daily employment ..... 10
Average yearly earnings ..... $\$ 968$ 50-
Average weekly wages. ..... 1861
Two averaged $\$ 20$ weekly; eight, $\$ 18.66$, and two, $\$ 17$.
Box Makers.
Number reporting ..... 24
Average number of weeks employed ..... 32.3:
Number of hours of daily employment ..... 10
Average yearly earnings ..... $\$ 45640$
Average weekly wages. ..... 1413.
Three averaged $\$ 15$ weekly; six, $\$ 14.65$, and fifteen, $\$ 13.86$.
Shearers.
Number reporting ..... 37.
Average number of weeks employed ..... 32.2:
Number of hours of daily employment ..... 12:
Average yearly earnings ..... $\$ 35066$
Average weekly wages ..... 1088
Four averaged $\$ 11.08$ weekly; six, $\$ 10.95$; twenty-five, $\$ 10.88$, and two, $\$ 10$.

## Earnings, Cost of Living and Prices.

## Packers.

Number reporting ..... 19
Average number of weeks employed ..... 32.27
Number of hours of daily employment. ..... 10
Average yearly earnings ..... $\$ 38576$
Average weekly wages ..... 11.98
Seventeen averaged $\$ 12$ weekly, and two, $\$ 11.82$.
Leer Tenders.
Number reporting ..... 18
Average number of weeks employed. ..... 32.3
Number of hours of daily employment ..... 11
Average yearly earnings ..... $\$ 27067$
Average weekly wages. ..... 835
Two averaged $\$ 8.58$ weekly, and sixteen, $\$ 8.45$.
Shovers up.
Number reporting ..... 20
Average number of weeks employed ..... 32.3
Number of hours of daily employment. ..... 11
Average yearly earnings ..... $\$ 27326$
Average weekly wages ..... 846
Layersout.
Number reporting. ..... 20
Average number of weeks employed. ..... 32.3
Number of hours of daily employment. ..... 11
Average yearly earnings. ..... $\$ 27326$
Average weekly wages ..... 846
MISCELLANEOUS WORKMEN IN FLINT GLASS FACTORIES.
Apprentices.
Number reporting ..... 63
Average number of weeks employed. ..... 45.5
Number of hours of daily employment. ..... 9
Average yearly earnings. ..... $\$ 46683$
Average weekly wages ..... 1026
Three averaged $\$ 15$ weekly; thirty-six, $\$ 1250$; three, $\$ 9.28$; ten, $\$ 8$, and eleven,$\$ 4.20$.
Pressers.
Number reporting ..... 20
Average number of weeks employed ..... 42.6
Number of hours of daily employment. ..... 9 to 10
Average yearly earnings. ..... \$1,148 07
Average weekly wages ..... 2695
Two averaged $\$ 31.80$ weekly ; six, $\$ 30$; four, $\$ 29$; three, $\$ 25.50$; three, $\$ 20.62$, andtwo, $\$ 21$.
Lamp Workers.
Number reporting ..... 38
Average number of weeks employed. ..... 47
Number of hours of daily employment ..... 9
Average yearly earnings ..... $\$ 82651$
Average weekly wages. ..... 1763
Ten averaged $\$ 20$ weekly; eighteen, $\$ 18$, and ten, $\$ 15$.
Stopper Grinders.
Number reporting ..... 23
Average number of weeks employed ..... 47.6
Number of hours of daily employment. ..... 9 to 10
Average yearly earnings ..... $\$ 88584$
Average weekly wages ..... 1861
Six averaged $\$ 22.50$ weekly; nine, $\$ 18.62$; one, $\$ 18$, and seven, $\$ 15.50$
Mould Makers.
Number reporting ..... 26
Average number of weeks employed ..... 47.4
Number of hours of daily employment. ..... 10
Average yearly earnings ..... $\$ 74892$
Average weekly wages ..... 1580
Three averaged $\$ 24$ weekly; six, $\$ 18$; nine, $\$ 15$, and eight, $\$ 12$.
Master Shearers.
Number reporting ..... 8
Average number of weeks employed ..... 42.7
Number of hours of daily employment. ..... 14
Average yearly earnings ..... $\$ 89670$
Average weekly wages. ..... 2100
Packers.
Number reporting ..... 28
Average number of weeks employed ..... 43
Number of hours of daily employment ..... 10
Average yearly earnings ..... $\$ 56072$
Average weekly wages. ..... 1304
Two averaged $\$ 18$ weekly; nine, $\$ 10$; thirteen, $\$ 9$, and four, $\$ 8$.
Shearers.
Number reporting ..... 16
Average number of weeks employed ..... 42.7
Number of hours of daily employment ..... 12
Average yearly earnings ..... $\$ 60036$
Average weekly wages. ..... 1406
Leer Tenders.
Number reporting ..... 8
Average number of weeks employed ..... 42.7
Number of hours of daily employment ..... 9
Average yearly earnings ..... $\$ 37619$
Average weekly wages ..... 881
cotton mill operatives.
Weavers (Men).
Number reporting ..... 250 ..... 250
Average number of weeks employed. ..... 45.55
Number of hours of daily employment. ..... 10
Average jearly earnings. ..... $\$ 34210$
Average weekly wages ..... 751
Forty-seven averaged $\$ 11$ per week; eighty, $\$ 8.50$; eighty-five, $\$ 6.83$; twenty-eight, $\$ 440$, and ten, $\$ 3.50$.
Weavers (Women).
Number reporting. ..... 438
Average number of weeks employed ..... 44.17
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... *\$349 37
Average weekly wages ..... 769
Thirty-four averaged $\$ 12$ weekly; seventy five, $\$ 9.67$; two hundred, $\$ 7.79$; thirty-six, $\$ 6.30$, and ninety-three, $\$ 3.92$.
Loom Fixers (Men).
Number reporting ..... 45
Average number of weeks employed. ..... 47
Number of hours of daily employment. ..... 10
Average yearly earnings ..... $\$ 54942$
Average weekly wages ..... 1171
Thirty-one averaged $\$ 12$ weekly; ten, $\$ 11.50$, and four, $\$ 10.50$.
Warp Drawers (Women).
Number reporting ..... 27
Average number of weeks employed ..... 47.13
Number of hours of daily employment. ..... 10
Average yearly earnings ..... \$353 98
Average weekly wages. ..... 751
Ten averaged $\$ 7.75$ weekly ; ten, $\$ 7.50$, and seven, $\$ 7.25$.
Mule Spinners (Men).
Number reporting. ..... 55
Average number of weeks employed ..... 46.66
Number of hours of daily employment. ..... 10
Average yearly earnings ..... $\$ 46333$
Average weekly wages ..... 993
Twelve averaged $\$ 12$ weekly; four, $\$ 11$; thirty-one, $\$ 9.50$, and eight, $\$ 8$.
Ring Spinners (Women).
Number reporting ..... 133
Average number of weeks employed ..... 47.79
Number of hours of daily employment ..... 10
Average yearly wages. ..... $\$ 30925$
Average weekly wages ..... 647

Twenty-six averaged $\$ 8$ weekly; twent,-five, $\$ 7.30$; fifty-seven, $\$ 6$, and twentyGive, $\$ 5$.

[^9]
## BLEAOHERY EMPLOYES.

Dyers (Men).
Number reporting ..... 62
Average number of weeks employed. ..... 41.88
Number of hours of daily employment. ..... 10
Average yearly earnings ..... $\$ 44524$
Average weekly wages ..... 1063
Eleven averaged $\$ 15$ weekly; ten, $\$ 12$; twenty-three, $\$ 10$, and eighteen, $\$ 8$.
Finishers (Men).
35
Number reporting
43.39
43.39
Average number of weeks employed
Average number of weeks employed
10
10
Number of hours of daily employment.
Number of hours of daily employment.
$\$ 39970$
$\$ 39970$
Average yearly earnings.
Average yearly earnings. ..... 921
Nine averaged $\$ 12$ weekly; three, $\$ 10$; five, $\$ 9.50$; twelve, $\$ 8$, and six, $\$ 7$.
Folders and Packers (Men).
Number reporting ..... 57
Average number of weeks employed ..... 39.42
Number of hours of daily employment. ..... 10
Average jearly earning. ..... $\$ 35360$
Average weekly wages. ..... 897
Fourteen averaged $\$ 12$ weekly; ten, $\$ 9$; twenty-two, $\$ 8$, and eleven, $\$ 7$.
WOOLEN MILL OPERATIVEB.
Weavers (Men).
Number reporting. ..... 125 ..... 125
Average number of weeks employed ..... 47.17
Number of hours of daily employment. ..... 10
Average yearly earnings ..... $\$ 37912$
Average weekly wages ..... 804
Eight averaged $\$ 8$ weekly; thirty-seven, $\$ 10$; fifty, $\$ 7.50$, and thirty, $\$ 6$.
Weavers (Women).
Number reporting. ..... 141
Average number of weeks employed ..... 43.73
Number of hours of daily employment. ..... 10
Average yearly earnings ..... $\$ 27419$
Average weekly wages. ..... 6-27
Forty averaged $\$ 8.25$ weekly ; fifty, $\$ 6$, and fifty-one, $\$ 5$.
Spinners (Men).
Number reporting ..... 29
Average number of weeks employed ..... 48.43 ..... 48.43
Number of hours of daily employment ..... 10
Average yearly earnings. ..... $\$ 41845$
Average weekly wages ..... 864 ..... 864
Two averaged $\$ 15$ weekly; twelve, $\$ 9$, and fifteen, $\$ 7.50$.
Spinners (Women).
Number reporting ..... 69
Average number of weeks empleyed ..... 48.22
Number of hours of daily employment ..... 10
Average yearly earnings ..... $\$ 29512$
Average weekly wages ..... 612
Thirty averaged $\$ 7$ weekly; thirty•three, $\$ 5.50$, and six, $\$ 4$.
SHOE FACTORY EMPLOYES.
Cutters.
Number reporting ..... 149
Average number of weeks employed. ..... 44.82
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 56075$
Average weekly wages. ..... 1251
One received $\$ 20$ weekly; two averaged $\$ 18$; forty-two, $\$ 15$; sixteen, $\$ 13.65$; forty-Give, $\$ 12$; thirty-seven, $\$ 10$, and six, $\$ 9$.
Heelers.
Number reporting ..... 116
A verage number of weeks employed. ..... 44.3
Number of hours of daily employment ..... 10
Average yearly earnings ..... $\$ 47537$
Average weekly wages ..... 1073
Two averaged $\$ 18$ weekly; ten, $\$ 15.61$; twenty, $\$ 12.90$; forty-two, $\$ 10$, and forty-two, \$9.
Number reporting ..... 103
Average number of weeks employed ..... 45
Number of hours of daily employment. ..... 10
Average yearly earnings ..... \$542 95
Average weekly wages ..... 1207
One received $\$ 17$ weekly; two averaged $\$ 15$; ninety-eight, $\$ 12.05$, and two, $\$ 9$
Lasters.
Nomber reporting. ..... 162
Average number of weeks employed ..... 45.89
Number of hours of daily employment. ..... 10
Avarage yearly earnings ..... \$561 79
Average weekly wages ..... 1224Four averaged $\$ 20$ weekly; three, $\$ 18$; three, 16.50 ; twenty-nine, $\$ 15$; seventeen,$\$ 14.25$; forty-six, $\$ 12$; eleven, $\$ 11$; forty-three, $\$ 10$, and six, $\$ 9$.
Stock Fitters.
Number reporting ..... 136
Average number of weeks employed ..... 47.6
Number of hours of daily employment ..... 10
Average yearly earnings. ..... $\$ 51401$
Average weekly wages ..... 1080
One received $\$ 20$ weekly; four averaged $\$ 18$; eleven, $\$ 15.10$; five, $\$ 14$; twenty-seypn, $\$ 12$; fifty-one, $\$ 10$; twelve, $\$ 9$, and twenty-five, $\$ 8$.
Finishers.82
Number reporting ..... 46.7
Average number of weeks employed
Average number of weeks employed
10
10
Number of hours of daily employment ..... $\$ 59030$
Average yearly wages. ..... 1307
Average weekly wagesTwo averaged $\$ 20$ weekly; six, $\$ 18$; twenty-six, $\$ 15$; five, $\$ 13.65$; twenty-five,$\$ 12$, and eighteen, $\$ 9.05$.
Females in Shoe Factories.244
Number reporting ..... 46.15
Average number of weeks employed
10
10
Number of hours of daily employment ..... $\$ 24324$
Average yearly earnings
Average yearly earnings ..... 527 ..... 527
Average weekly wages ..... fteen, $\$ 6.50$;
Twenty-six averaged $\$ 9$ weekly; eleven, $\$ 8$; thirty-six, $\$ 7.08$; fifteen, $\$ 3.20$;thirty, $\$ 6$; eighteen, $\$ 5.50$; fifteen, $\$ 5$; seven, $\$ 4.63$; thirty-nine, $\$ 4$; fifteen, $\$ 3.20$;seventeen, $\$ 2.53$, and fifteen, $\$ 2$.
CIGAR FACTORY EMPLOYES.
Cigar Makers. पlinb -ampod lo 10 19 drit
$\qquad$CIGAR FACTORYCigar Makers
siamis ..... 419
Number reporting ..... 45.88
Average number of weeks employed ..... 8 to 10
Number of hours of daily employment$\$ 59778$
Average yearly earnings ..... 1303Average weekly wagesFifty averaged $\$ 20$ weekly; one hundred and twenty-six, $\$ 15.05$; nine, $\$ 13$; fifty-six, $\$ 12$; seven, $\$ 11$; one hundred and sixty-two, $\$ 10$, and nine, $\$ 9$.
Strippers ..... 30
Number reporting
46.04
Average number of weeks employed8 to 10
Number of hours of daily employment ..... $\$ 58613$
Average yearly earnings1273
Average weekly wagesboys received $\$ 5$Six averaged $\$ 20$ weekly; eleven, $\$ 12$, and thirteen $\$ 10$; ten boys received $\$ 5$weekly, and eleven, $\$ 3.54$.
Wrappers.16
Number reporting48.11Average number of weeks employed.8 to 10
Number of hours of daily employment ..... $\$ 67650$
Average yearly earnings ..... 1406
Average weekly wagespodna:
Five averaged $\$ 18$ weekly; one, $\$ 15$, and ten, $\$ 12$.

## Packers.

Number reporting ..... 28
Average number of weeks employed ..... 48.72
Number of hours of daily employment. ..... 8 to 10
Average yearly earnings. ..... $\$ 57054$
Average weekly wages. ..... 1171
One received $\$ 20$ weekly; three averaged $\$ 15$; eleven, $\$ 13$; one, $\$ 12$, andtwelve, $\$ 9$.
Salesmen.
Number reporting ..... 99
Average number of weeks employed ..... 46.74
Nnmber of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 66977$
Average weekly wages. ..... 1433
Eighty-three averaged $\$ 15$ weekly; seven, $\$ 12$, and nine, $\$ 10$.
IRON WORKERS.
Moulders.
Number reporting ..... 235
Average number of weeks employed. ..... 48.17
Number of hours of daily employment. ..... 10 to 11
Average yearly earnings. ..... $\$ 72540$
Average weekly wages. ..... 1506
Fifty-four averaged $\$ 16.55$ weekly; one hundred and twenty-three, $\$ 15$; fifty-two,$\$ 14.12$, and six, $\$ 11$.
Core Makers.
Number reporting ..... 136
Average number of weeke employed ..... 47.89
Number of hours of daily employment. ..... 10 to 11
Average yearly earnings. ..... $\$ 72177$
Average weekly wages. ..... 1507
Twenty-five averaged $\$ 16.60$ weekly; eighty-eight, $\$ 15$, and twenty-three, $\$ 14.16$.
Helpers.
Number reporting ..... 310
Average number of weeks employed. ..... 47.93
Number of hours of daily employment. ..... 10 to 11
Average yearly earnings. ..... \$430 82
Average weekly wages. ..... 899
Three hundred and seven averaged $\$ 9$ weekly, and three $\$ 8.35$.
Cupola Men.
Number reporting ..... 41
Average number of weeks employed. ..... 48.14
Number of hours of daily employment. ..... 9 to 10
Average yearly earnings. ..... $\$ 48149$
Average weekly wages. ..... 1000
Cleaners. ..... 59
Number reporting
47.24
47.24
Average number of weeks employed
Average number of weeks employed ..... 9 to 10
Number of hours of daily employment .....
$\$ 44978$ .....
$\$ 44978$
Average yearly earnings
Average yearly earnings ..... 952 ..... 952
Average weekly wages.
Thirty-five averaged $\$ 10$ weekly; nine, $\$ 9.50$, and fifteen, $\$ 8.40$.
Loom Moulders.15
Number reporting ..... 45.9
Average number of weeks employed
10
10
Number of hours of daily employment. ..... $\$ 90733$
Average yearly earnings ..... 1933Average weekly wages.
Ten averaged $\$ 20$ weekly, and five, $\$ 18$.
Machinists.228
Number reporting ..... 49.48
Average number of weeks employed
10
10
Number of hours of daily employment ..... $\$ 61342$
Average yearly earnings. ..... 1260
Average weekly wages.
Five averaged $\$ 16$ weekly; twenty-one, $\$ 15$; sixty-one, $\$ 13.50$; ninety-eight,$\$ 12.40$; sixteen, $\$ 11$, and twenty-seven, $\$ 10$.Helpers.89
Number reporting ..... 49
Average number of weeks employed ..... 10
Number of hours of daily employment. ..... $\$ 41000$
Average yearly earnings. ..... 836
Average weekly wages.
Five averaged $\$ 10$ weekly ; nineteen, $\$ 9$; twenty-one, $\$ 8.50$; thirty, $\$ 8$, and four-teen, $\$ 7.50$.
Blacksmiths.76
Number reporting ..... 42.82
Average number of weeks employed
Average number of weeks employed ..... 10 ..... 10
Number of hours of daily employment. ..... $\$ 66512$
Average yearly earnings. ..... 1552
Average weekly wagesSix averaged $\$ 20$ weekly; seven, $\$ 18$; nine, $\$ 17.40$; eight, $\$ 16.31$; seven, $\$ 15$;seventeen, $\$ 14.58$; nine, $\$ 13.94$; eight, $\$ 11.89$, and five, $\$ 10.53$.
silk mill operatives.
Soft Silk Winders (Girls). ..... 170
Number reporting ..... 50
Average number of weeks employed ..... 10
Number of hours of daily employment ..... $\$ 30400$
Average yearly earnings ..... 608Average weekly wages.
Seventy-eight averaged $\$ 6.62$ weekly; seventy-seven, $\$ 6$; nine, $\$ 5.45$, and six, $\$ 3.50$.
Raw Silk Winders (Girls.)
Number reporting ..... 223
Average number of weeks employed ..... 50
Number of hours of daily employment. ..... 10
Average yearly wages. ..... $\$ 26650$
Average weekly wages. ..... 533
One hundred and forty-six received $\$ 5.50$ weekly, and seventy-seven, $\$ 5$
Spoolers (Girls).
Number reporting ..... 35
Average number of weeks employed. ..... 50
Number of hours of daily employment ..... 10
Average yearly earnings. ..... $\$ 26400$
Average weekly wages. ..... 528
Twenty-three averaged $\$ 5.60$ weekly; ten, $\$ 5$, and two, $\$ 3$.
Warpers (Men).
Number reporting. ..... 68
Average number of weeks employed. ..... 50
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 60450$
Average weekly wages. ..... 12: 09
Sixty-four averaged $\$ 12$ weekly, and four, $\$ 11$.
Warpers (Women).
Number reporting ..... 62
Average number of weeks employed. ..... 50
Number of hours of daily employment. ..... 10
Average yearly earning 8 . ..... $\$ 585 \quad 50$
Average weekly wages. ..... 1171
Fifteen averaged $\$ 13$ weekly; thirty-one, $\$ 12$; seven, $\$ 11$, and nine, $\$ 9.25$.
Twisters (Men).
Number reporting ..... 26
Average number of weeks employed. ..... 50.
Number of hours of daily employment. ..... 10.
Average yearly earnings ..... $\$ 64904$
Average weekly wages. ..... 1300
Ten averaged $\$ 13.50$ weekly, and sixteen, $\$ 12.70$.
Twisters (Women).
Number reporting ..... 5
Average number of weeks employed. ..... 50
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 51000$
Average weekly wages. ..... 1020
Four averaged $\$ 10.50$ weekly, and one, $\$ 9$.
Spinners (Boys). ..... 197
Number reporting.
Number reporting.
Average number of weeks employed ..... 50
Number of hours of daily employment ..... 10
Average yearly earnings ..... $\$ 38150$ ..... 763
Average weekly wages
One hundred and thirty-nine averaged $\$ 8$ weekly; twenty-eight, $\$ 7$, and thirty\$6.50.
Ribbon Weavers (Men).
Number reporting ..... 126
Average number of weeks employed ..... 50
Number of hours of daily employment ..... 10 ..... 10
Average yearly earnings ..... $\$ 82700$ ..... 1654
Average weekly wages
Eighty-five averaged $\$ 17$ weekly; twenty-four, $\$ 16$, and seventeen, ..... \$15.
Ribbon Weavers (Women). ..... 42
Number reporting
Number reporting ..... 50
Average number of weeks employed Average number of daily employment ..... 10
Average yearly earnings. ..... $\$ 60000$
1200
Average weekly wages.
Hand Loom Weavers (Men). ..... 171
Number reporting
Number reporting ..... 50 ..... 50
Average number of weeks employed.
Average number of weeks employed. ..... 10
Number of hours of daily employment.
Number of hours of daily employment. ..... $\$ 60000$
Average yearly earnings. ..... 1200Average weekly wages.
Power Loom Weavers (Men).287
Number reporting
50
50
Average number of weeks employed
10
10
Number of hours of daily employment
Number of hours of daily employment
$\$ 55332$
$\$ 55332$
Average yearly earnings.
Average yearly earnings. ..... 1114
Average weekly wages.Forty averaged $\$ 12$ weekly, and two hundred and forty-seven, $\$ 11$.
Power Loom Weavers (Women). ..... 261
Number reporting
Number reporting
Average number of weeks employed ..... 50 ..... 50 ..... 10
Number of hours of daily employment.
Number of hours of daily employment. ..... \$523 25
Average yearly earnings. ..... 1046
Average weekly wages$\$ 10$, and thirty,One hundred and forty-six averaged $\$ 11$ weekly; eighty-five, $\$ 10$, and thirty, $\$ 9.35$.

## POTTERY EMPLOYES.

Jiggermen.
Number reporting ..... 10
Average number of weeks employed ..... 34.9
Number of hours of daily employment ..... 10
Average yearly earnings. ..... $\$ 89500$
Ayerage weekly wages ..... 2564
Six averaged $\$ 30.40$ weekly, and four, $\$ 18.50$.
Pressers.
Number reporting ..... 17
Average number of weeks employed. ..... 35.28
Number of hours of daily employment. ..... 10
Average yearly earnings ..... $\$ 60400$
Average weekly wages ..... 1712
'Three averaged $\$ 20$ weekly; five, $\$ 18$; six, $\$ 16$, and three, $\$ 15$.
Kilnmen.
Number reporting ..... 206
Average number of weeks employed ..... 45.12
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 54142$
Average weekly wages. ..... 1200
Boss Kilnmen.
Number reporting ..... 29
Average number of weeks employed ..... 43.84
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 59312$
Average weekly wages. ..... 1353
Twenty-four averaged $\$ 13.50$ weekly, and five, $\$ 15.13$.
Dippers.
Number reporting ..... 17
Average number of weeks employed. ..... 46.27
Number of hours of daily employment. ..... 10
Average yearly earnings ..... $\$ 69400$
Average weekly wages. ..... 1500
Decorators (Men).
Number reporting ..... 27
Average number of weeks employed ..... 39.32
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 38144$
Average weekly wages. ..... 970
Nine averaged $\$ 13.50$ weekly; three, $\$ 9$, and fifteen, $\$ 7.50$.Decorators (Women).
Number reporting71
Average number of weeks employed ..... 39
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 23400$
Average weekly wages. ..... 600
Warehouse Girls.16
Number reporting ..... 39
Average number of weeks employed ..... 10
Number of hours of daily employment ..... $\$ 19500$ ..... 500
Average yearly earnings
Average yearly earnings
Average weekly wages
PRINTING-HOUSE EMPLOYES.Compositors.70
Number reporting ..... 52
Average number of weeks employed ..... 10Number of hours of daily employment$\$ 93315$
Average yearly earnings. ..... 1794
Average weekly wages.
$\$ 17$.
Sixty•six averaged $\$ 18$ weekly, and four, $\$ 17$.
Jobbers. ..... 20
Number reporting
52
52
Average number of weeks employed ..... 10
Number of hours of daily employment. ..... $\$ 88400$
Average yearly earnings. ..... 1700
Average weekly wages.Pressmen.
Number reporting. ..... 16
Number reporting.................................... ..... 52 ..... 10
Number of hours of daily employment
Number of hours of daily employment Number of hours of dail ..... $\$ 83475$
1606Average weekly wages.
Two averaged $\$ 20$ weekly; nine, $\$ 16$; three, $\$ 15$, and two, ..... \$14.
STATIONARY ENGINEERS
Number reporting ..... 79 ..... 51.64
Average number of weeks employed ..... 12
Number of hours of daily employment.
Number of hours of daily employment. Number of hours of daily
Average yearly earnings. ..... $\$ 55925$
1083Average weekly wages.
One received $\$ 15$ weekly; five averaged $\$ 13$; twenty, $\$ 12$; twenty-two, ..... $\$ 11$; eighteen, $\$ 10$; ten, $\$ 9$, and three, $\$ 8$.
FIREMEN. ..... 28
Number reporting
50.03
50.03
Average number of weeks employed
Average number of weeks employed
12
12
Number of hours of daily employment
Number of hours of daily employment ..... $\$ 46071$
Average yearly earnings921
Average weekly wagesThirteen averaged $\$ 10$ weekly; eight, $\$ 9$, and seven, $\$ 8$.
WATOHMEN.
Number reporting ..... 58
Average number of weeks employed ..... 51.17
Number of hours of daily employment. ..... 12
Average yearly earnings. ..... $\$ 51179$
Average weekly wages. ..... 1000
Eight averaged $\$ 12$ weekly; two, $\$ 11$; sixteen, $\$ 10$; twenty-six, $\$ 9$, and six, $\$ 8$.
OARPENTERS.
Number reporting ..... 72
Average number of weeks employed ..... 50.49
Number of hours of daily empioyment. ..... 10
Average yearly earnings ..... $\$ 71270$
Average weekly wages ..... 1424
Thirty-eight averaged $\$ 15$ weekly; seventeen, $\$ 14$; ten, $\$ 13.30$, and seven, $\$ 12$.
PAINTERS.
Number reporting ..... 14
Average number of weeks employed. ..... 50
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 75000$
Average weekly wages. ..... 1500
TEAMSTERS.
Number reporting ..... 53
Average number of weeks employed ..... 50.5
Number of hours of daily employment. ..... 10
Average yearly earnings. ..... $\$ 40302$
Average weekly wages ..... 798
LABORERS
Number reporting ..... 743
Average number of weeks employed ..... 51.8
Number of hours daily employed. ..... 10
Average yearly earnings. ..... $\$ 39900$
Average weekly wages ..... 772
Fourteen averaged $\$ 9$ weekly; seventy-nine, $\$ 8,50$; two hundred and seventy-one, $\$ 7.95$; three hundred and ten, $\$ 7.50$; sixty, $\$ 6.90$, and nine, $\$ 6$.

## SUMMARY OF TABLE No. 1.-EARNINGS OF INDIVIDUAL EMPLOYES.

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Glass WorkersBottle and vial blowers... |  |  |  |
| Flint-glass blowers......... | $8{ }_{9}{ }^{\frac{9}{6}}$ | $\begin{array}{r}\$ 28 \\ \hline 26 \\ \hline 7\end{array}$ | $\dagger 38$ |
| Window-glass blowers... | *91/2 | 2437 | -82 |
| Window-glass gatherers.. | $91 / 2$ | 1643 | -81 |
| Window-glass flatteners.. | $11{ }^{1 / 2}$ | 2190 | -75 |
| Window-glass cutters.... | 10 | 2176 | -81 |
| Master shearer, window | 15 | 2225 | -78. |
| Master shearer, bottle... | 14 | 1775 | $+6$ |
| Shearer, window...... | 12 | 1100 | $\dagger 40$ |
| Shearer, bottle.......... | 11 | 1025 | $\pm 6$ |
| Shearer, night, bottle. | 14 | 1500 1615 |  |
| Box maker | 10 | 1200 | 46 |
| Packer. | 10 | 984 | 8 |
| Mould maker, flint. | 10 | 1500 | 17 |
| Engraver, flint....... | 10 | 2160 | 27 |
| Lamp worker, flint.... | 10 | 1825 | 55 |
| Stopper grinder, flint | 10 | 1800 | 33 |
| Cotton and Woolen Mills |  |  |  |
| Weavers....... | 10 | 873 | 481/2 |
| Wool sorters. | 10 | 1800 |  |
| Dyers........ | 10 | 1333 | $851 / \mathrm{z}$ |
| Bleachers... | 10 | 900 | 52 |
| Bleachery folder | 10 | 1200 | 100 |
| Loom fixer. | 10 | 1175 | 68 |
| Warper... | 10 | 800 | 90 |
| Calender man. | 10 | 800 | 14 |
| $\ddagger$ Silk Mills- |  |  |  |
| Dyer............ | 10 | 1800 | 130 |
| Twister........ | 10 | 1600 |  |
| Weavers. | 10 | 1120 | 57 |
| Pickers.. | 10 | 1000 | 95 |
| Throwster. | 10 | 700 | 60 |
| Carpenters, house. | $9{ }^{5}$ | 1443 | 49 |
| Carpenters, ship... | 10 | 1800 | 113 |
| Blacksmiths........ | 10 | 1590 | $271 / 3$ |
| Moulders, iron. | ${ }^{911}$ | 1326 | 7212 |
| Core makers.... | 10 | 1620 |  |
| Machinists.. | 10 | 1345 | 401/4 |
| Rasp makers............ |  | 1000 | 17 |
| Printers................... | ${ }_{10} 91 / 2$ | 1680 | 2613 |
| Rubber workers | $9{ }^{98}$ | 875 | $39^{2}$ |
| Clay miners.... | 10 | 776 | $241 / 4$ |
| Laborers..... | $10{ }^{2}$ | 758 | 35 |
| Miscellaneous., | $10 \frac{2}{20}$ | 1347 | 581/4 |
| Total. | 3,215 | $\ldots$ | 14,297 |
| Average | 97 | .......... | $488_{10}^{3}$ |

*Only five days' work per week. †Do not work during July and August, which months are not included. $\ddagger$ In some establishments there is only half-time (five hours) on Saturday.

SUMMARY OF TABLE No．1．－EARNINGS OF INDIVIDUAL EMPLOYES．

| 宮 <br>  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \＄1，038 11 | 81，175 82 | \＄841 75 | 5.18 | 1.6 | 35 | 91.4 | 8.6 |  |
| 1，086 96 | 1，106 86 | 86620 | 5.43 | 1.1 | 7 | 85.7 |  | 14.8 |
| 75574 | 88828 | 74860 | 5.57 | 1.8 | 7 | 85.7 | 14.3 |  |
| 48915 | 48915 | 48064 | 3.22 | 1.0 | 4 | 50.0 | 50.0 | ．．．．．．．． |
| 66740 | 76340 | 75392 | 6.00 | 2.0 | 2 | 50.0 | 50.0 |  |
| 64908 | 70804 | 64194 | 5.00 | 1.2 | 5 | 60.0 | ．．．．．．．．． | 40.0 |
| 70637 77830 | 95237 94022 | 82090 74289 | 6.50 6.00 | 2.0 | ${ }_{3}^{2}$ | 100.0 | ．．．．．．．．． | ．．．．． |
| 77830 330 00 | 94022 75500 | 74289 75500 | 6.00 7.00 | 2.0 3.0 | 3 1 | 100.0 $\cdots \ldots . . .$. | ．．．．．．．．．．．． | 1．．．．．．． |
| 45100 | 45100 | 45100 | 3.00 | 3.0 1.0 | 1 | ．．．．．．．． | ．．．．．． | 100.0 |
| 65000 | 76000 | 68000 | 5.00 | 2.0 | 1 | 100.0 | ．．．．．．．．． |  |
| $84000 \cdot$ | 90000 | 90000 | 6.00 | 8.0 | 1 | ．．．．．．．．． |  | 100.0 |
| 51000 | 73100 | 72900 | 6.00 | 2.0 | 1 | ．．．．．．．．． | 100.0 |  |
| $\begin{array}{r}44500 \\ 724 \\ \hline 25\end{array}$ | 67516 72425 | 67516 <br> 490 <br> 00 | 5.83 8.00 | 2.3 1.0 | 3 2 2 | －1．．．． 0 | ．．．．．．．．． | 100.0 |
| 99860 | 99860 | 91000 | 7.00 | 1.0 | 1 | 100.0 | ． | ．．．．．．．．．． |
| 77550 | 77550 | 59380 | 3.50 | 1.0 | 2 | 100.0 | ．．．．．．．．． |  |
| 82800 | 95700 | 72875 | 5.00 | 2.0 | 1 | 100.0 | ．．．．．．．．．． | ． |
| 37870 | 51030 | 52761 | 3.54 | 1.7 | 18 | 23.0 | 38.5 | 38.5 |
| 74700 | 82200 | 62600 | 4.50 | 2.0 | 2 | 50.0 |  | 50.0 |
| 47766 | 64383 | 53966 | 3.66 | 2.0 | 8 | 33.3 |  | 66.7 |
| 35500 | 53750 | 52350 | 4.00 | 1.5 | 2 | 50.0 | 50.0 | 6． |
| 40000 465 465 | 65000 | 73000 | 4.00 | 2.0 | 1 |  | 100.0 | ．．．．．．．．． |
| 46525 29600 | 64222 59600 | 71275 <br> 840 <br> 00 | 5.50 7.00 | 1.5 2.0 | 4 | 25.0 | 75.0 | ．．．．．．．．． |
| 53200 | 53200 | 56600 | 5.00 | 1.0 | 1 | ．．．．．．．．． | 100.0 100.0 | ．．．．．．．．．．． |
| 49000 | 49000 |  | 1.00 | 1.0 | 1 |  | ．．．．．．．．． | ．．．．． |
| 77500 | 1，525 00 | 1，100 00 | 8.00 | 3.0 | 1 | 100.0 | ．．．．．．．．．．． | ．．．．．．．．．． |
| 45485 | －537 92 | －562 72 | 4.22 | 1.5 | 36 | 11.1 | 38．9 | 50.0 |
| 30500 29000 | 37700 89000 | 48700 88200 | 4.50 4.00 | 1.5 1.0 8.0 | 2 | 100.0 | 50.0 | 50.0 |
| 65850 | 70375 | 64458 | 8.81 | 1.4 | 12 |  |  |  |
| 58350 | 67825 | 67037 | 4.50 | 1.7 | 8 | 25.0 | 80．0 | 50.0 25.0 |
| 77400 | 79800 | 68440 | 4.80 | 1.4 | 5 | 60.0 | 20.0 | 20.0 |
| 52232 | 63966 | 64092 | 5.41 | 1.5 | 12 | 38.3 | 41.7 | 25.0 |
| 65000 | 1，057 00 | 79780 | 5.8 | 2.6 | 5 | 100.0 |  | ．．．．．．．．． |
| 62630 46450 | 72178 46450 | 66428 40450 | 4.87 2.75 | 1.4 | 16 | 81.3 | 18.7 | ．．．．．．．． |
| 46450 72480 | 46450 72480 | 40450 68480 | 2.75 2.40 | 1.5 1.0 | 4 5 | 50.0 40.0 | 25.0 40.0 | 25.0 |
| 59870 | 63896 | 56877 | 4.88 | 1.8 | 27 | 66.7 | 40.0 3.7 | 20.0 29.6 |
| 39322 | 47128 | 50600 | 4.77 | 1.5 | 18 | 11.2 | 66.6 | 22.2 |
| 35428 | 51216 | 55042 | 5.00 | 2.0 | 7 | 14.3 | 71.4 | 14.3 |
| $34031$ | 51152 | 52896 | 5.07 | 1.5 | 29 | 20.8 | 65.5 | 13.7 |
| 58967 | 65665 | 61620 | 4.45 | 1.3 | 40 | 42.5 | 25.0 | 32.5 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．． | 1，588 | 510 | 380 | 155 | 101 | 79 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．． | 4.59 | 1.5 | ．．．．．． | 46.8 | 30.1 | 23.6 |

## TABLE No. 1.-Earnings of Individual Employes. <br> BOTTLE AND VIAL BLOWERS (Green Glass).*



FLINT-GLASS BLOWERS (Covered Pots).*

| 38\|New York..|Millville.............| | Blower (wooden mould)....] | 10 9 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | " (prescriptton ware) | 9 | 500 500 400 | . |  |
| 40 New Jersey Millville.............. | " (tube) .................) | $91 / 2$ | 5003000. |  | 2 |
| 41 New York.. " | (prescription ware) | 10 | 3200 |  |  |
| 111 New Jersey | (pres | 10 | . 2480 | 13500 | 2 |
| 49 Penna........ Glassboro | (pres |  |  |  |  |

and August. These months not included in time reported * Do not work during July and Aug average but eight and one-half hours. $\ddagger$ Blowers anemployed. †These blowers mostlys, \&c.; hence, they do not always get a full month's siable
table No. 1.-Earnings of Individual Employes.
bOTTLE AND VIAL BLOWERS (Green Glass).*


FLINT-GLASS BLOWERS (Covered Pots).*

| 10 |  |  | 4 | \$992 00 |  |  |  | 5 | 1 | $\$ 99200$ | \$682 | 39 |  |  | 38 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 |  | 15 | 15 | 91094 |  |  |  | 5 | 1 | 91094 |  | 50 |  |  | 39 |
| 20 | 10 |  | 10 | 1,190 00 |  |  |  | 5 | 1 | 1,190 00 | 1,190 |  |  |  | 40 |
| 12 | 6 |  | 6 | 1,230 00 |  | \$136 79 |  | 7 | 2 | 1,366 79 |  |  | Surplus. |  | 41 |
| 25 | 12 |  | 13 | 1,170 00 |  |  |  | 5 | 1 | 1,170 00 |  | 45 |  |  | 0 |
| 12 | 6 |  | 6 | 1,283 00 |  |  |  | 7 | 1 | 1,283 00 |  |  | " |  | 1 |
| 40 | 5 | 15 | 20 | 83280 |  |  |  | 4 | 1 | 83280 |  | 25 |  |  | 49 |

[^10]
## TABLE No. 1.-Earnings of Individual Employes-Con. WINDOW-GLASS BLOWERS.*



WINDOW-GLASS GATHERERS, CUTTERS \& FLATTENERS.*


MISCELLANEOUS WORKMEN IN GLASS FACTORIES.


## Table No. 1.-Earnings of Individual Employes-Con. WINDOW-GLASS BLOWERS.*



WINDOW-GLASS GATHERERS, CUTTERS \& FLATTENERS.*


MISCELLANEOUS WORKMEN IN GLASS FACTORIES.


[^11]
## TABLE No. 1.-Earnings of Individual Employes-Con. IRON WORKERS.


*Dry sand core division. †Green sand pipe.

## TABLE No．1．－Earnings of Individual Employes－Con．

 IRON WORKERS．|  |  |  |  |  |  | INGS OF ERS IN T FAMILY． -шәхрп!чЬ | ALL <br> THE <br> ＇Sגəч7О |  |  | Total income of family． | Total outlay for family. | Surplus or deficiency． | $\begin{aligned} & \text { 岕 } \\ & \text { 品 } \\ & \text { a } \\ & \text { む } \\ & \text { d } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} 92 \\ 8 \\ 6 \\ 6 \\ 3 \end{array} .$ | 8 |  | $\begin{array}{r}92 \\ \ldots \ldots . . \\ \ldots . . \\ \hline\end{array}$ | $\$ 46800$ 750 900 900 900 85200 |  |  |  | $\begin{array}{lll}4 & \\ 6 & 2 \\ 4 & 1 \\ 4 & 1 \\ 5 & 2 \\ 5 & 1\end{array}$ | 2 <br> 1 <br> 1 <br> 2 <br> 1 | 858800 750 900 900 900 850 850 | $\$ 49500$ 750 652 00 78700 738 00 | Deficiency． <br> Surplus． | 81 82 83 84 225 |
| 75 |  | 75 |  | 45000 |  |  |  |  |  | 45000 | 41500 | － |  |
| 30 | 10 |  | 20 | $\ddagger 48300$ | ．．．．．．．．．．．．．．． | 7500 |  | 7 | 2 | $\pm 57500$ | 57500 |  | 89 |
| 88 |  | 12 | 8 | 705 648 40 |  |  |  |  |  | $\ddagger \begin{array}{r}690 \\ 648 \\ 40\end{array}$ | 947 738 00 | Deficiency． | 90 91 |
| 6 |  |  | 6 | 75700 |  |  |  |  | 1 | 75700 | 74500 | Surplus． | 92 |
| 8 | 6 |  |  | 75000 | \＄5000 | ．．．．．．．．．．．． |  |  | 2 | 80000 | 68100 |  | 93 |
| 144 |  | 144 | － | 36400 |  |  |  |  |  | $\ddagger 69400$ | 54200 |  | 94 |
| 120 |  | 120 | ．．．．．． | 46500 |  |  |  |  | 1 | 61300 | 51800 | ＂ | 95 |
| 216 | 60 | 156 |  | 20200 |  |  |  | $3{ }^{3} 1$ | 1 | $\pm 32400$ | 43300 | Deficiency． | 97 |
| 72 144 | － | 144 |  | 526 348 00 | ．．．．．．．．．．． | 30000 |  | 108 |  | $\ddagger 92200$ | 994 <br> 690 <br> 00 |  | 98 99 |
| 144 30 | ． | 144 30 | ． | 34800 450 00 | 2000 | 2500 |  | 9 1 <br> 5 3 | 1 3 | 508 495 00 | 620 483 50 |  | r99 |
| 12 | 7 | 5 |  | 375000 |  |  |  |  |  | 75000 | 67800 | Surplus． | 101 |
| 12 |  |  |  | 81，125 00 |  |  |  | 5 |  | $\ddagger 1,25300$ | 1，085 00 |  | 102 |
| 6 | 6 |  |  | 70000 |  | 72800 |  | 7 | 3 | 1，428 00 | 83400 |  | 103 |
| 182 | 52 | 130 |  | 27000 |  | 49300 |  | 7 | 4 | $\ddagger 90200$ | 73200 | ＂ | 104 |
| 144 |  | 144 |  | 40500 | ．．．．．．．．．．． | 31200 |  | 5 | 4 | $\ddagger 95200$ | 66000 |  | 105 |
| 36 | 2 | 34 |  | 51400 |  |  |  |  | 1 | 51400 | 45900 |  | 109 |
| 100 |  | 100 |  | 55000 |  |  |  |  |  | 55000 | 60000 | Deficiency． | 110 |
| 52 | 5 | 40 | 7 | 51450 |  | 12800 |  | 5 |  | 64250 | 65400 | Surplus． | 111 |
|  |  |  | ．．．．．． | 1，100 00 |  | 20000 |  | 12 | ${ }_{2}^{2}$ | 1，300 00 | 1，330 00 | Deficiency． | 112 |
| 28 38 | 6 | $\begin{aligned} & 22 \\ & 34 \end{aligned}$ | ．．．．． | 540 580 500 |  | 25500 <br> 258 <br> 00 |  | 5 | 2 | 79500 83800 | 59200 71500 | Surplus． | 113 |
| 38 | 4 | $34 .$ |  | 580 61600 |  | 258 258 00 |  | 5 | 2 2 | 83800 874 00 | 71500 80500 |  | 114 |
|  |  | 8 |  |  |  |  |  |  |  |  |  |  | 116 |
| 54 | ． 6 | 36 | 12 | 57000 |  |  |  | 2 |  | 57000 | 49400 |  | 117 |
| 75 |  | 75 |  | 44600 |  |  |  |  | 1 | 44600 | 36675 | ＂ | 118 |
|  |  |  |  | 76000 |  |  |  |  | 1 | 76000 | 76000 |  | 119 |
| 38 | 8 | 30 | ．．．．．． | 60750 |  | 42875 |  | 7 | 2 | 1，036 25 | 83000 | Surplus． | 120 |
| 20 | 10 | 10 |  | 57600 |  |  |  | 3 | 1 | －57600 | 51500 | \％ | 122 |
| 25 |  |  | 25 | 63675 | ．．． | ．．．．．．．．．．． |  | 4 | 2 | 63675 | 63675 |  | 123 |
| 9 |  | 9 | ．．．．．． | 60000 |  |  |  | 4 | 1 | 60000 | 50100 |  | 124 |
|  |  |  |  | 76000 | ．．．．．．．．．．． |  |  | 4 | 1 | 76000 | 86000 | Deficiency． | 380. |
| 15 | 10 |  | 5 |  |  |  |  | 5 |  | 45000 | 47000 |  | 126 |
| 30 |  |  | 30 | 46500 |  |  |  | 1 | 1 | 46500 | 35000 | Surplus． | 128 |
| 3 |  |  | 3 | 45600 |  |  |  | 4 | 1 | 45600 | 45600 |  | 127 |
| 20 | ．． |  | ．．．．．．． | 49500 |  |  |  | 1） | 1 | 49500 | 35000 | Surplus． | 129. |

$\ddagger$ Extra from outside sources．$\quad$ No deductions for holidays．｜I receive nothing of children＇s wages．

## TABLE No. 1.-Earnings of Individual Employes-Con. CARPENTERS.



COTTON AND WOOLEN OPERATIVES.


[^12]
## TABLE No. 1.-Earnings of Inbividual Employes-Con.

 OARPENTERS.

COTTON AND WOOLEN OPERATIVES.


## TABLE No. 1.-Earnings of Individual Employes-Con. COTTON AND WOOLEN OPERATIVES.

|  | Place of Birth. | Place of Employment. | Subdivision or Trade. |  | WAGES. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| 249 | Mass.......... | Camden............ | Loom fixer............................ | 10 10 | …... | \$11 ${ }_{12} 00$ | . | + 12 |
| 252 | Canada ...... | Gloucester Cly | " | 10 | $\ldots$ | ${ }_{12}^{12} 00$ |  |  |
| 253 | New York. |  | Warper ............................... | 10 | …... | 800 | ...... | + 10 |
| $\begin{gathered} 239 \\ 254 \end{gathered}$ | New Jersey | Pasaic. | Warper ......................... Calender man........... | 10 | ....... | 800 | ....... |  |

SHOEMAKERS.


SILK WORKERS.


## table No. 1.-Earnings of Individual Employes-Con. COTTON AND WOOLEN OPERATIVES.



SHOEMAKERS.


SILK WORKERS.


[^13]
## TABLE No. 1.-Earnings of Individual Employes-Con. <br> SILK WORKERS.



RUBBER WORKS EMPLOYES.

*Saturdays, 5 hours, since the strike, or 55 per week. †Fifty-eight a week.

## TABLE No. 1.-Earnings of Individual Employes-Con.

SILK WORKERS.


RUBBER WORKS EMPLOYES.

| 30 | \|. |  | 30 | \$375 00 |  |  |  | $\stackrel{2}{1}$ | 1 | \$375 001 | \$375 00 |  | 255 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | ..... | 13 |  | 44000 |  |  | 88000 | 3 | 2 | 53000 | 55500 | Deficiency. | 257 |
| 32 |  |  | 32 | 36000 |  |  |  | 3 | 1 | 36000 | 41000 |  | 258 |
| 14 | ..... |  | 14 | 43000 |  |  |  |  | 1 | 43000 | 43000 |  | 259 |
| 40 |  |  | 40 | 35000 |  |  |  | 4 | 1 | 35000 | 39000 | Deficiency. | 260 |
| 90 | - | 42 | 48 | 22000 |  |  |  | 4 | 1 | 22000 | 26000 | " | 261 |
| 20 |  |  | 30 | 37000 |  |  |  | 4 |  | 37000 | 40000 | / | 264 |
| 30 |  |  | 30 | 37000 |  |  |  |  |  | 37000 | 37000 |  | 268 |

[^14]
## TABLE No. 1.-Earnings of Individual Employes-Con. RUBBER WORKS EMPLOYES.



## LABORERS.

| 274 Ireland | Wood |  | 10 |  | 8750 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 275 \| | " |  | 10 |  | 810 |  |  |
| 276 Sweden. | " | " | 10 |  | 750 |  | $-10$ |
| 277 Ireland....... | " |  | 10 |  | 750 |  | - 10 |
| 278 Penua.. | "1 ........ |  | 10 |  | 750 |  | -10 |
| 279 Ireland....... | " | " | 10 |  | 810 |  |  |
| " | Gloucester City | Factory empl | 10 |  | 810 |  |  |
| 281 New Jersey | Gloucester City... | Factory empl | 10 |  | 750 |  |  |
| 282 Penna....... |  | Laborer, geu | 10 |  | + 85 |  |  |
| ${ }_{284}^{283}$ Rhode Isl'd | Millville............. | Glass works | 10 |  | 822 |  |  |
| 284 Mass.......... | . ${ }^{\text {a }}$............... |  | 101/2 |  |  |  | $1 / 2$ |
| $286{ }_{2}^{287}$ New Jersey | . ${ }^{\text {a }}$. | Glass works.. | $10^{2}$ |  | 852 |  |  |
| $\begin{aligned} & 287 \\ & 288 \end{aligned}$ | " |  | 10 |  | 85 |  |  |
| 289 Ireland...... | Vineland............ | Iron foundry | 10 |  | 750 |  |  |
| 291 Maine ...... |  | Laborer, gene | 10 |  | 750 |  |  |
| 292 New Jersey | Woodbury........... | Glass works. | 10 |  | 750 |  |  |
| 293 New York.. |  | Mould cleane | 10 |  | 9 |  |  |
| 297 Ireland...... | Bridgeton............ | Penna R. R. | 10 |  |  |  |  |
| 301 New Jersey | Camden ............. | Woolen mill | 10 |  |  |  |  |
| 302 Ireland...... | Paterson............. | General | 10 |  |  |  |  |
| 303 |  | Picking | 10 |  |  |  |  |
| 304 New York.. | " 11 ............. | Laborer | 10 |  |  |  |  |
| 306 Holland..... | " $11 . . . . . . . . . .$. | File work | 10 |  |  |  |  |
| 307 Italy... | , ${ }^{1}$............ | Foundry | 10 |  |  |  |  |
| 309 Scotland | Passaic. | Dy | 10 |  | 775 |  | + 15 |
| 310 Ireland ...... |  |  | 10 |  | 800 |  |  |
| 311 Germany ... |  | Woolen mill | 10 |  |  |  |  |
| 312 New Jersey | New Brunswick.. | Hardware | 10 |  |  |  |  |
| 31.4 Ireland | / | Pen | 10 |  |  |  |  |
|  | " " .. | Laborer | 10 |  | 780 |  |  |
| 817 | " 11 .. | Penna R. | 10 |  | 720 |  | 10 |
| 318 | " 4 " | ". ${ }^{\text {. }}$ | 10 |  | 600 |  | -10 |
| 319 " | " 1 | . ${ }^{\text {sec }}$ |  |  | \% |  | -1 |

## TABLE No. 1.-Earnivgs of Individual Employes-Con. <br> RUBBER WORKS EMPLOYES.



LABORERS.


* Including outside earnings.


## TABLE No. 1.-Earnings of Individual Employes-Con. MISCELLANEOUS WORKMEN, UNCLASSIFIED.



## TabLe No. 1.-Earnings of Individual Employes-Con.

MISCELLANEOUS WORKMEN, UNCLASSIFIED.


[^15]
## TABLE No. 2.-Workingmen's Budgets.

## Size of Family-Yearly Outlay-Surplus or Deficiency-Rent and Rooms.

## GLASS WORKERS.



[^16]TABLE No. 2.-Workingmen's Budgets.

## Size of Family_Yearly Outlay-Surplus or Deficiency-Rent and Rooms.

GLASS WORKERS.

t Own house.
$\ddagger$ Interest.
${ }^{\boldsymbol{\varepsilon}}$ Including furniture.

## TABLE No. 2.-Workingmen's Budgets-Continued.

 Size of Family-Yearly Outlay-Surplus or Deficiency-Rent and Rooms.GLASS WORKERS (Miscellaneous).


IRON WORKERS.


TABLE No. 2.-Workingmen's Budgets-Continued.
Size of Family-Yearly Outlay_Surplus or Deficiency-Rent and Rooms.

GLASS WORKERS (Miscellaneous).


## IRON WORKERS.

| *........... | \$280 00 | \$84 001 |  | 82000 | \$75 001 | \$459001 | \$514 001 | \$51400 |  |  |  | 109 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ............ | +26000 | 7400 |  | 1500 | 6500 | 41500 | 45000 | 45000 |  |  |  | 86 |
|  | $+26000$ | 6000 |  | 400 | 2700 | 35000 | 49500 | 49500 |  |  |  | 129 |
| $\$ 9600$ | 16700 | 4000 | \$35 00 | 875 | 2000 | 86675 | 44600 | 44600 | 6 | 12 | 2 | 118 |
| 12000 | 20800 | 5000 | 8500 | 500 | 7600 | 49400 | 57000 | 57000 | 5 | 20 | 4 | 117 |
| 12500 | 26000 | 6000 | 3000 |  | 4000 | 51500 | 57600 | 57600 |  | 20 | 4 | 122 |
| 12000 | 282 268 00 | 5500 | $\begin{array}{ll}38 & 00 \\ 59 & 00\end{array}$ | 500 30 | 6000 | 51000 | 65000 | 65000 | 7 | 14 | 2 | 116 |
|  | 26800 <br> 877 <br> 00 | 6500 15800 | 59 66 06 00 | $\begin{array}{ll}30 & 00 \\ 11 & 00\end{array}$ | 10 18 18 00 | 48200 | 32400 | 32400 | 6 | 6 | 1 | 97 |
| $\begin{array}{r}120 \\ 60 \\ \hline 00\end{array}$ | 87700 800 | 15800 4200 | $\begin{array}{ll}66 & 00 \\ 42 & 00\end{array}$ | 11 12 100 | 1800 | 74500 45600 | 75700 | 75700 | 6 | 6 | 1 | 92 |
| 15000 | 26175 | 9600 | 3800 |  | 9100 | 45600 686 | 45600 | 45600 |  |  |  | 127 |
|  | 35200 | 7800 | 5000 | 500 | 1600 | 50100 | 60000 | 636 <br> 600 <br> 00 |  | 16 | - 2 | 123 |
| 18200 | 80000 | 6000 | 4000 | 3000 | 29800 | 86000 | 76000 | 76000 |  | 10 | - 1 | 124 |
| 6800 | $\ddagger 69200$ | 10500 | 7200 | 450 | 1000 | 94700 | 89000 | 89000 | 5 | , | 1 | 90 |

[^17]
## TABLE No. 2.-Workingmen's Budgets-Continued.

Size of Family-Yearly Outlay-Surplus or Deficiency-Rent and Rooms.

IRON WORKERS.


CARPENTERS.


## TABLE No. 2.-Workingmen's Budgets-Continued.

## Size of Family-Yearly Outlay-Surplus or Deficiency-Rent and Rooms.

## IRON WORKERS.



## CARPENTERS.

|  | $1+8.84001$ | \$50 001 |  | \$6001 | \$50 001 | \$340 00 | \$462 00 | \$462 00 |  |  |  | 224 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | +250 00 | 5000 |  | 1400 | 5000 | 86400 | 48000 | 48000 |  |  |  | 209 |
|  | +26000 | 12500 |  |  | 22500 | 61000 | 67600 | 67600 |  |  |  | 208 |
| \$120 00 | 22800 | 5000 | \$30 00 | 1000 | 8000 | 56800 | 58400 | 53400 |  | 20 | 4 | 228 |
| 2800 | 38700 | 5000 | 1000 | 500 | 2000 | 50000 | 50000 | 50000 |  | 10 | 2 | 208 |
|  |  |  |  | 1500 |  | 60000 | 80000 | 80000 | 7 | 7 | 1 | 206 |
| 12000 | 28000 | 7500 | 8500 | 1000 | 7700 | 54700 | 64800 | $64 \times 00$ | 5 | 20 | 4 | 219 |
| 13200 | 30000 | 8800 | 4100 |  | 6500 | 62600 | 68000 | 68000 | 8 | 16 | 2 | 215 |
| 15000 | 24700 | 4000 | 3700 |  | 3000 | 50400 | 46200 | 462 ก0 | 7 | 14 | 2 | 221 |
| 6000 | 18200 | 5000 | 2000 | 400 | 1000 | 27600 | 26600 | 26600 | - | 3 | 1 | 213 |
| 18000 | 31200 | 11400 | 4300 | 600 | 4000 | 69500 | 62400 | 62400 |  | 21 | 8 | 217 |
| 18200 | 32500 | 9400 | 3700 | 509 | 2800 | 62100 | 62100 | 62100 | 8 | 16 |  | 216 |
| 20000 | 36500 | 18000 | 4700 | 1100 | 5000 | 85800 | 60000 | 80000 | 9 | 18 |  | 222 |
| 12000 | 42800 | 12500 | 2600 | 1500 | 2800 | 73200 | 78000 | 78000 | 5 | 18 | 5 | 203 |
| 20000 | 38800 | 16800 | 5000 | 1000 | 8600 | 90200 | 68400 | 90200 | 9 | 18 | 2 | 218 |
| 150 200 000 | 40800 | 11700 | 5000 | 5500 | 1000 | 78500 | 58500 | 78500 | 9 |  |  | 214 |
| 20000 | 44900 | 20000 | 5000 | ............ | 5500 | 95400 | 65400 | 95400 | 9 | 18 | 2 | 220 |

- Own house. + Board.

TABLE No. 2.-Workingmen's Budgets-Continued.

## Size of Family-Yearly Outlay—Surplus or Deficiency—Rent and Rooms. <br> SHOEMAKERS.



COTTON AND WOOLEN MILLS OPERATIVES.

| 23 | - 4 ..... | Jersey........... | Weaver (female)... |  |  |  | 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 234 | " ${ }^{\text {a }}$... |  |  |  |  |  | 1 |  |
| 232 | Millville | Massachusetts........ | " " . |  |  |  | 1 |  |
| 227 | Passaic | Holland................ |  |  |  |  | $\stackrel{2}{2}$ |  |
| 229 | Camden | New Jersey........... | " |  |  |  | 2 |  |
| 228 | Passaic ............ | England................ | Loom fixer |  |  |  | $\stackrel{2}{2}$ |  |
| 252 | Gloucester City. | New Jersey............ <br> England | Loom fixe |  |  |  | $\stackrel{2}{2}$ |  |
| 242 | Gloucester City | Canada...................... |  | 3 |  |  | 2 |  |
| 245 |  | Missouri. | Bleacher |  |  |  | 2 |  |
| 240 | Camden................ | England. | Wool sor |  |  | ...... |  |  |
| 231 | Millville................... | New Jersey | Weave |  |  |  | 2 |  |
| 2261 | Passaic ................. | Canada................... | Loom fi |  |  |  | 2 |  |
| 247 | Passaic ................. | Ireland................. | Folder |  |  |  | 2 |  |
| 236 | Gloucester City...... | Vermont.............. | Wea |  |  |  | 2 |  |
| 243 | " ${ }^{\text {" }}$ | North Carolina...... | Dyer. |  |  |  | $\stackrel{2}{2}$ |  |
| 246 | Millvi | New Jersey. Massachuset | Bleache |  |  |  | $\stackrel{2}{3}$ |  |

## TABLE No. 2.-Workingmen's Budgets-Continued.

 Size of Family-Yearly Outlay-Surplus or Deficiency-Rent and Rooms.
## SHOEMAKERS.



COTTON AND WOOLEN MILLS OPERATIVES.

|  | $1815600 \mid$ | \$55 00 |  | \$500 | \$1400\| | \$230 001 | \$248 00 | \$248 00 |  |  |  | 235 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\pm 15600$ | 5000 |  | 500 | 7500 | 28600 | 36800 | 36800 |  |  |  | 284 |
|  | $\ddagger 18000$ | 6000 |  |  | 3000 | 22000 | 22000 | 22000 |  |  |  | 232 |
| \$60 00 | 19500 | 6000 | \$22 00 | 100 | 2100 | 35900 | 27000 | 27000 | 3 | 6 | 2 | 227 |
| 12000 | 21600 | 5000 | 2800 | 1000 | 2500 | 44900 | 42300 | 42300 | 5 | 10 | 2 | 229 |
| 6000 | 25100 | 8600 | 3500 | 200 | 6800 | 50200 | 28900 | 28900 | 3 | 6 | 2 | 228 |
| 12500 | 21100 | 8200 | 3900 | 500 | 2500 | 48700 | 43600 | 43600. |  |  |  | 252 |
|  | 16400 | 10000 | 4000 | 1500 | 10000 | 41900 | 48000 | 73000 |  |  |  | 244 |
| 12000 | 23400 | 6000 | 4000 |  | 4600 | 50000 | 50000 | 50000 | 6 | 12 | 2 | 242 |
| $\begin{array}{r}9600 \\ 120 \\ \hline\end{array}$ | 158 234 00 00 | 2500 880 | $\begin{array}{lll}30 & 00 \\ 85 & 00\end{array}$ | 500 | 20 40 40 | 329 47200 00 | 315 864 800 | 815 864 800 | 6 <br> 7 | 12 | 2 | 245 |
| 12000 | 22100 | 5000 | 2500 | 50 | 34 <br> 00 | 47200 <br> 450 <br> 00 | 864 450 00 | 864 450 400 | 7 7 | 14 | 2 2 2 | 240 |
| 8400 | 28200 | 6000 | 3500 | 400 | 4700 | 51200 | 46000 | 46000 | 4 | 4 | 1 | 226 |
| 12500 | 28600 | 11000 | 4100 | 500 | 1000 | 57700 | 42400 | 42400 | 6 | 12 | 2 | 251 |
| 18200 | 42500 | 10000 | 3700 | 1900 | 1700 | 73000 | 40000 | 65000 | 9 | 9 | 1 | 247 |
| 12500 | 81200 | 7500 | 4000 |  | 2500 | 57700 | 39700 | 57700 | 7 | 14 | 2 | 286 |
| 12500 | 31100 | 15100 | 4000 | 1000 | 6300 | 70000 | 45000 | 70000 | 8 | 16 | 2 | 243 |
| 120 180 180 | 334 <br> 369 <br> 00 | 150 175 175 | 350 49 49 | 500 | 7400 <br> 56 <br> 00 | 71800 | 45000 | 76000 | 8 | 16 | ${ }^{2}$ | 246 |
| 18000 | 36900 | 17500 | 4900 |  | 5600 | 82900 | 55700 | 86500 | 8 | 16 | 2 | 249 |

*Own house. $\dagger$ To building association. $\ddagger$ Board.

## TABLE No. 2.-Workingmen's Budgets-Continued.

## Size of Family-Yearly Outlay-Surplus or Deficiency-Rent and Rooms.

COTTON AND WOOLEN MILLS OPERATIVES.


SILK WORKERS.


## LABORERS.



TABLE No. 2.-Workingmen's Budgets-Continued.
Size of Fumily-Yearly Outlay-Surplus or Deficiency-Rent and Rooms.

COTTON AND WOOLEN MILLS OPERATIVES.


SILK WORKERS.

|  | †\$260 001 | \$80 00 |  | \$20 00\| | \$130 00 | \$490 00 | \$49000 | $\$ 490$ |  |  |  | 171 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $+23400$ | 7000 |  | 1000 | 15000 | 46400 | 52800 | 52800 |  |  |  | 160 |
|  | +26000 | 6500 |  | 1200 | 7300 | 41000 | 50000 | 50000 |  |  |  | 150 |
|  | $\dagger 26000$ | 4200 |  | 500 |  | 31000 | 42500 | 42500 |  |  |  |  |
| \$4800 | 27000 | 4000 | \$20 00 | 1200 | 1500 | 40500 | 25300 | 25300 | 3 | 7 |  |  |
| 8400 | 25600 | 12500 | 3400 | 2600 | 2500 | 55000 | 55000 | 55000 |  | 16 | 4 |  |
| 10800 | 28400 | 10000 | 3500 | 3000 | 3000 | 58700 | 52000 | 52000 | 4 | 8 | 2 |  |
| 6000 | 32800 | 3000 | 1000 |  | 2000 | 448 co | 42000 | 42000 | 5 | 5 | 1 |  |
| 9000 | 21800 | 5000 | 3000 | 600 | 3000 | 42400 | 34400 | 34400 |  |  |  |  |
| 4800 | 30000 | 5000 | 2500 | 500 | 6200 | 49000 | 39000 | 49000 | 2 | 8 | 3 | 143 |
| 7200 | 15000 | 8000 | 2500 | 400 | 8500 | 41600 | 46000 | 59000 |  | 24 | 6 | 136 |
| 7200 | 32000 | 6000 | 1800 |  | 1000 | 48000 | 26000 | 26000 | 5 | 10 | 2 |  |
| 9600 | 39200 | 16500 | 3800 | 1900 | 12200 | 83200 | 29000 | 89000 | 4 | 8 |  | 172 |
| 9600 | 51400 | 6000 | 2000 | 1000 | 2000 | 72000 | 35200 | 65200 | 4 | 8 | 2 | 170 |
| 6000 | 27700 | 6000 | 2800 |  | 6900 | 49400 | 35000 | 49400 | 5 | 5 | 1 |  |
| 7200 | 36000 | 10000 | 3200 | 1000 | 1600 | 59000 | 50000 | 50000 | 4 | 21 | 6 |  |
| 16800 | 41600 | 14000 | 3500 | 1000 | 3300 | 80200 | 80200 | 80200 |  | 7 |  | 148 |
| 84.00 | 25800 | 9000 | 3200 | 400 | 3700 | 50500 | 45000 | 50500 | 3 | 13 |  | 137 |
| 9600 | 30900 | 3300 | 500 | 300 | 4600 | 49200 | 42000 | 42000 | 5 | 5 | 1 | 168 |
| 10800 | 33000 | 10000 | 3600 | 1700 | 2400 | 61500 | 54000 | 61500 | 6 | 12 |  |  |
| 9600 | 30000 | 7500 | 3000 | 2000 | 7900 | 60000 | 60000 | 60000 | 3 | 12 |  |  |
| 120 00 | 40000 | 10000 | 2500 | 6000 | 10000 | 80500 | 41000 | 95100 |  | 16 |  | 134 |
| 8400 | 30000 | 12500 | 5000 | 1200 | 6900 | 64000 | 40500 | 55500 | 3 | 10 |  |  |
| 12000 | 33000 | 7500 | 2700 | 1000 | 3800 | 600 ก0 | 600 no | 600 00 | 4 | 16 |  | 139 |

## LABORERS.

| …......\| $\mid+234000$ |  |
| :---: | :---: |
|  |  |
| 88400 | 15600 |
| 9 0 00 | 26000 |
| 6000 | 25000 |
| 8400 | 21300 |
|  | 36300 |

[^18]
## TABLE No. 2.-Workingmen's Budgets-Continued.

## Size of Family-Yearly Outlay-Surplus or Deficiency-Rent and Rooms.

LABORERS.

|  | Residence. | Place of Birth. | Occupation. | NUMBER IN FAMILY. |  |  | 営 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| 276 | Woodbridge.......... | Sweden.. | Clay miner. |  |  |  |  |
| 311 | Passaic .................. | Germany ................. | Woolen mills.................... |  |  |  |  |
| ${ }_{228}^{293}$ | Woodbury............. | New Jersey............. | Glass factory................... |  |  |  |  |
| 308 | Passaic.. |  | Woolen mil |  |  | 2 |  |
| 306 | Paterson............... | Holland............... | File works........................ |  |  | 2 |  |
| ${ }_{291}^{292}$ | Woodbury............. | New York.............. | Glass factory....................... |  |  | ${ }_{3}^{3}$ |  |
| 284 | Nillville.................. | Massachusetts ........ | Glass factory........................... |  |  | 3 |  |
| 288 |  | Rhode Issand ........ |  |  | 2 |  |  |
| $\begin{aligned} & 282 \\ & 301 \end{aligned}$ | Gloucester City...... | Pennsylvania <br> New Jersey. | Laborer.......... |  |  |  |  |
| 227 | Nillville............... |  | Glass factory... |  | 3 4 |  |  |
| 288 | " .............. | ...... | .............. ........ |  | , |  |  |

## MISCELLANEOUS WORKMEN.



TABLE No. 2.-Workingmen's Budgets-Continued.
Size of Family-Yearly Outlay-Surplus or Deficiency-Rent and Rooms.

## LABORERS.



## MISCELLANEOUS WORKMEN.

| ........... 3826000 |  |  |  | 22600 | \$603 00 | \$644 00 | 44 |  |  | 361 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 5000 | \$700 | 6000 | 11700 | 22000 | 22000 |  |  | 360 |
|  | 331200 | 10000 | 1800 | 15000 | 58000 | 54000 | 54000 |  |  | 325 |
|  | \& 31200 | 25000 | 1500 | 22300 | 80000 | 90000 | 90000 |  |  | 322 |
| \$13000 | ${ }^{224} 00$ | 1500085000 |  | 17400 | 72800 | 72800 | 728 co |  | 2 | 347 |
| 1:0 00 | 17300 | 40003400 |  | 500 | 37200 | 32500 | 372 c0 | $4{ }^{4} 18$ | 3 | 366 |
| 9600 | 26400 | $8500 \quad 2000$. |  | 14700 | 61200 | 65000 | 85000 | $9{ }^{9}$ | 1 | 341 |
| 7500 | 16600 | 65003300 |  | 2500 | 36400 | 40800 | 40800 | $6 \quad 12$ | 2 | 368 |
| 13200 | 17900 | 75 00 3700 | 200 | 7900 | 50400 | 50400 | 50400 | 7. 21 | 3 | 359 |
| 12000 | 21200 | $8100 \mid 3800$ | 2000 | 4900 | 52000 | 52000 | 52000 | 8 | 1 | 352 |
| 9600 | 32000 | $3000 \quad 3500$ | 800 | 1100 | 50000 | 50000 | 50000 | $3{ }^{3} 14$ | 4 | 350 |
| 12000 | 33700 | 60004000 | 200 | 2500 | 58500 | 45600 | 45600 | $4{ }^{4} 15$ | 3 | 340 |
| 7200 | 31000 | 63003000 | 3000 | 4800 | 55300 | 62400 | 624 c0 | $3{ }^{3} 12$ |  | 358 |
| 20000 | 42600 | $11600 \dagger 6200$ |  | 5500 | 85900 | 60000 | 66800 |  |  | 348 |
| 16800 | 29400 | 150004600 | 200 | 8400 | 74400 | 74400 | 74400 | 816 | 2 | 338 |
|  | 73200 | 100005000 | 2400 | 10800 | 1,01400 | 1,22400 | 1,224 00 | $9{ }^{9} 9$ | 1 | 357 |
| 6000 | 29200 | 10002500 | 300 | 1000 | 40000 | 25000 | 25000 |  | 2 | 353 |
| 14400 | 35000 | 60004000 | 5000 | 4600 | 69000 | 85000 | 85000 | 12 |  | 351 |
| 18600 | 39400 | 134004900 | 200 | 3500 | 80000 | 46000 | 76000 |  |  | 364 |
| 14400 | 40300 | 197004800 | 500 | 5900 | 85300 | 40000 | 98500 | 5 | 1 | 367 |
| 4800 | 49600 | $20000 \mid 10100$ | 1500 | 900 | 86900 | 31000 | 87500 |  |  | 376 |

[^19]*Live along railroad track, and children gather fuel.
$\dagger$ Including tailor shop.

## TABLE No. 3.-Workingmen's Budgets.

Cost of Living - Weekly Quantity Consumed and Amount Expended for Food.
GLASS WORKERS.


TABLE No. 3.-Workingmen's Budgets.
Cost of Living-Weekly Quantity Consumed and Amount Expeniled for Food.
GLASS WORKERS.


* Raise my own, also.


## TABLE No. 3.-Workingmen's Budgets-Continued.

 Cost of Living-Weekly Quantity Consumed and Amount Expended for Food.GLASS WORKERS


CARPENTERS.


## SHOEMAKERS.



TABLE No. 3.-Workingmen's Budgets-Continued. Cost of Living - Weekly Quantity Consumed and Amount Expended for Food.
GLASS WORKERS.


CARPENTERS.


SHOEMAKERS.


[^20]
## TABLE No. 3.-Workingmen's Budgets-Continued.

## Cost of Living-Weekly Quantity Consumed and Amount Expended for Food. <br> SHOEMAKERS.



## IRON WORKERS.

| 148 Gloucester City ... | Ireland................ | Machinist................... | $2 \ldots . . . \mid . . .$ | $2 \mid \ldots$ | 50 75 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 148 Gloucester Camden........... | New Jersey........... |  | $\begin{array}{lllll}3 & \cdots & & \cdots\end{array}$ |  | 71 |
| 122 " $12 . . . . . . . . . . .$. | New York............. | " | 3 1 $\ldots$ |  | 65. |
| 116 Gloucester City... | England............... | Mould |  |  | 175 |
| 97 Millville............. | New Jersey........... | Machi |  | 2. | 75 |
| 123 Camden............. | Pennsylvania........ |  | $4 \quad 2 \ldots$ | 2 | 290 |
| 124 Florence............. | New Jersey............ | " | $4{ }^{4} \quad 2$ |  | 200 210 |
| 380 Camden............ |  | Moulder. | 4.2 |  | 210 150 |
| 91 Fiorence............. | " | Blacksmith |  |  | 15 1 1 |
| 83 Bridgeton............ | Delaware ............. | Machini | $\begin{array}{ll}5 & 2 \\ 5 & 2\end{array}$ | 2 | 210 |
| 111 Paterson............... | Massachuset |  | 5.2 | 2 | 186 |
| 101 Burlington......... | New Jersey |  | 5 |  | 120 |
| 100 Vineland........... | Maine.................. | Black | 5 |  | 132 |
| 84 Woodbury........... | New Jersey............. |  |  |  | 1 1 1 40 |
| 225 Camden.. .......... |  | Machinist | 3 |  | 175 |
| 115 Gloucester City ... | Engian | Blacksmith | $\begin{array}{ll}2 & 2 \\ 2 & 3\end{array}$ |  | 160 |
| 120 Camden............ | New Jersey | Mac | $\begin{array}{llll}8 & 3 & 3\end{array}$ |  | 185 |
| 119 Bridgeton.. |  |  |  |  |  |

TEXTILE WORKERS.


TABLE No. 3.-Workingmen's Budgets-Continued.
Cost of Living - Weekly Quantity Consumed and Amount Expended for Food.
SHOEMAKERS.


IRON WORKERS.


TEXTILE WORKERS.

|  |  |  | $\begin{array}{r} 45 \\ 120 \\ 75 \\ 56 \\ 100 \\ 50 \\ 90 \\ 40 \\ 70 \\ 64 \end{array}$ |  | 15 | 25 | \$0 50 | \$1 25 | \$0 25 | \$0 35 | \$0 30 | 135 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 |  |  |  | 2 | 36 | 60 | 50 | 50 | -22 | 78 | 251 |
|  |  |  |  |  | 16 | 25 | 125 | 100 | 25 | 40 | 105 | 247 |
|  |  |  |  |  | 15 | 50 | 50 | 100 | 35 | 50 | 50 | 174 |
|  | 21 |  |  | 2 | 28. | 93 | 150 | 100 | 47 | 45 | 30 | 170 |
|  | 1 |  |  |  | 1 | 22 | 75 | 85 | 126 | 30 | 55 | 236 |
|  | 2 |  |  |  | 2 | 44 | 75 | 95 | 91 | 35 | 80 | 246 |
|  |  |  |  |  | .. 1 | 25 | 100 | 92 | 25 | 30 | 100 | 175 |
|  | ... |  |  |  | 18 ... | 25 | 125 | 100 | 20 | 50 | 50 | 163 |
|  |  |  |  |  |  | 25 | 90 | 50 | 18 | 25 | 10 | 137 |

*Raise them myself. † Raise my own at a cost of $\$ 18$ per year.

## TABLE No．3．－Workingmen＇s Budgets－Continued．

 Cost of Living－Weekly Quantity Consumed and Amount Expended for Food．TEXTILE WORKERS．

| \＆०品品品 | Residence． | Place of Birth． | OcCupation． | NUMBER IN FAMILY． |  |  |  | MEAT AND FISH． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 㗊 |  |
| 148 | Paterson．．．．．．．．．．．．． | England．．．．．．．．．．．．．．．． | Silk weaver．． |  |  | ．．．．． |  |  |  | 300 150 |
|  | Town of Union．．． Bridgeton．．．．．．．．．． | Germany．．．．．．．．．．．．．．． England． | Wool sorter．．．．． |  |  |  |  |  |  | 150 185 |
|  | Bridgeton．．．．．．．．．．． | Pennsylvanla．．．．．．．．． | Cotton weaver |  |  |  |  |  |  | $\begin{array}{r}185 \\ \hline 9\end{array}$ |
| 233 | Millville．．．．．．．．．．．． | Canada，．．．．．．．．．．．．．．． |  |  | 6 |  |  | 3 |  | 125 |
| 230 | Camden．．．．．．．．．．． | New York．．．．．．．．．．．．．． | Warper ．．．．．．．．．．．． |  | 7 |  |  |  | 12 | 150 |
|  | Gloucester City．．． | New Jersey ．．．．．．．．．．． |  |  |  |  |  |  |  | 175 278 |
|  | Union Hill Couty．．． | Germany ．．．．．．．．．．．．．． | Cotton weaver．．． |  |  |  |  |  | 16 | 2 <br> 192 |
| 258 | ${ }^{\text {a }}$－．．．． | New York．． | Loom fixer． |  |  |  |  |  |  |  |

## LABORERS



MISCELLANEOUS WORKMEN．


TABLE No. 3.-Workingmen's Budgets-Continued.
Cost of Living-Weekly Quantity Consumed and Amount Expended for Food.
TEXTILE WORKERS.


LABORERS.


MISOELLANEOUS WORKMEN.


## TABLE No. 4. RETAIL PRICES OF COMMODITIES.



[^21]TABLE No. 4.
RETAIL PRICES OF COMMODITIES.

|  |  |  |  |  |  | 宫 |  |  |  |  |  |  | 茄 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 <br> 14 <br> ..... | 10 14 18 | 10 | 14 <br> 16 <br>  <br>  <br>  | 18 14 15 | 12 14 16 | 11 | ${ }_{10}^{6}$ | 2 $21 / 2$ 3 | 40 45 50 | 18 25 | 70 75 85 | $11 / 4$ $2^{11}$ 3 | 18 20 25 | ${ }_{10}^{9}$ |
| 12 14 | …....... |  | 12 16 | 12 15 | ........... |  |  | 8 | 48 | 12 36 | 65 85 | 2 | 20 40 | 10 12 |
| 10 12 | 10 12 | 12 | 16 | ${ }^{16}$ | 15 18 |  | 8 10 | 2 | 48 | 25 | 65 75 | 2 | 20 | 12 |
| ......... | ...... | ......... | . | ......... | . |  | 16 | . | ... | ........ | 85 | .......... | 38 |  |
| 12 | 12 | 12 | 14 | 14 | ... |  | 15 | 3 | 45 | 25 | 70 | 3 | 30 | 10 |
| 7 | 8 | 8 | 10 | 9 | 12 | 10 | 8 | 3 | 5 | 12 | 60 | $21 / 2$ | 15 | 9 |
| 8 | 10 | 10 | 12 | 10 | 16 | 12 | 5 | ......... | 8 | 15 | 65 | $8^{2 / 2}$ | 20 | 10 |
| 10 | 12 | , | 13 | 11 | 18 | ........ | 8 | . | 10 | 20 | 70 |  | 25 | 11 |
| 11 | 15 | ......... | 14 | 12 | 20 | ......... | 15 | . | 12 | 25 | 80 | .......... | 30 | 12 |
| 12 | 18 |  | 15 | 18 | 25 | , | 18 | . | 30 |  |  | ......... | 35 |  |
| ........ | 20 |  | 18 | ....... | 30 |  | 20 | . |  |  | 110 |  | 40 | ...... |
| 12 | 12 | 8 | 8 | 11 | 14 | 10 | 8 | 4 | 5 | 24 | 75 | 2 | 30 | 10 |
| ........ | ......... | 10 | 10 | 14 | 18 | 12 | 7 | ........ | 8 | .... |  | ......... |  | ......... |
|  |  | (1) | 101/2 | 10 | 14 | 7 | 4 |  | 30 | 20 | 60 |  | 20 |  |
|  |  | 10 | $14^{2}$ | 181/2 | 15 | 10 | 8 | $8^{2}$ | 48 | 25 | 75 | 21/2 | 25 | $10^{8 / 3}$ |
| ......... | ... |  | 15 | ......... | 16 |  | 10 |  | 50 |  | 80 |  | 28 | ......... |
| ...... | ........ | ......... | ..... | . | 20 |  | 15 | . |  |  | 90 | $\ldots$ | 38 | . |
| 10 | 10 |  | 12 | 10 | 121/2 | 10 | 8 | 8 | 12 | 20 | 60 | 21/2 | 20 | 8 |
| 121/2 | 121/2 | 8 | 14 | 12 | 16 | 12 | 10 |  | 14 | 25 | 75 | $3^{2 / 2}$ | 30 | 10 |
| 14 | 18 | 10 | 15 | 121/2 | 20 | 18 | 12 | ........ | 40 |  | 90 |  | 40 | 11 |
| . | ....... |  | 16 | ....... | ...... | ......... | 18 | ......... | 55 | ......... | 100 | ......... | 48 | 12 |
| ........ |  | 10 | $141 / 2$ | 11 | 14 | - | 7 | 2 | 45 | 20 | 70 | 3 | 20 | 10 |
| ........ | ......... |  |  | ......... | 20 | 20 | 20 | 8 | 50 | 30 | 90 | ......... | 35 | 12 |
| 12 | 18 | 10 | $12^{1 / 2}$ | 10 | 10 | 8 | $71 / 2$ | 2 | 12 | 24 | 65 | 2 | 15 | 10 |
| 14 | ......... | 10 | 15 16 | 11...... | 16 18 | 12 | ${ }^{8} 8$ | 3 | 48 |  | 70 80 | 8 | 25 |  |
|  | ......... |  |  |  | 22 |  | 12 |  |  |  | 90 | ............ | 30 | . |
| 15 | 20 | 12 | 16 | 12 | 16 | 10 | 10 | 3 | 50 | 20 | 65 | 4 | 25 | 14 |
| ........ | ........ |  |  | ........ | 18 |  | 14 |  |  |  | 80 |  | 32 |  |
|  |  | 8 | 15 | 12 | 14 |  | 5 |  | 30 | 12 | 65 |  | 20 |  |
|  |  | 9 | 18 | 14 | 18 |  | 10 | $3^{2 / 2}$ | 50 | 18 | 95 | $2^{1 / 2}$ | 25 | 12 |
| ........ | ... | 10 | 20 | ......... |  |  | 15 |  |  | 25 |  |  | 30 |  |

## TABLE No. 4-Continued.

 RETAIL PRICES OF COMMODITIES.

[^22]TABLE No. 4-Continued. RETAIL PRICES OF COMMODITIES.

$\ddagger$ Per pound. \&Three-pound can.

TABLE No. 5.-Establishments.
GREEN GLASS (Bottle and Vial) FACTORIES.*


[^23]$\qquad$

TABLE No．5．－Establishments．
GREEN GLASS（Bottle and Vial）FACTORIES．＊

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 8 |  | $\stackrel{1}{3}$ | 8 |  |  | 58 |
|  |  |  |  |  |  | 8 |  | 3 | 9 |  |  |  |
|  |  |  |  |  |  | 3 |  | 3 | 9 |  |  | 5 |
|  |  |  |  |  |  | 12 |  | 3 | 81 |  |  | 58 |
| ．．．．．．．．．．． |  |  |  |  |  | 12 |  | 3 | 81 |  |  | 58 |
|  |  |  |  |  |  | 30 |  | 3 | 81 |  |  | 58 |
|  |  |  | ．．．．．．．． |  |  | 6 |  | 3 | 8 |  |  | 58 |
|  |  |  |  |  |  | 6 |  |  | 8 |  |  | 58 |
|  |  |  |  |  |  | 7 |  | 2 | 9 |  |  | 58 |
|  |  |  |  |  |  | 7 |  |  | 9 |  |  | 58 |
| ．．．．．．．．．．． |  |  |  |  |  | 6 |  | 8 |  | ． |  | 58 |
| ．．．．．．．．．．． |  |  |  |  |  | 6 |  |  | 9 | ．．．．．．．．．．．．．． |  | 58 |
| ．．．．．．．．．．．．．． |  |  |  |  |  | 6 |  | 3 | 9 |  |  | 58 |
|  |  |  |  |  |  |  |  |  |  |  |  | 58 |
| \＄2 82 |  |  |  |  |  |  | 78 |  | 9 |  |  | 58 |
| ${ }^{3} 60$ |  |  |  | ．．．．．．． |  |  | 43. |  | 9 | ． |  | 58 |
| 364 4 4 | ．．．．．．．．．． | ．．．．．．．． |  |  |  | ．．．．．．．．． | 32 |  | 9 | ． |  | 58 |
| 360 |  |  |  |  |  |  | ${ }_{8}^{4}$ |  | 9 |  |  | 8 |
| 510 |  |  |  |  |  |  | 19. |  | 9 |  |  | 88 |
| 480 |  |  |  |  |  |  | 4. |  | 9 |  |  | 58 |
| 600 |  |  |  |  |  | ． | 4. |  | 9 |  |  | 58 |
| 750 |  |  |  |  |  | ， | 5 |  | 9 |  |  | 58 |
| 660 |  |  |  |  |  |  | 11. |  | 9 | ． |  | 58 |
| 762 |  |  |  |  |  |  | 3. |  | 9 |  |  | 58 |
| 650 |  |  |  |  |  | ． | 6. |  | 10 |  |  | 58 |
| ．．．．．．．．．．． |  |  |  |  |  | ．．．．．．．．． | 1. |  | 10 |  |  | 58 |
|  |  |  |  |  |  |  | 8. |  | 10 | ． |  | 58 |
|  |  |  |  |  |  |  | 14. |  | 10 | ． |  | 58 |
|  |  |  |  |  |  | …．．．．． |  | ．．．．．．．．． | 10 | ． | ＊＊＊＊＊＊＊＊＊＊＊＊＊ |  |
|  |  |  |  |  |  |  | 8. |  | 10 | ． | ．．．．．．．．．．．．．． |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 8. |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  | 3. |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  | 4. |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  | 5. |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  | 2 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 16. |  | 10 |  |  | 18 |
|  |  |  |  |  |  |  | 6 |  | 10 |  |  | 18 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 58 |
|  |  |  |  |  |  |  | 6 |  | 10 |  |  | 58 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 58 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 58 |
|  |  |  |  |  |  |  | 4. |  | 10 |  |  | 6 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 58 |
|  |  |  |  |  | ．．．．．．．． | ．．．．．．．．． | 2 |  | 10 |  |  | 58 58 |
|  |  |  |  |  |  |  | 4. | ．．．．．．．．． | 10 |  |  | 58 |

## TABLE No. 5.-Establishments-Continued. GREEN GLASS (Bottle and Vial) FACTORIES.



TABLE No．5．－Establishments－Continued． GREEN GLASS（Bottle and Vial）FACTORIES．

| 出 <br> 望 <br> 9 <br> 茞 ～2 Sis <br> E |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 18 |  | 10 |  |  |  |
|  |  |  |  | ． |  |  | 14 |  | 10 | ．． | ． |  |
|  | ．．．．．．． | ……．．．． |  |  |  |  | 1 |  | 10 |  |  |  |
|  | ．．．．．．．．．．．．．．． |  |  |  |  |  | 1 |  | 10 | ．．．．．．．．．．．．．．．． |  |  |
|  |  |  |  |  |  | 3 |  |  | 10 |  |  | 58 58 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ． |  |  |  |  | 2 |  | 2 | 9 |  |  |  |
|  | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．． |  | ．．．．．．．． | $2$ | ．．．．．．．．． | $\stackrel{2}{3}$ | 9 | ．．．．．．．．．．．．． |  | 54 |
|  |  |  |  |  |  | 21 |  | 3 | 9 |  |  | 54 |
|  | ．．． | ．．．．．．．． | ．．．．．．．． |  |  | 6 |  | 3 | 9 |  |  | 54 |
|  | ．．．．．．．．．．． |  | ．．．．．．．．． |  | ．．．．．．．．． | 21 |  | 3 | 9 |  |  | 54 |
|  |  | ．．．．．． | ．．．．．．．． | ．．．．．．． |  | 18 | ．．．．．．．． | $\stackrel{3}{3}$ | 9 |  |  | 51 |
|  | ．．．．．．．．．．． | ．．．．．．． |  |  |  | 3 |  | 3 | 9 |  |  | 54 |
|  | ．．．．．．．．．．． | ．．．．．．．． |  |  |  | 3 |  | 3 | 9 |  |  | 54 |
|  | ．．．．． | ．．．．．．．． | ．．．．．． |  |  |  |  | 3 | 9 | ． | ．．．．．．．．．．．．． | 54 |
|  |  |  |  |  |  | 12 |  | 3 | 9 |  |  | 54 |
|  |  |  |  |  |  | ．．．．．．．． | 1 |  | 10 |  |  | 54 |
| $\begin{array}{r} \$ 600 \\ 500 \\ 400 \\ 300 \end{array}$ | ．．．．．．．．．．． | 52 | 30 | ．．．．．．． | ．．．．．．．． | ． | 10 | ．．．．．．．．． | 9 | ．．．．．．．．．．．．．． | ．．．．．．．．．．．． | 54 |
|  |  |  |  |  |  | ．．．． | 15 | ．．．．．．．． | 9 |  |  | 54 |
|  | ．．．．．．．．．．． | ．．．．．．．． | ．．．．． |  |  | ．．．．．．．．． | 20 | ．． | 9 |  | ．．．．．．．．．．．．． | 54 |
|  | ．．．．．．．．．．．．．． | ．．．．． | － |  |  | $\cdots$ | 5.2 |  | 9 |  |  | 54 |
|  |  |  |  |  |  |  | 4 |  | 10 |  |  | 54 |
| ．．．．．．．．．．． |  | ．．．．．．．． | ．．．． |  |  |  | 6 |  | 10 |  |  | 54 |
| ．．．．．．．．． |  |  |  |  |  |  | 5 |  | 10 |  |  | 54 |
| ．．．．．．．．．．．．．．． | ．．．．．． | ．．．．．． | ．．．．． |  |  | ．．．．．．．． | 1 | ．．．．．．．． | 10 | ．．．．．．．．．．．．． |  | 12 |
|  | ．．． | ．．．．．． |  |  |  |  | 1 |  | 10 |  |  | 12 |
| ．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．．． | ．．．．．． |  |  | ．．．．．．．．． | 1 |  | 10 | $\ldots$ |  | 12 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．． | ．．．．．．．． |  |  | ．．．．．．．．． | 2 |  | 10 | － |  | ．．．．．．．． |
|  |  |  |  |  |  |  | 5 |  | 10 |  |  |  |
| ．．．．．．．．．．．．．．． |  | ．．．．．．． |  |  |  |  | 15 |  | 10 |  |  |  |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  | 5 |  | 10 |  |  |  |
|  | ．．．．．．．．．． |  | ．．．．．．． |  |  |  | 3 |  | 10 |  |  |  |
| ．．．．．．．．．．．．．．． |  |  |  |  |  |  | 12 |  | 10 |  |  | 54 |
|  |  |  |  |  |  |  | 8 |  | 12 |  |  | 54 |
| ．．．．．．．．．．．．．．． |  |  | ．．．．．．．． |  |  | ． | 4 |  | 14 |  |  | 54 |
|  | ． | ．．．． | ．．．．．．．． |  |  | ．．． | 2 |  | 10 |  |  | 12 |
| ．．．．．．．．．．．．．．． |  | ．．．． | ．．．．．． |  |  | ．．．．．．．．． | 4 |  | 10 |  |  | 54 |
|  |  | ．．．．．．．． | ．．．．．．．． |  |  |  | 3 | ．．．．．．．．． | 10 |  |  | 54 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 9 |  |  |  |  |  | 60 |
|  |  |  |  |  |  | 21 |  |  | 8 |  |  | 60 |
| ．．．．．．．．．．． |  | ．．．．．．．． |  |  |  | 6 |  |  | 81 |  |  | 60 |
| ．．．．．．．．．．． |  |  |  |  |  | 9 |  |  |  |  |  | 60 |
|  |  |  |  |  |  | 8 |  |  |  |  |  | 60 |
|  |  | ．．．．．． |  |  |  | 8 |  |  | 8 |  |  | 60 |
|  |  |  |  |  |  |  |  |  |  |  |  | 60 |
|  |  |  |  |  |  |  |  |  |  |  |  | 60 |

TABLE No. 5.-Establishments-Continued.
GREEN GLASS (Bottle and Vial) FACTORIES.


## TABLE No．5．－Establishments－Continued．

GREEN GLASS（Bottle and Vial）FACTORIES．

|  |  |  |  |  | $\begin{aligned} & \text { Number of girls between } \\ & \text { sixteen and eighteen } \\ & \text { years. } \end{aligned}$ |  |  |  |  |  | 品 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 8 |  |  |  |  |  |  |
|  |  | 20 | 11 |  |  |  |  |  | $9^{1 / 2}$ |  |  | 60 |
|  |  |  |  |  |  |  | 10 |  | 9 |  |  | 60 |
| \＄5 00 |  |  |  |  |  |  | 10 |  | 9 |  |  | 60 |
| 400 | ．．．．．．．．．． | ．．．．．．．． |  |  |  |  | 11 |  | 9 | ．．．．．．．．．．． |  | 60 |
| 300 |  |  |  |  |  |  | 20 |  | 9 | ．．．．．．．．．．．．． |  | $60$ |
|  |  | ．．．．．．．． | ．．．．．．．． |  | ．．．．．．．． | ．．．．．．．．． | 1 |  | 10 |  |  | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 60 |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  | 60 |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  | 6 |
|  | ．．．．．．．．．．． | ．．．．．．． | ．．．．．．．． |  |  |  | 1 |  | 10 |  |  | 6 |
|  | ．．．．．．．．．． | ．．．．．．．． |  |  |  |  | 1 |  | 10 | ．．．．．．．．．．．．． |  | 6 |
|  | ．．．．．．．．．． | ．．．．．．．． |  |  | ．．．．．．．．． |  | 2 |  | 10 |  |  | 6 |
|  | ．．．．． | ．．．．．．．． |  |  | ．．．．．．． | ．．．．．．．． | 15 |  | 10 | ．．．．．．．．．．．．． |  |  |
|  | ．．．．．．．．． |  | ．．． |  | ．．．．．．．． |  | 2 |  | 10 | ．．．．．．．．．．．．． |  |  |
|  | ．．．．．． |  |  |  |  |  | 6 |  | 10 |  |  | 60 |
|  |  |  |  |  |  |  | 8 |  | 10－14 |  |  | 60 |
|  |  |  |  |  |  |  | 2 |  | 14 |  |  | 60 |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  | 60 |
|  |  |  |  |  |  |  | 1 |  | 10 | ．．．．．．．．．．．．． |  | 60 |
|  |  |  |  |  |  | 1 |  | 1 | 9 |  |  |  |
|  |  |  |  |  |  | 6 |  |  | 9 |  |  | 60 |
| ．．．．．．．．．．． | ．．．．． | ．．．．．．．．． |  |  |  | 6 |  | 3 | 9 | ．．．．．．．．．．．．． |  | 60 |
|  | ．．．．． |  |  | ．．．．．．．． |  | 12 | ．＊ | 3 | 9 | ．．．．．．．．．．．．． |  | 60 |
|  | ．．．．．．．．． |  |  | ．．．．．．．． | ．．．．．．．．． | 18 | ．．． | 3 | 9 | ．．．．．．．．．．．．．． |  | 60 |
|  | ．．．．．．．．．．． | ．．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  | 3 |  | 3 | 9 | ．．．．．．．．．．．．．． |  | 60 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．． |  |  |  |  | 6 |  |  | 9 |  |  | 60 |
|  |  | ．．．．．．．． |  | ．．．．．．．． | ． | 3 |  |  | 9 |  |  | 60 |
| ．．．．．．．．．． |  |  |  |  |  | 1 |  |  | 9 |  |  | 60 |
| \＄5 00 |  | 40 | 20 |  |  |  | 10 |  | 9 |  |  | 60 |
| 400 |  |  |  |  |  |  | 10 |  | 9 |  |  | 60 |
| 300 | ．．．．．．．．．． | ．．． | ．．． | ． | ．．．．．．．．． |  | 40 | ．． | 9 |  | ．．．．．．．．．．．．．． | 60 |
| ．．．．．．．．．．．． |  |  |  |  |  |  | ， |  | 10 |  |  | 60 |
|  |  |  |  |  |  |  | 3 |  | 10 |  |  | 60 |
| ．．．．．．．．． |  |  |  |  |  |  | 3 | ． | 10 | ．．．．．．．．．．．．．． |  | 60 |
| ． |  | ． | ．．． | ．．．．．．．．． | ．．．．．．．． |  |  | ．．．．．．．． | 10 |  |  |  |
| \％．．．．．．．．．． |  | ．．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  |  | 1 | ． | 10 | ．．．．．．．．．．．．．． |  |  |
| ．．．．．．．．．．．． |  |  | ．．．．．．．． | ．．．．．．． |  |  | 1 | ．． | 10 |  |  | 12 |
| ．．．．．．．．．．．． |  |  | ．．．．．．．． | ．．．．．．． | ．．．．．．．． | ．．．．．．．． | 8 | ．． | 10 | $\ldots$ |  | ．．．．．．．． |
|  |  |  |  | ．．．． | ．．．．．．．． |  | 10 |  | 10 | ．．． |  | ．．． |
|  |  |  |  | ．．． |  |  | 2 |  | 10 | \|... |  | ．．．．．．．．． |
|  |  |  |  |  |  |  | 2 |  | 10 | ．．．． |  | ．．． |
|  |  |  |  |  |  |  | 3 |  | 10 |  |  | 12 |
|  |  |  |  | ．．．．．．．． |  |  | 8 |  | 10－14 |  |  | 60 |
| ．．．．．．．．．．． |  |  |  |  |  |  | 2 | ．．．．．．．．． | 14 |  |  | 60 |
|  |  |  |  | ．．．．．．．．． |  |  |  | ．．．．．．．． | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 | ．．．．．．．．．．．．．． |  | 60 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 60 |

## TABLE No. 5.-Establishments-Continued. <br> GREEN GLASS (Bottle and Vial) FACTORIES.



TabLE No．5．－Establishments－Continued． GREEN GLASS（Bottle and Vial）FACTORIES．

| 㟔 <br> 气 <br> 9 <br> 荡 <br> 哭皆 <br> $\stackrel{\leftrightarrow}{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | 8 | 9 |  |  |  |
| $\ldots$ |  |  |  | ． |  | f |  | 3 | 9 |  |  | 60 |
|  | ．．．．．．．．． |  |  |  | ．．． | 18 |  | 3 | 9 |  |  | 60 |
|  | ．．．．．．．．．． | ．．．．． |  |  |  | 16 |  | 3 | 9 |  |  | 60 |
| ．．．．．．．．．．． | ． | ．．．．．．．． | ． |  | ．．．．．．．．． | 6 |  | 3 | 9 |  |  | 60 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．． |  |  |  |  | 6 |  | 3 | 9 |  |  | 60 |
| $\ldots$ |  |  |  | ． |  | $\begin{aligned} & 4 \\ & 1 \end{aligned}$ |  | 1 | 9 |  |  | 60 |
| ．．．．．．．．．．． | ．．．．．．．．．． |  | ．．．．．．．． |  |  | 1 |  | 1 | 9 | ．．．．． |  | 60 |
| ．．．．．．．．．．． | ．．．．．．．．．． | ．．．．．．．． |  | ．．．．．．．． |  | 1 |  | 1 | 9 | ．．．．．．．．．．．．．． |  | 60 |
|  |  |  |  |  |  |  | $\begin{aligned} & 16 \\ & 10 \end{aligned}$ |  | 9 | ．．．． |  | 60 |
| \＄5 00 |  | 14 | 10 | ．．．．．．．．．． |  |  | 10 |  | 9 |  |  | 60 |
| 400 |  |  |  |  |  |  | 10 |  | 9 |  |  | 60 |
| 300 |  | ．． | －．．．．．．．． | ．．．．．．．． |  |  | 14 |  | 9 | ．．．．．．．．．．．．．．． |  | 60 |
| ．．．．．．．．．．． | ．．．．．．．．． | －．．．．．．．． | ． | ．．．．．．．．． |  | ．．．． | 2 | ．． | 10 | ． |  |  |
| ．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． | ． | ．．．．．．．． | ．．．．．．．．． | 3 |  | 10 | ． |  |  |
| ．．．．．． | ．．．．．．．．．． | ．．．．． | ．．．．．．． |  |  | ．．．．．．．．． | 1 | ．．．．．．．．． | 10 | ． |  | 12 |
| ．．．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．．．． | ．．．．．．．． | ． |  | ．．．．．．．．．．． |  |  | 10 | ．．．．．．．．．．．．．．． |  | 18 |
| ．．．．．．． | ．．．．．．．．．．．．．． | ．．．．．．．．． |  |  |  |  | 1 | ．．．．．．．．．．． | 10 | ．．．．．．．．．．．．．．．．．． |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 6 |
|  |  | ．．．． |  |  |  |  | 8 |  | 10 |  |  | 6 |
|  | ．．．．．．．．．．． | ．．． | ． |  |  |  | 10 |  | 10 |  |  | 6 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  | ．． | ．．．．．．． | 3 | ．．．．．．．． | 10 | ．．．．．．．．．．．．．． |  | 6 |
|  |  |  |  |  |  |  | 6 |  | 10 |  |  | 6 |
|  |  |  |  |  |  |  | 8 | ．．．．．．．．． | 10－14 |  |  | 60 |
|  |  |  |  |  |  |  | 2 |  | 14 |  |  | 60 |
| ．．．．．．．．．．． | － |  |  |  |  |  | 2 | ．．．．．．．．． | 10 |  |  | 60 |
| ．．．．．．．．．．． | ．．．．．．．．．．． |  |  |  |  |  | 1 | $\cdots$ | 10 |  |  | 60 |
|  |  |  |  |  |  | 9 |  |  | 9 |  |  | 60 |
| ．．．．．．．．． | ．．．．．．．．．． | ．．． |  |  |  | 12 |  |  | 9 |  |  | 60 |
| ．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．． | ． |  | ．．．．．．．．． | 10 |  |  | 9 |  |  | 60 |
| ．．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．． | ． | ．．．．．．．． | ．．．．．．．． | 10 | ． |  | 9 | ．．． |  | 60 |
|  |  | ．．．．．．．．． | ， |  | ．．．．．．．．．． |  |  | ．．． | 9 9 | ． |  | 60 |
|  |  |  |  |  |  | $\stackrel{5}{15}$ | ．．．．．．．．． |  | 9 | ．．．．．．．．．．．．．． |  | 60 |
|  |  |  |  |  |  | 10 |  |  | 9 |  |  | 60 |
| ．．．．．．．．．．．． |  |  | ． |  |  | 6 | ．．． |  | 9 |  |  | 60 |
| ．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 9 | ． |  | 60 |
| ．．．．．． |  | 30 | 022 |  |  | ．．．．．．．． | 5 | ．． | 9 |  |  | 60 |
|  |  |  |  |  |  | ．．．．．．．．． | 25 |  | 9 | ．．．．．．．．．．．．．． |  | 60 |
| 400 | ．．． | ． | ．．．．．．．．．．． | ．．．．．．．． | ． | ． | 12 |  | 9 | $\ldots$ |  | 60 |
| ＋ 300 |  |  | ． |  |  |  | 30 |  | 9 |  |  | 60 |
|  | ．．．．．．．．．．． | ．．．．．．． | ．．．．．．．．． |  |  | $\ldots$ | 2 | 2 | 10 |  |  | 60 |
| ．．．．．．．．．．． |  | ．．．．．．．． |  |  |  |  | 2 | 2 ．．．．．．．．． | 10 |  |  | 60 |
|  | ．．．．．．．．．．． |  |  |  |  |  |  | ， | 10 |  |  | 60 |
|  |  |  |  |  |  |  |  | $1 . . . . . .$. | 10 |  |  | 12 |
| ．．．．．．．．．．． |  | － | ．．． | ．．．．．．．． |  |  |  |  | 10 |  |  | 12 |
| ．．．．．．．．．．． |  |  | － |  | ．．．．．．．． | ．．．．．．．． |  | ．．．．． | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 18 |
|  |  |  |  |  |  |  |  |  | 12 |  |  |  |

＊Worked fifty－two weeks，but ten weeks outside of trade．

## TABLE No. 5.-Establishments-Continued. GREEN GLASS (Bottle and Vial) FACTORIES.



[^24]TABLE No. 5.-Establishments-Continued. GREEN GLASS (Bottle and Vial) FACTORIES.

$\dagger$ Night.

## TABLE No．5．－Establishments－Continued． GREEN GLASS（Bottle and Vial）FACTORIES．

|  | Subdivision of Trade． |  |  |  | ＂，臂 む゙ぎす。磁侌管品高高萛白品 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Master sh Shearers | $\frac{1}{2}$ | 2 | $\$ 2500$ 8001 | 1，025 020 |  |  |  |
|  | Shearers＇．．．．．．． |  | $\begin{array}{r} 2 \\ 1 \\ 0 \end{array}$ |  | 328 307 50 |  |  |  |
|  | Takers out， | 2 | 2 | 750 | 30750 |  |  |  |
|  | Pot maker Batch mak | 1 | ＇ 1 | 2010 | 1，010 00 |  |  |  |
|  | Clay hand | 1 | 1 | 8000 | 32800 | ．．．．．． |  |  |
|  | Packer．．． Mill hand | 2 | 2 | 1050 | 43051 |  |  |  |
|  | Carpenter | 1 | 1 | ${ }_{12} 50$ | 65001 |  |  |  |
|  | Mason．．．．． | 1 | 1 | 1800 | 93600 |  |  |  |
|  | Engineer． | 1 | 2 | 1051 | 5460 |  |  |  |
|  | Watchman， Team driver Laborers． | 1 | 1 | － 800 | 44200 $46 \times 00$ |  |  |  |
|  | Laborers．．． | 3 | 3 | 750 | 39000 |  | ． |  |
|  | wers．． | 71 | 3 | 1800 | 77400 |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 3 <br> 8 | 19000 | ${ }_{860}^{81700}$ |  | ．．．．．．．．．．． |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 3 | 2200 | 94600 |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ${ }_{3}^{8}$ | 25 280 08 | $1,0-5$ 1,204 000 |  |  |  |
|  | ＂ |  | 36 | 3000 | 1，201 10 |  |  |  |
|  | ＂${ }^{\text {a }}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ${ }_{3}$ | 3400 | 1，462 00 |  |  |  |
|  | Apprentices | 30 | ${ }_{6}^{3}$ | 35 1500 | 1，0500 | ．．．． |  |  |
|  | －＂ |  | 12 | 1200 | 636.00 |  | ．．．．．．．．．． |  |
|  | Blow |  | 6 | 800 | 34400 | ．．．． |  |  |
|  | Blowers（supern Tending boys．．． |  | 3 | 3100 2400 | 60000 |  |  |  |
|  |  |  | 35 | 300 | 12900 | ．．．． |  |  |
|  |  |  | 20 4 4 | 4 3 500 | 172001 | ．．．．．． | ． |  |
|  | ＂in big shop．． |  | ${ }_{1}^{8}$ | 5 | ${ }_{2} 21500$ |  |  |  |
|  | Supernumeraries Gathering |  | 8 | 600 | 28800 | ．．．． |  |  |
|  | Gathering．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 10 | $\begin{array}{r}650 \\ 7 \\ \hline\end{array}$ | 27950 300 00 | ．．．．． | ．． |  |
|  | Packers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 10 | 3 2 2 | 500 1050 | ${ }_{4}^{215} 50$ | ．．．．． |  |  |
|  |  |  | 6 | 1900 9 8 40 | 3870 | ．．．． | ．． |  |
|  | Carpenters． | 3 | 1 | 1500 | 7350 | ．．．．． |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 1 1 | 1350 |  |  |  |  |
|  | Mould makers．．．．．．．．．．．．．．．．．．．．．．．． | － 3 | 1 | 1800 | 90800 | ．．．．．． | ．．．．．．．．．．．．．． |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1650 | 811 612 60 | ．．．． |  |  |
|  | Laborers．．．．．．．．．．．． | 15 | ${ }^{5}$ | 810 | 40500 | ．．．． |  |  |
|  |  |  | 2 | 750 1000 | ${ }_{600}^{370} 00$ | ．．．．． |  |  |
|  |  | 14 | 8 | 950 | 47500 |  |  |  |

TABLE No．5．－Establishments－Continued． GREEN GLASS（Bottle and Vial）FACTORIES．

|  |  |  |  |  |  | Number of piece workers． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 15 |  |  |  |
|  |  | ．．．．．．． |  |  |  | ．．．．．．．．．．． |  |  | 12 |  |  |  |
|  |  |  |  |  |  |  |  |  | 12 |  |  | 66. |
|  |  |  |  | …… |  | …．．．．． |  |  | 10 |  |  | 66 |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 66. |
| ．．．．．．．．．．．．．．． |  | ．．．．．．．．． |  |  |  | ．．．．．．． |  |  | 10 |  |  | 66. |
|  |  |  |  |  |  |  |  | ．．．． | 10 |  |  | 66. |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
| ．．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．．． | ．．．．．．．．． | ．．．．．．． | ．．．．．．．． | ．．．．． |  |  | 10 |  |  |  |
|  |  | ．．．．．．．． |  |  |  | ．．．． |  |  | 10 |  |  |  |
| － | ．．．．．．．．．．． | ．．．．．．．．． | ．．．．．．．． | ． |  | ．．．．．．．．． |  |  | 10 |  |  |  |
|  | ．．．．．．．．．．． |  |  |  |  |  |  | ．．．．．．． |  |  |  |  |
| － |  |  |  |  |  |  |  |  | 9 |  |  | 54 |
| ．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  |  | 3 |  |  | 9 |  |  | 54 |
| ．．．．．．．．． | ．．．．．．．．．．． | …．．．．．． | ． | ．．．．．．．． | ．．．．．．．．． | － 3 |  | ．．．．．．．． | 9 |  |  | 54 |
| ．．．．．．．．．．．．．． | ．． |  | ．．．．．．．． |  |  | 8 |  | ．．．．．．．． | 9 |  |  | 54 |
|  | －．．．．．．．．．．．．． |  | ．．．．．．．． | ．．．．．．．．．． |  | 3 |  |  | 9 |  |  | 54 |
|  |  |  |  |  |  | 36. |  |  | 9 |  |  | 54 |
|  |  |  |  |  |  | 6. |  |  | 9 |  |  | 54 |
|  | ．．．．．．．．．．． |  |  |  |  | 3. |  |  | 9 |  |  | 54 |
| ．．．．．．．．．．． | ． | ．．．．．．．．． | ．．．．．．． |  | ．．．．．．．．． | 3. | ．．． | ．．．．．．．． | 9 | ．．． |  | 54 |
|  | ． |  | ．．．．．．．．． | ．．．．．．．． | ．．．．．．．． | 12. |  | ．．．．．．．． | 9 |  |  |  |
|  |  |  |  |  |  | 6. |  |  | 9 |  |  | 4 |
| ．．． |  |  |  |  |  | 6 | ．．．． |  | 9 |  |  | 54 |
|  |  | － | ．．． | ．．．．．． | ．．．．．．．．． | 3 |  |  | 9 |  |  | 80 |
| ．．．．．．．．．．． |  |  |  | ．．．．．．．．． | ．．．．．．．． | 4. |  |  | 9 |  |  | 110. |
| \＄30\％ |  | 39 | 28 | ．．．．．．．．．． |  |  | 35 |  | 9 |  | ．．．．．．．．．．．．．．．．． |  |
| 350 |  |  |  |  |  |  | 20 |  | 9 | ．．．．．．．．．．．．． |  | 54 |
|  |  |  |  |  |  |  | 4 |  | 9 |  |  | 54 |
|  |  | ． | ．．．．．．．． |  |  |  | 8 |  | 9 |  |  | 54 |
| 兂 | ．． | ．． | ．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  |  |  | 9 |  |  | 54 |
|  | ．．．．．．．．．．． |  |  | ．．．．．．．． |  |  | 10 | ．．．．．．． | 9 | ．．．．．．．．．．．． |  | 54 |
| ．．．． | ．．．．．．．．．．． |  | ．．．． | ．．．． | ．．． |  | 10 |  | 9 |  |  | 54 |
|  |  |  |  | … | ．．． | ．．．．．．．． |  |  | 9 |  |  | 54 |
|  |  |  |  | ．．． | ．．． | ．．．．．．．．．．． | 2 |  | 10 |  |  | 54 |
|  |  |  |  |  |  |  |  | ．．．．．．．． | 10 |  |  | 4 |
|  |  |  |  |  |  |  | 2 | ．．．．．．．．．．． | 10 |  |  | 54 |
|  | ．．．．．．．．．．． |  | ．．．．．．．． | ．．．．．．．．． | ．．．．．．．． |  |  | ．．．．．．．．． | 10 |  |  | 18. |
|  | ．．． |  |  | ．．．．．． | ．．．．．．．．． | ．．．．．．．．． |  | ．．．．．．．． | 10 |  |  | 18 |
|  |  |  |  |  |  |  |  | ．．．．．．． | 10 |  |  | 18 |
| ．．．．．．．．．．．． |  |  |  |  |  |  |  | ．．．．．．． | 10 |  |  | 6. |
|  | ．．． | ．．．．．．．．．．． |  | …．．．．． | ．．．．．．．．．． | ．．．．．．．．．． |  | ．．．．．．． | 10 |  |  | 6 |
|  |  |  |  |  |  |  | 5 |  | 10 |  |  | 6. |
|  |  |  |  |  |  |  | 10 |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  | 2 |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  | ．．．．．．．．．． | 10 |  |  | 54 |

＊Nine hours are the full time，but only eight and a half are averaged．

# TABLE No．5．－Establishments－Continued． <br> GREEN GLASS（Bottle and Vial）FACTORIES． 

|  | Subdivision of Trade． |  |  |  | ＂ばロ求草 む゙っぱ品名俈長高 후4영 |  |  | \％島解会 <br> 动客荡 สีㅋํ 48 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | Miscellaneous |  | $\begin{array}{r} \hline 6 \\ 12 \\ 4 \\ 4 \\ 4 \\ 4 \\ 2 \\ 2 \\ 2 \\ 1 \\ 1 \\ 4 \\ 2 \end{array}$ | $\$ 750$775012001010201800131310200015151512001200 | $\begin{array}{r} \$ 37500 \\ 375 \\ 600 \\ 500 \\ 500 \\ 1,000 \\ 1000 \\ 900 \\ 650 \\ 650 \\ 500 \\ 500 \\ 1,000 \\ 780 \\ 780 \\ 645 \\ 645 \\ 636 \\ 600 \end{array},$ |  |  |  |
|  | Oven takers－off．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 12 |  |  |  | ．．． |  |  |
|  | Shearers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | ．． |  |  |
|  | Master shearers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 4 |  |  |  | ．．． | ．．．．．．．． |  |
|  | Masons．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ${ }_{4}^{2}$ |  |  |  | ．．． | ．．．．．．．． |  |
|  | Batch makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  | ．．．．．．．． |  |
|  | Blacksmiths．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 |  |  |  |  |  |  |
|  | Box makers |  |  |  |  |  |  |  |
|  | ＂ |  |  |  |  |  |  |  |

FLINT GLASS FACTORIES（Covered Pots．）


## TABLE No．5．－Establishments－Continued．

 GREEN GLASS（Bottle and Vial）FACTORIES．| 訔 <br> 00 <br> 8 <br> 蓲 <br> 运 ©o <br> $\stackrel{\infty}{\infty}$ |  |  |  |  |  | Number of piece workers． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 6 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 12 |  | 10 |  |  | 4 |
|  |  |  |  |  |  |  | 4 |  | 10 |  |  | 54 |
|  |  |  |  |  | ．．．．．．．．． | ．．．．．．．．． | 4 |  | 10 |  |  | 5 |
|  |  |  |  |  | ．．．．．．．．． |  | 4 |  | 14 |  |  | 54 |
|  |  |  |  |  |  |  | 2 |  |  |  |  | 4 |
|  |  |  |  |  |  |  | 2 |  | 10 |  |  | 54 |
|  |  |  | ． |  |  |  | ， |  |  |  |  | 54 |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  |  |
|  |  |  |  |  |  | 4 |  |  | 10 |  |  | 54 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 54 |

FLINT GLASS FACTORIES（Covered Pots）．

＊In addition to the 10 per cent．last year，an additional 10 per cent．reduction was made on all classes of unlettered ware．

## TABLE No．5．－Establishments－Continued．

FLINT GLASS FACTORIES（Covered Pots）．

|  | Subdivision of Trade． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | Engravers． |  | 3 | \＄20 01 |  |  |  |  |
|  | Packers． | 28 | 2 | 1800 | $77400$ | ．．．．．．． |  | ．．．．．．．．．．．．．．．．．． |
|  | ＂ |  | ${ }_{13}^{9}$ | 10 902 901 |  | ．．．．． |  |  |
|  | Master shearers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 4 | 800 | 34400 |  |  |  |
|  | Master shearers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 7 14 | 7 | 2128 | 915 6 6 |  |  |  |
|  | Pot makers | 2 | 2 | 2000 | 1，020 00 |  |  |  |
|  | Leer tender | 7 | 7 | 900 | 30700 |  |  |  |
|  | Mill hands．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 4 | 4 | 852 | 44304 | ．．．．． |  |  |
|  | Carpenters． | 4 | 3 | 1500 | 78000 62400 | ．．．．． |  |  |
|  | Masons． | 4 | 4 | 1800 | 93600 |  |  |  |
|  | Blacksmiths | 6 | 3 | 1718 | 89856 |  |  |  |
|  | Engin |  | 3 | 1038 | 53976 |  |  |  |
|  | Eng | 4 | 2 | 10 1200 00 | 520 <br> 624 <br> 0 | ．．．．．．． | ．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Machinists．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | 1 | 1300 | 67600 | ．．．．．． |  |  |
|  | Watchm | 3 | 1 | 950 | 49400 | ．．．．．． |  |  |
|  |  |  | 2 | 852 | 44304 | ．．．．．． |  |  |
|  | Laborers．．．．．． | 10 | 10 | 682 | $3 \sim 461$ |  |  |  |
|  | Engraving room． | 5 |  |  |  | 3 | \＄4 50 | \＄195 75 |
|  | Tie－up room | 13 | ．．．． |  |  | $\stackrel{2}{9}$ | 900 450 | 39550 18900 |
|  | 促 |  |  |  |  | 4 | 600 | 25200 |
|  | ． |  | ． |  |  | － | 480 450 | 20166 189 |
|  | ．．．．．． |  | ．．．．． | ．．．．．．．．． | ．．．．．．．．．．． | 1 | 510 | 21420 |
|  | Graduating room． | 5 | ．．．． |  |  | 3 | 450 | 18000 |
|  | a ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | ． |  | 1 | 600 648 | 28800 |
|  |  |  |  |  |  |  |  |  |
| 12 | Blowers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 18 | 6 | 3000 | 1，200 00 |  |  |  |
|  | ．．． |  | 6 3 | 2500 20 20 | $\begin{array}{r}1,050 \\ 808 \\ 81 \\ \hline 1\end{array}$ | ． | ．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | ． |  | 3 | 1860 | 74100 |  |  |  |
|  | Gathering boys．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 8 | 4 | 750 | 30000 | ．．．．． |  |  |
|  | Tending boys | 43 | 8 | ${ }_{5}^{6} 80$ | 2320 | ．．．．．． |  |  |
|  |  |  | 10 | 411 | 16440 | ．．．． |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 15 | 312 282 | 12480 | ． | ．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Apprentices．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 12 | 3 | 1500 | 61000 | ．．．．． | ．．．．．．．．．． |  |
|  |  |  | 6 3 | 1250 9 | － 50000 | ．．．．．． | ．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Master sheare | 1 | 1 | 2100 | 84000 | ．．． |  |  |
|  | Shearers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | 2 | 1100 | 44000 | ．．．．． |  |  |
|  | Pot maker．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 1 | 1 | 750 | 1， 30000 | ．．．．． | ．．．．．．．．．． |  |
|  | Mould maker | 1 | 1 | 1200 | 57600 |  |  |  |
|  | Stopper griuder | 1 | 1 | 1800 | 86400 | ．．．．． |  |  |
|  | Presser．．．．．．．．．．．． | 1 | 1 | 24 18 18 | 96000 | ．－ |  |  |
|  |  | 1 | 1 | 180 | 720 |  |  |  |

## TABLE No．5．－Establishments－Continued．

FLINT GLASS FACTORIES（Covered Pots）．

| 呂 <br> 合 <br> \＆ <br> 荡 <br> 皆 <br> $\stackrel{3}{3}$ |  | 䔍 <br>  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ．．．．．．． |  |  |  | 3 |  |  | 12 |  |  | 24 |
| $\cdots$ |  | ．．．．．．． | ． |  |  |  | 2 |  | 10 |  |  | 54 |
|  |  | ．．．．．．． |  |  |  |  | 9 |  | 10 |  |  | 54 |
| ．．．．．．．．．．． | ．．．．．．．．．．． |  |  |  |  |  | 13 |  | 10 |  |  | 54 |
|  |  |  |  | ．．．．．． |  |  | 4 |  | 10 |  |  | 54 |
| ．．．．．．．．．．．．．． |  | ．．．．．．． |  |  |  |  | 7 |  | 14 |  |  | 54 |
|  |  |  |  |  |  |  | 14 |  | 12 |  |  | 54 |
| ．．．．．．．．．．．． | － |  |  |  |  |  | 7 |  | 9 |  |  | 54 |
| $\ldots$ | ．．．．．．．．． | ．．．．．．．．． | ．．．．．．． |  |  |  |  |  | 10 | ．．． |  | 54 |
|  | －，．．．．．．．．． |  |  |  |  |  | 4 |  | 10 | ．．．．．．．．．．．． |  |  |
|  | ．．．．．．．．．． |  |  | ．．．．．．．． | ． |  | 4 |  | 10 | ．．．．．．．．．．．．． |  |  |
|  |  | ．．．．．．．．．．． |  |  |  |  | 6 |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 4 |  | 12 |  |  |  |
|  | ．．．．．． |  |  |  |  |  |  |  | 12 | ．．．．．．．．．．．．． |  |  |
| ．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  | ． | ．．．．．．． |  |  |  |  | 3 |  | 12 | ．．．．．．．．．．．．．． |  |  |
|  |  |  |  |  |  |  | 10 |  | 12 |  |  |  |
|  |  |  |  |  |  |  | 39 |  | 10 |  |  |  |
|  |  |  |  | 25 |  |  | 3 |  | 10 |  |  | 52 |
|  |  |  |  |  |  |  | 2 |  | 10 |  |  | 52 |
|  |  |  |  |  |  |  | 9 |  | 10 |  |  | 60 |
|  |  |  |  |  | ．．．．．．． |  | 5 |  | 10 |  |  | 60 |
|  | ．．．．．．．．．．． |  |  |  |  |  | 12 |  | 10 | ．．．．．．．．．．．．． |  | 60 |
|  |  |  |  |  |  |  | 12 |  | 10 |  |  | 60 |
|  |  |  |  |  |  |  | ．．．．．．．． |  | 10 |  |  | 60 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 60 |
|  |  |  |  |  |  |  |  | ．．．．．．．．． | 10 | ．．． |  | 4 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | ${ }_{24}^{24}$ |
|  |  |  |  |  |  |  |  |  |  |  |  | 24 |
|  |  |  |  |  |  | 6 |  |  |  |  |  | 70 |
|  |  |  |  |  |  | ， |  |  |  |  |  | 70 |
|  | ．．．．．．．． | ．．．．．．．．． |  |  | ．．． | ， |  |  |  |  |  | 70 |
|  | ． |  |  |  |  | 3 |  |  |  |  |  | 70 |
|  |  |  |  |  |  |  |  |  |  |  |  | 70 |
| \＄5 80 |  | 18 |  |  |  |  | 8 | ……．．．． |  |  |  | 70 |
| 411 |  |  |  |  |  |  | 10 |  | 8 | ．．．．．．．．．．．．．．．．． |  | 70 70 |
| 312 |  |  |  |  |  |  | 10 |  |  | ．．．．．．．．．．．．． |  | 70 |
| 282 |  |  |  |  |  |  | 15 |  |  |  |  | 70 |
| ．．．．．．．．．．． |  |  |  |  |  | 3 |  |  |  |  |  | 70 |
|  |  | ． | ．．．．．．．． | ．．．．．．．． | ．．． | 6 |  |  |  |  |  | 70 |
|  |  |  | ．． |  | － | 3 |  |  |  |  |  | 70 |
|  |  |  |  |  |  |  |  |  | 16 | ．．．．．．．．．．．．． |  | 70 |
|  |  |  |  |  |  |  | 2 |  | 12 | ．．．．．． |  | 70 |
|  |  |  | ．．．．．．．． |  |  |  | 1 |  | 10 | ．．．．．．．．．．．．．． |  | 70 |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  | 70 |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  | 70 |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  | 70 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 70 |

## TABLE No．5．－Establishments－Continued． <br> FLINT GLASS FACTORIES（Covered Pots）．

|  | Subdivision of Trade． |  |  |  | ＂is昌荡 ずった。苝各 <br>  $0_{4}^{5}$ ㅇ․ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | ＊Blowers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 27 |  | $\begin{array}{r} \$ 2800 \\ 2500 \\ 20 \end{array}$ |  |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  | ．．．．．．．．．．．． |  |
|  | ＂ |  |  |  |  | ．．．． |  |  |
|  | Gathering boys Tending boys． | 39 | 4 | $\begin{array}{ll}6 & 00 \\ 5 & 20\end{array}$ |  | ．．．．． |  |  |
|  | －1 ${ }^{\text {a }}$ ．．．．． |  | 8 | 400 | ．． | ．．．．．． | ．．．．．．．．．．．．． |  |
|  | ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 20 | 200 |  | ．．．．． |  |  |
|  | Master shearer | 1 | 1 | 2000 |  | ．． |  |  |
|  | Shearers．．．． | ${ }_{1}^{2}$ | $\stackrel{1}{1}$ | 2050 |  | －．．．．． |  |  |
|  | Leer tender． | 1 | 1 | 540 |  | ．．．． | ．．．．．．．．．．．． |  |
|  | Packer．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 3 | ${ }_{2}^{1}$ | 900 750 | ．．．．．．．．．．．．． | ．．．．．． |  |  |
|  | Mill hand | 2 | 2 | 750 |  | ．．．． |  |  |
|  | Carpenter． |  | 1 | 1200 | ．．．．．．．．．．．． | ．．．．． |  |  |
|  | Blacksmith | 1 | 1 | 1650 |  | ．．．． |  |  |
|  | Engineer．． | 1 | ${ }_{1}^{1}$ | 1000 | ．．．．．．．．． |  |  |  |
|  | Teamsters．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | 2 | \％ 800 |  | ．．．．． |  |  |
|  | Laborers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 6 | 6 | 750 |  |  |  |  |

WINDOW GLASS FACTORIES．$\dagger$

|  | Blowers | 16 | $1)$ | \＄27 80 | \＄889 60 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ，${ }^{\text {a }}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 2318 | 74181 | ．．． |  | ．．．．．．．．．．．．．． |
|  | ＂ |  | 3 3 | 2265 2258 | 72482 722 76 |  | ．．．．．．．．．．． | ．．．．．．．．．．．．．．．．．． |
|  | ， |  | 3 | 2032 | 65037 |  |  |  |
|  | ＂ |  | 2 | 1971 | 63102 | ．．．． | ．．． |  |
|  | Gatherers | 16 | 1 | 19 18 18 | 61103 |  |  |  |
|  | ＂ |  | 2 | 1561 | 49972 |  |  |  |
|  | ＂ | ．．．．．．．． | 3 | 1529 | 48925 |  |  | ．．．．．．．．．．．．．． |
|  | ＂ |  | 3 | 1371 | 43902 | ．．．．． |  |  |
|  | Flattener | 4 |  | 2380 | 73617 |  |  |  |
|  |  |  | 2 | 2299 | 73531 |  |  |  |
|  | Cutters | 8 | 2 | 2362 | 77962 |  |  |  |
|  | ／ |  | 2 | 2218 21 | 70547 | ．．．．． |  |  |
|  | ＂ |  | 2 | 2084 | 68798 |  |  |  |
|  | Flatteners＇help | 2 | 2 | 852 | 27264 |  |  |  |
|  | Second hands．． | 16 | 16 | 300 | 9600 |  |  |  |

＊The factory only in operation four months during the year．†Window glass factories （like the green glass bottle and vial）are not in operation during July and August．The actual running time of this concern was but thirty－two weeks during the year．The prices paid throughout the State are uniform as to the blowers，gatherers，flatteners，cutters and master shearers；the difference in earnings is due solely to time and opportunity to work，and also to skill．The blower and gatherer each pay the second hand $\$ 1.50$ per week，which is all that any of the workmen pay their assistants．

## TABLE No．5．－Establishments－Continued．

FLINT GLASS FACTORIES（Covered Pots）．

| $\stackrel{H}{\circ}$ <br> 웅 <br> 9 <br> 藏 <br> 형 <br> 孯 <br> $B$ |  |  |  |  |  | Number of piece workers． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 9 |  |  | 9 |  |  |  |
|  |  | ．．．．．．．． |  |  |  | 12 |  |  | 9 |  |  |  |
|  |  |  |  |  |  | 6 |  |  | 9 |  |  |  |
|  |  |  |  | ．．． |  |  |  |  | 9 |  |  |  |
| \＄5 20 |  | 18 | 20 |  |  |  |  |  | 9 | ．．．．．．．．．．．． |  |  |
| 400 |  |  |  |  |  |  |  |  | 9 |  |  |  |
| 300 |  | ．．．．．．．． |  |  |  |  | 20 |  | 9 | ．．．．．．．．．．．．． |  |  |
| 20 |  |  |  |  |  | ．．．．．．．． | ， |  | 9 | ． |  |  |
|  |  |  |  |  |  |  | 1 |  | 14 | ．．．．．．．．．．．．． |  |  |
|  |  |  |  |  |  |  | 1 |  | 12 | ．．．．． |  |  |
|  |  |  |  | ．．． |  | ．．．．．．．．． | 1 |  | 9 |  |  |  |
|  |  |  |  |  |  |  | 3 |  | 11 |  |  |  |
|  |  | ． |  |  |  |  |  |  | 10 |  |  |  |
|  |  | ．．． |  |  |  |  | 2 |  | 10 |  |  |  |
|  |  | ．．．．．．．． |  | ． |  |  | 1 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 1 |  | 12 |  |  |  |
|  |  |  |  |  |  |  | 1 |  |  |  |  |  |
|  | ．．．．．．．．．． |  |  |  |  | ．．．．．．．．． |  | ．．．．．．．．． | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |

WINDOW GLASS FACTORIES．

| －8＊＊＊＊＊＊＊＊＊＊ |  |  |  |  |  | 1. |  |  | $91 / 10$ p．c ．．．．．｜．．．．．．．．．．．．． $\mid$ |  |  |  |  | 120 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 2. |  |  |  |  |  |  |  | 120 |
|  |  |  |  |  |  | 3. |  |  |  |  |  |  |  | 120 |
|  | ．．．．．．．．．．． | ． |  |  |  | 3. |  |  |  |  |  |  |  | 120 |
|  |  |  |  |  |  | 3. | ．．．．．．． | ．．．．．．． |  | 10 |  | ،．．．．． |  | 120 |
| ．．．．．．．．．．． | ．．． | ．．．．．．．． |  |  | ．．．．．．．．． | 2 | ．．．．．．．．． | ．．．．．．． |  | 10 |  |  |  | 120 |
|  |  |  |  |  |  | 2. |  | ． | $11^{1 / 2}$ | 10 |  |  |  | 120 |
|  |  | ． | ．．．．． |  |  |  |  |  |  |  |  |  |  | 120 |
| ．．．．．．．．．．．．．． |  | ．．．．．． |  |  | ．．．．．．．． |  | 2 |  | 10 | 0 |  |  |  | 120 |
|  | ．．．．．．．．．．． | ．．．．．．．．． |  |  |  |  | － | ． |  | 10 |  |  | ．．．．．．．．．．．．．． | 120 |
|  | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．． | ．．．．．．．．． |  |  | 3 | ．．． | 10 | 10 |  |  |  | 120 |
|  |  |  |  |  |  |  |  | ．．． |  | 10 |  |  | ．． | 120 |
|  |  |  |  |  |  |  | 2 |  |  | 10 |  |  |  | 120 |
|  |  |  |  |  |  |  | 2 |  | 10 | 10 |  |  |  | 120 |
|  |  |  |  |  |  | 2 |  |  |  | 10 |  |  |  | 120 |
|  |  |  |  |  |  |  |  | ．．．．．．．． |  | 10 |  |  |  | 120 |
|  |  |  |  |  |  |  |  | ．．．．．．．．． |  | 10 |  |  |  | 120 |
| ．．．．．．．．．．． |  |  |  |  |  |  |  | ．．．．．．．． |  | 0 |  |  |  | 120 |
|  |  |  |  |  |  | 2 |  |  |  | 10 |  |  |  | 120 |
|  |  |  |  |  |  |  | 2 |  | 11 |  |  |  |  | 120 |
| \＄300 |  | 16 |  |  |  |  |  | ．．． | $91 / 2$ |  |  |  |  | 120 |

## TABLE No．5．－Establishments－Continued． WINDOW GLASS FAOTORIES．

|  | Subdivision of Trade． |  |  |  | ర゙ば <br> 皆鳥蔦 む璑 む్మూ能药 สีョ ड |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | 3 Roller ${ }^{\text {boys．}}$ | 2 | 1 | 84 342 | $\$ 13248$ 10944 |  |  |  |
|  | Blacksmith |  |  | －${ }_{12}^{3} 182$ |  |  |  |  |
|  | Pot maker． | 1 | ， | 1730 | 90000 |  |  |  |
|  | Box maker |  | 3 | 1500 | 4800 |  |  |  |
|  | Engineers． |  | 1 1 1 | 1038 822 82 | 53976 426 64 | ．．．．． |  |  |
|  | Teamsters | 4 | 4 | 852 | 42600 |  |  |  |
|  | Laborers．．．． | 4 | 4 | $\begin{array}{r}88 \\ 11 \\ \hline 8\end{array}$ | ${ }_{354} 56$ | ．．．．．．． |  |  |
|  | Packers．． | ， |  | 1200 | 38400 |  |  |  |
|  | Leer tenders | 2 | $\stackrel{2}{2}$ | 858 | 27456 | ．．．． |  |  |
|  | Layers－out．．．．．．．．．．．．．．．． | ${ }_{2}^{2}$ | 2 | 858 | 27456 | ． |  |  |
| ＊ 16 | － |  |  |  |  |  |  |  |
|  | 6 Blowers．． | 8 | ${ }_{1}^{1}$ | 2700 | 1，107 46 |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | －2450 | 1，004 50 | ．．．．．．． |  |  |
|  | ＂．－．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | ${ }_{22}^{23} 41$ |  | ．．．．． |  |  |
|  | ＂${ }^{\text {a }}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 2000 | 82000 | ．．．．．． |  |  |
|  | Gatherers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | ${ }_{18}^{18} 50$ | 75850 | ．．． | ．．．．．．．．．． |  |
|  | Gatarers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 1728 | 70848 | ．．． |  |  |
|  | ＂، ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．．．． | 1 | 1654 15 80 | 67814 647 80 | －．．．． |  |  |
|  |  |  | 1 | 1511 1350 | 61951 553 50 | ．．．．．． |  |  |
|  | Cutters．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | － 4. | 1 | 12 <br> 29 <br> 59 | ${ }_{963} 5120$ | － |  |  |
|  | ＂／．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 2240 | 91840 | ．．．．．． |  |  |
|  |  |  | 1 | 1996 | ${ }_{818} 86$ | －．．．． |  |  |
|  | Flatteners． | 2 | 1 | ${ }^{23} 100$ | 94300 | ．．． |  |  |
|  | Master sheare | 1 | 1 | 2254 | 91414 | ．．．．．． |  |  |
|  | Flatteners＇hel |  | 1 |  | ${ }_{123}^{344} 81$ | ．．．．． |  |  |
|  | Roller boy．．． | 1 | 1 | 411 | 16551 | ． |  |  |
|  | Blacksmith Pot maker． |  | 1 | 1800 | 73800 |  |  |  |
|  | Pox maker | 2 | 2 | 1450 | 1，750 00 |  |  |  |
|  | Engineers．．．．．．． | 2 | 2 | 1200 | 49200 | ． |  |  |
|  | Leamsters．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 850 | ${ }_{390}^{431} 00$ | ． |  |  |
|  | Shearers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | 2 | 1095 | 44895 | ．．．． |  |  |
|  | Packers | 1 | 1 | 1200 | 49200 | ．．．．． |  |  |
|  | Leer tender．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | $\stackrel{1}{2}$ | 845 | ${ }_{396} 95$ | ．．．． |  |  |
|  | Layers－out．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ${ }_{2}$ | 845 | 39645 |  |  |  |

＊This establishment was operated by the blowers，cutters，flatteners and master shearers on the co－operative plan．They rented the factory and tools，and after paying themselves the usual rates of wages，and interest on capital，they had a surplus．The factory was in operation forty－one weeks，while those controled by the employets only ran but little more than thirty－ two weeks．Only those trades enumerated above participated in the profits；the rest of the workmen were paid wages received in other factories．

## TABLE No．5．－Establishments－Continued． <br> WINDOW GLASS FACTORIES．

| H <br> 琞 <br> 9 <br> 荡 <br> 5is品塄 <br> $\stackrel{\infty}{\infty}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \＄4 14 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | － 1 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | $10^{-2}$ |  |  |  |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  | 8 |
|  | ．．．．．．．．．． |  |  |  | ．．．．．．．． | 3 |  |  | 10 |  |  | 120 |
|  |  |  |  |  |  |  | 1 |  | 12 |  |  |  |
|  |  |  |  |  |  |  |  |  | 12 |  |  |  |
|  |  |  |  |  |  |  | 4 |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  | 15 |  | 12 |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 20 |
|  |  | ．．．．． |  |  |  |  | 2 |  | 11 |  |  | 120 |
|  |  |  |  |  |  |  |  |  | ，11 |  |  | 120 |
|  |  |  | ．．．．．．． |  |  |  | 2 |  | 11 |  |  | 120 |
|  |  |  |  |  |  |  |  |  | 9 | 10 p．c． |  | 66 |
|  |  |  |  |  |  | 2 |  |  | 9 | 10 ¢ ${ }^{\text {c／．．．．．．}}$ |  | 66 |
|  |  |  |  |  |  | 1 | ．．．．．．．．． |  | 9 | 10 ＂.... |  | 66 |
| ．．．．．．．． |  |  |  |  |  | 1 | ． |  | 9 | 10 ＂ |  | 66 |
| ．．．．．．． | ．．．．．．．．．．． | ．．．．．．． | ．．．．．．．．． | ．．．．．．．． |  | 1 | ． |  | 9 | 10 ＂ |  | 66 |
|  | ． | ．．．．．．．． |  |  |  | 1 |  |  | 9 | 10 ＂．．．．．． |  | 66 |
|  | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  |  | 1 | ．．．．．．．． |  | 9 | 10 ＂ |  | 66 |
|  | ．．．．．．．．．．． | ， |  |  |  | ．．．．．．． |  |  |  | 10 ، ${ }^{10}$ ．．．． | ．．．．．．．．．．．．．． | 66 |
| ．．．．．．．．．．．．．． | ．．．． | ．． | ． |  |  |  |  |  |  | 10 ＂ |  | 66 |
|  |  |  |  |  |  |  |  |  | 9 | 10 ＂$\quad . . .$. |  | 66 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  | 1 |  |  | 10 ＂ |  | 66 |
|  |  |  |  |  |  |  | 1 |  | 9 | 10 ＂ |  | 66 |
|  | ． | ．．．．．．．． |  |  |  |  | 1 |  | 9 | 10 ＂．．．．．． |  | 66 |
| ．．．．．．．．．．．．．． |  | ．．．．．．．． | ．．．．．．．． |  |  | 1 |  |  | 10 | 10 ＂${ }^{10}$. | ．．．．．．．．．．．．．． | 66 |
| ．．．．．．．．．．．．． |  |  |  |  |  | 1 |  |  | 10 | 10 ، ．．．．． |  | 6 |
|  | ．．．．．．．．．．． |  |  |  | ．．． | 1 |  |  | 10 | 10 ＂${ }^{10 . .}$ | ．．．．．．．．．．．．．． | ${ }^{66}$ |
| ．．．．．．．．．．．．．． |  |  |  |  |  | 1 | ． |  | 11 | 10 ، $\quad . . . .$. |  | 66 |
|  |  |  |  |  |  | 1 |  |  | 11 | 10 ＂$\quad . . .$. |  | 66 |
|  |  |  |  |  |  |  | 1 |  | 15 | 10 ＂$\quad . . .$. |  | 66 |
|  |  |  | ． |  |  |  |  |  | 11 | ． |  | 66 |
| $\begin{array}{rrr} 3 & 00 \\ 4 & 11 \\ & \end{array}$ |  |  | ．．．．．．．． |  |  |  | 8 |  | 9 | ． |  | 66 |
|  |  |  |  |  |  |  |  |  | 10 | ．．．．．．．．．．． |  | 66 |
|  |  |  |  |  |  |  |  |  | 10 | ． |  | 66 |
|  |  |  |  |  |  |  | 1 |  | 10 | ．．．．．．．．．．．．．． |  |  |
| ．．．．．．．．．．．．．．．． |  |  |  |  |  | 2 | 2 |  | 12 | ．．．．． |  | 66 |
| ．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 8 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 2 |  | 12 |  |  | 66 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 66 |
|  |  |  |  |  |  |  | 1 |  | 11 |  |  | 66 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 11 |  |  | 66 |
|  |  |  |  |  |  |  | 2 |  | 11 |  |  | 66 |

## TABLE No．5．－Establishments－Continued． WINDOW GLASS FACTORIES．

|  | －Subdivision of Trade． |  |  |  | ＂ <br> 宦 ฐ゙ずシ むొゴ䟚品 픙․光 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{* 17}$（1） | 17 Blowers． | 8 | $\stackrel{2}{2}$ | \＄25 00 | \＄1，050 00 |  |  |  |
|  | ＂ |  | 2 | ${ }^{22} 00$ | 92400 | ．．．．． |  |  |
|  | Gatherers． |  | 2 | 1900 | 79500 | ．．．．．． |  |  |
|  | Gatherers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 8 | ${ }_{2}^{2}$ | 1687 | 70854 61230 |  |  |  |
|  | ＂${ }^{\text {a }}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 1417 | 59474 |  |  |  |
|  | Cutters． | 4 | 2 | 1382 2200 | 581 924 920 |  |  |  |
|  | Flattene | 2 | ${ }_{1}^{2}$ | 2000 2200 | 840 924 00 |  |  |  |
|  | Master shearer．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 1 | 1 | 21 22000 | 88200 924 | ．．．． |  |  |
|  |  |  |  |  |  |  |  |  |
|  | 14 Blowers． | 16 | 1 | 2740 | 1，096 00 |  |  |  |
|  | ＂ |  | 3 | 2235 | 89400 |  |  |  |
|  | ＂／．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | ${ }_{3}^{3}$ | ${ }_{20}^{22} 28$ | 889120 |  |  |  |
|  | ＂ |  | 2 | 1943 | 77720 |  |  | ．．．．．．．．．．．．．．．．． |
|  | herers | 16 | 1 | 1850 | 74000 |  |  | ．．．．．．．．．．．．． |
|  | ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 3 | 1504 | 61600 |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | －13 130 | 540 524 40 |  |  |  |
|  | rs．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | $\stackrel{2}{2}$ | ${ }^{12} 70$ | 50800 |  |  |  |
|  | ars．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 8 | 2 | ${ }_{21}^{23} 90$ | ${ }_{876} 00$ |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．． | 2 | 21 2100 20 | 840 82160 |  |  |  |
|  | Flatteners | 4 | 2 | 2285 | 91400 | ．．．．． |  |  |
|  | Master shearers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | 2 | ${ }_{21} 89$ | 87560 |  |  | ．．．．． |
|  | Flatteners＇helpers <br> Second hands | ${ }_{16}^{2}$ | ${ }_{16}^{2}$ |  | 336 120 00 | ． | ．．．． |  |
|  |  | 2 | ， | 4 4 3 3 11 1 | 16440 <br> 135 <br> 10 |  |  |  |
|  | Blacksmith |  | 2 | 1182 81 | ${ }_{614} 74$ | ．．．．．． |  |  |
|  | Pot maker．．． | 1 | 1 | 1728 | 89865 |  |  |  |
|  | Engineers．．．．．．．．． | 2 | 1 | ＋10 810 | 42120 |  |  |  |
|  | eamsters | 4 | ${ }_{4}^{4}$ | 810 | 42120 |  |  |  |
|  | Laborers．．．． |  | 15 | 750 10 95 | 43800 | ．．．．． |  |  |
|  | Packers． | 2 | 2 | 1182 | 47280 |  |  |  |
|  | Leer tenders．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | ${ }_{2}^{2}$ | 845 845 8 | ${ }_{338}^{338} 00$ | ．．．．．． |  | ．．．．．．．．．．．．． |
|  | Shovers－up．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 845 | 33800 |  |  |  |

[^25]Collated Statistics from Various Establishments. 101

TABLE No. 5.-Establishments-Continued.
WINDOW GLASS FACTORIES.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | , |  |  |  | $9{ }^{9} 10 \mathrm{p}_{\text {i }} \mathrm{c}$........ |  | 60 |
|  |  | ........ |  | ........ |  |  |  |  |  | 910 " |  | 60 |
|  |  |  |  |  |  | ${ }_{0}^{2} \cdot$ |  | . |  | ${ }_{9}^{9} 10{ }_{10} 10 \times \cdots$ |  | 60 |
|  |  |  | .......... |  |  | ${ }_{2}$ |  |  |  | ${ }_{9}^{9} 10{ }_{10}{ }_{10}$ " $\quad \cdots \cdots$ |  | 60 |
| ........... | ........... | ........ | . | ....... |  | 2 |  |  |  | ${ }_{9}^{9} 10$ 10 $\quad$....... |  | 60 60 |
|  |  |  |  |  |  | 2 |  |  |  | 910 " |  | 60 |
|  |  |  | ........ | . |  | - 2 |  |  |  | $9{ }^{10}$ " ${ }^{\text {c..... }}$ |  | 60 |
| ............. |  |  |  |  |  | 1 |  |  |  | $9{ }_{9}^{9} 10$ " |  | 60 |
| ........... |  | ....... |  |  |  | 1 |  |  |  | 910 " $\ldots$...... |  | 60 60 |
| ........... | .......... |  |  |  |  | 1 |  |  |  | 510 " ...... |  | 60 |
|  |  |  |  |  |  | 1 |  |  |  | 910 " |  | 72 |
|  | ........... |  |  |  |  |  |  |  |  | 910 " |  | 72 |
|  | . |  |  | ........ | ......... | - 8 |  |  |  | 910 '6 ...... |  | 72 |
| ........... | ... | ........ | ........ |  | ...... |  |  | ......... |  | $9{ }^{10}$ ". $\quad . . .$. |  | 72 |
| ........... | .......... | ......... |  | ........ | ......... |  |  |  |  | ${ }_{9}^{9} 10{ }^{10}$ " $10 . .$. |  | 72 |
| ........... |  |  |  |  | ......... |  |  |  |  | ${ }_{9}^{9} 10{ }_{10}{ }^{10}$ ، $\quad \cdots \cdots$ |  |  |
|  | . | …..... |  |  | ... | 1 |  |  |  | ${ }_{9}^{9} 10{ }_{10}^{10}$ " $\cdots \cdots . .$. |  | 72 |
|  |  |  |  |  |  | 2 |  |  |  | 910 " $\ldots$..... |  | 72 |
| ..... |  |  |  |  |  | 3 |  | .......... |  | 910 ". $\cdots$..... |  | 72 |
|  |  |  |  |  | ....... | 8 |  |  |  | $9{ }^{10}$ " ${ }^{\text {u }}$...... |  | 72 |
| ........... | ......... |  |  |  |  | 3 |  |  |  | 910 |  | 72 |
|  | ...... |  |  |  |  | ${ }^{2}$ |  |  |  | $9{ }^{9} 10$ " |  | 72 |
| ........... | ........... |  |  |  |  |  |  |  |  | ${ }^{9} 10$ " |  | 72 |
|  |  |  |  |  |  | 2 |  |  |  | 010 " $\ldots . . .$. |  | 72 |
|  |  |  |  |  |  | 2 |  |  |  | 10 " $\ldots$..... |  | 72 |
|  |  |  |  |  |  | 2 |  |  |  | 010 " ...... |  | 72 |
| ........... |  |  |  |  |  | 2 |  |  |  | 110 " |  | 72 |
| ........... | ........... |  |  |  |  | 2 |  |  |  | $11^{10}$ " ${ }^{\text {c..... }}$ |  | 72 |
|  |  |  |  |  |  |  |  |  |  | 510 " |  | 72 |
|  |  | 16 |  |  |  |  | 16 |  |  | 9 |  | 72 |
|  |  |  |  |  |  |  | , |  |  | 9 ............... |  | 72 |
|  |  | 1 |  |  |  |  | 1 |  |  | 9 .. |  | 72 |
|  |  |  |  |  |  |  | 1 |  | 10 | 0 |  |  |
|  |  |  |  |  |  |  | 1 |  | 10 | 0 |  |  |
|  |  |  |  |  |  | 8 |  |  | 10 | 0 |  | 72 |
|  |  |  |  |  |  | .. | 2 |  |  | 2 |  | ... |
|  | 污 |  |  |  |  |  |  |  | 12 | 2 |  |  |
|  | ..... |  |  |  |  |  | 4 |  | 10 | 0 .............. |  | 24 |
|  | ... |  | ......... |  |  | ........ | 15 |  | 10 | 0 .............. |  |  |
|  |  |  |  |  |  |  | 4 |  | 10 | 10 .............. |  | 72 |
|  |  |  |  |  |  |  | …… 2 |  | 10 | 0 |  | 72 |
|  | ........... |  |  |  |  |  | 2 |  | 11 | 1 |  | 72 |
|  |  |  |  |  |  |  |  |  |  | 2 |  | 72 |

## TABLE No．5．－Establishments－Continued． WINDOW GLASS FACTORIES．

|  | Subdivision of Trade． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | Blowers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | －8 |  | \＄23 00 | \＄943 00 |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 22 2100 21 | 90200 86100 |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 2000 | 82000 |  |  |  |
|  | Gatherers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 8 | ${ }_{2}^{2}$ | 15 <br> 14 <br> 145 | 63632 60885 | ．．．． |  |  |
|  | ． |  | 2 | 1417 | 580 97 | ．．．．．． |  |  |
|  | Cutters ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ， | 1350 | 55350 | ．．．． |  |  |
|  |  | 4 | ${ }_{2}^{2}$ | 1900 | 77900 | ．．．．．． |  |  |
|  | Flatteners．．． | 2 | 1 | 2200 2100 | 90200 86100 | ．．． |  |  |
|  | Master shearer | 1 | 1 | 2200 | 90200 | ．．．．．． |  |  |
|  | Flattener＇s hel |  | $\stackrel{1}{8}$ | 8 3 300 | ${ }_{123}^{342} 00$ | ．．．． |  |  |
|  | Roller boy． | 1 | ${ }_{1}^{1}$ | 411 4 18 | 16551 | ．．． |  |  |
|  | Pot maker． | 1 | 1 | 2000 | 1,04000 | ．．．．．． |  |  |
|  | Box maker | 1 | 1 | 1450 | 7500 | ． |  |  |
|  | Engineers． |  |  | 1200 | 49200 | ．．．．． |  |  |
|  | Laborers．．． | 2 | ${ }_{2}^{2}$ | 750 | 39000 | ．．．．．． |  |  |
|  | Shearers．． | 2 | 2 | 1000 | 41000 | ．．．．．． |  |  |
|  | Packer．．． | 1 | 1 | 1200 845 | ${ }_{396}^{492} 4$ | ．．．．． |  |  |
|  | Shover－up． | 1 | 1 | 845 | 39645 | ．．．． |  |  |
|  | Layer－out．．．．．．．．．．．．．．．． | 1 | 1 | 845 | 39645 |  |  |  |
| 18 | Blowers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 8 | ${ }_{2}^{2}$ | \＄23 00 | \＄94300 |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | ${ }_{21}^{22} 000$ | 866100 | ．．．．．．． |  |  |
|  | Gather | 8 |  |  | 82000 | ．．．．． | ．．． |  |
|  | ＂ |  | 2 | 1485 | 60885 | ．．．．．．． |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | $\stackrel{2}{2}$ | 1417 13 50 | 58097 553 50 |  | ．．．．．．．．．． |  |
|  | Cutters．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 4 | ${ }_{2}^{2}$ | 2200 19 | 90200 | ．．．．．． |  |  |
|  | Flatteners．．． | 2 | 1 | ${ }_{22} 200$ | 90200 | ．．．． |  |  |
|  | Master shearer．．．．．． | 1 | 1 | 22 2200 | 801 9720 | ．．．．．． | ．．．．．．．．．．．．． | ．．．．．．．．．．．．． |
| ＊19 |  |  |  |  |  |  |  |  |
|  | Blowers． $\qquad$ | 103 | ${ }_{16}^{8}$ | 2634 2386 | 88650 745 |  |  |  |
|  | ＂ |  | 18 | 2259 | 70598 | ．．．． | ．．．．．．．．．． | － |
|  | ＂ |  | 18 | 2074 | 64815 | ．．．． |  | ．．．．．．． |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 13 | 2046 19 46 | 64363 59648 | ．．．．．． |  |  |
|  | Gatherers．． | 106 | 8 | 1761 | 55156 | ．．．． |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 18 | 1631 1598 | ${ }_{409} 497$ | ．．．．． |  |  |
|  | ＂． |  | 18 | 1519 | 48123 |  |  |  |
|  |  |  | 18 | 1416 | 44231 |  |  |  |

[^26]TABLE No．5．－Establishments－Continued．
WINDOW GLASS FACTORIES．

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 9 | 10 p．c．．．．． |  |  |
| ．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 9 | $10{ }_{10}{ }^{1}$ ．．．．．．．． |  | 66 |
|  |  |  |  |  |  | 2 |  |  | 9 | 10 ＂．．．．． |  | 66 |
| ．．．．．．．．．．． |  |  |  |  |  | 2 |  |  | 9 | 10 ＂$\quad . .$. |  | 66 |
| ．．．．．．．．．．．．． |  |  |  | ． |  | ． |  |  | 9 | 10 ＂$\quad . . .$. |  | 66 |
|  |  |  |  |  |  |  | 2 |  | 9 | 10 ＂．．．．． |  | 66 |
|  |  |  |  |  |  |  | 2 |  | 9 | 10 ＂$\quad . .$. |  | 66 |
|  |  |  |  |  |  |  | 2 |  | 9 | $10^{\prime \prime}$＂．．．．． |  | 66 |
|  |  |  |  | ．．．．．．．． | ．．．．．．．． | 2 |  |  | 9 | 10 |  | 66 |
| ．．．．．．．．．．． |  |  |  |  |  | 2 |  |  | 9 | 10 ＂．．．．． |  | 66 |
|  |  |  |  |  |  | 1 |  |  | 11 | $10{ }_{10}^{10}$＂${ }^{\text {a }}$ ．．． |  | ${ }_{6}^{66}$ |
| ．．．．．．．．．．．．．． |  | ．．．．．．．． |  |  |  |  |  |  | 15 | 10 ＂ |  | 66 |
|  |  |  |  |  |  |  |  |  | 11 |  |  |  |
| \＄3 00 |  |  |  |  |  |  |  |  | 9 | ．．．．．．．．．．．．．．． |  | 66 |
| 411 |  |  |  | ．．．．．．．．． |  |  |  |  | 9 |  |  | 66 |
|  |  |  |  |  |  |  | 1 |  | 10 | ．． |  | ．．．．．．．．． |
|  |  |  |  |  |  | 1 | 1 |  | 10 |  |  |  |
|  |  |  |  |  |  | 1 | 2 |  | 10 |  |  | 66 |
|  |  |  |  |  |  |  | 2 |  | 10 |  |  | ．．．．．．．．． |
|  |  |  |  |  |  |  | 2 |  | 10 | ．．．．．．．．．．．．．． |  |  |
|  |  |  |  |  |  |  | 2 |  | 12 |  |  | 66 |
| ．．．．．．．．．．． |  |  |  |  |  |  | 2 |  | 10 |  |  | 66 |
|  |  |  |  |  |  |  |  |  | 11 | ．．．．．．．．．．．．． |  | 66 |
| ．．．．．．．．．．． |  |  |  |  |  |  |  |  | 11 |  |  | 66 |
|  |  |  |  |  |  |  | 1 |  | 11 |  |  | 66 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 2 |  |  | 9 | 10 p．c．．．．． |  | 66 |
|  |  |  |  |  | ．．．．．．．． |  |  |  | 9 | $10.10 . . .$. |  | 66 |
|  |  |  |  |  | ．．．．．．．．． |  |  |  | 9 | $10.10 . . . .$. |  | ${ }_{6}^{66}$ |
|  |  |  |  |  |  | 2 |  |  | 9 | $10.10 . . . .$. |  | 66 |
|  |  |  |  |  |  | 2 |  |  | 9 | 10 ＂$\quad$ ．．．．．． |  | 66 |
|  |  |  |  |  |  | 2 |  |  | 9 | 10 ＂$\quad$ ．．．．．． |  |  |
|  |  |  |  |  |  | 2 |  |  | 9 | 10 ＂ |  | 66 |
|  |  |  |  |  | － | 2 |  | ．．．．．．．． | 10 | 10 ＂$\quad . . .$. |  | 66 |
|  |  |  |  |  |  |  |  | ．．． | 10 | $10{ }^{10}$＂．．．．． |  | 66 |
|  |  |  |  |  |  |  | ．． |  | 11 | 10 ＂ $10 . .$. |  | 66 |
|  |  |  | ．．．．．．．． |  |  | 1 |  |  | 11 | $10.10 \cdot \cdots$ |  | 66 |
|  |  | － | $\cdots$ | ．．．．．．．．． |  |  |  | ． | 15 | 10 ＂．．．．． |  | 66 |
|  |  |  |  |  |  | 8 |  |  | 9－9 | 10 ＂ |  |  |
|  |  |  |  |  |  | 16 |  |  | 9－91 | 10 ＂．．．．．． |  | 18413 |
|  |  |  |  |  |  | 18 |  |  | 9－91 | 10 ＂ $10 . .$. |  | 1841 |
|  |  |  |  |  |  | 18 |  |  | 9－91 | 10 ＂10．．．． |  | 13412 |
|  |  |  |  | ．．．．．．．．． | － | 12 |  |  | 9－91 | 10 ＂10．．．． |  | 13413 |
|  |  |  | ．．．．．．．． | ．．．．．．．． | ． | 18 |  |  | 9－91 |  |  | 18419 |
|  |  |  |  |  |  | $\begin{array}{r} 18 \\ 8 \end{array} .$ |  |  | 9－91 | ${ }_{10}^{10}{ }^{10}$＂．$\quad . .$. |  | $1341 / 3$ |
|  |  |  |  |  |  | $\begin{array}{r} 8 \\ 16 \end{array}$ |  | ．． | 9－91 | 10.10 | ．．．．．．．．．．．．．． | 13413 |
|  |  |  |  |  |  | 18 |  |  | 9－91 | $10{ }^{10} 10.7 . .$. |  | 18413 |
|  |  |  |  |  |  | 18 |  | ． | 9－91 | 10 ＂ |  | $1341 / 3$ |
|  |  |  |  |  |  | 18 | ．．．．．．．．． |  | 9－91／ | 10 ＂ |  | 13413 |

$\dagger$ Average time lost．

## TABLE No．5．－Establishments－Continued． WINDOW GLASS FACTORIES．

|  | Subdivision of Trade． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Gatherers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 14 | \＄13 41 1268 | $\$ 118 \quad 59$ |  |  |  |
|  | Cutter | 52 | 13 | ${ }_{22} 84$ | 72609 |  |  | … |
|  |  |  | 13 | 2182 | 68620 | ．．． |  |  |
|  | ＂ |  | 13 | 2049 | 64051 | ．．．． |  |  |
|  | Flatten |  | 18 | 1943 | 60693 | ．．．． | ．．．．．．．．．． | \％ |
|  | －${ }^{\text {a }}$ ． |  | 14 | 2133 | 66489 | ．．．．．．． |  |  |
|  | Master shearers | 12 | 12 | 2141 | 64556 | ．．． |  |  |
|  | Flatteners＇helper Second hands．．．．．．． | 104 | 104 | 817 300 | $\begin{array}{r}25914 \\ 95 \\ \hline 15\end{array}$ | ．．．．．． | ．．．．．．．．． |  |
|  | Roller ＂boys | 13 | 8 | 408 | 12726 |  |  |  |
|  | Blacksmi | 13 | 5 | 340 | 10812 | ．．．．． | ．．．．．．．．．． |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 14  <br> 11 62 <br> 1  | 57200 | ．．． | ．．．．．．．．．． |  |
|  | Pot makers | 8 | 8 | 1866 | 96800 | ．．． |  |  |
|  | Box makers <br> Engineers | 15 16 | 888888 | 1386 11 11 26 | 44300 | ．．．．． | ．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  |  |  | 8 | 899 | 44070 |  |  |  |
|  | Shearers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 25 | 25 | 1088 | 33918 | ．．．．． |  |  |
|  | Pack tender | 13 | 13 | 1200 | 37500 | ．．． |  |  |
|  | Shovers－up． | 13 | 12 | 828 845 | 26808 | ．．．．． | ．．．．．．．．．． |  |
|  | Layers out． | 13 | 13 | 845 | 26808 |  |  |  |

COTTON MILLS．

|  | Weavers， 8 looms． | 44 | 2 | \＄12 00 | \＄600 00 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ＂1 6 ＂．． |  | 10 | 750 | 37500 |  | \＄775 | \＄38750 |
|  | ＂ 5 ＂ |  | 22 | 600 | 38000 | 2 | 55000 | 27500 |
|  | ＂14 4 |  | 4 | 450 | 22500 | 16 | 47500 | 23750 |
|  | ＂ 3 ＂ |  |  |  |  |  | 35000 | 17500 |
|  | ＂ 2 ＂ |  | 1 | 215 | 10750 | 3 | 22500 | 11250 |
|  | Spare hands． | 12 |  |  |  | 12 | 45000 | 22500 |
|  | Overseers．．． | 1. | 1 | 1500 | 75000 |  |  |  |
|  | Loom fixers． | 10 | 4 | 1150 | 57500 | ．．．．． |  |  |
|  | ＂${ }^{\text {＂}}$ ex |  | 2 | 10 10 10 | 500 500 500 | ．．．．． |  |  |
|  | Filling boys．．． | 2 | 2 | 1400 | 20000 |  |  |  |
|  | Scrubber．．．．． | 2 |  |  |  | 1 | 58100 | 26550 |
|  | Slasher hands． | 2 | 2 | 600 | 30000 |  |  |  |
|  | Warp－drawing room： |  |  |  |  |  |  |  |
|  | Mender．．．．． | 1 | 1 | 750 | 37500 |  |  |  |
|  | Cleaner．． | 1 | 1 | 750 | 37500 |  |  |  |
|  | Warp drawers． | 7 |  |  |  |  | 725 | 36250 |
|  | Cloth room second hand．．．．．．．．．．．．．．．．．．．． | 1 | 1 | 1500 | 75000 |  |  |  |
|  | Trimmer．． | 1 | 1 | 1000 | 50000 |  |  |  |
|  | ＂extra |  | 1 | 750 | 37500 |  |  |  |
|  | Cloth lookers | 3 | $3$ | 750 | 37500 |  | 60 | 30000 |
|  | Section hands | 3 | 3 3 | 750 |  |  |  |  |

## TABLE No. 5.-Establishments-Continued. <br> WINDOW GLASS FACTORIES.

|  | Wages of girls per week. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 14 |  |  | 9-91/2 | 10 p.c....... |  |  |
|  |  |  |  |  | ......... | 13 |  |  | 10 | 10 " ...... |  | 1341/2 |
|  |  |  |  |  | ........ | 13 |  |  | 10 | 10 " ${ }^{10}$. |  | $1341 / 2$ |
|  |  |  |  |  |  | 13 |  |  | 10 | ${ }_{10}^{10}$ " ${ }^{\text {c...... }}$ |  | 13412 |
|  |  |  |  |  |  | 13 |  |  | 11 | 10 " |  | $1341 / 2$ |
|  | - | ........ | ........ |  |  | 14 |  |  | 11 | 10 " $\ldots . .$. |  | 1341/3 |
|  |  |  |  |  |  |  | 12 |  | 15 | 10 " ...... |  | 1341/2 |
|  |  |  |  |  |  | ... | 12 |  | 11 |  |  | $1341 / 2$ |
| 408 |  | 104 | 7 |  |  |  | 104 |  | 9-91/2 |  |  | $1341 / 2$ |
|  |  |  |  |  |  |  |  |  | 10 | ..... |  | $1341 / 2$ |
|  |  |  |  |  |  |  | 12 |  | 10 |  |  | 1341/2 |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  | 15 | 8 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | S |  | 12 |  |  | $\dagger 1341 / 2$ |
|  |  |  |  |  |  |  | 8 |  | 12 |  |  | , |
|  |  |  |  |  |  |  | 25 |  | 12 |  |  |  |
|  |  |  |  |  |  |  | 18 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 12 |  | 11 |  |  | 1341/3 |
|  |  |  |  |  |  |  |  |  | 11 |  |  | $134{ }^{1 / 3}$ |
|  |  |  |  |  |  |  | 13 |  | 11 |  |  | 1341/2 |

COTTON MILLS.

|  |  |  |  |  | 20 |  |  |  | $\ddagger 60$ |  | 10 p. c..... | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 | 70 |  |  | +60 |  | 10 " ${ }^{\text {c..... }}$ | 10 |
|  |  |  |  |  | 11 | 24 |  |  | 60 |  | 10 " | 10 |
|  | ........... |  |  | 10 | 6 | 20 |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  | 3 |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  | 4 |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  | …...... |  |  |  |  |  |  | 60 |  | $\begin{array}{ll}10 & \text { "..... } \\ 10 & \text { " }\end{array}$ | 0 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " ${ }^{10}$.... | 10 |
|  |  |  |  |  |  |  | 2 |  | 60 |  | 10 " | 10 |
|  | ........... | .. |  | ......... |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  | ........ |  |  |  |  | 60 | ......... | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 0 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  | 3 |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 | .......... | 10 " | 10 |
|  |  |  |  |  |  | ......... | ......... |  | 60 |  | 10 ". | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |

[^27]
## TABLE No. 5.-Establishments-Continued. COTTON MILLS.



## TABLE No．5．－Establishments－Continued．

 COTTON MILLS．|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 60 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 0 |
|  |  |  |  |  | 13 |  |  |  |  |  |  | 10 |
|  |  |  |  |  |  |  |  |  |  |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  | 10 |  |  |  |  | 60. |  |  | 10 |
|  |  |  |  | 9 | 8 |  |  |  | 60. |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  | 2 |  |  |  |  |  |  | 60. |  |  | 10 |
|  |  | ．．．．．．．．． |  |  |  |  |  |  | 60. |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  | 2 |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60. |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  |  |
| \＄3 00 |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2 |  |  |  |  |  |  | 60 |  | ${ }_{10}^{10} 0$＂$\quad$ ．．．．．．． | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 ＂ | 10 |
| ．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  | 10 ＂ | 10 |
| 300 |  |  |  |  |  |  |  |  | 60 |  | 10 ＂${ }^{10}$ ．．．．． | 10 |
| 800 |  |  |  |  |  |  | ， |  | 60 |  | 10 ＂＇．．．．． | 10 |
| ．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  | 10 ＂ | 10 |
| ．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  | 10 ＂ | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 ＂ | 10 |
|  |  |  | 10 |  |  |  |  |  | 60 |  | 10 ＂ | 0 |
|  |  |  |  | 18 |  |  |  |  | 60 |  | 10 ＂ | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 ＂ | 10 |
|  |  |  | 10 |  |  |  |  |  | 60. |  | 10 ＂${ }^{\text {＂．．．．．}}$ | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 ＂${ }^{\text {＂}}$ ． | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 ＂．．．．．． | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  |  |  |  | 10 |
| 相 |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 0 |
| ．．．．．．．．．．．． | ．．．．．．．．．．． |  |  |  |  |  |  |  | 60. |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
| 350 |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  | \＄3 |  |  |  | ．．． |  |  |  | 60 |  | ．．．．．．．．．．．．．． | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 0 |

## TABLE No．5．－Establishments－Continued． <br> COTTON MILLS．

| $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \text { 品 } \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\circ}{0} \end{aligned}$ | Subdivision of Trade． | $\square$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 0 Teamsters |  |  | 852 | \＄426 00 |  |  |  |
|  | Sweepers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 7 2 |  |  |  |  | \＄600 | \＄300 00 |
| 21 | 1 Weavers， 8 looms． | 83 |  |  |  |  |  |  |
|  | ＂̈ ${ }_{5}^{6}$ \＃． |  | 6 | 750 | 35250 | 35 | 750 | 35250 |
|  |  |  | 22 3 | 600 400 | 28800 188 |  | 6 00 <br> 3 75 | 28200 17625 |
|  | ＂ 3 ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  | 350 | 16550 |
|  | Spare hands | 9 | 1 | （1） | 94600 376 | 8 <br> 8 | ${ }_{5}^{200}$ | 94 23500 |
|  | Overseer．．．．． Loom fixers | 1 | 1 | 1500 | 75000 |  |  |  |
|  | Loom fixers | 7 | ${ }^{6}$ | 1150 | 470 | ． |  |  |
|  | Filling boy． | 1 | 1 | 400 | 18800 |  |  |  |
|  | Scrubber．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | $\left.\frac{1}{1} \right\rvert\, \cdot$ |  | 00 | 00 | 1 | 525 | 24675 |
|  | Warp－drawing room： |  |  | 7 |  |  |  |  |
|  | Harness menders． |  |  | 750 750 | $\begin{aligned} & 352 \\ & 350 \\ & 350 \\ & 50 \end{aligned}$ |  |  |  |
|  | Warp draw | 5 |  |  |  | 5 | 750 | 35250 |
|  | Second ha |  |  |  |  |  |  |  |
|  | Trimmer．．． | 1 |  | 1000 | 47000 | ．． |  |  |
|  | Extra．．．．． | 1 | 1 | 800 | 37600 |  |  |  |
|  | Section hands | 2 | 2 | 750 | 35250 |  |  | 00 |
|  | Waste sorters |  |  | 750 | 35250 |  |  |  |
|  | Spinning overseers． | 31 | 1 | 1800 | 84600 |  |  |  |
|  |  |  |  |  |  | 11 | 500 | 35250 23200 |
|  | ＂．mule．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 5 | 1000 | 470 37600 |  |  |  |
|  | Back boys | 3 | 3 | 250 | 11850 |  |  |  |
|  | Doffers， | 18 |  |  |  | $7$ | ${ }_{2}^{2} 25$ | $\begin{array}{r}91 \\ 105 \\ \hline\end{array}$ |
|  | Roving boy． | 1 | 1 | 300 | 14100 |  |  |  |
|  | Second hand． | 1 | $\begin{array}{lll} 1 \\ 1 & 1 \\ 1 & 1 \end{array}$ | 1350 | 63450 |  | ．．．．．．．．．．．．． |  |
|  | Section＂－．．．． |  |  | 750 1800 | 35250 846 |  | ．．．．．．．．．． | ．．．．．．．．． |
|  | Spooling overseer． |  |  |  |  |  |  |  |
|  | Spoolers．． | 3 | ．．．． |  |  |  | 400 | 16550 18100 |
|  | Spoolers and warpers <br> Second hands |  |  |  | 47000 |  | 600 | 28200 |
|  | Picking overseer．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 2000 | 94000 | ．．．．． |  |  |
|  | Openers．．．．．．．．．．．．．． |  | ${ }_{2}^{2}$ | ${ }_{6}^{6} 00$ | 28200 |  | ．．．．．．．．．．．．． |  |
|  | Spreaders．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 300 | 14100 |  |  |  |
|  | Second or spare hand ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 400 | 188 |  |  |  |
|  | Carding overseer ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | $\stackrel{1}{3}$ | 3 | ${ }_{3} 50$ | 16550 |  |  |  |
|  | Card cleaner． | 1 | 1 | 550 | 25850 | ．．．．． | ．．．．．．．．．． |  |
|  | ＂ard grinders．．．．．．．．．．．．．．．．．．．． | 2 |  | 600 600 | 28200 |  | ．．．．．．．．．． |  |
|  | Cad dofters．．．．．． |  |  | ${ }_{7}^{3} 50$ | 16550 |  |  |  |
|  | Railway hand．．．．．．．．．．． |  |  | 750 | 35250 |  |  |  |

## TABLE No．5．－Establishments－Continued． COTTON MILLS．

|  <br>  әш！̣ $750[$ sК8p 10 дәqumn | 욱응 |  |  |
| :---: | :---: | :---: | :---: |
|  |  | $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ $\vdots$ |  |
|  |  |  |  |
|  | 888 | 8888888888888888 | 88888888888888888888888888888888880 |
|  <br>  | 狊 |  |  |
|  | 亠 |  |  |
|  | $\vdots$ $\vdots$ $\vdots$ $\vdots$ |  |  |
|  | $\vdots$ $\vdots$ $\vdots$ $\vdots$ |  |  |
|  <br>  | ¢ |  |  |
|  <br>  |  | $\vdots$ $\vdots$ $\vdots$ $\vdots$ |  |
|  ェəpun sioq jo ェəqưn |  |  |  |
|  |  |  |  |
|  | ¢ $\vdots \vdots$ |  |  |

## TABLE No. 5.-Establishments-Continued. COTTON MILLS.



## TABLE No. 5.-Establishments-Continued. COTTON MILLS.



[^28]
## TABLE No. 5.-Establishments-Continued. COTTON MILLS.



## TABLE No. 5.-Establishments-Continued. COTTON MILLS.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | * 60 |  |  | 10 |
| .............. |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
| .... |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  | ........ |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  | ....... | ........ |  | 60 |  | 10 " | 10 |
| .............. |  |  |  |  |  |  |  |  | 60 |  | 10 "̈ | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  | 180 |  | 60 |  | 10 " ${ }^{\text {"..... }}$ | 10 |
|  | ............. |  |  |  |  |  |  |  | 60 |  | 10 ". $\quad . .$. | 10 |
|  |  |  |  |  |  |  | ....... |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
| \$275-300 |  |  |  |  | 25 |  | ........ |  | 60 |  | 10 | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
| ............. |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  | ........ | ... | 60 |  | 10 | 10 |
|  |  | . | ........ | ......... | ........ |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  | ........ |  |  |  |  |  |  | 60 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10 ": | 10 10 |
|  |  |  |  |  |  |  |  |  | 6 |  |  |  |
|  |  |  |  |  |  |  |  |  | 12 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 12 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 12 |  | 10 | 10 |
|  |  | - | ........ |  | ........ |  |  |  | 12 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 12 |  | 10 " | 10 |
|  |  |  |  | ¢ | 20 |  | 152 |  | 10 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 | 10 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 '11 | 10 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 " | 10 |
|  |  |  |  |  | ........ |  |  |  | 10 |  | 10 " | 10 |
|  |  |  |  |  | ........ |  |  |  | - 10 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 " | 10 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 " ...... | 10 |
|  |  |  |  |  |  |  |  |  | 10 | ............. | 10 " | 10 |

* Per week.


## TABLE No. 5.-Establishments-Continued. COTTON (Gingham) MILLS.



TABLE No．5．－Establishments－Continued．
© COTTON（Gingham）MILLS．

| 㟔 <br> 慦 <br> － <br> ＂ \＆路 <br> $\beta$ |  |  | $\begin{aligned} & \hline \text { a } \\ & \text { d } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \＄3 50 | \＄3 50 |  | $\begin{array}{\|c} \hline \cdots \cdots \\ \hline \end{array}$ | $\overline{15}$ |  | 203 | 30 |  |  | ．．．．．．．．．．．．．．．．．．．． |  | ＊103 |
|  |  |  |  |  |  |  |  |  | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  | ${ }^{10-15}$ p．c．${ }^{10-15}$ ． | 103 |
|  |  |  |  |  |  |  |  |  |  |  | 10－15＂ | 103 |
|  | ．．．．．．．．． |  |  |  |  |  |  |  | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  |  |  | 60 |  | $10-15$ <br> $10-15$ <br> 1 | 10 |
| ．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  | 10－15 | 10 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  |  |  | $\begin{gathered} 60 \\ 60 \end{gathered}$ |  | 10－15 | 103 |
|  |  |  |  |  |  |  |  |  | $60$ |  | 10－15 | 103 |
|  | ．．．．．．．．．．．．．． |  |  |  |  |  |  |  | $60 .$ |  | 10－15 | 10 |
|  | ．．．．．．．．．． |  |  | ．．．．．．．． |  | ．．．．．． |  |  | $60 \text {. }$ |  | $10-15$ $10-15$ | 10 |
|  |  |  |  |  |  | ．．．．． |  |  | 60 |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  |  |  | 60. |  |  |  |
|  |  |  |  |  |  |  |  |  | 60 |  |  |  |
|  |  |  |  |  |  |  |  |  | $60$ |  | 10－15＂ | 103103 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10－15 | 103 |
| ．．．．．．．．．．． | ．．．．．．．．．．． |  | 11 |  | 7 | ．．．．．．． | 1 |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  |  |  |  | 60 |  | 10－15 ، | 103 |
|  |  |  |  | ． |  | ．．．．．．．． |  |  | 60 |  | ${ }^{10-15}$＂ | 103 |
| 350 |  |  |  | ．．．．．．． |  | ．．．．．． | 1 |  | 60. |  | 10－15 | 103 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 60. |  | 10－15 | 103 |
|  | ．．．．．．．．．． |  |  | ．．．．．．．． |  | … ．．．． | $\stackrel{2}{2}$ |  |  |  | 10－15 | 103 |
|  |  |  |  |  |  |  | 2 |  | 60. |  | 10－15 | 103 |
|  |  | ．．．．．．．． | ． |  |  | ．．．．．．．． |  |  | 60. |  | 10－15 | 103 |
|  |  |  |  |  | ．．．．．．．． | ．．．．．．．．． | 1 |  | $\begin{array}{cc} 60 \\ 60 & . . \end{array}$ |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  | $\stackrel{3}{5}$ |  | $\begin{array}{c\|c} 60 \\ 60 & . . \end{array}$ |  | 10－15 | 103 |
|  |  | ．．．．．．．． |  |  | ．．．． |  | 2 |  | $60 .$ |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  | 2 |  | 60. |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  | 16 |  | 60. |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  | 5 |  | 60. |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  | 6 |  | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  | 10－15＂ | 103 |
|  |  |  |  | ．．．．．．．． |  |  |  |  |  |  | 10－15 ． | 103 |
|  |  |  |  | ．．．．．．． |  |  | 6 |  | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  | 10－15 | 103 |
| ． |  | ．．．．．．．． |  |  |  |  | 2 |  | 60. | ． | 10－15 | 103 |
|  |  |  |  |  |  |  | 8 |  | $\begin{array}{c\|c} 60 \\ 60 & . . \\ \hline \end{array}$ |  | 10－15 | 103 |
|  |  |  |  |  |  |  | 3 |  |  |  | 10－15 | 103 |
|  |  |  |  |  |  | 1 | 8 |  | 60. |  | $10-15$ $10-15$ | 103 |
|  |  |  |  |  |  |  | 10 |  | 60. |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  | $\bigcirc$ |  | 60. |  | 10－15＂ | 103 |
|  |  |  |  |  |  | 4 |  |  | $601 .$ |  | 10－15．＂ | 103 |
|  |  |  |  |  |  |  |  |  |  |  | 10－15 | 103 |

[^29]
## TABLE No．5．－Establishments－Continued． COTTON（Gingham）MILLS．

|  | Subdivision of Trade． |  | $\begin{aligned} & \text { घं } \\ & \text { 日 } \\ & \text { ¢ } \\ & \text { H } \\ & 0 \\ & \text { B } \\ & \text { B } \end{aligned}$ | 青 <br> ゅ <br>  <br> 吕晏 <br> 菦 <br> 玉造家 <br> E | OHO <br> 50궁 <br> 会 <br> む็． <br> ส゙っ芫 <br> 苗思兌 <br>  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | Mule spinners．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |
|  | Back boys．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 275 | 10175 | 6 | \＄2 25 | \＄8300 |
|  | Doffers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  | 11100 |  |  | 9250 |
|  | Tuber． |  | 1 | 300 | 11100 |  |  |  |
|  | Second hand |  |  | 1200 | 44400 |  |  |  |
|  | Section hand |  |  | 11 20 20 | 41250 <br> 740 | ．．．．． |  |  |
|  | Winders |  |  |  |  | 6 | 400 | 14800 |
|  | Spoolers．．． |  |  |  |  | 3 | 400 | 14800 |
|  | Spooler and warpe |  |  |  |  | 4 | 650 | 24050 |
|  | Engineers．．． |  | 1 | 1200 | 60000 | ．．．．． |  |  |
|  | Firemen |  | 2 | 1000 | 50000 | ．．．．．． |  |  |
|  | Watchmen， 7 nights |  | 2 | 1000 | 52000 | ．．．．． |  |  |
|  | Elevator hands．． |  |  | 800 | 29600 |  |  |  |
|  | Blacksmiths ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | $\stackrel{2}{2}$ | 1600 | 50000 | ．．．．． |  |  |
|  | Carpenters．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 1500 | 75000 | ．．．．．． |  |  |
|  | Machinists． |  | 12 | 1200 | 60000 | ．．．．． |  |  |
|  | Painters．．．．．．． |  | 4 | 300 1500 | 75000 | ．． |  |  |
|  | Oilers．． |  | 6 | 400 | 14800 |  |  |  |
|  | Cleaners |  | 5 | 400 | 14800 | $\stackrel{2}{2}$ |  | $\begin{aligned} & 14800 \\ & 22200 \end{aligned}$ |
|  | Yard hand |  | 12 | 800 | 40000 |  |  |  |
|  | Teamsters． |  |  | 800 | 40000 |  |  |  |
|  | Sweepers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | $\ldots$ |  | 62400 | 6 | 650 | 24050 |

WOOLEN MILLS．


## TABLE No．5．－Establishments－Continued． COTTON（Gingham）MILLS．

|  |  |  |  |  |  |  |  |  |  |  | $\not \underset{\sim}{\circ}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 3 |  |  | ， |  | 10－15 | 103 |
| \＄275 | \＄2 25 | 3 | 5 | 11 | 10 |  | 1 |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  |  | 8 |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  |  | 2 |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  |  | 1 |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  |  | 1 |  | 60 |  | 10－15＂ | 103 |
|  |  |  |  |  |  |  | 1 |  | 60 |  | 10－15＂ | 103 |
|  | ．．．．．．．．．． | ．．．．．．．． |  |  |  |  | 1 |  | 60 |  | $10-15$＂ | 103 |
|  |  |  |  |  |  | ．．．．．．．． |  |  | 60 |  | 10－15＂ | 103 |
|  | ．．．．．．．．．． | ．．．．．．． |  |  |  |  |  |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  | ．．．．．．． |  |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  |  | 1 |  | 60 |  | 10－15 | 103 |
|  |  |  |  |  |  | ．．．．．．． | 2 |  | 12 |  | 10 | ．．．．． |
|  |  |  |  |  |  |  | 2 |  | 12 |  | 10 ＂ | ．．．．． |
|  |  |  |  |  |  |  | 2 |  | 12 |  | 10 ＂ |  |
|  |  |  |  |  |  | …．．．．．．． | 2 |  | 10 |  | 10 ＂ | 103 |
| ， | ．．．．．．．．． | ．．．．． |  |  |  | ．．．．．．．． | 2 |  | 10 |  | 10 ＂ | ．．．．．．．． |
|  | ．．．．． | ．．．．．．．． | ．．．．．．．．． | ．．．．．．． | ．．．．．．．．． | ．．．．．．．．． | 2 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 14 |  | 10. |  |  |  |
| 300 |  | 10 |  |  | 8 |  |  |  | 10. |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  | ．．．．．．．．．． |  |  |  | ．．．．．．．． | ．．．．．．．．． | 7 |  | 10 |  |  | 103 |
|  |  |  |  |  | ．．．．．．．． | ．．．．．．．．． | 7 |  | 10. |  |  | 103 |
|  |  |  |  |  | ．．．．．．． |  | 2 |  | 10 |  |  | 103 |
|  |  |  |  |  |  |  | 12 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 4 |  | 10. |  |  |  |
|  |  |  |  |  |  |  | 6 |  | 10 |  |  | 103 |
|  |  |  |  |  |  | ， | 2 | ．．．．．．． | 10. | ．．．．．．．．．．．． | ．．．．．．．．．．．．．． |  |

WOOLEN MILLS．

|  | ．．．．．．．．． | 15 | 14 | 25 | 30 | 310 | 163 |  | ＊ 60 |  |  | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ．．．．．．．．．．． |  |  |  |  |  |  | ．．．．．．．．． | 60 | ．．．．．．．．．．．．．．．．．．． |  | 12 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60. |  |  | 12 |
| ． |  |  |  | ． |  |  | ． |  | 60. |  |  | 12 |
| ．．． | ．．．．．．．．．． |  |  |  |  |  |  | ．．．．．．．．． | 60 |  |  | 12 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．． |  |  | ．．．．．．．．． |  |  |  | ．．．．．．．．． | 60. |  |  | 12 |
| ．．．．．．．．．．． | ．． | ．．． |  |  |  |  |  | ．．． | 60. | ．．． | ．．．．．．．．．．．．．． | 12 |
|  |  |  |  |  |  |  |  |  | 60. |  |  |  |
|  |  |  |  | ．．．．．．．． |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| ． |  |  |  |  |  |  |  |  | 60. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60. |  |  |  |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60. |  |  | 12 |
|  |  |  |  |  |  |  |  | ．．．． | 60. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 0 |  |  | 12 |

＊Per week．

## TABLE No. 5.-Establishments-Continued. <br> WOOLEN MILLS.


*All except weavers work on time system.

Collated Statistics from Various Establishments． 119

## TABLE No．5．－Establishments－Continued． WOOLEN MILLLS．

| 落 <br> 告 <br> $\$$ <br> 茄 Bid Sos <br> $\stackrel{\infty}{\infty}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  |  |  |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
|  |  | ．．．．．．．． |  |  |  |  |  |  | 60 |  |  | 12 |
| …．．．．．．．．． |  | ．．．．．．．． | ．．．．．．．． |  | ．．．．．．．． | ．．．．．．．． |  |  | 60 |  |  | 12 |
|  |  | ．．．．．．．． | ．．．．．．．． |  | ．．．．．．．． | ． |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．． |  | ．．．．． |  |  |  |  |  |  | 60 |  |  | 12 |
| ， |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．．． | ．．．．．．．．．．． | －．．．．．．． | － | ． | ．．．．．．．． | ．．．．． | ．．．．．．．． | ．． | 60 |  |  | 12 |
|  | ．．．．．．．．．．． | ．．．．．．．． |  | ．．． |  | ．． |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．． |  |  |  | ．．．．．．．． | ．．．．．．．． |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．． |  | …… |  |  |  |  |  |  | 60 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．． |  |  | ．．．．．．．． |  |  | ．．．．．．． | ．．．．．．．． | ．．．．．．．． | 60 |  |  | 12 |
|  | ．．．．．．．．．．． | ．．．．．．．． | ． | ． | ．．．．．．．． | ．．．．．．．． | ． | ．．．．．．．． | 12 |  |  | 12 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  | ．．．．．．．． | ．．．．．．．． |  |  | $+60$ |  |  | 12 |
|  | ．．．．．．．．．．． | ．．．．．．．． |  |  | ．．． | ．．．．．．．． |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．． |  |  |  |  |  | ……．． |  |  | 60 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．． |  | ．．．．．．．． |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．．．． |  | ．．． |  |  | ． | ．．．．．．．．． |  | ．．．．．．．． | 60 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| …．．．．．．．．．．． |  | ．．．．．．．．． |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．． |  | ．．． |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
|  |  | ．．． |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．． |  | ．．． | ．．． |  |  |  |  |  | 60 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 60 |  |  | 12 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 10 | 15 | 9 | 18 | 110 | 116 |  | $\dagger 60$ |  |  | 92 |
|  |  |  |  |  |  |  | 1 | ．．．．．．．． | 60 |  |  | 92 |
|  |  | ．．． | ．．．．．．．． |  |  |  | 7 |  | 60 |  |  | 92 |
| ．．．．．．．．．．． | ．．．．． | ．． | ． |  |  |  | 1 |  | 60 |  |  | 92 |
|  | ．．．．．．．．．． | ．．．．．． | \％ |  | ．．．．．．．． |  | 4 |  | 60 |  |  | 92 |
|  | ．．． | ．．．．．．．． | ．．．．．．．． |  |  |  | 4 |  | 60 |  |  | 92 |
|  |  |  |  |  |  |  | 2 |  | 60 |  |  | 92 |
|  |  |  |  |  |  |  | 2 |  | 60 |  |  | 92 |
|  |  |  |  |  |  |  | 8 |  | 60 |  |  | 92 |
|  |  |  |  |  |  |  | 4 |  | 60 |  |  | 92 |
|  |  |  |  |  |  |  | 1 |  | 60 |  |  | 92 |
|  |  |  |  |  |  |  | 5 |  | 60 |  |  | 92 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 92 |

$\dagger$ Per week．

## TABLE No. 5.-Establishments-Continued. WOOLEN MILLS.



## HOSIERY AND KNIT UNDERWEAR MILLS.



## TABLE No．5．－Establishments－Continued． WOOLEN MILLS．

|  |  |  | $\begin{aligned} & \text { Number of boys between } \\ & \text { fifteen and eighteen years } \\ & \text { old. } \end{aligned}$ |  |  |  |  |  | 菭 <br> ＂ 台 品 <br> 曾 <br>  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | ＊60 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | ${ }_{2}^{2}$ |
|  |  |  |  |  |  | ${ }_{32}^{28}$ |  |  |  |  |  | 92 |
|  |  |  | ．． |  |  | 40 |  |  | 60 |  |  | 92 |
|  |  |  | ．．．．．．．．． |  |  |  |  |  | 60 60 |  |  | ${ }_{92}^{92}$ |
|  |  |  |  |  |  |  |  |  |  |  |  | 92 |
|  |  |  |  |  |  |  |  |  | 60 |  |  |  |
| \＄3 00 |  | ．．．．．．．． |  |  |  |  |  |  | 60 |  |  |  |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 92 |
| ．．．．．．．．．．．．． |  | ．．．． | ． | ．．． |  |  |  |  | ${ }_{60}^{60}$ |  |  |  |
|  |  | ．．．．．．．．．． |  | ．．．．．．．．． | ．．． |  |  |  | 60 |  |  | ${ }_{92}$ |
|  |  |  |  |  | ．．．．．．．．．． |  |  |  | 60 |  |  | 92 |
| ．．．．．． |  | ．．．．．．．．．． | ．．．．．． |  | ．．．．． |  |  |  | 60 |  |  | 92 |
|  |  |  | ． |  | ．．．． |  |  |  | 60 |  |  | 92 |
|  |  |  |  |  |  |  |  |  | 60 |  |  | ${ }_{92}^{92}$ |
|  |  | ． |  |  |  |  |  |  |  |  |  | ${ }_{92}^{92}$ |
|  |  |  | ．．．．． |  |  |  |  |  | ${ }^{80}$ |  |  | 92 |
|  |  |  |  |  |  |  |  |  | 60 60 |  |  | ${ }_{92}^{92}$ |
|  |  | ．．．．．．．．．． |  |  |  |  |  |  | 60 |  |  | ${ }_{92}^{92}$ |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 92 |
| － |  |  |  |  |  |  |  |  | 60 |  |  | ${ }_{92}^{92}$ |
|  |  |  |  |  |  |  |  |  | 60 |  |  | 92 |
| ．．．．．．．．．．． |  | ．．．．．．．． | ．．． | ．．． | ．．．．．．． |  |  |  | 60 60 |  |  | 92 |
| ．．．．． |  |  | ．．． | ．．．．．．．．．． | ．－．．．．．．．．． |  |  |  | 60 |  |  | ${ }_{92}$ |
|  |  | ．．． |  |  |  |  |  |  | 60 60 |  | ．．．．．．．．．．．．． | ${ }_{92}^{92}$ |
| ．．．．． |  | ．．．． |  |  |  |  |  |  | 60 |  |  |  |

HOSIERY AND KNIT UNDERWEAR MILLS．


[^30]
## TABLE No．5．－Establishments－Continued． HOSIERY AND KNIT UNDERWEAR MILLS．

|  | Subdivision of Trade． |  |  |  |  |  |  | ¢゙ロ <br> \＆on <br> 鳥蔦 <br> 命 <br> ば <br> 茄莫芴 <br> ณิ <br> 岢会品 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 70 | General laborers and utility men．．．．．．．． |  | 15 | \＄750 | \＄367 51 |  |  |  |
|  | Machinists．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 7 | 1350 | 66150 | ．．．．．．． |  |  |
|  | Carpenters． |  | 3 | 1200 | 58800 | ．．．．． |  |  |
|  | Wool sorters |  | 6 | 1350 | 66150 | ．．．． |  |  |
|  | Spinners，foreman．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 1725 | 845 <br> 588 <br> 80 | ．．．． |  |  |
|  | ＂．automatic mules．． |  |  |  |  |  |  |  |
|  | Winders，foreman |  | 1 | 1050 | 51450 |  |  |  |
|  | ＂assistant foremen．．．．．．．．．．．．．．．． |  | 3 | 750 | 36751 |  |  |  |
|  | ool carders， |  | 1 |  | 1，029 00 |  |  |  |
|  | ＂assistant foremen．．．．．．．．．．．．． |  | 5 | 1200 | － 58800 | ．．． |  |  |
|  | strippers ．．．．．．．．．．．．．．．．．．．．．． |  |  | 700 | 34300 | ．．．．．． |  |  |
|  |  |  |  |  |  |  |  |  |

BLEACHERY MILLS．

| 24 | Dyers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．｜ | 141 | 18 | \＄8001 | \＄240 00 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | D ${ }_{\text {＂}}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 12 | 1000 | 30000 |  | ．．．．．．．．．．．． | ．．．．．．．．．． |
|  | ＂ |  | 10 | 1200 | 36000 |  |  | ．．．．．．．．．． |
|  | Finishers． |  | 6 5 | 700 950 | 21000 28500 |  |  | ． |
|  |  |  | 5 3 | $\begin{array}{r}9 \\ 10 \\ \hline 10\end{array}$ | 30000 |  |  |  |
|  | Bleachers： |  |  |  |  |  |  |  |
|  | Folders and packers．．．．．．．．．．．．．．．．．．．．． |  | 14 | 1200 | 36000 |  | \＄10 50 | 831500 |
|  | Dryers |  | 18 | 800 | 24000 |  | 450 | 22500 13500 |
|  | Sewers．．． |  |  |  |  |  | 50 | 15000 |
|  | Fireman． |  | 1 | 11 9 00 | 330 270 00 |  |  |  |
|  | Machinists |  | ¢ | 1200 | 36000 |  | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．．．．． |
|  | Carpenter |  | 4 | 1500 | 40500 |  |  |  |
|  | Laborers． |  | 27 | 750 | 22500 |  |  |  |
|  | Overseer Watchm | ．．．．．．．． | 1 | 2500 850 | $\begin{aligned} & 70500 \\ & 255 \\ & 250 \end{aligned}$ |  | ．．．．．．．．．．． | ．．．．．．．．．．．．． |
| 25 |  |  |  |  |  |  |  |  |
|  | Dyers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 99 | 11 | 1500 | 76500 |  |  |  |
|  | ¢ 4 ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 11 | 1000 | 51000 |  | ．．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Finish |  | 9 | 1200 | 61200 |  | ．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Bleach |  | 5 | 1500 | 76500 |  |  |  |
|  | Blea |  | 4 | 700 | 35700 |  |  |  |
|  | Folders and packers．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 10 | 900 | 45900 |  |  |  |
|  | ＂ |  | 9 | 800 | 408 |  |  |  |
|  | Dryer．． |  | 1 | 750 | 38250 |  |  |  |
|  | Printers． |  | 4 | 1200 | 61200 |  |  |  |
|  | Others． |  | 4 | 1500 | 76500 | 8 | 700 | 35700 |

## TABLE No．5．－Establishments－Continued．

HOSIERY AND KNIT UNDERWEAR MILLS．

| $\begin{aligned} & \text { 山̈ } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ | Wages of girls per week. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 19 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 19 |
| ．．．． |  | ． |  |  | ．．．．．．．．． |  |  |  | 10 |  |  | 19 |
|  |  |  |  |  | － |  |  |  | 10 |  |  | 19 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 19 |
| \＄3 50 |  |  |  |  |  |  |  |  | 10 |  |  | 19 |
| $\left\{\begin{array}{rr}5 & 00\end{array}\right.$ |  | 17 | 35 |  |  |  |  |  | 10 |  |  | 19 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 19 |
| 2 |  |  |  |  |  |  |  |  | 10 |  |  | 19 |
| 450 |  | 31 | 20 |  |  |  |  |  | 10 |  |  | 19 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 19 |
|  |  |  |  |  |  | ． |  |  | 10 |  |  | 19 |
| 350 |  |  |  |  |  | ． |  |  | 10 |  |  | 19 |
| 500 |  | 11 | 20 |  |  |  |  |  | 10 |  |  | 19 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 19 |

BLEACHERY MILLS．

|  |  | ．．．．．．．．． |  | ｜．．．．．．．． |  | ｜．．．．．．．． | 18 | ．．．．．．．．． | ＊ 60 |  |  | $\dagger 156$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 12 |  | 60 | ．．．．．．．．．．．．．．． |  | 156 |
|  |  |  |  |  |  |  | 10 |  | 60 |  |  | 156 |
|  | ．．．．．．．．．．．．．． |  |  |  |  |  | 6 |  | 60 |  |  | 156 |
| ．．．．．．．．．．． | ．．．．．．．．．．． |  |  |  |  |  | 5 | ．．．．． | 60 |  |  | 156 |
| ．．．．．．．．．．． | － |  |  |  |  |  | 3 |  | 60 |  |  | 156 |
|  |  |  |  |  |  |  | 19 |  |  |  |  | 156 |
|  |  |  |  |  |  |  | 17 |  | 60 |  |  | 156 156 |
| ．．．．．．．．．．． | ．．．．．．．．．．．．．． |  |  |  |  |  | 6 | ．．．．．．．．．．． | 60 |  |  | 156 |
|  | ．．．．．．．．．．． | ．．．．．． |  |  |  |  | 4 | ．．．．．．．． | 60 |  |  | 156 |
|  |  | ．．．．．．．．． | ．． |  |  |  | 1 | ．． | 60 |  |  | 156 |
| ．．．．．．．．． | …．．．．．．．． | ．．．．．．．．． | ． | ． |  |  | 1 | ． | 60 |  |  | 156 |
| ．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．． | ．．．． |  |  |  | 5 | ．．．．．．．．． | 60 |  |  | 156 |
| ．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．． | ．．． |  |  | 7 |  | 60 | ．．．．．．．．．．．．．． |  | 156 |
| ．．．．．．．．．．． |  |  | ．．．．．．． | ．．．．．．．． | ．．．．．．． | ．．．．．．．．． | 27 | ．．．．．．．．． | 60 |  |  | 156 |
| ． | ．．．． | ．．．．．．．． | ． | ．． |  | ．．．．．．．．． |  | ．．．．．．．． | 60 | ．．．． |  | 156 |
| ．．． | ．．．．．．．．．．．． |  |  |  | ．．．．．．．．． | ．．．．．．．．． | 2 | ．．．．．．．． | 60 | ．．．． | ．．．．．．．．．．．．．． | 156 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| ．．．．． | ．．．．．．．．．．．． | ． |  |  | ． | ．．．．．．．．． | 11 | ．．．．．．．． | 60 |  |  | 4 |
| ．．．．．．．．． | ． | ．．．．．．．． | ．．．．．．．． |  | ．．．．．．． | ． | 11 | ． | 60 | ．．．．．．．．．．．．．． |  | 4 |
|  | ．．．．．．．．．．． |  | ． | ． |  |  | 9 |  | 60 | ．．．．．．．．．．．．． |  |  |
|  | ．．．．．．．．．．． |  |  |  |  |  | 12 |  | 60 | ．．．．．．．．．．．．．． |  |  |
|  |  |  |  |  |  | ．．．．．．．． | 5 | ．．．．．．．． | 60 | ．．．．．．．．．．．．．． |  | 4 |
|  |  |  | ．．．．．．．． | ．．．． |  | ．．．．．．．． | 4 | ．．．．．．．． | 60 | ．．．． |  | 4 |
| ．．．． | ．． |  | $\cdots$ | ．．．．．．．． |  | ．．．．．．．．． | 10 | ．．．．．．．． | 60 |  |  | 4 |
|  | ．．． |  | ．．．．．．．． | ． |  | ．．．．．．．． |  | ．．．．．．． |  |  |  | 4 |
|  |  |  |  |  |  |  | 11 |  |  |  |  | 4 |
|  |  |  | ．．．．．．．． |  |  | ．．．．．．．．． | 1 | ．．．．．．． |  |  |  | 4 |
|  |  |  |  |  |  |  |  |  |  |  |  | 4 |
|  |  |  |  |  |  |  |  | ．．．．．．． |  | ．．．．．．．．．．．．．． |  | $4$ |

＊Per week．†This establishment was in operation but thirty weeks during the year．

## TABLE No．5．－Establishments－Continued． SILK MILLS．

|  | Subdivision of Trade． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 | Soft silk winders．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |
|  | ＂．wpoolers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 10 | 18 | \＄1200 | \＄600 00 | 22 | \＄1200 | \＄600 00 |
|  | ＂twisters | 4 | 4 | 1350 | 67500 |  |  |  |
|  | Ribbon weavers | 72 | 30 | 1700 | 85000 | 42 | 1200 | 60000 |
|  | Card cutter | 1 | 1 | 1200 | 60000 |  |  |  |
|  | Machinist | 1 | 1 | 1200 | 600 | ．．．．． |  |  |
|  | Fireman． | 1 | 1 | 1000 | 50000 |  |  |  |
|  | Watchmen． |  | 2 | 1100 | 55000 | ．．．．．． |  |  |
| 58 | Soft silk winders ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 10 |  |  |  |  |  |  |
|  | ＂spoolers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 5 |  |  |  |  |  |  |
|  | ＂warpers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 6 <br> 2 |  | 1200 | 60000 |  | $\begin{array}{ll}10 \\ 11 & 00 \\ & 00\end{array}$ | 500 550 500 |
|  | Power loom weav | 22 | 12 | 1100 | 55000 | 10 | 950 | 47500 |
|  | Machinist． | 1 |  | 1200 | 60000 |  |  |  |
|  | Watchman |  | 1 | 1000 | 51200 | ．．．．． |  |  |
|  | Loom fixer． | 1 | 1 | 1350 |  | ．．．．． |  |  |
| 59 | Raw silk winders． | 40 |  |  |  |  |  |  |
|  | ＂cleaners．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 12 | ．．． | ．．．．．．．．．．． |  | ．．．．． |  |  |
|  | ＂doublers． | 44 | ．．．．． | ．．．．．．．．．．． | ．．．．．．．．．．．．．． | ．．．．． | ．．．．．．．．．．． |  |
|  | Reel hands．．．．．．． | 10 |  |  |  |  |  |  |
|  | Soft silk winders | 2 |  |  |  |  |  |  |
|  | Dyers．．．．． | 3 | 3 | 1000 | 50000 | ．．．．． |  |  |
|  | Machinist | 1 | 1 | 1200 |  | ．．．．．． |  |  |
|  | Engineer | 1 | 1 | 1000 | 450 |  |  |  |
|  | Watchman | 1 | 1 | 1200 | 60000 | ．．．．．． |  |  |
| 60 | ＊Soft silk winders．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 6 |  |  |  |  |  |  |
|  | ＂／${ }^{\text {spoolers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．}}$ | $\stackrel{2}{5}$ |  |  |  | ．．．．．． |  |  |
|  | ＂pickers | 2 | 2 | 1100 | 55000 | ．．．．．．． |  |  |
|  | Soft warp twister．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 1 | 1 | 1400 | 70000 | ．．．．． |  |  |
|  | helper | 1 | ．．．． |  |  | 20 | 900 | 45000 |
|  | Hemmers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 5 |  |  |  |  |  |  |
|  | Loom fixers．． | 2 | 2 | 1200 | 60000 | ．．．．． |  |  |
|  | Watchman ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 1 | 1 | 1200 | 60000 | ．．．．． |  |  |
| 61 | Soft silk winders ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 35 |  |  |  |  |  |  |
|  |  | 9 6 | 4 | $\begin{array}{r}\dagger 12 \\ 12 \\ \hline 12\end{array}$ | 600 62500 60 |  | 1200 | 60000 |
|  | Hand loom weavers．． | 81 | 81 | $\ddagger 1200$ | 60000 |  |  |  |
|  | Power＂ | 106 | 50 | $\pm 1100$ | 55000 | 56 | $\ddagger 1100$ | 55000 |
|  | Ribbon weavers． | 45 | 45 | 81700 | 85000 |  |  |  |
|  | Designer．．． | 1 | 1 | 4000 | 2，000 00 |  |  |  |

[^31]
## TABLE No．5．－Establishments－Continued． SILK MILLS．

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 10 |  | $12 \mathrm{p} . \mathrm{c} . . .$. |  |
|  | $550$ |  |  | 10 |  |  |  |  | 10 |  | 12 ＂${ }^{12}$ ．．．．．． |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 12 |  |
|  |  |  |  |  |  |  |  |  | 10 |  | $\begin{array}{lll}12 & \text {＂} \\ 12 & \text {＂．．．．}\end{array}$ |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 12 ＂ |  |
|  |  |  |  |  |  | ． |  |  | 10 |  | 12 ＂ |  |
|  |  | ．．．．．．．． |  |  | ．．． |  |  |  | 10 |  | 12 ＂ |  |
|  |  |  |  |  |  |  |  |  | ． 10 |  | 12 ＂ |  |
|  |  |  |  |  |  |  |  |  |  |  |  | ．．．．．．．． |
|  | 600 |  |  |  | 10 | 10 |  |  | 10 |  |  |  |
|  | 500 |  |  |  |  |  | 5 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | ， |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 2 |  | 10 |  |  |  |
|  | ．．．．．．．．．． |  |  |  |  | 22 |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  | ．．．．．．．．． | ．．．．．．．．． |  |  | ．．． |  | 12 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 | ．．． |  | ．．．． |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| \＄400 |  | 12 |  |  |  |  | 12 |  | 10 |  |  |  |
| ．．．．．．．．．．． | 520 |  |  |  | 44 |  | 44 |  | 10 | ．．．． |  | ．．．．．．．． |
| 650 |  |  |  |  |  |  | 80 |  | 10 |  |  |  |
| 600 |  |  | 10 | ．．．．．．．．． |  |  | 10 |  | 10 |  |  |  |
|  | 500 |  |  |  |  |  |  |  | 10 |  |  | ．．．．．．．． |
|  | ．．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  | ．． |
|  |  |  | …．．．．． |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  |  |
| ． |  |  | ．．．．．．．．． |  |  |  |  |  |  |  |  |  |
|  | \｜ 350 |  |  |  |  |  |  |  | 10 |  |  |  |
|  | 300 |  |  | 2 |  |  | 2 |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 5 |  | 10 |  |  |  |
|  |  |  |  | ．．．．．．．．． |  | ．．．．．．．．． | ${ }^{2}$ |  | 10 |  |  |  |
|  |  |  |  | ．．． |  | ， | 1 |  | 10 |  |  |  |
| 450 |  |  |  |  |  |  | 1 |  | 10 |  |  |  |
| ．．． | 150 |  |  |  |  | 5 | ．．．．．．．．．． |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  | 1 |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 性 600 |  |  | 10 | 25 |  |  |  | 10 |  | 10 p. |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | ．．．．．．．． |
|  | ．．．．．．．．．．． |  |  | ．．．．．．．． | ．．．． |  |  |  | 10 |  | 10 ＂ 10. | ．．．．．．．． |
|  | ．．．．．．．．．．． |  |  | ．．．．．．．．． | ．．． |  |  |  | 10 |  | 10 ＂ $10 .$. | ． |
|  | ．．．． |  |  | ．．．．．．．．． |  |  |  |  | 10 | ． | 10.1 ．．．．． | ．．．．．．．．． |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ $10 . .$. | ．．．．．．．． |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ．．．．．． |  |

Lowest，\＄2．50 ；highest，\＄5．ILowest \＄4；highest，\＄12－principally learners．＊Lowest， $\$ 4$ ；highest，$\$ 9.50$ ．

## TABLE No. 5.-Establishments-Continued. SILK MILLS.



[^32]
## TABLE No．5．－Establishments－Continued． SILK MILLS．

|  |  | H 嘏 <br>  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ |  |
| ．．．．．．．．．．．．．．． |  |  |  |  |  |  | ．．．．．．．．． |  | 10 |  |  |  |
|  | ．．．．．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  | 10 ＂ |  |
|  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  | ．．．．．．．． |
|  | \＄6 00 |  |  |  | 12 | 12 |  |  | 355 |  | $8 \$ 050$ |  |
| \＄5 50 | 550 | ．．．．．．．．． |  | ．．．．．．．．． | 5. |  | 6 | ． |  |  | \＆1 100 |  |
|  |  |  | …．．．．．．． |  |  | 15 | 2 |  | ． |  |  |  |
| ．．．．．．．．．．．． | ．．．．．．．．．．．． |  |  |  |  | 65 |  |  | ．．．．．．．．．．． |  | 8200 |  |
| ．．．．．．．．．．． |  |  |  | ．．．．．．． |  |  | 1 | ． |  |  |  | ．．．．．．．．． |
| ．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |
| ．．．．．．．．．．． |  |  |  | ．．．．．．．．． |  |  | 1 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| ．．．．．．．．．．．． | 550 |  |  |  |  |  | 7 |  | 10 |  | 10 p．c．．．．． |  |
| ．．．．．．．．．．． | 550 | － |  | \％ | 4 |  | 4 |  | 10 |  | 10 ＂．${ }^{10}$. |  |
|  |  |  |  |  |  |  | 15 |  | 10 |  | 10 ＂ $10 . . . . .$. | ， |
|  |  |  |  |  |  |  | 4 |  | 10 |  | 10 ＂ | － |
|  |  |  |  |  |  |  | 17 |  | 10 |  | 10 ＂ |  |
| 600 | 500 | － |  | ．．．．．．．． | 26 |  | 26 |  | 10 |  | 10 ＂ |  |
|  |  |  | 2 | ．．．．．．．．．．． | ．．．．．．．．．． |  | 1 |  | 10 |  | 10 ＂．． | ．．．．．．．．．．． |
|  |  |  |  |  |  |  | 1 |  | 10 |  | 10 ＂ |  |
| ．．．．．．．．．．．． |  |  | ．．．．．．．．． | ．．．．．．．．． |  |  | 1 | $\cdots$ | 10 |  | 10 ＂ | ．．．．．．．．． |
|  | 600 |  |  |  | 12 | 12 |  |  | 10 |  | 10 p．c．．．．．． |  |
|  |  |  |  |  |  | 7 |  |  | 10 |  | 10 pic．．．．．．． | ．．．． |
|  | 550 |  | ． |  | ．．．．．．．． | 4 |  | ．．．．．．．．． | 10 | ， | 10 ＂ | ， |
|  | 550 | ．．．．．．．．． |  |  |  | ．．．．．．．．． |  |  | 10 | ．．．．．．．．．．．．．． | ${ }_{10}^{10}$＂${ }^{10}$. |  |
|  | 900 | ． |  |  | 8 |  | 8 |  | 10 |  | 10 ＂ | － |
|  |  |  |  |  |  |  | 6 |  | 10 |  | 10 ＂ | － |
|  |  |  |  |  |  | 125 |  |  | 10 |  | 10 ＂．．．．． |  |
|  |  |  |  |  |  |  | 1 |  | 10 |  | 10 |  |
|  | ．．．．．． |  |  |  |  | ．．．．．．．． | 4 |  | 10 |  | 10 ＂ |  |
|  | ．．．．．．．．．．． |  |  |  |  | ．．．．．．．．． |  |  | 10 | ．．． | 10 ＂ |  |
|  |  |  |  |  | ．．．．．．．． | ．．．．．．．．． |  |  | 10 | ．．．．．．．．．．．．．． | 10 ＂ $10 . .$. | ． |
|  | 600 |  |  |  |  | ．．．．． | 11 |  | 10 |  | ${ }_{10}^{10}$＂${ }^{\prime}$ ， | － |
| ．．．．．．．．．．．． |  |  |  | ， |  | ．．．．．．．．． |  | ．． |  |  | 10 ．．．．． |  |
|  | 550 |  |  | 120 |  |  | 120 |  | 10 |  | 10 p．c．f．．． |  |
|  | 650 |  |  |  | 70 |  | 70 |  | 10 |  | 10 ＂ $10 . .$. |  |
| 800 |  | 50 | 80 | ．．．．．．．．． |  |  | 130 |  | 10 |  | 10 ＂ |  |
| 800 | ．．．．．．．．．．． | ．．．．．．．． | － 20 | ．．． | ． | ．．．．．．．．． | 20 | ．．．．．．．．． | 10 |  | 10 |  |
| ． | － |  | ．．．．．．．． | ．．．．．．．． |  |  | 2 | ．．．．．．．．． | 10 |  | 10 ＂ |  |
| ．．．．．．．．．．．． | ．．．．．．．．．．． |  | ．．．．．．．．． | ．．．．．．．． | －．．．．．．．． |  |  | …．．．．．． | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 |  |

§Per week．\｜Averaged about．

## TABLE No．5．－Establishments－Continued． SILK MILLS．

|  | Subdivision of Trade． |  |  | 兌 <br> ณ <br> 苗 <br> 気总 <br> 4 <br> Bis <br> 熍 <br> $E$ | O゙か <br>  <br> 畐著 <br> む゙気 <br> 品品荡 <br>  <br> ส్త్ర ㄷ⼸ㄹ <br> ⿹ㅓㄴ옹 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 66 | Raw silk winders．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 26 | ．．．． |  | ．．．．． | ．．．．． |  |  |
|  | ＂${ }^{\text {＂}}$ doublers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 9 | ．．．．． |  | ．．．．． | ．．．．． |  |  |
|  | Power reels．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 7 |  |  |  | ．．．．． |  |  |
|  | Soft silk winders ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 18 |  |  |  |  |  |  |
|  | ＂warpers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 18 | 13 | \＄1200 | \＄600 00 |  |  |  |
|  | Power loom weav | 200 | 125 | 1100 | 55000 | 75 | S11 00 | \＄550 00 |
|  | Loom fixers | 5 |  | $\dagger 1500$ | 75000 |  |  |  |
|  | Machinist． | 1 | 1 | 1200 | 60000 | ． |  |  |
|  | Fireman． | 1 | 1 | 1000 | 50000 |  |  |  |
|  | Watchman． | 1 | 1 | 1200 | 60000 | － |  |  |
| 67 | Raw silk winders．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 37 |  |  |  |  |  |  |
|  | Soft silk spinders ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 28 |  |  |  | 8 | z 600 | 30000 |
|  | ＂spoolers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 5 |  |  |  |  |  |  |
|  | ＂．warpers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | 12 | 1200 | 60000 |  |  |  |
|  | ＂warp twis | 1 |  |  | 65000 | 2 | 1000 | 00 |
|  | Power loom weavers．．．．．．．．．．．．．．．．．．．．．．．． | 10 | 10 | 1100 | 55000 |  |  |  |
|  |  | 24 | 24 | $\ddagger 1600$ | 80000 | ． |  |  |
|  | Loom fixer．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 1 | 1 | 1400 | 600 |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 68 | Soft silk winders．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 12 |  |  |  |  |  |  |
|  | ＂spoolers $\qquad$ <br> warpers | 4 |  |  |  |  | ＊1200 | 60000 |
|  | ＂warptwiste | 2 | 2 | T 1300 | 65000 |  |  |  |
|  | Hand loom weavers．．．．．．．．．．．．．．．．．．．．．．．．．． | 90 |  | ＊＊ 1200 | 60000 | ．．．．． | ．．．．．．．．．． |  |
|  | Ribbon weavers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 10 |  | ＋1700 | 85000 | ．．．．． |  |  |
|  | Loom fixers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | 2 | ＋ 1500 | 75000 | ．．．．． | ．．．．．．．．．． |  |
|  | Machinist． | 1 | 1 | 1200 | 600 600 00 | ．．．． |  |  |
|  | Watchman．． | $1)$ | 1 | 1200 | 60000 |  |  |  |

SHOE FACTORIES．


[^33]
## TABLE No．5．－Establishments－Continued． <br> SILK MILLS．

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \＄5 50 |  |  | 10 | 16 |  | 26. |  | 10 |  |  |  |
| 800 |  |  | 7 |  |  |  |  |  | 10 |  | 10 ． $10 . . .$. |  |
| ．．．．．．．．．．．． | 650 |  |  |  | 18 |  |  |  | 10 |  | 10 ＂ |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 |  |
|  |  |  |  |  |  | ．． |  | ．．．．．．．．．． | 10 |  | 10 ＂ |  |
|  |  |  |  | ． |  | ． |  |  | 10 |  | 10 ＂ |  |
|  |  | ． |  | ．．．．．．．．． |  | ．．．．．．．． |  |  | 10 |  | 10 ＂．．．．．． |  |
|  |  |  |  |  |  | ．．．．．．．． | ．． |  | 10 |  | 10 ＂．．．．．． |  |
|  |  | ．．． |  |  |  | ．．．．．．．． |  | ．．．．．．．．． | 10 |  | ＂．．．．．．． |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | \｜11 500 |  |  |  | 37. |  | 37 |  | 10 |  |  |  |
| \＃700 |  | ．．．．．．．． | 28 | ． |  | $\cdots$ | 28 |  | 10 |  |  |  |
| \％ 500 |  |  |  | ．．t．．．．．． | 5 |  |  |  | 10 | ．．．．．．．．．．．．．． |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  | ． |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  | ． |  | ．．．．．．．． | 10 | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．． |  |
|  |  |  |  |  | 12 |  |  |  | 10 |  |  |  |
|  | โโ 575 |  |  |  |  |  | ．． |  | 10 |  |  |  |
|  |  |  |  |  |  |  | ． |  | 10 |  |  |  |
|  |  |  |  | ．．．． |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  | ．．．．．．．． | 10 |  | 10 |  |  |  |
|  |  |  | $\cdots$ | ．．．．．．． | ．．．．．．．． | ．．．．．．．．． | 10 | ．．．．．．．． | 10 | ， |  |  |
|  |  |  |  | ．．．．．．．． |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |

SHOE FACTORIES．

\＃Lowest，$\$ 5$ ；highest，$\$ 9$ ． $\mathrm{z}_{\mathrm{E}}$ Lowest，$\$ 4$ ；highest， 86 ．$\|\|$ Lowest，$\$ 3$ ；highest，$\$ 6$ ． IV Lowest，$\$ 5$ ；highest，$\$ 6.50$ ．

## TABLE No．5．－Establishments－Continued． SHOE FACTORIES．

|  | Subdivision of Trade． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | Beating－out boys．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 5500 | $\$ 24000$ |  |  |  |
|  | Heeling boys．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 2 | 1584 5 500 | 760 240 20 |  |  |  |
|  | Breasting and ex．nailing．．．．．．．．．．．．．．．．．．．．． |  | 1 | 960 | 46080 |  |  |  |
|  | Second lasting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 8 04 <br> 4 00 | 3859 |  |  |  |
|  | Trimming． |  | 1 | 1500 | 7200 |  |  |  |
|  | Shaving．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 1440 | 69020 |  |  |  |
|  | Edge setting boy |  | $\stackrel{1}{2}$ | 4400 | 67200 |  |  |  |
|  | Heel d burnishing b．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ， | 1 | 400 1050 | 19200 500 |  | ．．．．．．．． | ． |
|  | Acid and cutting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | ${ }^{4} 000$ | 19200 |  |  |  |
|  | Striping $\qquad$ <br> Finishing |  | 2 | ${ }^{6} 00$ | 28800 |  | ．．．．．．．．．．．．． |  |
|  | Cleaning dining bo．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 13 9 90 | 64800 39200 |  |  |  |
|  | Closing．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 4. | 400 | 19200 |  |  |  |
|  | Staying．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | ．．．．．． | ．．．．．．．．．．． |  |  | $\$ 6$ 560 50 | $\$ 288800$ 26880 |
|  | Pasting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ．．．．．．． | ．．．．．．．．．．．．． | ．．．．．．．．．． |  | 500 | 24000 |
|  | Quarter stitching．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 3 |  | 16800 220 50 |
|  | Lining making．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．． | ．．．．． | ．．． |  | $\stackrel{3}{5}$ | 400 | 19200 |
|  | Closing on．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | ．．．．．．．．．．． |  | 4 | 600 | 118800 288 |
|  | Vamping．．．． |  |  |  | ．．．．．．．．． |  |  | 19200 460 80 |
|  | Cording button holes |  |  |  |  | 2 | 500 | 240 00 |
|  | Button sewing．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | ．．．．．．．．．． | ．．．．．．．．．．．．． | 5 | 400 | 19200 |
|  | End sewing．．．．．． |  |  | ． |  | 2 | 400 | 19200 |
|  | Cutting button holes．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ．．．．． | ．．．．．．．． |  | 1 | 250 | 11800 |
|  | Working button holes．．．．．．．．．．．．．．．．．．．．．．．．．．．． | －．．．．．．．． | ．．．．．． | ．．．．．．．．．． |  | 2 | 250 | 11800 |
|  | Marking and blocking |  |  |  |  | 2 | 250 | 11800 |
|  | Packing．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 600 | 28800 |  |  |  |
|  | Floor girl．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 1 | 250 | 11800 |
|  | Engineer |  | 1 | 1000 | 64800 |  |  |  |
|  | Watchme |  | 1 | － 900 | 46800 |  | ．．．．．．．．．． |  |
|  | Shipper． |  | 1 | 900 | 39200 |  |  |  |
|  | Clerks |  | 2 | 1000 | 48000 |  | ．．．．．．．．．． |  |
|  | Bookkeeper Laborers．．．．． |  | 5 | 20 7 50 | ${ }_{360} 00$ |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 31 |  | 60 |  |  |  |  |  |  |
|  | $\qquad$ | ．．．．．．．．．． |  | 1200 | 52800 | ．．．．．． | ．．．．．．．．．．． |  |
|  |  |  |  | ${ }^{9} 000$ | ${ }_{616} 160$ | ．．．．． | ．．．．．．．．．．． |  |
|  | Lasting．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ${ }_{3}^{2}$ | 14 10 000 | 61600 440 |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 900 | 39600 |  |  |  |
|  | Tacking．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1300 | 57200 830 | ．．．．．． |  |  |
|  | McKay machine．．． |  | 1 | 1500 | 44000 |  |  |  |

## TABLE No．5．－Establishments－Continued． SHOE FACTORIES．

| 崽合 9 <br> 荡告辰 500 $B$ |  |  |  |  |  |  | Number of time workers． |  |  |  | 』 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ．．．．．．．．．．．．．． | ．．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
| ．．．．．．．．．．．．．． |  |  |  | ．．．．．．．． |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  | ． |  | 10 |  |  | 24 |
|  |  |  |  | ． |  | ．．． |  |  | 10 |  |  | 24 |
| ．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
| ．．．．．．．．．．．．．．．．． | …．．．．．．．． | ．．．．．．．． |  | ．．．．．．．．． |  | ．．．．．．．． | ．．．．． |  | 10 |  |  | 24 |
| ．．．．．．．．．．． |  |  |  |  |  |  | ． |  | 10 |  |  | 24 |
| ．．．．．．．．．． |  |  |  | ．．． |  | ．．．．． | ．．．． |  | 10 |  |  | $\stackrel{24}{24}$ |
| ．．．．．．．．．．．．．． | ． | ．．．．．．．． |  | ．．．．．．．． | ．．．．．．．． | ．．．．．．．．． | ．．．．．． |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  | ．．．．． |  | 10 |  |  | 24 |
|  |  |  |  |  |  | ．．．．．．．．． | ．．．．． |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
| ． |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
| ．．．．．．．．．．．．． | ．．．．．．．．．．． |  |  |  |  |  | ．．．．．． |  | 10 |  |  | 24 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  | ．．．．．．．．． | ．．．．．．．．． | ．．．．． | ．．．．．．．．． | 10 |  |  | 24 |
| ．．．．．．．．．．． |  |  |  |  |  |  | ．．．．．． |  | 10 |  |  | 24 |
| ．．．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  | 24 |
| － | 硣 |  | ．．．．．．．． |  | ． |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  | ．．．．．．．． | ．． | ．．．．． |  | 10 |  |  | 24 |
|  | ．．．．．．．．．．．．．． |  |  |  |  |  | ．．．．．． | …．．．．．．． | 10 |  |  | 24 |
|  |  |  |  |  |  |  | ．．．．． | ．．．．．．．．． | 10 |  |  | 24 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  | ．．．．．．． |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  | ． |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  | ．．．．． |  | 10 |  |  | 24 |
|  |  |  |  |  |  | ．．． | ．．．．．． |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  | ．．．． |  | 10 |  |  | 4 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  | ．．．．． |  | 10 |  |  | 24 |
|  |  |  |  |  |  |  | ．．．．． |  | 10 |  |  | 24 |
| ．．．．．．．．．．．．．． | ．．．．．．．．． |  |  | ．．．．．．． | ．．． |  | ．．．．． | ．．．．． | 10 |  |  | 24 |
| $8400-500$ | \＄4 00 |  | 3 | 5 | 3 | 35 | 25 |  | 10 |  |  | 48 |
|  |  |  |  |  |  |  | ．．．．． |  | 10 |  |  | 48 |
|  |  |  |  |  |  |  | ．．．．．． |  | 10 |  |  | 48 |
|  |  |  |  |  |  |  | ．．．．． |  | 10 |  |  | 48 |
|  |  |  |  |  |  |  | ．．．．． |  | 10 | ．． |  | 48 |
|  |  | ．．．．．．．． |  |  |  | ．． | ．．．．． |  | 10 | ． |  | 48 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  | …．．． | ．．．．．．．． | 10 |  |  | 48 |
|  |  |  |  |  |  |  |  | …．．．．．． | 10 |  |  | 48 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 48 |

## TABLE No. 5.-Establishments-Continued. SHOE FACTORIES.



[^34]TABLE No．5．－Establishments－Continued． SHOE FACTORIES．

|  |  |  |  |  |  |  |  |  |  | (1) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 48 |
| ．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 48 |
| ．．．．．． |  | ．．．．．．．． |  |  |  |  |  |  | 10 |  |  | 48 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 48 |
|  |  | ．．．．．．．．． |  |  |  |  |  |  | 10 |  |  | 8 |
| $\cdots \cdots$ |  |  | ．．．．．． | ． |  |  | ．．． | ．．． | 10 |  |  | 8 |
| ． | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． | ．．． |  |  |  |  | 10 |  |  | 48 |
| ．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 48 |
| ．．．．．．．．．．． |  |  |  | ．．．． |  |  |  |  | 10 |  |  | 48 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 48 |
|  |  |  | $\cdots$ |  |  | ．．．． |  |  | 10 |  |  | 48 |
|  |  |  |  |  |  |  | ．．．．．．．． |  | 10 |  |  | 48 |
| ．．．．．．．．．．． |  | ．．．．．．．．． |  |  |  |  |  |  | 10 |  |  | 48 |
| ． |  |  |  |  |  |  |  |  | 10 |  |  | 48 |
| ．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．． | ．．．．．．．． | ．．． | ．．．．．．．． |  | ．．．．． |  | 10 |  |  | 48 |
| ．．．．．．．．．．． |  |  |  |  |  | ．．．．． |  |  | 10 |  |  | 48 |
| ．．．．．．．． |  | ．．．．．．．． |  |  | ．．．．．．．． | ．．．．．． |  |  | 10 |  |  | 48 |
|  |  |  |  | 6 |  |  |  | 3 | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
| ．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  | ．．．．．．．．． | ．．．．．．．． | ．．． | ．．．．．．． | ．．．．．．．．． | 10 | ． | ．．．．．．．．．．．．． | 12 |
|  |  |  |  |  |  | ．．．． | ．． | ．．．．．．．．． | 10 |  |  | 12 |
|  | ．．．．．．．．．．． | ．．．．．．．．． | ．．．．．．．． | ．．．．．．．．． | ． | ． | ．．．． | ． | 10 |  |  | 12 |
|  | ．．．．．．．．．．． | ．．．．．．．．． | ．．．．．．．． | ．．．．．．．．． | ．．．．．．．．． |  | ．．．．．． |  | 10 |  |  | 12 |
| ．．．．．．．．．．．．．． | ．．．．．．．．．．．．． | ．．．．．．．．．． | ．．．．．．．．．． | ．．．．．．．．． | ．．．．．．．． | ．．．． | ．．．．．． | ．．．．．．．．．．．． | 10 |  |  |  |
|  |  | ．．．．．．．．．．． |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  | ． |  |  |  |  | 10 |  |  | 12 |
|  |  | ．．． |  | ．．．． |  | ．．．．．．．． | ． | ．．．．．．．．． | 10 |  |  | 12 |
|  |  | ．．．．．．． |  | ．．．．． |  | ．．．．． | ． |  | 10 |  |  | 12 |
|  |  | ．．．．．．．．． |  | ．．．．．．．．． | ． | ．．． | ． | ．．．．．．．．． | 10 |  |  | 12 |
|  |  | － |  | ．．．．．．．．．． |  | ．．．．．．．． |  | ．．．．．．．．． | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  | ． | ．．．．．．．． |  |  |  |  |  |  | 10 |  |  | 12 |
| ．．．．．．．．．．． |  | ．．．．．．．． |  |  |  |  |  |  | 10 |  |  | 12 |
| ．．．．．．．．． |  |  |  | ．．． |  | ．．．．．．．．． | ． |  | 10 |  |  | 12 |
| ．．．．．．．．．． |  |  |  | ．．．． |  | ．．．．．．．． | ．． | ．．．．．．．．． | 10 |  |  | 12 |
|  |  | ．．．．．． | ．．． |  |  | ．．．．．． |  | ．．．．．．．． | 10 |  | ．．．．．．．．．．．．．． | 12 |
| 3375 |  |  | 2 | 2 | 2 | 27 | 33 |  |  |  |  |  |
|  |  | ．．．．．．．．． | 2 | 2 | 2 |  |  |  | 10 |  |  | 14 |
| ．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 | ．．． | ．．．．．．．．．．．．．． | 14 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 14 |
|  |  |  |  |  | ．．．．．．． |  |  |  | 10 |  |  | 14 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 14 |

$\dagger$ In busy times twelve to fifteen hours per day．Extra pay allowed for overtime．

## TABLE No. 5.-Establishments-Continued. <br> SHOE FACTORIES.



[^35]TABLE No．5．－Establishments－Continued．
SHOE FACTORIES．

|  |  |  |  |  |  | Number of piece workers． |  |  | Number hours worked per day． |  | 品 | $\begin{aligned} & \text { Number of days lost time } \\ & \text { during the year-not in- } \\ & \text { cluding legal holidays. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 4 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 14 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 14 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 14 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 14 |
|  |  |  | ．．．．．．．． |  |  |  |  |  | 10 |  |  | 14 |
|  |  |  |  |  | ．．．．．．．． |  |  |  | 10 |  |  | 4 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 14 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 14 |
| ．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 4 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 4 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 14 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 4 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 4 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 14 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 14 |
|  |  |  |  |  |  |  |  |  | 10. |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 4 |
|  |  |  | ．．．．．．．． |  | ．．．．．．．． | ．．．．．．．． |  |  | 10. |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  | ．．．．．．．． |  |  |  | 10. |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| $8400-500$ | \＄2 00－2 50 |  | 4 | 17 | 18 |  |  |  | 10. |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
| ．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  | ．．．．．．．．．．．．． | ．．．．．．．．． | ．．．．．．．． | ．．．．．．．．． | ．．．．．．．．． | ． | ． |  | 10 |  |  | 72 |
|  |  |  | ．．．．．．．． | ．．．．．．．．． |  | ． | ．．．．．．．． |  | 10 |  |  | 72 |
|  | （ |  | ．．．．．．．．． |  |  |  |  |  | 10 |  |  |  |
|  | ．．．．．．．．．．．．．． |  | ．．．．．．．． |  |  | ． |  |  | 0 |  |  |  |
|  |  |  | ．．．．．．．．． | ．．．．．．．．． |  |  | ． |  | 10 |  |  | 2 |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  | ．．．．．．．．． |  |  |  |  |  |  |  | 10. |  |  | 2 |
|  | ．．．．．．．．．．．．．． |  |  |  |  | ． |  |  | 10 |  |  | 72 |
|  | ．．．．．．．． |  |  | ．．．．．．．． |  | ．．．．．．．． |  |  | 10. |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  | ．．．．．．．． |  | 10 |  |  | 72 |
|  |  |  |  |  |  | － | ．．．．．．．．． |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  | ．．．．．．．．．． |  | 10 |  |  | 2 |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  |  |  |  | 20 |

$\dagger$ In busy times，twelve to fifteen hours per day．Extra pay allowed for overtime．

## TABLE No．5．－Establishments－Continued． <br> SHOE FACTORIES．

|  | Subdivision of Trade． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ＊33 | Working button hole |  |  |  |  |  |  | \＄120 00 |
|  | ＂．boys＇shoes．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ．．．． |  |  | 1 | 300 | 12000 |
|  | Others．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ．．．． |  |  | ${ }_{3}^{1}$ | 200 400 | 80 160 160 |
|  | Stock fitiong．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | \＄900 | \＄860 00 |  | ＋ 00 | ${ }_{160} 00$ |
|  | Packing．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 600 | 24000 | 3 <br> $\cdots$ | 200 | 8000 |
|  | Floor girl ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | i | 350 | 14000 |
|  | Engineer Machini．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．．．．． | 1 | 1000 1200 | 48000 |  |  |  |
|  | Watchmen |  | 2 | 1000 | 52000 | ．．． |  |  |
|  | Shipper |  | 1 | 1000 | 40000 |  | ．．．．．．． |  |
|  | Bookkeeper |  | 1 | 1800 | 72000 | ．．．．． | ．．．．．．．． |  |
|  | Laborers |  | 3 | 750 | 30000 |  |  |  |
| *34 | Cutting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 36 |  | 1500 |  |  |  |  |
|  | ＂${ }^{\text {a }}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 1000 | 38000 | ．． | ．．．．． |  |
|  | Lasting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1500 | 57000 | ． | ．．．．．．．．．． |  |
|  | Heeling． |  | 1 | 1200 | 45600 | ． | ．．．．．．．．．．．． |  |
|  | Trimming |  | 1 | 1200 | 45600 |  |  |  |
|  | Edge setting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1200 | 45600 | ．．． | ．．． |  |
|  | Fieel burnishing．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 7 10 10 | 28500 380 | ． | ．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Closing ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 1 | 550 |  |
|  | Staying．．．． |  |  | ．．．．．．．．．． |  | 1 | 00 | 17100 |
|  |  |  |  | ．．．．． |  |  | 500 | 19000 |
|  | Lining making |  |  |  |  |  | 550 | 24700 |
|  | Closing on．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | ．．．．．．．．． |  | 1 | 550 | 21140 |
|  | Cording button holes．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ．．．．． | ．．．．．．．．．． |  | 1 | 5 50 | 21140 |
|  | Button sewing．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 1 | 400 | 15000 |
|  | End sewing．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | ．．．．．．．．． |  | 1 | 400 | 15000 |
|  | Marking linings．．．．．．． |  |  |  |  | 1 | 600 | 22800 |
|  | Working button holes．．． |  |  |  |  | 2 | 600 | 22800 |
|  | Ploor giri．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 600 | 22800 | 1 | 350 | 13300 |
|  | Engineer |  | 1 | 1000 | 38000 |  |  |  |
|  | Machinist． |  |  |  | ${ }_{380} 00$ | ．．．．． | ．．．．．．．．．． | ．．．．．．．．．．．．． |
|  | Clerk． |  | 1 | 1000 | 38000 |  |  |  |
|  | Bookkeeper．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． Laborers．．．． |  | 1 | ${ }_{7}^{15} 50$ | 57000 285 |  |  |  |
|  | Laborers．．．．．． |  |  |  |  |  | ．．．．．．． |  |
| ＊29 |  |  |  |  |  |  |  |  |
|  | Cutting． |  |  | 1800 13 50 | 84600 634 | ．．．．．． | $\cdots$ | ． |
|  | Lasting |  | 1 | 2000 | 94000 |  |  |  |
|  | Lasting．．．．．．．．．．．．．．．．．．．．． |  |  | 1650 | 77700 |  |  |  |

[^36]
## TABLE No．5．－Establishments－Continued．

## SHOE FACTORIES．

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 7 |
| ．．．．．．．．．．． | ． |  |  |  |  |  | ．． |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 2 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 2 |
| $\cdots$ |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
| ．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  | ．．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  | ．．．． |  |  |  |  | ．．．．．．． |  |  | 10 |  |  | 72 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 72 |
|  | ．．．．．． |  |  |  |  | ． |  |  | 10 |  |  | 72 |
| ．．． | ．．． |  |  |  |  |  |  |  | 10 |  |  | 72 |
| ．．．．．．．．．．． | ．．．．．．．．．．． |  |  | ．．．．．． |  |  |  |  | 10. | ．．．．．．．．．．．．．． |  | 72 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| \＄400 |  |  | 1 | 6 | 9 | 27 |  |  | $\dagger 10$ |  |  | 84 |
|  |  |  |  |  |  |  |  | …．．．．． | 10 | ．．．．．．．．．．．．． | ．．．．．．．．． | 84 |
|  | ．．．．．．．．．．．． |  |  |  |  |  |  |  | 10. |  |  | 84 |
|  |  |  |  |  |  | － |  |  | 10. |  |  | 84 |
| ． |  |  | ．．．．．．．． |  | ．．．．．．．．． | ． | ．．．．．．． | ．．．．．．．． | 10. |  |  | 84 |
| － | ．．．．．．．．．．． |  |  |  |  |  | ． | ．．．．．．．．． | 10. |  |  | 84 |
|  | $\ldots$ | ．．． | ．．．．．．．．． |  | ． | ．． | ．．．．．．．． | ．．．．．．．．． | 10 | ． | ．．．．．．．．．．．．．． | 84 |
| ．．．．．．．．．．．．．．． |  |  |  |  | ． | ．．．．．． |  |  | 10 |  |  | 84 84 |
| ．．．．．．．．．．． |  |  | ．．．．．．．． | ． | ． | ．．．． | ．．．．．．．． | ． | 10. |  |  | 84 |
|  | ．．．．．．．．．．． |  |  |  |  |  |  |  | 10. |  |  | 84 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 84 |
| ．．． | ．．．．．．．．．．． |  |  |  | ．．．．．．．．． |  |  | ．．． | 10. | ．．．．．．．．．．．． |  | 84 |
| ．．．．．．．．．． |  |  | ． |  | ． | ． |  |  | 10 |  |  | 84 |
| ．．．．．．．．．．．． |  |  | ．．．．．．． | ． | ．．．．．．．． | ．．．．．． |  | ．．．．．．．．． | 10 |  |  | 84 |
|  |  |  | ．．．．．．．．． | ．．． | ．．．．．．．． |  | ．．．．．．．．． | ．．．．．． |  |  |  | 84 |
|  |  |  | ．．．．．．．． |  |  | ． | ．．．．．．．． | ．．．．． | 10 |  |  | 84 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 84 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 84 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 84 |
|  |  |  | ．．．．．．．． |  |  | ． |  |  | 10. |  |  | 84 |
|  |  |  |  |  |  | ． |  | － | 10. |  |  | 84 |
|  |  |  | ．．．．．．．． |  | ．．．．．．．．． |  |  | ． | 10. |  |  | 84 |
|  |  |  | …．．．．．． |  | …．．．．．． | ． | …．．．．．．． | ．．．． | 10. |  |  | 84 |
|  |  |  |  |  | … | ．．．．．．．． |  |  | 10. |  |  | 84 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 84 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 84 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10. |  |  | 84 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 84 |
|  |  | 12 | 9 | 14 | 16 | 51 | 23 |  | 10. |  |  |  |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 24 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 24 |
|  |  |  | ．．．．．．．． |  |  |  |  |  | 10. |  |  | 24 |
|  |  |  |  |  |  |  |  | ．．．．．．．．． | 10 |  |  | 24 |

$\dagger$ Twelve to fifteen in busy time．

## TABLE No. 5.-Establishments-Continued. SHOE FACTORIES.



TABLE No. 5.-Establishments-Continued.
SHOE FACTORIES.


## TABLE No．5．－Establishments－Continued． SHOE FACTORIES．

|  | Subdivision of Trade． |  |  | छ <br> ๘ <br> 룬 <br> 무영 <br> ， <br> 家 <br> $\stackrel{\circ}{\circ}$ <br> 일 <br> $\%$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ＊37 |  | 1，310 |  |  |  |  |  |  |
|  | Lasting |  | 20 | \＄15 00 | \＄675 00 |  |  |  |
|  | ＂${ }^{\text {a }}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 40 | 1200 | 54000 | ．．．．． | ．．．．．．．．．． |  |
|  | Heeling |  | 18 | 1300 | 58500 |  |  |  |
|  | ＂${ }^{\text {\％}}$ |  | 42 | 1000 | 45000 | ．． |  |  |
|  | Burnish |  | 40 | 900 | 40500 | ．．．．． |  | ．．．． |
|  |  |  | 35 | 1600 1400 | 720 630 00 |  |  |  |
|  |  |  | 45 | 1200 | 54000 |  |  |  |
|  | $\qquad$ |  | ．． |  |  | 50 <br> 55 | $\$ 8$ 700 | $\begin{array}{r}\$ 360 \\ 31500 \\ \hline 00\end{array}$ |
|  | ＂${ }^{\text {c }}$ ． |  | ．．．． |  |  | ， 75 | 600 | 27000 |
|  |  |  | 25 |  |  | 50 | 400 | 18000 |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 50 | 1200 | 54000 | ．．．．． |  | ．．．．．．．．．．．．．．．．． |
|  | Operating | ．．．．．．．． | 40 | 1400 | 63000 | ． | ．．．．．．．．．．． | ．．．．．．．．．．．． |
|  | Finishing |  | 20 | 1500 | 67500 |  |  |  |
|  |  |  | 25 | 1200 | 54000 | ．．．．． |  |  |
|  | Cuttin | ．．．．． | 15 | 900 | 40500 |  |  |  |
|  |  |  | 35 | 1200 | 54000 |  |  |  |
|  |  |  | 30 | 1000 | 45000 |  | ．．．．．．．．． |  |
|  | tock fitting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | 50 | 1200 | 45000 |  | ．．．．．．．．．．． |  |
|  | ＂ |  | 25 | 800 | 360.00 | ．．．．． |  | ．．．．．．．．．．．．． |
|  | McKay machi | ．．．．．．．． | 40 | 1200 | 540 |  |  |  |
|  | Packers．．． |  | 25 | 800 | 36000 |  |  |  |
|  | Edge setting |  | 20 | 1500 | 67500 | ．．．．． |  |  |
|  | ＂ |  | ， | 800 | 36000 | ．．．．． |  |  |
|  | Laborers．． |  | 100 | 750 | 33750 |  |  |  |
|  | Others．．．． |  | 50 | 750 | 33750 | 25 | 500 | 22500 |
| ＋36 | Cutting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 68 | 2 | 1400 | 68600 |  |  |  |
|  | Lasting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 1450 | 71000 | ．．．．．． |  |  |
|  | Tacking． |  | 1 | 1200 | 58800 | ．．．．． |  |  |
|  | McKay machine．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1200 | 58800 |  | ．．．．．．． |  |
|  | Goodyear＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1200 | 58800 |  |  |  |
|  | Beating out． |  | 1 | 1200 | 58800 |  |  |  |
|  | B．and ex．nailing |  | 1 | 1500 | 73500 |  |  |  |
|  | Second lasting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1600 | 78400 |  |  |  |
|  | Trimming．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 18.50 | 80850 |  |  |  |
|  | Edge setting．．． |  | 1 | 1800 | 88200 | ．．．．．．． |  |  |
|  | Heel burnishing． |  | 1 | 1600 | 78400 | ． |  |  |
|  | Acid and cutting |  | 1 | 1200 | 58800 |  |  |  |
|  | Finishing ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1800 | 88200 |  |  |  |
|  | Cleaning lining． |  |  |  |  | 1 | 700 600 | $\begin{aligned} & 34300 \\ & 29400 \end{aligned}$ |

＊Various small firms．Team and machine work．† Machine work．

TABLE No. 5.-Establishments-Continued. SHOE FACTORIES.


## TABLE No．5．－Establishments－Continued． SHOE FACTORIES．

|  | Subdivision of Trade． |  |  |  |  | i 品 0 0 H H 品 号 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ＊ 36 |  |  | ．．．． |  |  | 2 |  | \＄274 00 |
|  | Quarter stitching．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ．．．．．．． |  |  | 2 | 650 | \＄21850 |
|  | Lining making．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | ， | 700 | 34300 |
|  | Vamping |  |  |  |  | 1 | 900 | 44730 |
|  | Cording button holes．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 2 | 650 | 31850 |
|  |  |  |  |  |  | $\stackrel{1}{2}$ | 800 500 | 39200 269 |
|  | Button sewing |  |  |  |  | 1 | 700 | 34300 |
|  | End sewing |  |  |  |  | 2 4 | 800 | 37300 |
|  | Marking linings． |  |  |  |  | 1 | 700 | 29400 34300 |
|  | Working button holes．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 2 | 650 | 34300 31850 |
|  | Marking and blocking．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 1 5 | 900 500 | 44100 |
|  | Stock fitting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | $\$ 1800$ | \＄882 00 |  |  |  |
|  | Packing |  | 2 | 800 | 735 390 |  |  | ．．．．．．．．．． |
|  | Floor girls |  |  |  |  | 3 | 450 | 22050 |
|  | Engineer． |  | 1 | 1000 | 520 70200 |  |  |  |
|  | Watchman |  | 1 | 1000 | 52000 |  |  | ． |
|  | Shipper |  | 1 | 800 | 41600 |  |  |  |
|  |  |  |  |  |  |  |  | ． |
| ＋35 |  |  | 1 | 2000 | $\begin{aligned} & 90000 \\ & 67500 \end{aligned}$ | ．．．．．．． | ．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．．． |
|  | Cuting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |
|  | Lasting． |  | 1 | 1500 2000 | 675 900 00 | ．．．．．．． |  | ．．．．．．．．．．．．．．．．．． |
|  |  |  | 3 | 1800 | 810 630 600 | ．．．．．．． | ．．．．．．．．．．．．．．． |  |
|  | Tacking |  | 5 <br> 1 | 1400 | 63000 67500 | ．．．．．． |  | ．．．．．．．．．．．．．．．．．．．． |
|  | MeKay mach |  |  | 1500 1200 | $\begin{aligned} & 67500 \\ & 54000 \end{aligned}$ | ．．．．．．． | …．．．．．．．．．．． | ．．．．．．．．．．．．．．．．．．．． |
|  | Beating | ．．．．．．．． | 2 | － 1200 | 540 67500 |  |  | ．．．．．．．．．．．．．．．．．． |
|  | Hee ${ }^{\text {a }}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 3 | 1800 1500 | $\begin{aligned} & 81000 \\ & 81500 \\ & 675 \end{aligned}$ | ．．．．．．．． | ．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．．．． |
|  | Second lasting |  | 2 1 1 | 1500 |  | ．．．．．．． |  | …．．．．．．．．．．．．． |
|  | Trimming． |  | 1 | 2000 1600 | $\begin{aligned} & 90000 \\ & 72000 \end{aligned}$ | ．．．．．． | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．． |
|  | Heel scouring． |  | 1 | ［15 <br> 15 <br> 18 <br> 18 <br> 00 | 67500 | $\cdots \cdots .$ | …．．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Edge setting． |  |  | 1815001500 | 810 675 00 | ．．．．．．． |  | ．．．．．．．．．．．．．．．．． |
|  | Acid and cutting |  | 1 |  | 60750 |  |  |  |
|  | Striping．．．．． |  | 2 | $\begin{array}{r} 1350 \\ -1400 \end{array}$ |  | ．．．．．．． | ．．．．．．．．．．． |  |
|  | Finishing．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1135 | $\begin{array}{ll} 20 & 00 \\ 18 & 00 \\ 15 & 00 \end{array}$ | $\begin{aligned} & 90000 \\ & 81000 \\ & 67500 \end{aligned}$ | $\ldots$ | ．．．．．．．．．．．．．．． |  |
|  | ＂ |  |  |  |  |  |  |  |
|  | Cleaning lining． |  | ．．．．． |  |  | － $\begin{array}{r}1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 1 \\ 2\end{array}$ | 900500700700700500800600 | 4050023000315003150031500225003600027000 |
|  | Closin |  |  |  |  |  |  |  |
|  | ting |  |  |  |  |  |  |  |
|  | Quarter stitching |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

[^37]TABLE No．5．－Establishments－Continued．
SHOE FACTORIES．

|  |  |  |  |  |  |  |  |  |  |  | 出 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
| ．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  | ．．．．．．． | ．．．．．．． |  | 10. |  |  | 12 |
|  |  |  |  |  |  | ．．．．．．．． | ．．．．．．．． |  | 10 |  |  | 12 |
|  |  |  |  |  |  | ． |  |  | 10. |  |  | 12 |
|  |  |  |  |  |  | ． |  |  | 10 |  |  |  |
|  |  |  |  | ． |  | ．． |  |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  |  |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10. |  |  |  |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10. |  |  |  |
| \＄3 00－4 00 | \＄3 00 | 10 | 7 | 16 | 12 | 21 | 84 |  | 10. |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 36 |
| ．．．．．．．．．．．．．． |  |  |  | ．．．．．．．．． |  |  |  |  | 10. |  |  | 36 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  |  | ．．．．．．．． | ．．．．．．．． |  |  |  | 10. |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  | －． |  |  |  |  |  | 10. |  |  | 36 <br> 36 |
|  |  |  |  |  |  |  |  |  | 10. |  |  |  |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  | ．．．．．．．． |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  | ．．．．． |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  | ．．．．．．． |  | ．．．．．．． |  |  |  | 10. |  |  | 36 |
|  |  |  | ．．．．．．．．． |  | ．．．．．．．． |  |  |  | 10. |  |  | 36 |
|  |  | ． | ．．．．．．． |  | ．．．．．．．．． |  | …．．．．．． |  | 10. |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 36 36 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 6 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | ${ }_{36}$ |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  |  |  | ．．．．．．．． |  |  |  | 10. |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10. |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 26 |
|  |  |  |  |  |  |  |  |  |  |  |  | 86 |

$\ddagger$ Worked all the year．

## TABLE No．5．－Establishments－Continued． SHOE FACTORIES．

|  | Subdivision of Trade． |  |  |  |  |  |  | ஸ゙か <br> $80_{0}$ <br> 名莦 <br> มี่ <br> జ్ <br> 國䓵 <br> ๗ <br> む్త유 <br> 花 $\geqslant$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ＊35 |  |  |  |  |  |  |  |  |
|  | Closing－on． | ．．．．．．．．．． | ． |  |  | 2 | 8650 650 | \＄29250 |
|  |  |  | ．．．． |  |  |  | 800 | 36000 |
|  | Vamping ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | ．．．． | ．．．．．．．．． | ．．．．．．．．． | 2 | 700 | 31500 |
|  | Cording button holes．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | ．．．．． |  |  | 1 | 700 | 31500 |
|  | Buton sewing．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ．． |  |  | 3 | 800 | 360 270 00 |
|  | Cutting button holes．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 1 | 700 | 27000 31500 |
|  | Marking lining．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | ．．．．． | ．．．．．．．．．． |  | 2 | 700 | 31500 |
|  | Working button holes．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 3 | 750 | 33750 |
|  | Stock fitting．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | 1 | \＄20 00 | $\$ 90000$ |  | 6 | 29250 |
|  | ＂${ }_{\text {＂}}$／．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | 3 | 1800 | 81000 | ．．． |  |  |
|  | Packing ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1400 | 630 <br> 540 <br> 00 | ．．．．． | ．．．．．．．．． |  |
|  | Floor girls．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | 3 | 450 |  |
|  | Engineer．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 1100 | 57200 |  |  | 20250 |
|  | Machinist．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．． | 1 | 1200 | 612 46800 | ．．．．． | ． |  |
|  | Shipper．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 900 | 46800 44200 | ．．． | ． |  |
|  | Clerk ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 1 | 850 | 44200 832 | ．．．．．． |  |  |
|  | Bookkeeper |  | 1 | 1800 | 93600 |  |  |  |
|  | Laborers．．． |  | 3 | 750 | 39000 |  |  |  |

RUBBER BOOT AND SHOE FACTORIES．


IRON FOUNDRY．


[^38]
## TABLE No．5．－Establishments－Continued． <br> SHOE FACTORIES．

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 36 |
| ．．．．．．． | ．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 36 |
| ．．．．．．．．．．． | ．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  | 36 36 |
|  | ．．．．．．．．．．． | ．．．．．． | ．．．．．．．． | ．．．．．．．． |  |  |  |  | 10 |  |  | 36 |
| ．．．．．．．．．．．．．．． | ．．．． |  |  | ．．．．．．．． | ．．．．．．．．． | ．．．．．．．．． |  |  | 10 |  |  | 36 |
|  | ．．．．．．．．．．．． | ．．．．．．．．． |  | ．．．． | ． |  |  |  | 10 | ．．．．．．．．．． |  | 36 |
|  |  |  |  |  |  |  | ．．．．．．．．．． |  | 10 |  |  | 36 |
|  | ．．．．．．．．． | ．．．．．．．． | ．．．． |  |  |  |  |  | 10 |  |  | 36 |
|  | ．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  |  | ．．．．．． |  |  | 10 |  |  | 36 |
|  | ．．．．．．．．．．．．． |  |  |  | ．．．．．．．．． | ．．．．．． | ．．．．．．．． |  | 10 | ．． |  | 36 |
|  | － |  |  |  |  |  |  |  | 10 |  |  | 36 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 18 |
| ．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 18 |
|  | ．．．．．．．．．．． |  | ．．．．．．．． | ．．．．．．．． | ．． | ．．．．．．．． |  |  | 10 | ．．．．．．．．．．．．． |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | ．．．．．．．．．． |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

RUBBER BOOT AND SHOE FACTORIES．


IRON FOUNDRY．

|  |  |  |  |  |  |  | 20 |  | 10 |  |  | 26 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ．．．． |  |  |  |  |  | 10 |  |  | 26 |
|  |  |  | ．．．．．．．． | ．．．．．．．．．．． |  | ．．．．．．．．． |  |  | 10 |  |  | 26 |
|  | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．．． |  |  | ．．．．．．．．． |  |  | 10 |  |  | 26 |
|  |  |  | ， | ．．．．．．．． | ． | ． |  |  | 10 |  |  | 26 |
| ．．．．．．．．．．． |  | ．．．．．．．．． |  | ．． | ． | ． | ．．．．．．．． | ．．．．．．．．． | 10 |  |  | 26 |
| ．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．．． |  | ．．． | ．．．．．．．． | ．．．．．．．． | ．．．．．．．． | ．．．．．．．．． | 10 | ．．．．．．．．．．．．．． |  | 26 |
|  | ．．．．．．．．．．． | ．．．．．．．．． | ．．．．．．．． | ． | ． | $\cdot$ | ． | ．．．．．．．．． | 10 |  |  | 26 |
|  | ．． |  |  | ． | ． | ． | ．．．．．．．．． | ．．．．．．．． | 10 |  |  | 26 |
|  |  |  |  | ……． |  |  |  |  | 10 | ． |  | 26 |
|  |  |  |  | …… |  |  |  |  | 10 |  |  | 26 |
| $\cdots$ |  |  |  |  |  |  |  |  | 10 |  |  | 26 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | ${ }_{26}^{26}$ |

## TABLE No．5．－Establishments－Continued． IRON（Job and Pipe）FOUNDRY．

| $\begin{aligned} & \text { 岕 } \\ & \text { 品 } \\ & \text { ㄹ } \\ & \text { 영 } \end{aligned}$ | Subdivision of Trade． |  |  |  | ఢூ <br> ${ }_{80-1}^{80}$ <br> 픕 <br> む゙ミロ் <br> ごっか <br> 鳥荡 <br> む゙ち <br> む్ 『ొ <br> 던옹 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 45 | Moulders | 131 | 31 | \＄1500 | \＄735 00 |  |  |  |
|  | Core makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 20 | 1500 | 73500 |  |  |  |
|  | Helpers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | 35 | 900 | 44100 | ．．．． |  |  |
|  | Cupola men．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | 4 | 1000 | 49000 | ．．．． | ．．．．．．．．．． |  |
|  | Carpenters． |  | 5 | 950 1400 | 46500 | ．．． | ．．．．．．．．．．． |  |
|  | Laborers． |  | 20 | 850 | 41650 | ．．．．． | ． |  |
|  | Machinists．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． |  | 1200 | 58800 |  |  |  |
|  | Blacksmiths．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 1400 | 68600 | ．．．．． | ．．．．．．．．．． |  |
| 46 | Moulders．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 609 | 92 | 1500 | 69000 |  |  |  |
|  | Core makers．． |  | 68 | 1500 | 69000 |  |  |  |
|  | Crane runners |  | 17 | 1000 | 46000 | ．．．．． |  |  |
|  | Shovelers． |  | 17 | 900 | 414 C0 |  |  |  |
|  | Head ramı | ．．．．．．．． | 17 | 900 | 41400 | ．．．．． |  |  |
|  | Clampers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | 17 17 | 900 900 | 41400 41400 | ．．．．． | ．．．．．．．．．． |  |
|  | Rammers． |  | 51 | 900 | 4140 |  |  |  |
|  | Laborers．． |  | 119 | 800 | 36800 | ．．．．． |  |  |
|  | Cleaners． |  | 35 | 1000 | 46000 | ．．．．．． |  |  |
|  | Helpers．．．．．．． |  | 134 | 900 | 41400 |  |  |  |
|  | Cupola men．．． |  | 15 | 1000 | 46000 |  |  |  |
|  | Loom moulders．． |  | 10 | 2000 | 92000 |  |  |  |

IRON PIPE FOUNDRY．

| 47 | Moulders．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．｜ | 267 | 52 | \＄14 10 | \＄690 90 | ．．．．．． | ｜．．．．．．．．．．． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Core makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 23 | 1410 | 69090 |  | ．．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Helpers． | ．．．．．．．．． | 73 | 900 | 44100 |  |  |  |
|  | Cleaners．． |  | ${ }^{6}$ | 900 | 44100 |  |  |  |
|  | Cupola men |  | 12 | 1000 | 49000 |  |  |  |
|  | Machinists． |  | 21 | 1250 | 61250 |  |  |  |
|  | Blacksmiths． |  | 6 | 1400 | 68600 |  |  |  |
|  | Carpenters． |  | 12 | 1500 | 73500 |  |  |  |
|  | Laborers． |  | 55 | 800 | 39200 |  |  |  |
|  | Loom moulders．． |  | 5 | 1800 | 88200 |  |  |  |
|  | Head moulder． | ．．．．．．．．． | 1 | 2200 | 1，028 00 |  | ．．．．．．．．．．． |  |
|  | ＂core m | ．．．．． | 1 |  | 1，028 00 |  |  |  |
| 48 | Moulders | 252 | 52 | 1660 | 83000 |  |  |  |
|  | Core mak |  | 25 | 1660 | 83060 |  |  |  |
|  | Helpers．．．． |  | 65 | 900 | 45000 |  | ．．．．．．．．．．． |  |
|  | Cupola men．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 10 | 1000 | 50000 |  |  |  |
|  | Cleaners．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．． | 9 | 800 | 40000 |  |  |  |
|  | Carpenters．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 55 | 14 7 7 50 | 700 375 00 |  |  |  |
|  | Machinists． |  | 19 | 1200 | 60000 |  |  |  |
|  | Blacksmiths． |  | 5 | 1450 | 72500 |  |  |  |

## TABLE No．5．－Establishments－Continued． IRON（Job and Pipe）FOUNDRY．

|  |  | H \＃ Z कั⿱宀㠯犬 <br> 岕券日息云 |  |  |  | Number of piece workers. |  |  |  |  | 出 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 11 | 20 |  | 10 |  |  |  |
|  |  |  |  |  |  | 11 | 9 |  | 10 |  |  |  |
|  | ．．．．．．．．．．． | ．．．．．．．． |  | ．．．．．．．．． |  |  | 35 |  | 101／2 |  |  | 18 |
|  |  |  |  |  | ． |  | 4 |  | 9 |  |  | 18 |
|  |  |  |  |  |  |  | 9 |  | 9 |  |  | 18 |
|  |  | ．．．．．．．． |  |  |  |  | 5 |  | 10 | ．．．．．．．．．．．． |  | 8 |
|  |  | ．．．．．．．．． |  |  | ．．． |  | 5 |  | 10 |  |  | 18 |
| ．．．．．．．．．．． |  |  |  |  |  |  | 2 |  | 10 |  |  | 18 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 5 | 40 |  | 11 |  | $10 \mathrm{p} . \mathrm{c}$ | 24 |
|  |  |  |  |  |  | 68 |  | 4 | 11 |  |  | 24 |
|  |  |  |  |  |  |  |  | 1 | 11 |  |  | 24 |
|  |  |  |  |  |  |  |  | 1 | 11 |  |  | 4 |
|  |  |  |  |  |  |  |  |  | ．．．．． |  | 10 | 24 |
|  |  |  |  |  |  |  |  | 1 |  |  |  | 24 |
|  |  |  |  |  |  |  |  | ， | 11 |  | 10 | 24 |
|  |  |  |  |  |  |  |  |  |  |  | 10 | 24 |
|  |  |  |  |  |  | 30 |  |  |  |  | 10 ＂ | 24 |
|  |  |  |  |  |  |  |  | 2 |  |  | 10 ＂ | 24 |
|  |  |  |  |  |  |  |  |  |  |  | 10 ＂ | 24 |
|  |  |  |  |  |  |  |  |  |  |  | $1{ }^{\prime \prime}$ | 24 |

IRON PIPE FOUNDRY．


## TABLE No．5．－Establishments－Continued． MACHINE SHOPS．

|  | Subdivision of Trade． |  |  |  | O゙M気等玉゙も あ゙ゴ匡운 む゙き 언요 |  |  | 需 むฟ <br>  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ＊ 50 | Machinis | 74 |  |  |  |  |  |  |
|  |  |  | 7 | 1500 | 72000 | ．．．． |  |  |
|  | ＂$\quad$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 6 | 1200 | 54600 | ．． |  |  |
|  | Helpers．． |  | 5 | 1000 | 42000 | ．．． |  |  |
|  | \％．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 7 |  | ${ }_{360}^{384} 00$ | ．．．． | ．．．．．．．．．． | ．．．．．．．．．．．．． |
|  | Laborers． |  | 11 | 750 | 36000 | ． |  |  |
|  | Oversee |  | $\stackrel{8}{8}$ | 2500 | 1，200 00 | ．．．．． |  |  |
|  | Others．． |  | 4 | 900 | 46800 | ．．．．．．． |  |  |
|  | Engineers．．． |  | ） | 1200 | 54600 | ．． |  |  |
| $\dagger 51$ |  | 175 |  |  |  |  |  | ．．．．．．．．．．．．．． |
|  | Machisist．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．．．．． | 14 | 1250 | 62500 | ．．．．．． | ．． | ．．．．．．．．．．．．．． |
|  | ＂، ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 16 | 11100 | 55000 | ．．．．．． |  | ．．．．．． |
|  | Blacksmiths．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．．．．． | 5 | 2000 | 1，000 00 | ． |  |  |
|  | Helpers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 1500 | 75000 | ．．．．．． | ． | ．．．．．．．．．．．．． |
|  | \＃1 ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 21 | 850 | 42500 |  |  |  |
|  | Laborers． |  | 22 | 750 | 47500 | ． |  | ．．．．．．．．．．．．．．． |
|  | Others．．．． |  | 11 | 800 | 4000 | ．．．．． |  |  |
|  | Overseers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 30 900 90 | $\begin{array}{r}1,500 \\ 494 \\ \hline 00\end{array}$ | ．．．．．． |  |  |

SHEET IRON AND WIRE MILLS．



| 20 | \＄17001 | 814200 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 2400 | 62400 |  |  |  |
| 2 | 1900 | 49400 |  |  |  |
| 2 | 950 | 24700 | ．．．． | ．．．．．．．．．．．． | ．．．．．．．．．．．．．． |
| 2 | 1600 | 41650 | ．．．．．． |  | ．．．．．．．．．．．．． |
| 2 | 800 | 20800 | ．．．．．． |  | ．．．．．．．．．．．．．． |
| 4 | 1500 | 39000 | ．．．．． |  |  |
| 4 | 800 | 20800 | ．．．．．． | ．．．．．．．．．．． | ．．．．．．．．．．．．．． |
| 2 | 1400 |  | ． |  |  |
| 6 | 1200 | 31200 |  |  |  |
| 4 | 1700 | 44200 | ．．．．．． |  |  |
| 4 | 850 | 22100 | ．．．．． |  |  |
| 2 | 3700 | 96200 | ． |  |  |
| 6 | 1750 | 45500 | ， |  |  |
| 2 | 8 |  |  |  |  |

＊Three establishments．$\dagger$ This represents the number of workmen and the wages receivad at three establishments in the same town．

## TABLE No. 5.-Establishments-Continued. MACHINE SHOPS.



SHEET IRON AND WIRE MILLS.

|  |  |  |  |  |  | 20 |  |  |  |  |  | 154 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| .............. |  |  |  |  |  |  |  |  |  |  |  | 154 |
| . |  |  |  |  |  | 2 |  |  |  |  |  | 154 |
|  | ............... | ............ |  |  | ... | 2 |  | ......... |  | . | .............. | 154 |
|  |  |  |  |  |  | 2 | .. | .......... | .......... |  |  | 154 |
|  | ........... |  |  |  |  | 4 |  | ......... | ......... |  |  | 154 |
|  |  |  |  |  |  | 4 |  | . |  |  |  | 154 |
|  | .. |  |  |  |  | 2 |  | . |  |  |  | 154 |
|  | ........... | ... | ......... |  |  | 6 | ... | . |  |  |  | 154 |
|  |  |  |  |  |  |  |  |  | . |  |  | 154 |
|  |  |  |  |  |  | 2 |  |  |  |  |  | 154 |
|  |  |  |  |  |  | 6 |  |  |  |  |  | 154 154 |
|  |  |  |  |  |  |  |  |  |  |  |  | 154 |

## TABLE No．5．－Establishments－Continued． <br> SHEET IRON AND WIRE MILLS．

|  | Subdivision of Trade． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 53 | Striking in on 10 －inch rolls．．．．．．．．．．．．．．．． |  | $\stackrel{2}{2}$ | $\$ 847$ |  |  |  |  |
|  | Reeling rods on 10 inch rolls．．．．．．．．．．．．．．．．．． | ．．．．．．．．． | $\stackrel{2}{2}$ | 1400 847 | ．．．．．．．．． | ．．．．． |  |  |
|  | Running hook．．．．．．．．．．．．．．．．．．．．． |  | 12 | 566 | ． |  |  |  |
|  | Stocking up．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | ， | 638 |  |  |  |  |
|  | Heating billets， 8 －inch rolls．．．．．．．．．．．．．．．． | ．．．．．．．． | 1 | 1600 | \＄116 00 | ．．．．． |  |  |
|  | Helper＂＂${ }^{\text {Hen }}$ |  | ， | 800 | 20800 | ．．．．． |  |  |
|  | Finishing Woughing | ．．．．．．．．． | 3 | 27 <br> 1200 <br> 10 | 70200 312 | ．．．．．． |  |  |
|  | Wire drawer． |  | 1 | 1600 | 70400 |  |  |  |
|  | ＂ 16 －inch biock | ．．．．． | 28 | 1300 | 43800 |  |  |  |
|  | Fine wire drawers．．．．．．．．．． | ． | 10 | 1300 | 43800 | ．．． | ．．．．．．．．． | ．．．．．．．．．．．．． |
|  | －4 | ．．．．． | 5 | 1300 | 43800 | ．．．．．． | ． |  |
|  | Machinists． | ．．．．．． | 11 | 1230 | 61500 | ．．．．． | ．．．．．．．．． | ．．．．．．．．．．．．． |
|  | Engineer |  | 4 | 1050 | 52500 | ．．．．．．． |  |  |
|  | Firemen． |  | 8 | 1000 | 50000 | ．．．．． |  |  |
|  | Hammer runne |  | 4 | 847 | 29645 | ．．．．． |  |  |
|  | Hooking up．．．．．．．．．．．．．．．．．．． |  | － 46 | 687 | 24045 |  |  |  |
|  | Dragging off and stacking． |  | 4 | 687 | 24045 |  |  |  |
|  | Laborers． |  | 60 | 690 | 24150 |  |  |  |

SHEET IRON AND NAIL WORKS．

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Heaters．． |  | ${ }_{4}^{2}$ | $\begin{array}{r}513 \\ 1190 \\ \hline\end{array}$ | $\$ 468$ 428 40 |  |  |  |
| ＂，helpers |  | 2 | 800 | 31600 |  |  |  |
| Helpers |  | 4 | ${ }_{11} 110$ | ${ }_{390}^{257} 0$ |  |  |  |
| Roller．．．．．．．． |  | 1 | 800 | 31680 |  |  |  |
| Catchers． |  | $\stackrel{2}{2}$ | 800 | 31680 27720 | ．．．．． |  |  |
| Hooker． |  | 1 | 660 | 23760 | ． |  |  |
| Sheet layers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 2 | 460 660 | 123760 |  |  |  |
| ＂ |  | 2 | 440 | 158 285 285 56 |  |  |  |
| unner down． |  | 1 | 660 | ${ }_{237}^{230}$ |  |  |  |
| Scraper．．． |  | 1 | 2 1 1 75 | 90 6300 |  |  |  |
| Stokers |  | 2 | 600 | 21600 | ．．．．． | ．．．．．．．．． |  |
| te she |  | 2 | － 800 | 29700 |  |  |  |
|  |  | 2 | 660 | 23760 |  |  |  |
| Kelp shearer． |  | 2 | $\begin{array}{r}16 \\ 715 \\ \hline 15\end{array}$ | 25740 |  |  |  |
| Roughers． |  | 2 | 1200 | 43400 |  |  |  |
|  |  | 2 | 1000 | 360 |  |  |  |

## TABLE No．5．－Establishments－Continued． SHEET IRON AND WIRE MILLS．

|  |  |  |  |  |  | Number of piece workers. | Number of time workers． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 2 |  |  |  |  |  |  |
|  |  |  |  |  |  | 2 |  |  |  |  |  | 154 |
|  |  |  |  |  |  | 2 |  |  |  |  |  | 154 |
|  |  |  |  | ．．．．．．．．．． | ．．．．．．．． | 12 | ． |  |  |  |  | 154 |
|  |  |  |  |  |  | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  | 1 |  |  |  |  |  | 154 |
|  |  |  |  |  |  | 1 |  |  |  |  |  | 154 |
|  |  |  |  | ．．．．．．．． |  | 1 |  |  |  |  |  | 154 |
|  |  |  |  |  |  | 28 |  |  |  |  |  | 154 |
|  |  |  |  |  |  | 10 | ． |  | ．．．．．．．． |  |  | 154 |
|  |  |  |  |  |  | 10 |  | ．．．．．．．． |  |  |  | 52 |
|  |  |  |  |  |  |  | 11 | 11 | ．．．．．．．．．．． | ．．．．．．．．．．．．．．． |  |  |
|  |  |  |  |  |  |  |  |  | ．．．．．．．．．．． |  |  |  |
|  |  |  |  |  |  |  | 8 |  | ．．．．．．．．．．． |  |  |  |
|  |  |  |  |  |  |  | ．．．．．．．． |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 4 |  | ．．．．．．．．．．．．．．．．．．．． |  | ＋103 |
|  |  |  |  |  |  |  |  | 16 |  |  |  | ＋103 |
|  |  |  |  |  |  |  |  | 4 |  |  |  | ＋103 |
|  |  |  |  |  |  |  |  |  |  |  |  | $\dagger 103$ |

SHEET IRON AND NAIL WORKS．


F Full time．$\quad$ These men only made eleven days in two weeks when steadily employed．

## TABLE No．5．－Establishments－Continued． <br> SHEET IRON AND NAIL WORKS．

| $\begin{aligned} & \dot{\Delta} \\ & \text { o } \\ & \text { 品 } \\ & \text { © } \\ & \dot{0} 0 \end{aligned}$ | Subdivision of Trade． |  | Number of men． | 云 <br> $\infty$ <br> $\stackrel{4}{4}$ <br>  | 世゙ロ <br> $\stackrel{8}{6 \rightarrow-1}$ <br> 兌 <br> 岂ぞロ <br>  <br> 路苔 <br> むも <br> జ్ర్ 릴 <br> 던옹 | Number of women． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 45 | Pudlers． | 140 | 10121234222222221122222110 |  | \＄160 00 |  |  |  |
|  | Puarers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | $\begin{array}{r}\$ 13 \\ 11 \\ \hline 10 \\ \hline\end{array}$ |  | ．．．．． |  |  |
|  | ＂ ＂helpers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．．． |  | 1050 | 37800 | ．．．． |  |  |
|  | Rollers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 715 810 | 25740 316 80 | ．．．．． | ．．．．．．．．．． | ．．．．．．．．．．．．． |
|  | Catchers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．．． |  | 600 | 21600 | ．．．．．． |  | ．．．．．．．．．．．．．．．． |
|  | Catchers | ．．．．．．．．． |  | 880 | 31680 | ．．．．． |  | ．．．．．．．．．．．．．．．． |
|  | Hookers |  |  | 660 | 23760 | ． |  | ．．．．．．．．．．．．． |
|  |  |  |  | 440 | 15840 | ．．．．． | ． |  |
|  | ， |  |  | 5 | 18000 |  | ．． | ．．．．．．．．．．．． |
|  | Squeezer |  |  | 715 | 25740 |  |  |  |
|  | Engineers | ．．．．．．．． |  | 1200 | 15840 |  | ．．．．．．．．．． | ．．．．．．．．．．．．． |
|  | Water tender |  |  | 1036 | 37296 | ．．．．． |  |  |
|  | Stackers．．．．．．．． |  |  | 715 | 25740 | － | ．．．．．．．．． |  |
|  | Weighers．．．．．． | ．．．．．．．．． |  | 715 | 25740 |  | ．．．．．．．．． | ．．．．．．．．．．．．． |
|  | Superintendent．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 2000 | 1，010 00 | ．．．． | ．．．．．．．．． |  |
|  | Nailers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 3000 20 | 1，080 00 | ． | ．．．．．．．．．． |  |
|  | ، ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  | 1000 | 36000 | ． | ．．．．．．．．．． |  |
|  | Feeders． |  |  | 800 | 28800 |  |  |  |
|  |  |  |  | 300 | 10800 |  |  |  |
|  | Stokers． | ．．．．．．．．． |  | 715 | 25740 | ．．．．．． | ． | ．．．．．．．．．．．．． |
|  | Shakers |  |  | 1100 | 39600 | ． |  |  |
|  | Wheelers． |  |  | 330 | 11880 |  |  |  |
|  | Engineers． |  |  | 1200 | 43200 |  |  |  |
|  | Blacksmiths |  |  | 1500 | 78000 |  |  |  |

POTTERIES．

| 55 ／Clay | 3 | 1 | \＄1600 | \＄704 00 | －．．．．． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mould makers and modelers．． | 3 | 1 | 20 1200 00 | 94000 56400 |  |  |  |
|  |  | 1 | 900 | 42300 |  |  |  |
| Jiggermen plat | 10 | 6 | 3040 1850 | 1,06750 64750 |  |  |  |
| essers | 26 | 4 | 2000 | 70000 | ．．．．．． |  |  |
| ＂． |  | 5 | 1800 | 63000 |  |  |  |
|  |  | ${ }_{8}^{6}$ | 1600 1500 | 56000 |  | ．．．．．．．．．．． |  |
| ＂apprentices．． | 9 | 4 | 1000 | 35000 |  |  |  |
| ＂${ }^{\text {c }}$ |  |  | 700 | 24500 |  |  |  |
| Throwster． |  | 1 | 2600 | 91000 |  |  |  |
|  | 4 | 1 | 1800 | 82800 |  |  |  |
| ＂．apprentice |  | 1 | 1200 | 55200 |  | ．．．．．．．．．．． |  |
| ＂ |  | 1 | 7 | 32200 |  |  |  |
| Handlers | 3 | 1 | 1900 | 74100 |  |  |  |
| drs |  |  | 1800 | 78200 |  |  |  |

## TABLE No．5．－Establishments－Continued．

SHEET IRON AND NAIL WORKS．

|  |  | 苟 品 <br>  <br> 형 <br> 艺 |  |  |  | Number of piece workers． |  |  |  |  | $\underset{\square}{\infty}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \＄300 |  |  | 20 |  |  | 86 | 54 | 5 | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 6 |
|  | ．．．．．．．．．．．．． |  | ．．．．．．．． |  |  |  |  |  | 10 |  | 10 | 96 |
| ．．．．．．． |  |  |  |  |  |  |  |  | 10 |  | 10 | 96 |
| ．．．．．．．．． |  |  | ．．．．．．．．． |  |  |  |  |  | 10 |  | 10 ＂ | 96 |
| ．．．．． |  |  |  |  |  | ， |  |  | 10 |  | 10 | 96 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 | ， |
|  | ．．．．．．． | ．．．．．．．． |  |  |  |  |  |  | 10 |  | 10 |  |
|  |  |  |  |  |  |  |  |  |  |  | 10 | 6 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 6 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 96 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 96 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 9 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 96 |
|  |  |  |  |  |  | ．．．．．．．． |  |  | 1 |  | 10 | 96 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 6 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 6 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 96 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 96 |
|  |  |  | ．．．．．．． |  |  | ． |  |  | 10 |  | 10 ＂ | 96 |
|  |  |  | ．．．．．．．． |  |  |  |  |  | 10 |  | 10 ＂${ }^{10}$ ．．．．． | 96 |
|  |  |  | ． |  |  |  |  |  | 10 |  | 10 ${ }^{10}$ ، $\quad \cdots$ | 96 |
|  |  |  |  |  |  |  |  |  | 10 |  | $\begin{array}{ll}10 & \text {＂} \\ 10 & \text {＂．．．．}\end{array}$ | 96 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 6 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 6 |
|  |  |  |  |  |  |  |  |  | 10 |  | 10 ＂ | 96 |

POTTERIES．

|  |  |  |  |  |  | 1. |  |  | 10 |  |  | 52 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 10 |  |  | ${ }^{26}$ |
| ．． |  |  |  |  |  |  |  |  | 10 |  |  | ${ }_{26}$ |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 104 |
| ．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 104 |
| 硣 |  |  |  |  |  |  |  |  | 10 |  |  | 104 |
|  |  |  | ．．． |  |  | 6 |  |  | 10 |  |  | 104 |
| ．．．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．． | ．．．．．．．．．． |  |  | ．．．．． |  |  | ．．． | 10 |  |  | 104 |
| ．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 104 104 |
| ．．．．．．．．．．．．．．．．． | ．．．． |  |  |  |  |  | ．．．．．．．．．． |  | 10 |  |  | 104 |
| ．．．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．．． | ．．．．． | ．．．．．．．．．． |  |  |  | ．．．．．．．． |  | 10 |  |  | 104 |
| ．．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  |  |
| ．．．．．．．．．．．．．．． | ．．．．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  | 52 52 |
| ．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  | 10 |  |  | 52 |
|  |  |  |  |  |  |  | ．．．．．．．．．．． |  | 10 |  |  | 78 78 |

## TABLE No. 5.-Establishments-Continued. POTTERIES.



[^39]
## TABLE No．5．－Establishments－Continued． POTTERIES．

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 8 |
|  |  |  |  |  |  |  |  |  |  |  |  | 93 |
|  |  |  |  |  |  | 7 |  |  | 10 |  |  | 93 |
|  |  |  |  |  |  | 13 |  |  | 10 |  |  | 93 |
| ．．．．．．．． |  |  |  |  |  | 1 |  |  | 10 |  |  | 3 |
| $\cdots$ |  |  |  |  |  |  | 1 |  | 10 |  |  | 3 |
| ， |  |  |  |  |  |  | 4 |  | 10 |  |  | 78 |
|  |  |  |  |  |  |  | 16 |  | 10 |  |  | 78 78 |
|  |  |  |  |  |  |  |  |  | ， |  |  |  |
|  |  |  |  |  |  | 3 |  |  | 9 |  |  | 130 |
|  |  |  |  |  |  | 8 |  |  | 9 |  |  | 130 |
|  |  | ．．．．．．．． |  |  |  | ， |  |  |  |  |  | 130 |
|  |  |  |  |  |  | 0 |  |  |  |  |  | 130 |
| ．．．． | ．．．．．．．．．．． | ． | ．．．．．．．． | ．．．．．．．． |  | 9 |  | ．．． | 9 |  |  | 130 |
|  |  |  |  |  |  |  |  | ．．． | ${ }_{10}^{9}$ |  |  | 130 130 |
|  |  |  |  |  |  |  | 8 | ．．．． | 10 |  |  | 130 130 |
|  |  |  |  |  |  | 8 |  |  | 10 |  |  | 130 |
|  |  |  |  |  |  |  | 12 |  | 10 |  |  | 130 |
|  |  |  |  |  |  |  | 12 |  | 10 |  |  | 130 |
|  | ．．．．．．．．．． |  |  |  |  |  | 12 |  | 10 |  |  | 130 |
|  |  |  |  |  |  | ， |  |  | 9 |  |  | 130 |
|  | ．．．．．．．．．．． |  | ．．．．．．．． |  |  | 1 |  | ．．．．．．．．． | ${ }^{9} 9$ |  |  | 78 |
| ．．．． |  |  |  |  |  |  |  | ．．．．．．．．． |  |  |  | 52 |
| ．．．． | ．．．．．． | ．．．．．．．．． | ．．．．．．．．．． |  |  |  |  |  | \％ | ．．．．．．．．．．．．．． |  |  |
|  |  | ．．．．．．．．．． |  | ．．．．．．． |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  |  | ．．．．．．．． |  |  |  |  |  |  | 10 |  |  | 12 |
| ．．．．．．．．．．． | ．．．．．．．．．．． |  |  |  |  |  |  |  | 10 |  |  | 12 |
|  | ．．．．．．．．．． |  |  | ．．．．．．．． |  |  |  |  | 10 |  |  | 12 |
|  |  |  |  |  |  | 283 | 28 |  |  |  |  |  |
|  | ．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |
|  | ．．．．．．．．．．． |  |  |  |  |  |  |  | ．． |  |  | 36 |
|  |  |  |  |  |  |  |  |  |  |  |  | 119 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | $\begin{array}{r}119 \\ \hline 6\end{array}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 36 |
|  |  | ．．．．．．．． |  |  |  |  | …．．．．． |  |  |  |  | 60 |
|  |  |  |  |  |  | ．．．．．．．．． | ．．．．．．．．． |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 30 91 |
|  |  |  |  |  |  |  |  |  |  |  |  | 91 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | ．．．．．．．． |  |  |  |  | 46 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

\＆Hours are irregular ；from ten to twenty hours per day．

## TABLE No. 5.-Establishments-Continued. POTTERIES.



HAT FACTORIES.

| $\dagger 74$ | Overseer | 44 | 44 | \$17 50 | §875 00 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dyers............................................... | 25 | 25 | 1000 | 52000 | ...... |  |  |
|  | Formers.......................................... | 75 | 75 | 1200 | 50400 |  |  |  |
|  | Sizers. | 609 | 600 | 1300 | 54600 | ..... |  |  |
|  | Pouncers | 125 | 125 | 1200 | 44400 | ...... |  |  |
|  | Blockers... | 40 | 40 | 1800 | 84600 |  |  |  |
|  | Trimmers... | 425 | 15 | 1400 | 70000 | 425 | 5600 | \$22200 |
|  | Flangers. | 60 | 60 | 1800 | 66600 | ....... |  |  |
|  | Curlers... | 10 | 10 | 2500 | 92500 |  |  |  |
|  | Finishers. | 520 | 520 | 1400 | 51800 |  |  |  |
|  | Binders .. | 20 |  |  |  | 20 | 1000 |  |
|  | Packers.. | 30 | 30 | 1800 | 66600 |  |  |  |
|  | Engineers. | 20 | 20 | 1500 | 750 co | ..... |  |  |
|  | Watchmen. | 10 | 10 | 1000 | 50000 |  |  |  |

CIGAR FACTORIES.


[^40]TABLE No．5．－Establishments－Continued． POTTERIES．

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 29 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 30 |
|  |  |  |  |  |  |  |  |  |  |  |  | 98 |
|  |  | ． |  | ．．．．．． |  | ．．．．．．．． | ．．．．．．．． | ．．．．．．．． |  | － |  | 21 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 93 |
|  |  |  |  | ．．．．．． | ．．．．．．．．．． |  | …．．．．．．． | ．．．．．．．．．． |  | ．．．．．．．．．．．．． |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 95 |
|  |  |  |  |  |  | ． |  |  |  |  |  |  |
|  |  |  |  |  | ． | ．．．． | ．．．．．．．．．． |  |  |  |  | 2 |
|  |  |  |  |  | ．．．．．．．． | ．．．．．． | ．．．．．．．． | ．．．．．．．． |  |  |  | 12 |
|  |  |  |  | ．．．．． |  |  | ．．． |  |  |  |  | 31 |
|  |  |  |  |  |  |  |  |  |  |  |  | 12 |

## HAT FACTORIES．

|  |  |  |  |  |  |  |  |  | 10－12． |  |  | ．． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | ．． | ．．．．．．．．． | 60 54 | 15 60 | ．．．．．．．． | 9－10． |  |  | 60 |
| \＄700 | ．．．．．．．．．．．．．．． | ．．．．．．．． |  |  |  | 100 | 25 | ．．．．．．．．．．． | 9－10． |  |  | 90 |
|  | ．．．．．．．．．．． | ．．．．．． |  |  |  | 20 | 20 | ．．．．．．．．． | 10. |  |  | 30 |
| ．．．．．．．．．．． | ．．．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． | ．．． | 200 | 400 | 25 |  | 9－10． | ．．．．．．．．． | ．．．．．．．．．．．．． | 90 |
|  |  |  |  |  |  | 60 |  | ．．．．．．．．． | 9－10． |  |  |  |
|  |  |  |  |  |  | 10 |  | ．．．．．．．．． | 9－10 |  |  | 90 |
| 1200 |  |  |  |  |  | 520 |  |  | 9－10． |  |  | ＋90 |
|  |  |  |  |  |  | 10 | 10 | ．．． | 9－10． |  |  | 90 |
|  |  |  |  |  |  | 30 |  |  | 10. |  |  | 90 |
|  |  |  |  |  |  |  | 10 |  | 10－12． |  |  |  |
|  |  |  |  |  |  |  |  | ．．．．．．． | 12. |  |  |  |

## CIGAR FACTORIES．


$\ddagger$ Curlers stop at any one factory only for a short period，but，on the average，lose little time．

## TABLE No．5．－Establishments－Continued． <br> CIGAR FACTORIES．

|  | Subdivision of Trade． |  |  |  |  | $\begin{aligned} & \text { d } \\ & \text { 品 } \\ & 0 \\ & \text { 世 } \\ & \text { H } \\ & 0 \\ & \text { B } \\ & \text { z } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 39 |  | 36 |  |  |  |  |  |  |
|  | Cigar makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 8 8 | $\$ 15$ 1200 1200 | $\$ 72000$ 57600 | ．．． | ．．．．．．．．．．．．．．． | ．．．．．．．．．．．．．．．．．． |
|  |  |  | 13 | 1000 | 48050 | ．．．．． |  |  |
|  | Wrappers an |  | 2 | 1250 | 57600 | ． |  |  |
| 40 |  |  |  |  |  |  |  |  |
|  | Cigar makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | 5 | 1500 | 72000 | ．．．．． |  |  |
|  | ＂ |  | 7 | 1100 | 52800 | ．．．．． |  |  |
|  | Stripper． |  |  |  |  |  |  |  |
|  | Wrapper ma |  | 1 | 1500 | 72000 |  |  |  |
|  | Salesman | ．．．．．．．． | 1 | 1000 | 48000 | ．．．．． |  |  |
|  |  |  |  |  | 624 | $\cdots$ |  |  |
| 41 |  | 330 |  |  |  |  |  |  |
|  | Cigar makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 100 | 1500 | 69000 |  | ……．．．．．．． |  |
|  | 免 |  | 123 | 1000 | 46000 |  |  |  |
|  | Strippers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．．． | ${ }^{6}$ | 20 1200 1200 | 920 500 | ．．．．． | ．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | ． |  | 13 | 1000 | 46000 | ． |  |  |
|  | Wrapper mot |  | 5 | 1800 | 828 c0 |  |  |  |
|  | Wrapper makers and packers．．．．．．．．．．．$\{$ |  | 12 | 180 900 | 46800 | ．．．．． | ．．．．．．．．．．． |  |
| ＊ 42 |  |  |  |  |  |  |  |  |
|  | Cigar makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 4 | 8 | 1500 | 60000 | …．．． | ．．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Cigar ${ }^{4}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 10 | 1200 | 48000 | ．．．．．． |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．．． | 15 | 1000 | 40000 | ． | ．．．．．．．．．．． | ．．．．．．．．．．．．．． |
|  | Strippers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | $\ddot{3}$ | 1200 | 48000 | ．． |  |  |
|  | Salesmen．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 6 | 1200 | 62400 | ．．．． | ．．．．．．．．．．． |  |
| $\dagger 43$ | Cigar makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 3 | 3 | 1000 | 50000 | ．．．．．． |  |  |
|  | Makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 10 | 10 | 1200 | 60000 | ．．．．．． | ．．．．．．．．．．． | ．．．．．．．．．．．．． |
|  | Strippers． <br> Makers． | 20 | 23 | 1200 | 60000 | ． |  |  |
|  | Packers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2 | 2 | 1500 | 75000 | ．．．． |  |  |
|  | Strippers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 7 |  |  |  | ．．．．． | ．．．．．．．．．．． |  |
|  | Makers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 9 | 9 | 1300 | 65000 | ．．． |  |  |
|  | Packer．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 1 | 1 | 2000 | 1，000 00 | ．．．．． |  |  |
|  | Strippers．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 3 | 3 |  |  |  | ．．．．．．．．．． | ．．．．．．．．．．．．． |

＊Three small factories．†These are the returns from four small firms in the same town．

## TABLE No. 5.-Establishments-Continued.

 CIGAR FACTORIES.
$\ddagger$ Full time.

## TABLE No．5．－Establishments－Continued． PRINTING ESTABLISHMENTS．

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
\& \text { 岕 } \\
\& \text { 首 } \\
\& \text { O } \\
\& \text { 日 }
\end{aligned}
\] \& Subdivision of Trade． \& 方 \&  \& \begin{tabular}{l}
云 \\
a \\
㞻 \\
豆尝 \\
© is \\
5 \\
ぶ \\
\(F\)
\end{tabular} \&  \&  \&  \&  \\
\hline ＊ 69 \& Compositors．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． \& 52 \& 25 \& \＄1800 \& 893600 \& \& \& \\
\hline \& Jobbers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． \& \& 15 \& 1700 \& 88400 \& \& \& \\
\hline \& Pressmen．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． \& \& 7 \& 1600 \& 83200 \& ．．．．．． \& \& \\
\hline \& Compositors \& 12 \& 4 \& 1700 \& 88400 \& \& \& \\
\hline \& Press feeders．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． \& \& 5 \& 1700 \& 881 C0 \& ．．．．． \& \& \\
\hline \& Compositors ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． \& 17 \& 17 \& 1800 \& 93600 \& \& \& \\
\hline \& Pressmen．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． \& 3 \& 1 \& 2000 \& 1，040 00 \& ．．．． \& \& \\
\hline \& Foreme \& 2 \& 1 \& 1400 \& \(\begin{array}{r}72400 \\ 1,410 \\ \hline\end{array}\) \& ．．．．．． \& ．．．．．．．．．． \& ．．．．．．．．．．．．．． \\
\hline \& \& \& 1 \& 1800 \& 1，936 00 \& ．．．．．．． \& \& \\
\hline \& Compositor \& 10 \& 10 \& 1800 \& 93600 \& \& \& \\
\hline \& Foreman
Pressmen \& 2 \& 1
2 \& 23
16
16 \& 1，196 00 \& ．．．．． \& ．．．．．．．．．． \& ．．．．．．．．．．．．． \\
\hline \& Compositors．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． \& 20 \& 14 \& 1800 \& 93600 \& ．．．．．．． \& ．．．．．．．．．．． \& \\
\hline \& Foreman ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． \& \& 1 \& 2000 \& 1，040 00 \& \& \& \\
\hline \& Pressman \& \& 1 \& \begin{tabular}{l}
17 \\
2000 \\
\hline 00
\end{tabular} \& 884
1,040

1 \& \& \& <br>
\hline \& \& \& 3 \& 1500 \& 1，780 00 \& \& \& <br>
\hline
\end{tabular}

RAILROAD COMPANY．

| $\dagger 93$ | Engineers ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 33 | 5 | $\ddagger$ S80 00 | \＄960 00 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ＂ |  | 10 | 7500 | 91000 | ．．．．． | ．．．．．．．．．． | ． |
|  | ＂${ }^{\text {a }}$ ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  | 12 | 70 60 60 00 | 81000 | ．．．． | ．．．．．．．．．． |  |
|  | Conductors．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 33 | 6 | 7200 | 86400 |  |  |  |
|  |  |  | 9 | 6400 | 76800 | ．．．．． | ．．．．．．． |  |
|  | ． |  | 10 | 60 5400 | 72000 | ．．． |  |  |
|  | Baggage mas | 30 | 10 | 6000 | 72000 |  | ．．．．．．．．．． |  |
|  |  |  | 20 | 5400 | 64800 |  | ．．．．．．．．．． |  |
|  | Brakem | 60 | 40 | 4500 3500 | 54000 420 | ．．．． |  | ．．．．．．．．．．．．．． |
|  | Platform hands | 33 | 8 | 4500 | 59000 |  |  |  |
|  | ＂${ }^{\text {u }}$＂ |  | 8 | 4000 | 48000 |  |  |  |
|  | Firem | 33 | 16 | 5000 | 60000 |  |  |  |
|  |  |  | 17 | 4000 | 48000 |  |  |  |
|  | Laborers． | 150 | 51 | 35 30 30 | $\begin{array}{ll} 420 & 00 \\ 360 & 00 \end{array}$ |  |  |  |
|  |  |  |  |  |  |  |  |  |

＊Five establishments．$\dagger$ During the summer the travel is much greater than in winter， and many of the hands are not kept busy from November to June，although they are not laid off，but kept until the return of summer．The freight business is，however，greater in fall，win－ ter and spring，and the laborers are kept busy repairing and extending the road．The employes have an accident and sick insurance society of their own，entirely independent of the com－ pany．All of the employes are time workers，except where special contract is made for a specific job．$\quad \ddagger$ Wages of men for a full month＇s work．

## TABLE No．5．－Establishments－Continued．

PRINTING ESTABLISHMENTS．

|  |  | 苞 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 25 |  |  | 10 |  |  |  |
| \＄6 87 |  |  | 5 |  |  |  |  |  | 10 |  |  |  |
|  |  |  |  |  |  | ${ }^{-1.7 .7}$ |  |  | 10 |  | 12 |  |
| 500 |  |  |  |  |  |  |  |  | 10 |  | 12 ＂ |  |
| 50 |  | ．．．．．．．． | 3 | ．．．．．．．．． |  | 17 |  |  | 10 |  | ${ }_{12}^{12}$＂${ }^{12}$ |  |
|  |  |  |  |  |  |  | 1 |  |  |  | 12 ＂．．．．．． |  |
|  |  |  |  |  |  |  | 2 |  | 10 |  | 12 ＂${ }^{12}$＂．．．． |  |
|  |  |  |  |  |  | ． | 2 |  | 10 |  | 12 |  |
|  |  |  |  |  |  | 10 |  |  | 10 |  | 12 ＂ |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 12 ＂ |  |
|  |  |  |  |  |  |  | 2 |  | 10 |  | 12 ＂ |  |
|  |  |  |  |  |  | 14 |  |  | 10 |  | 12 ＂．．．．．． |  |
|  |  |  |  |  |  |  | 1 |  | 10 |  | 12 ＂ |  |
| ．．．．．．．．．．． |  |  |  |  |  |  | 1 |  | 10 |  | 12 ＂ |  |
|  |  |  |  |  |  |  |  | $. . \mid$ | 10 |  | 12 ＂ |  |
|  |  |  |  |  |  |  |  |  | 10 |  | 12 ＂ |  |

RAILROAD COMPANY．

| ．．．．．．．．．．．． |  | ．．．．．．．． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ．．． |  |  |  |  | …．．．．．．．．．． |  |  |  |
| ．．．．．．．．．． |  |  |  | ．．．．． |  |  |  |  |  |  |  |  |
| ．．．．．．．．．．．．．．． |  |  |  | ．．．． |  | ．．．．．．．．． | ． | ．． |  |  |  |  |
| $\cdots$ |  | ．． | ．．．． | ．．．． |  | ．．．．．．．． | ． |  |  |  |  |  |
| ．．．．．．．．．．．．．．． |  |  |  |  |  | ．．．．．．． |  |  | ．． | ． |  |  |
|  | ．．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  | ．．．．．．．．．．．．． |  |
| ．．．．．．．．．．．． | ．．．．．．．．．．． | ．．．．．．．． | ．．．．．．．． | ．．．．． |  |  |  |  |  |  |  |  |
| ． |  | ．．．．．．．．． | ． | ． | － | －．．．．．． |  |  |  |  |  |  |
| ．．．．．．．．．．．．．．． |  |  | ．．． | ．．． |  |  |  |  |  | ． |  |  |
|  |  |  | ．．．．．．．． | ．．． |  |  |  |  |  |  |  |  |
| ． |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | ．．．．．．．． |  |  |  |  |  |  |  |  |  |  |
|  | ．．．． |  |  |  |  |  |  |  |  |  |  |  |

## TABLE No．5．－Establishments－Continued． GLASS SAND WORKS．

|  | Subdivision of Trade． |  |  |  | ＂is 50.首等 む゙ぎロ品荈風家号官范 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ＊72 | Engineers． | 85 | 33202530 | $\begin{array}{r} \$ 1200 \\ 10000 \\ 18 \\ 1800 \\ 1060 \\ 10000 \\ 9000 \\ 7 \\ 700 \end{array}$ | $\begin{array}{r} \$ 50400 \\ 420 \\ 756 \\ 750 \\ 67200 \\ 420 \\ 478 \\ 378 \\ 31500 \\ 315 \end{array}$ |  |  |  |
|  | Foremen．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | ．．．． |  | ．．．．．．．． |
|  | Unskilled hands．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | ．．．．．．．．．． |  |  |  |  |  | ． |
|  | Unskilled |  |  |  |  |  |  |  |
|  | ＂．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |

BUTTON WORKS．

| 54 <br> Machine operators $\qquad$ $\qquad$ <br> Button workers <br> Buthon workers $\qquad$ $\qquad$ <br> Overseer． $\qquad$ <br> Laborers． $\qquad$ $\qquad$ | 24 10 $\ldots \ldots \ldots .$. $\cdots \cdots$ 10 $\ldots \ldots \ldots .$. $\cdots$ 1 1 2 $\|$ | $\begin{array}{r} \ldots \ldots . \\ \cdots \cdots . . \\ \cdots \cdots . . \\ \cdots \cdots . \\ \cdots \cdots . \\ \cdots \\ 1 \\ 1 \\ 2 \end{array}$ |  |  | $\left\lvert\, \begin{array}{r}\ldots \\ 3 \\ 3 \\ 4 \\ 2 \\ 3 \\ 5 \\ \ldots \ldots . \\ \ldots \ldots . . \\ \ldots\end{array}\right.$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

＊Five firms．A large quantity of the sand produced at these mines is used in glass making in the southern part of the State，while that which is shipped elsewhere for the same purpose gives employment to a considerable number of men to handle．

TABLE No．5．－Establishments－Continued． GLASS SAND WORKS．

|  |  | 苟 no on on 答 फัठ 농艺艺 |  |  |  |  |  |  |  |  | 宗 <br> 島 <br> 苟 <br> － <br>  <br> © <br> 츨 <br> 会艺品 <br> 畀 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 85 |  | 10 |  |  |  |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 56 |
|  |  |  |  |  |  |  | ． |  | 10 |  |  | 56 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 56 56 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 56 |
|  |  |  |  |  |  |  |  |  | 10 |  |  | 56 |

BUTTON WORKS．


# TABLE No. 5.-Establishments-Continued. <br> Prices Paid for Piece Work. GLASS FACTORIES. 

SUBDIVISION of Trade.

Green glass (bot-) tle and vial) blower's

Green glass (apprentices) blowers.

Flint glass (cov-) ered pots) blow- $\}$
ers....................

Lamp workers.

Stopper grinders.....

Price Paid for Work by the Piece-State What Constitutes a Piece.


Apprentices received one-half the price paid to journeymen by the piece.
\{1 oz., 60c. per gross, less 10 per $\}$ cent ............................................... 4 oz . weight, 75 c . per gross, less 10 per cent ...................................... 10
8 oz . weight, $\$ 1.14$ per gross, less 10 per cent
10 oz . weight, $\$ 1.32$ per gross, less 10 per cent.
ight, $\$ 1.60$ per gross, less 10
12 oz . weight, $\$ 1.60$ per gross, less 10
$\left.\begin{array}{c}\text { per cent ..................................... } \\ 20 \text { oz. weight, } \$ 2 \text { per gross, less } 10 \text { per }\end{array}\right\}$
cent............................... there are no
All kinds of ware, where there an additional 10 per cent. reduction in prices.
$\{1 / 8,1 / 4,1 / 2$ and 1 drachm vials, 25 c . per $\}$ gross.
$\{1 / 2$ gallon bottles, 20 c . per dozen, less $\}$ 15 per cent. 1 gallon bottles, 22c. per dozen, less 15 per cent..................................... Pint bottles, 12c. per dozen, less 15 per cent....................................... Quart bottles, 15c. per dozen, less 15

The Average Quantity Produced.

1 man and 2 boys, 120 per day. 3 men, 168 dozen per day.
3 men, 198 dozen per day.
3 men, 160 dozen per day.
3 men, 22 gross per day.
3 men, 24 gross per day.
3 men, 28 gross per day.
3 men, 26 gross per day.
3 men, 25 gross per day.
3 men, 24 gross per day.
2 men, 75 dozen per day.

3 men, $273 / 4$ gross per day.
3 men, 20 gross per day.
3 men, 168 dozen per day. 3 men, 153 dozen per day.
3 men, 150 dozen per day.
3 men, 144 dozen per day.

1 man, 20 to 25 gross per day.

1 man, 20 dozen per day. 1 man, 18 dozen per day.

1 man, 30 dozen per day.
1 man, 25 dozen per day.

## TABLE No. 5.-Establishments-Continued.

## Prices Paid for Piece Work. <br> GLASS FACTORIES.



# TABLE No. 5.-Establishments-Continued. <br> Prices Paid for Piece Work. <br> TEXTILE MILLS. 

| Subdivision of Trade. | Price Paid for Work by the Piece-State what Con situtes a Piece. | The Average Quantity Produced. |
| :---: | :---: | :---: |
| $\left.\begin{array}{c}\text { Cotton mills, } \\ \text { weavers......... }\end{array}\right\}$ |  | $\left\{\begin{array}{l} \text { The quantity produced varies } \\ \text { with the number of tucks, from } \\ 3 \text { to } 41 / 2 \text { cuts of } 56 \text { yards to a } \\ \text { loom per week. } \end{array}\right.$ <br> 15 to 17 cuts per week with 3 looms. <br> $\{1$ weaver with 3 looms produces from 15 to 17 cuts per week. 1 weaver with 6 looms produces from 16 to 20 cuts per week. <br> 8 looms, 15 cuts per week. <br> 8 looms, 24 cuts per week. |
| Spoolers............... | 6 c . per box, 10 per cent. added.............. | 1 spooler, 10 to 12 daily. |
| $\underset{\text { Woolen mills, }}{\substack{\text { weavers......... }}}\}$ | $\left\{\begin{array}{l}\text { Lowrest price, 5c. per yard ................ }\end{array}\right\}$ | $\left\{\begin{array}{l} 1 \text { weaver, } 12 \text { to } 20 \text { yards per day. } \\ \text { There is a great variety and dif. } \\ \text { fference in quality of the goods } \\ \text { made. in que } \\ \text { All broad loom, } 56 \text { yards or one } \\ \text { cut per day. } \end{array}\right.$ |
| Soft silk warpers.... |  |  |
| Soft silk winders.... | $\left\{\begin{array}{c} 10 \text { to 40c. per pound, according to qual. } \\ \text { ity and fineness......................... } \end{array}\right.$ |  |
| Silk hemmers....... | 5 and 6c. per dozen handkerchiefs......... | 12 to 18 dozen per day. |
| $\left.\begin{array}{c}\text { Silk power loom } \\ \text { weavers............. }\end{array}\right\}$ |  | 2 dozen per day. |
| Soft silk winders.... | 12 to 25c. per pound............................. |  |
| Soft silk warper...... | 41/2 to 5c. per 100 metres...................... |  |
| $\left.\begin{array}{c}\text { silk power loom } \\ \text { weavers.......... }\end{array}\right\}$ | 6 to 25c. per yard ................................ |  |
| $\left.\begin{array}{c}\text { Soft silk warpers } \\ \text { (power)............. }\end{array}\right\}$ | 4 to 5 c . per 100 yards of 100 ends............ |  |

# TABLE No. 5.-Establishments-Continued. <br> Prices Paid for Piece Work. TEXTILE MILLS. 

| SUBDIVISION OF Trade. | Peice Paid for Work by the Piece-State What Constitutes a Piece. | The Average Quantity Produced. |
| :---: | :---: | :---: |
| Soft silk warpers (hand) | 2 to 7c. per 100 yards of 100 ends............. |  |
| Gilk warp pickers... |  |  |
| Silk quillers.......... | 4 to $5 \frac{1}{2}$ c. per pound............................ |  |
| $\left.\begin{array}{l} \text { Silk hand loom } \\ \text { weavers............ } \end{array}\right\}$ | 12 to 15c. per yard............................... |  |
| Silk ribbon weaver. | 8 to 25c. per yard................................. |  |

## SHOE FACTORIES.

| $\left.\begin{array}{r} \text { Cutting women's } \\ \text { misses', and } \\ \text { children's shoes } \end{array}\right\}$ |  | $\left\{\begin{array}{l} 11 \text { men, } 8 \text { cases per day, } 60 \text { pairs } \\ \text { to case. } \end{array}\right.$ |
| :---: | :---: | :---: |
| Lasting................. | £3/4 to 7c. per pair................................. | $\left\{\begin{array}{l} 12 \text { men, } 8 \text { cases per day, } 60 \text { pairs } \\ \text { to case. } \end{array}\right.$ |
| Tacking............... |  | $\left\{\begin{array}{l} 1 \text { man, } 8 \text { cases per day, } 60 \text { pairs to } \\ \text { case. } \end{array}\right.$ |
| Beating out........... | 35c. per case, 60 pairs | $\left\{\begin{array}{l} 2 \text { men, } 8 \text { cases per day, } 60 \text { pairs to } \\ \text { case. } \end{array}\right.$ |
| Heeling................ | 46c. per case, 60 pairs........................... | $\left\{\begin{array}{l} 1 \text { man, } 8 \text { cases per day, } 60 \text { pairs to } \\ \text { case. } \end{array}\right.$ |
| Second lasting....... | 23c. per case, 60 pairs........................... | 1 man and boy, 8 cases per day. |
| Shaving................ | 60c. per case, 60 pairs......................... | 4 men, 8 cases per day. |
| Edge-setting.......... | $\left\{\begin{array}{l} \text { Women's, 35c. per case................................................................................ } \\ \text { Misses', 25c. per case........ } \\ \text { Children's, 15c. per case.... } \end{array}\right\}$ | 1 man and boy, 8 cases per day. |
| Heel burnishing..... | 20 to 25c. per case............................... |  |
| Acid and cutting... | 12, 14 and 15c. per case........................ |  |
| Closing.................) | $\left\{\begin{array}{l} \text { Women's, 30c. per case................................................... } \end{array}\right\}$ | 2 women, 8 cases per day. |

# TABLE No. 5.-Establishments-Continued. Prices Paid for Piece Work. SHOE FACTORIES. 

| SUbdivision of Trade. | Price Paid for Work by the Piece--State What Constitutes a Piece. | The Average Quantity Produced. |
| :---: | :---: | :---: |
| Staying................ | $\left\{\begin{array}{l}\text { Women's, 40c. per case....................... } \\ \text { Misses', 35c. per case....................... }\end{array}\right\}$ | 8 women, 8 cases per day. |
| Pasting................. |  | 10 women, 8 cases per day. |
| Quarter stitching... | 80c. for 60 pairs (average price).............. | 3 women, 8 cases per day. |
| Lining making...... | $\left\{\begin{array}{l} \text { Women's, 40c. per case......................................................................... } \end{array}\right\}$ | 5 women, 8 cases per day. |
| Closing-on............. | $\left\{\begin{array}{l} \text { Women's, 55c. per case......................... } \\ \text { Misses', 50c. per case............................................... } \\ \text { Children's, 40c. per case..... } \end{array}\right.$ | 4 women, 8 cases per day. |
| Vamping......... ..... | $\left\{\begin{array}{l} \text { Women's, 60c. per case......................... } \\ \text { Misses', 50c. per case................................................. } \end{array}\right\}$ | 3 women, 8 cases per day- |
| $\left.\begin{array}{r} \text { Cording button } \\ \text { holes................ } \end{array}\right\}$ | $\left\{\begin{array}{l} \text { Women's, 40c. per case......................................................................... } \end{array}\right\}$ | 2 women, 8 cases per day |
| Button sewing....... | $\left\{\begin{array}{l} \text { Women's, 69c. per case....................................................................... } \end{array}\right\}$ | 8 women, 8 cases per day |
| Marking lining...... | 9c. per case, 60 pairs............................ |  |
| $\left.\begin{array}{c} \text { Marking and } \\ \text { Blocking....... } \end{array}\right\}$ | $\left\{\begin{array}{r} \text { Women's, 7c.; children's and misses', } \\ \text { 6c................................................... } \end{array}\right\}$ | 2 women, 8 cases per day. |
| Stock fitting.......... | 10 to 15 c . per dozen pairs..................... | 1 man, 100 dozen pairs weekly |
| Cutters................. | 60 to 70c. per case, 60 pairs.................... |  |
| Lasters.................. | 15c. per dozen pairs.............................. |  |
| Fitters.................. | 9c. per pair........................................ |  |
| Stock fitting.......... | 10 to 15c. per dozen pairs...................... |  |
| Button sewers........ | 1c. per pair. |  |

## TABLE No. 5.-Establishments-Continued.

## Prices Paid for Piece Work. SHOE FACTORIES.

| SUbDIVISION OF Trade. | Price Paid for Work by the Piece-State What Constitutes a Piece. | The Average Quantity Produced. |
| :---: | :---: | :---: |
| Closing................ | $\left\{\begin{array}{l} \text { Women's, 30c. per case, } 60 \text { pairs........... } \\ \text { Misses', 28c. per case, } 60 \text { pairs........... } \\ \text { Children's, 20 and 18c. per case, } 60 \\ \text { pairs..................................................... } \end{array}\right.$ |  |
| Staying................ | $\left\{\begin{array}{l} \text { Women's, 50c. per case, } 60 \text { pairs............ } \\ \text { Misses', 45c. per case, } 60 \text { pairs............ } \\ \text { Children's, } 85 \text { and } 30 \mathrm{c} \text {. per case, } 60 \\ \text { pairs....................................... } \end{array}\right.$ |  |
| Pasting................. | $\left\{\begin{array}{l} \text { Women's, 90c. per case, } 60 \text { pairs ........... } \\ \text { Misses', 821/2c. per case, } 60 \text { pairs.......... } \\ \text { Children's, 75c. per case, } 60 \text { pairs........ } \end{array}\right.$ |  |
| Vamping............... | ( ${ }_{\text {Women's, } 90,75,70,55,45 \text { c. per case, } 60}^{\text {pairs............................ }}$ |  |
| Blocking ............... | 80, 75, 65, 55c. per case, 60 pairs...... ....... |  |
| $\left.\begin{array}{r} \text { Heeling women's } \\ \text { and misses } \\ \text { shoes ................ } \end{array}\right\}$ | 25c. to \$1.25 per case of 72 pairs.............. | 33 to 35 weekly, 1 man. |
| $\left.\begin{array}{r} \text { Trim'g women's } \\ \text { and misses' } \\ \text { shoes.............. } \end{array}\right\}$ | 40c., 1 dozen pairs................................ |  |
| $\left.\begin{array}{c} \text { Burnishing } \\ \text { women's and } \\ \text { misses' shoes.... } \end{array}\right\}$ | 40c., 1 dozen pairs............................... | . |
| $\left.\begin{array}{c} \text { Oper't'g women's } \\ \text { and } m \text { isses s....... } \\ \text { shoes ............ } \end{array}\right\}$ | 12c., 1 dozen pairs............................... | - |
| $\left.\begin{array}{c} \text { Fin'h'g women's } \\ \text { and misses } \\ \text { shoes................ } \end{array}\right\}$ | 60c., 1 dozen pairs............................... |  |
| $\left.\begin{array}{c} \text { Cutting women's } \\ \text { and misses' } \\ \text { shoes................. } \end{array}\right\}$ | 12c., 1 dozen pairs................... ............ | 150 dozen weekly. |
| $\left.\begin{array}{r} \text { Fitting women's } \\ \text { and misses' } \\ \text { shoes................ } \end{array}\right\}$ | 72c., 1 case of 72 pairs.......................... | . |

## TABLE No. 5.-Establishments-Continued. Prices Paid for Piece Work. <br> SHOE FACTORIES.

| SUBDIVISION OF Trade. | Price Paid for Work by the Piece-State What Constitutes a Piece. | The Average Quantity <br> Produced. |
| :---: | :---: | :---: |
| $\left.\begin{array}{l} \text { Wppercutter } \\ \text { women's and } \\ \text { misses' shoes.... } \end{array}\right\}$ | \$1 to \$1.50 per case, 60 pairs................. |  |
| Trimming cutter, women's and misses' shoes.... | 40 to 60c. per case, 60 pairs................. | $\left\{\begin{array}{l} 16 \text { hands turn out } 600 \text { pairs or } 10 \\ \text { cases per week. } \end{array}\right.$ |
| $\left.\begin{array}{l} \text { Sole stock cutter, } \\ \text { wo m en n's and } \\ \text { misses' shoes.... } \end{array}\right\}$ | \$1 to $\$ 1.50$ per case, 60 pairs................ |  |
| $\left.\begin{array}{r} \text { Mckay sewer } \\ \text { women's and } \\ \text { misses' shoes.... } \end{array}\right\}$ | 30c. to \$1 per case, 60 pairs.................. J |  |
| Stock fitter............ | 80c. to $\$ 1.20$ per case, 60 pairs................ |  |
| Laster................... | 3 to 6c. per pair................................... |  |
| Heeler. ................. | 3 to 6c. per pair.................................. |  |
| Burnisher.............. | 3 to 6c. per pair....................................... |  |
| Finisher................ | 3 to 6c. per pair.......... ......................... |  |
| Trimming............. | 3 to 6c. per pair................................... |  |

## RUBBER. BOOT AND SHOE FACTORY.

| Varnishers............ |  | 500 pairs per day. |
| :---: | :---: | :---: |
| Boot makers.......... | 8 to 21c. per pair................................... | 12 to 18 pairs per day. |
| Cutters.................. | $\left\{\begin{array}{l}33 / 4 \mathrm{c} \text {. to } \$ 1.11 \text { per } 100 \text { pairs............................................................ } \\ \text { 18c. per } 100 \text { pairs....... }\end{array}\right.$ | 4,000 to 200 pairs per day. 9,000 to 10,000 pairs per day. |
| Shoemakers.......... | $\left\{\begin{array}{l}3 \text { to 10c. per pair.................................................... } \\ 2 \text { to 12c. per pair.......... }\end{array}\right.$ | 15 to 50 pairs per day. 12 to 60 pairs per day. |
| $\left.\begin{array}{l} \text { Tacking depart- } \\ \text { ment ............... } \end{array}\right\}$ | 2 to 25c. per 100 pairs............................. |  |

# TABLE No. 5.-Establishments-Continued. <br> Prices Paid for Piece Work. IRON FOUNDRIES-PIPE AND JOB WORK. 

| SUBDIVISION of TRADE. | Price Paid for Work by the Piece-State What constitutes a Piece. | The Average Quantity Produced. |
| :---: | :---: | :---: |
| Moulders.............. | ......................................................... | $\left\{\begin{array}{l}4 \text { men mould } 20 \text { green sand pipes } \\ \text { per day. } \\ 4 \text { men mould } 212 \text {-inch branches } \\ \text { A gang mould } 18 \text { 12-inch pipes } \\ \text { per day. } \\ \begin{array}{l}\text { A gang mould } 40 \\ \text { per day. }\end{array} \text {-inch pipes }\end{array}\right.$ |
| Moulders. $\qquad$ Core makers. Crane runners Shovelers. Head rammers.... | Lowest 25c, highest \$2, per 1 casting...... | $\left\{\begin{array}{l}308 \text {-inch pipes per day per gang } \\ \text { of } 17 \mathrm{men} \text {. } \\ 2012 \text {-inch pipes per day per gang } \\ \text { of } 17 \mathrm{men} \text {. } \\ 854 \text {-inch pipes per day per gang } \\ \text { of } 17 \text { men. } \\ 15 \text { i6-inch pipes per day per gang } \\ \text { of } 17 \mathrm{men} \text {. } \\ 1812 \text { inch pipes per day per gang } \\ \text { of } 17 \mathrm{men} .\end{array}\right.$ |
| Moulder. <br> Core makers Helpers. Cupola men - Cleaners. $\qquad$ | 25c. to $\$ 1.50$ per casting....................... | 15 16-inch pipes per gang per day. 1812 -inch pipes per gang per day. 84 4-inch pipes per gang per day. 308 -inch pipes per gang per day. 20 12-inch pipes per gang per day. |

## SHEET IRON AND WIRE MILL.

| Charcoal sinkers.... | $\left\{\begin{array}{c} \$ 2.85 \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent........................................................................ } \end{array}\right\}$ | 2,700 pounds per day per man. <br> 2,400 pounds per day per man. |
| :---: | :---: | :---: |
| $\underset{\text { charcoal loop... }}{\text { Hammering }}$ | $\left\{\begin{array}{r} 49 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent........................................ } \end{array}\right\}$ | 1,200 pounds per day per man. |
| $\left.\begin{array}{c} \text { Re-hammering } \\ \text { charcoal loop... } \end{array}\right\}$ | $\left\{\begin{array}{c} 20 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent.......................................... } \end{array}\right\}$ | 1,100 pounds per day per man. |
| $\left.\begin{array}{l} \text { Hammering pud- } \\ \text { dle balls .......... } \end{array}\right\}$ | $\left\{\begin{array}{r} 58 \mathrm{c} \text {. per ton, } 2, \text { coo pounds, less } 20 \text { per } \\ \text { cent } \end{array}\right\}$ | 2,500 pound |
| Hammering scrap.. | $\left\{\begin{array}{c} 31 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent ............................................ } \end{array}\right\}$ | 4,500 pounds per day per man. |
| Heating blooms...... | $\left\{\begin{array}{c} 40 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { ceut.............................................. } \end{array}\right\}$ | 22,000 pounds per day per man. |
| $\left.\begin{array}{c} \text { Helper, bloom } \\ \text { furnace............ } \end{array}\right\}$ | $\left\{\begin{array}{r} 20 \mathrm{c} . \text { per ton, } 2,009 \text { pounds, less } 20 \text { per } \\ \text { ent. ........................................... } \end{array}\right\}$ | 22,000 pounds per day per man. |

# TABLE No. 5.-Establishments-Continued. Prices Paid for Piece Work. SHEET IRON AND WIRE MILL. 

| SUbDIVISION OF Trade. | Price paid for Work by the Piege-State What Constitutes a Piece. | The Average Quantity Produced. |
| :---: | :---: | :---: |
| Heating scrap....... | $\left\{\begin{array}{r}\text { 81c. per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent..................................... }\end{array}\right\}$ | 9,000 pounds per day per man. |
| $\left.\begin{array}{c}\text { Helpers, scrap } \\ \text { furnace............. }\end{array}\right\}$ | $\left\{\begin{array}{r}40 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent.................................... }\end{array}\right\}$ | 9,000 pounds per day per man. |
| Puddlers......... ...... | $\left\{\begin{array}{r} 81.331 / 3 \text { per ton, } 2,000 \text { pounds, less } 20 \\ \text { per cent...................................... } \end{array}\right\}$ | 5,000 pounds per day per man. |
| Puddlers' helpers... | $\left\{\begin{array}{r} 762 / 3 \mathrm{c} \text { per ton, } 2,000 \text { pounds, less } 20 \\ \text { per cent........................................ } \end{array}\right\}$ | 5,000 pounds per day per man. |
| $\left.\begin{array}{c} \text { Finishing billets, } \\ 20 \text {-inch rolls..... } \end{array}\right\}$ | $\left\{\begin{array}{r}21 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent................................... }\end{array}\right\}$ | 40,(00 pounds per day per man- |
| $\left.\begin{array}{l} \text { Roughing billets, } \\ 20 \text {-inch rolls..... } \end{array}\right\}$ | $\left\{\begin{array}{r}18 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent.................................... }\end{array}\right\}$ | 40,000 pounds per day per man. |
| $\left.\begin{array}{l} \text { Heating billets, } \\ 10 \text {-inch rolls..... } \end{array}\right\}$ | $\left\{\begin{array}{r} 47 \mathrm{c} \text {. per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent.............................................. } \end{array}\right\}$ | 16,000 pounds per day per man.. |
| $\left.\begin{array}{l} \text { Helpers at billet } \\ \text { furnace.............. } \end{array}\right\}$ | $\left\{\begin{array}{r} 23 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent............................................... } \end{array}\right\}$ | 16,000 pounds per day per man- |
| $\left.\begin{array}{l} \text { Finishing wire } \\ \text { rods, } 10 \text {-inch } \\ \text { rolls................... } \end{array}\right\}$ | $\left\{\begin{array}{r} 53 \mathrm{c} . \text { per ton, } 2.000 \text { pounds, less } 20 \text { per } \\ \text { cent............................................. } \end{array}\right\}$ | 32,000 pounds per day per man.- |
| Roughing on 10 inch rolls. $\qquad$ | $\left\{\begin{array}{r} 25 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent............................................... } \end{array}\right\}$ | 32,000 pounds per day per man. |
| $\left.\begin{array}{l}\text { Turning up on 10- } \\ \text { inch rolls........ }\end{array}\right\}$ | $\left\{\begin{array}{r} 121 / 2 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \\ \text { per cent....................................... } \end{array}\right\}$ | 32,000 pounds per day per man- |
| $\left.\begin{array}{l}\text { Sticking in on 10- } \\ \text { inch rolls........ }\end{array}\right\}$ | $\left\{\begin{array}{r} 12 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent.............................................. } \end{array}\right\}$ | 32,000 pounds per day per man- |
| Sticking in on 10 inch rolls $\qquad$ | $\left\{\begin{array}{r} 20 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent............................................... } \end{array}\right\}$ | 32,000 pounds per day per man. |
| $\left.\begin{array}{l} \text { Reeling rods, } 10- \\ \text { inch rolls......... } \end{array}\right\}$ | $\left\{\begin{array}{r} 12 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent.............................................. } \end{array}\right\}$ | 32,000 pounds per day per man- |
| Running hook...... | $\left\{\begin{array}{r} 8 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per } \\ \text { cent............................................. }\} \end{array}\right\}$ | 32,000 pounds per day per man. |

# TABLE No. 5.-Establishments-Continued. <br> Prices Paid for Piece Work. <br> SHEET IRON AND WIRE MILL. 

| Subdivision of Trade. | Price Paid for Work by the Piece-State What Constitutes a Piege. | The Average Quantity Produced. |
| :---: | :---: | :---: |
| Stocking up........... | $\left\{\begin{array}{r} 9 \mathrm{c} . \text { per ton, } 2,000 \text { pounds, less } 20 \text { per }\} \\ \text { cent.............................................. }\} \end{array}\right.$ | 32,00 ) pounds per day per man. |
| $\left.\begin{array}{l} \text { Heating billets, 8- } \\ \text { inch rolls......... } \end{array}\right\}$ | 64c. per ton, 2,000 pounds, $1 / 4$-inch $\}$ rods, less 20 per cent. <br> 53 c . per ton. 2,000 pounds, $\frac{5}{16}$-inch rods, less 20 per cent. <br> 46 c . per ton, 2,000 pounds, $3 / 8-$ inch rods, less 20 per cent. | 10,0c0 pounds per day per man. <br> 14,000 pounds per day per man. <br> 14,000 pounds per day per man. |
| $\left.\begin{array}{c} \text { Helpers, billets, 8- } \\ \text { inch rolls......... } \end{array}\right\}$ |  | 10,000 pounds per day per man. 14,000 pounds per day per man. 14,000 pounds per day per man. |
| $\left.\begin{array}{c}\text { Finishing, 8-inch } \\ \text { rolls .............. }\end{array}\right\}$ | \$1.16 per ton, 2,000 pounds, No. 4 rods, $\}$ less 20 per cent 90c. per ton, 2,000 pounds, r $^{5}$-inch rods, less 20 per cent. <br> $\$ 1.121 / 2$ per ton, 2,000 pounds, $1 / 4$ inch rods, less $2 \theta$ per cent. <br> 70c. per ton, 2,000 pounds, $3 / 8$-inch <br> rods, less 20 per cent...................... | 8,000 pounds per day per man. <br> 14,000 pounds per day per man. <br> 10,000 pounds per day per man. <br> 14,000 pounds per day per man. |
| $\left.\begin{array}{l} \text { Roughing, 8-inch } \\ \text { rolls................... } \end{array}\right\}$ | \{45c. per ton, 2,000 pounds, $1 / 4$-inch \} rods, less 20 per cent. $\qquad$ 40 c . per ton, 2,000 pounds, $\frac{5}{16}$-inch rods, less 20 per cent. $\qquad$ 3 jic. per ton, 2,000 pounds, $3 / 8$ inch rods, less 20 per cent. $\qquad$ | 10,000 pounds per day per man. <br> 14,000 pounds per day per man. <br> 10,000 pounds per day per man. |

## SHEET IRON AND NAIL WORKS.

| $\left.\begin{array}{l}\text { Heaters ................ } \\ \text { Helpers........ }\end{array}\right\}$ | $\left\{\begin{array}{c} 35 \mathrm{c} \text {. per ton, } 2,240 \text { pounds, } 10 \text { per } \\ \text { cent. added................................................................................... } \end{array}\right\}$ | Team of 13 men, 6 tons daily. |
| :---: | :---: | :---: |
| $\left.\begin{array}{l} \text { Rollers................. } \\ \text { Catchers............ } \end{array}\right\}$ | $\left\{\begin{array}{l}10 \mathrm{c} . \text { per ton, } 2,240 \\ \text { cent. added........................ } \\ 71 / 2 \mathrm{c} . \text { per ton, } 2,240 \text { pounds, } 10 \text { per } \\ \text { cent. added....................... }\end{array}\right\}$ | Team of 4 men, 18 tons daily. |
| Sheet layers .......... | $\left\{\begin{array}{c} 61 / 2 \mathrm{c} . \text { per ton, } 2,210 \text { pounds, } 10 \text { per } \\ \text { cent. added................................... } \end{array}\right\}$ | Team of 4 men, 18 tons daily. |
| Scrapers........... | $\left\{\begin{array}{r} 13 / 4 \mathrm{c} . \text { per ton, } 2,210 \text { pounds, } 10 \text { per } \\ \text { cent. added................................... } \end{array}\right\}$ | Team of 2 men, 18 tons daily. |

# TABLE No. 5.-Establishments-Continued. Prices Paid for Piece Work. SHEET IRON AND NAIL WORKS. 

| SUbDIVISION of Trade. | Price Paid for Work by the fiece-State What Constitutes a Piece. | The Average Quantity Produced. |
| :---: | :---: | :---: |
| Plate shearers........ |  | Team of 4 men, 18 tons daily. |
| Roughers............... | $\left\{\begin{array}{c} 111 / 2 \mathrm{c} . \text { per ton, } 2,240 \text { pounds, } 10 \text { per } \\ \text { cent. added.................................. } \end{array}\right\}$ | Team of 4 men, 18 tons daily. |
| Puddlers............... | $\left\{\begin{array}{c} \$ 2.80 \text { per ton, } 2,240 \text { pounds, } 10 \text { per } \\ \text { cent. added................................. } \end{array}\right\}$ | 4,975 pounds daily per team. |
| Helpers................ | 25 c . one heat..................................... |  |
| Rollers.................. | $\left\{\begin{array}{c} 71 / 2 \mathrm{c} . \text { per ton, } 2,240 \text { pounds, } 10 \text { per } \\ \text { cent. added............................... } \end{array}\right\}$ | $\left\{\begin{array}{l} 4 \text { men, } 40,800 \text { pounds per team } \\ \text { daily. } \end{array}\right.$ |
| Catchers................ | $\left\{\begin{array}{c} 71 / 2 \mathrm{c} . \text { per ton, } 2,240 \text { pounds, } 10 \text { per } \\ \text { cent. added.................................. } \end{array}\right\}$ | $\left\{\begin{array}{l}4 \text { men, } 40,800 \text { pounds per team } \\ \text { daily. }\end{array}\right.$ |
| Hookers-up. | $\left\{\begin{array}{r} 5 \mathrm{c} . \text { per ton, } 2,240 \text { pounds, } 10 \text { per cent. } \\ \text { added......................................... } \end{array}\right\}$ | $\left\{\begin{array}{l} 4 \text { men, } 40,800 \text { pounds per team } \\ \text { daily. } \end{array}\right.$ |
| Draggers-out.......... | $\left\{\begin{array}{l} 5 \frac{1}{2} \text { c. per ton, } 2,240 \text { pounds, } 10 \text { per } \\ \text { cent. added................................... } \end{array}\right\}$ | $\left\{\begin{array}{l} 4 \text { men, } 40,800 \text { pounds per team } \\ \text { daily. } \end{array}\right.$ |
| Squeezers...s......... | $\left\{\begin{array}{c} 5 \frac{1}{2} \text { c. per ton, } 2,240 \text { pounds, } 10 \text { per } \\ \text { cent. added................................... } \end{array}\right\}$ | $\left\{\begin{array}{l} 2 \text { men, } 40,800 \text { pounds per team } \\ \text { daily. } \end{array}\right.$ |

## POTTERIES.



## TABLE No. 5.-Establishments-Continued.

## Prices Paid for Piece Work. POTTERIES.



# TABLE No. 5.-Establishments-Continued. <br> Prices Paid for Piece Work. <br> POTTERIES. 

| Subdivision of Trade. | Price paid for Work by the Piece-State What Constitutes a Piece. | The average QuantityProduced. |  |
| :---: | :---: | :---: | :---: |
| Kiln | ( ${ }^{8}$ g gloss kilns, 16 feet by 6 inches......... |  | In setting a gloss kiln four bungs are a fair days work for one man can set five bungs. In setting the gloss ware each, while in the bisket it is simply sanded. In a gloss kiln there are from 80 to 93 bungs, containing from 1600 to 1900 from 1600 to 1900 dozen pieces of ware, and it requires three bisket kilns of ware to make two of gloss. gangs, and are paid for each kiln for a given number of days. Thus, a kiln to fill, the workmen are paid $\$ 36$, except where there are apprentices, tice is counted as a day's worker, not get full pay. |

## TABLE No. 5.-Establishments-Continued. Prices Paid for Piece Work. MISCELLANEOUS.

| Subdivision of Trade. | Price Paid for Work by the Piece-State What Constitutes a Piece. | The Average Quantity Produced. |
| :---: | :---: | :---: |
| Cigar makers........ | ( | 1 man, 1,500 to 2000 weekly. <br> 1 man, 1.600 weekly. <br> 1 man, 1,500 to 2,400 weekly. <br> 1 man, 1,000 to 2,000 weekly. <br> 1 man, highest price, 250 daily. |
| $\left.\begin{array}{l} \text { Compositors } \\ \text { (printing)......... } \end{array}\right\}$ | 36 cents per thousand "ems." An "em" is the square of the type. The number of "ems" in a line vary with the size of the type........... One morning paper , pays 40 cents per thousand "ems." The rates are almost universally higher on morning than evening papers. ................. |  |
| Hat sizers.............. | 10 to 15c. per hat. ............................... | 24 hats per day. |
| Hat pouncers........ | 25 to 60c. per dozen ............................. | $2 \mathrm{men}, 20$ dozen per das. |
| Hat blockers.......... | 18 to 38c. per dozen ............................. | 3 men, 24 dozen per day. |
| Hat trimmers......... | 48c. to $\$ 1.80$ per dozen.......................... | $11 / 2$ dozen per day. |
| Hat shavers........... | 24 to 42c. per dozen.............................. | 200 hats per day. |
| Hat finishers.......... | \$1.15 to \$2. 37 per doz............................ | $11 / 2$ to 2 dozen per day. |
| Hat curlers............ | \$1.30 to \$1.75 per dozen......................... | 5 to 8 dozen per day. |



## PART II.

## REMARKS AND SUGGESTIONS BY WORKINGMEN

in reply to question number 20, blank number 3.
"Remarks on any Subject of Interest to Wage-Earners, not only in Relation to the General Conditiov of Yourself and Your Fellow-Workmen and Their Families, but Espectally Regarding the Movement for a Shorter Day of Work, and Whether it is Practicable in Your Trade, Giving Your Reasons; Also State Whether any Strikes Have Occurred in Your Neighborhood During the Year, Giving Details-Their Cause and Result."

## PART II.

## REMARKS AND SUGGESTIONS BY WORKINGMEN

in reply to question number 20, blank number 3.

The several hundred answers here reproduced were given by wageearners in reply to a general request for information as to their condition and for their views on the different phases of the labor question. An account of many of the labor troubles which have taken place throughout the State during the past year is also annexed, our correspondents being in every case workingmen themselves. These statements give nearly all the important strikes in 1886, and are complete for South Jersey, and Passaic and Essex counties. Particular attention has been devoted to the latter, a résume of the industrial history of that county closing this chapter.

## A SHORTER WORKING DAY.

"The work is hard and eight hours are fslly all that a man can endure and last long. Glass blowers only average about eight and a half hours daily now, but a half hour is considerable when one is very tired."-Glass Blower.
"Eight hours should become general over the whole country. In our trade few work more than that."-Glass Blower.
"The eight-hour movement is the most important of any."-Glass Blower.
"The general condition of the bottle and vial glass blowers here (Millville) during the past season has been good, as most of them have had full work. They sympathize with the eight-hour movement, mainly because of the general benefit to wage-workers. Very few blowers work more than eight and a half hours daily, and many do not do over eight hours' work."-Glass Blower.
"This is the first full season I have had in three years. Last year I only got three months' work at my trade and two months' outside, or five months' work in all."-Glass Blower.
"Window glass blowers only work forty-eight hours, full time, per week ; generally only forty-five."-Glass Blower.
"The shorter-hour movement is a good one, which will benefit the great army of workers; but hasty action is injudicious."-Glass Blower.
"Shorter laboring time as soon as it can be done with safety to the business interests of the country."-Glass Blower.
" It would be very difficult for piece workers to take advantage of fewer work hours and get the same wages as now. In time this matter though would regalate itself, and as much or more wages would be made as at present."-Glass Blower.
"There are too many men out of work, and the eight-hour plan would provide employment. Even if lower wages should result, it would be a general benefit."-Glass Blower.
"Cannot see the good of shortening the hours of labor."-Glass Blower.
"That weuld do us little good; we should turn our attention to co-operation."-Glass Blower.
"Fewer hours of labor would benefit wage-workers, but it is impracticable for master shearers."-Master Shearer.
"A shorter working day would reduce piece workers' wages, and therefore I am opposed to it."-Stopper Grinder.
"It takes longer than that (eight hours) to melt the glass, and so eight hours wouldn't do for us."-Night Shearer.
"A shorter working day as soon as it is possible without disturbing business."-Window Glass Flattener.
"Good wages are the principal concern. Unless they have that the work people won't progress in anything. A reduction of hours evidently would lower wages."-Window Glass Cutter.
"Labor organizations spend too much time on impracticable questions. Let alone everything but that of wages."-Glass Packer.
"Wages are more of an object than a reduction in the hours of labor."-Gatherer.
"As yet there has been very little agitation among us. Should imagine that an eight-hour day would necessitate a reduction in wages."-Mould Maker.
"Ten hours is nøt too long to work. Workmen can't expect ten hours' pay for eight hours' work."-Mould Maker.
"Have time enough now to be idle; but I believe eight hours a day would benefit the great body of workers."-Window Glass Gatherer.
"Even eight hours of daily labor is too much for the increasing number of laborers in this country. Some day it will have to come down lower still."-Master Shearer (Bottle House).
"Our business, that of general jobbing and repairing, would, in my opinion, hardly warrant a reduction in the work day, especially on Saturdays, when the mills in Paterson bring in their machinery to be repaired for Monday's use. In overtime, up to 12 P. M., we are paid an extra half, and after midnight and on holidays double rates." -Machinist.
"The question of limiting the working day to eight hours is eagerly discussed and anxiously looked for in Camden. But the power of organization should bring this about all over the country at the same time, and capitalists should have one or two years' fair notice." Machinist.
"Abolishment of piece work would do more good than an eighthour system. Piece work gives a greater production for the same wages than by any other plan."-Machinist.
"Most, if not all, of the Paterson employers pay by the hour, and if we had fewer hours of work we would get less pay. Yet, I think if we were strong enough, which we are not at present, that we could get eight hours a day and that the pay would shortly regulate itself." -Machinist.
"I could do very well and keep clear of debt if I only had steady work. I suppose there are a great many more in the same boat with myself. Under the present condition of trade I don't think it would be advisable to agitate for fewer hours. Nevertheless, an eight-hour day would be a benefit to our trade, as it would tend to give steadier employment, for we would not stock the market so quick, taking longer to build a certain number of engines."-Machinist.

[^41]increase in pay. The very name of labor-saving machinery implies this for the worker as well as money making for the employer."Machinist.
"Eight hours and no overtime. Let the extra work now done in the busy season be made up during the dull times."-Blacksmith.
"Am not sure that eight hours could do with us; but know that we work too long now."-Core Maker.
"Firmly believe in eight hours. The late demonstration shows that the movement is becoming popular. Yet, if we don't get the same wages, it would prove detrimental."-Iron Moulder.
" We only get enough pay now to keep body and soul together, and we would get less under an eight-hour system. Then, too, men would be apt to spend their few idle hours foolishly. I believe in a gradual decrease, so that we could come to eight hours in about two years." Iron Moulder.
"There is no movement in our trade for a reduction of hours. It is not practicable at present."-Rasp Puncher.
"Ten hours is too much of a strain on the system, as we areobliged to sit all day in a stooping position. The work also is hard and tedious."-File Cutter.
"Have not studied the question much, but should like eight hours for a day's work if that would not reduce the wages."-Carpenter.
"The difficulty with the carpenter trade is that there are too many at it. We are able to do all the building there is a demand for during the year in four months. The remedy is fewer hours of daily employment; but the movement must be national, or the outsideworkers and employers will run us out."-Carpenter.
"Ten hours daily labor is not oppressive. A reduction though would be welcome if wages could remain the same."-Carpenter.
" Want eight hours for a day's work and no overtime." "Of course we would like to have eight hours, but not in a way which would lessen our wages."-Shoemaker.
"The work hours are entirely too long."-Shoe Fitter (Female).
"The reduction should come gradually."-Shoe Nailer.
"The building trades in this locality (Newark) work only nine hours, and they do not seem to be desirous of going back to the old system. In fact, my personal experience has been that those who once get a shorter working day stick to it. The German printers
have succeeded in obtaining an eight-hour day, and they are not inclined to return to ten hours."-Compositor.
"The movement for a shorter working day has been premature, although it will be a good move at the proper time, and if general. Employers should be given a fair notice. Eight hours as soon as practicable."-Shoe Operator.
"Eight hours as soon as it can be brought about without hurting-business."-Carpenter.
"We ought to have a Saturday half-holiday. We would not lose anything by it, as we never have more than five and a half days ${ }^{\text { }}$ work in the week anyway."-Hatter.
" Eight hours of work is enough and would be feasible in my trade. At present forty men belonging to our Union (Newark) are idle, and I suppose as many outsiders. Some are idle seventeen weeks and over. In 1881, when we worked eighteen hours daily, we struck for shorter hours, and we now work but twelve, except on Fridays, when the time is fifteen, mostly night work. In some places in Essex and Passaic eighteen hours are still the rule. Our Union only had sixtythree members left in 1884, but now we number four hundred."Baker.
" We work ten hours, and so far as I can see, it would harm our employer if they were cut down."-Copper Roller.
"All the stores close early in Vineland daily, except on Saturdaysand the nights before holidays."-Clerk.

> "The failure of the Newark Savings Bank made a poor man of me."-Hatter.
"I think the eight-hour day is practicable in my trade. I have been working only that time since January. I do not make as much, but I get along very well if I have steady work."-Cigar Maker.
"The eight-hour plan has given our trade more work and steadier employment. We have now sixty-seven men employed ; before wehad but thirty-five here (Paterson)."-Cigar Maker.
"In several of the trades they have busy seasons and dull seasons, and do not average eight hours a day during the year. But because of the change of fashion and want of knowledge of what kind of goodsthe market will demand, this cannot be helped."-Weaver.

[^42]"The eight-hour system would give us steadier work. We now lose about four months in the year."-Ribbon Weaver.
"We tried to get fifty-five hours a week-ten hours for five days and a Saturday half-holiday. We only got the latter, and the rest of the week work ten and a half hours."-Ribbon Weaver (Paterson).
"The condition of the silk pickers in Hudson county is very poor now, and it would not be advisable to agitate for a shorter working day; there is too little doing."-Picker.
"The overtime could be stopped by putting on regular night shifts. But unless we had more pay we couldn't get along without doing overtime. The average heat in summer is $112^{\circ}-115^{\circ}$."-Calender Man.
"Even if the present generation might suffer, pecuniarily, for a time, the eight-hour system should be tried. I am convinced that it will be, and it cannot be begun too soon."-Broad silk Weaver.
"An eight-hour day would do much to stop overtime work and give employment to unemployed workmen. It would permit the workers to get more fresh air and to educate themselves. But, especially, the time thus gained to the head of the family could be spent at home, and he and his family might enjoy some of the blessings of family life."-Silk Weaver.
"No children under eighteen years should be permitted to work more than eight hours daily, as they ought to have time to get an education."-Carpenter.
"There should be a compulsory attendance of children at school for three hours daily."-Ship Carpenter.
"The hours were reduced here (Newark)."-Carpenter.

## MISCELLANEOUS OBSERVATIONS.

"Labor should organize, but use its power justly and wisely, and not abuse it. The condition of window glass blowers has been vastly improved by organization."-Glass Blower.
"The silk ribbon trade seems to be in a good condition now."Paterson Weaver.
"Our condition here (Bridgeton) has not improved during the past year."-Window Glass Flattener.
"The laborers in Woodbury have suffered a great deal this year, because of the importation of a lot of Italians to work at ninety cents a day on the water works. It seems to me that something
should be done to prevent that. The trouble between the glass blowers and their employers regarding apprentices has also been a great hardship to the unskilled workmen, who were not consulted in the matter at all. The loss in such cases should be borne by those who are responsible for it."-Glass Packer.
"The trouble with the window glass men is that they do not have enough work."-Glass Blower.
"Something should be done to employ our idle men (flint glass blowers), or there will be a fall in wages."-Glass Blower.
"The temperance question is just now of more importance to work people than any other."-Glass Blower.
"My house only costs me five dollars a month, which I pay to the building and loan association."-Glass Worker.
"The lamp workers have only recently organized, and the great question now discussed is that of apprentices, of whom there are too many."-Glass Worker.
"The condition of the Camden wage-earners is better than that of those in most eastern cities, on account of cheap rents, ready access to a cheap market and comparatively fair wages. The liquor laws are stringent and tolerably well enforced. Yet the workingmen are lazy agitators, allowing many golden opportunities to slip by. More educational facilities are still clamored for, and these should be provided in preference to spending money on a useless militia. We have no free library here yet. We are very conservative with strikes." Machinist.
"A change is necessary in our so-called protective tariff. All raw material should be free, and a sufficient tax be placed on all immigrants in order to keep our labor market from being glutted." Machinist.
"Our prospects of late years have not been very bright here (Paterson) but they are beginning to improve. At present the greater portion are only working two-thirds of the time, and but few make full time. All this leaves us in a poor condition at the end of the year, wages at best being low."-Machinist.
"Labor-saving machinery has resulted in greater production, but it has also cheapened goods, increased the demand and, consequently, the wages of working people."-Machinist.
"Ignorance, intemperance and indifference are the three great obstacles in the way of improvement."-Carpenter.
" Importation of foreign unskilled laborers prevents increase of our wages. They offer their services at a too low figure."-Car Carpenter (Wortendyke).
"Temperance, Sabbath observation and education of the young. If the next generation be better educated the workingmen will be able to take care of themselves."-Ship Carpenter.
"The reduction of the legal rate of interest to four per cent. would be a great benefit to the building trades. Railroad freight diserimination is a great evil, but the greatest is intemperance."-Carpenter.
"Since the girls have joined the Knights of Labor here (Vineland), they make the same wages as the men. We have not had any strikes. for a long time, and don't want any."-Shoe Fitter (Female).
"The men in our trade drink a great deal."-Shoe Cutter.
"The condition of our people in Vineland was never better. We are well provided with schools. We have now a good co-operative store, through which we can save on our purchases."-Shoe Finisher.
"Some of the working people here (Vineland) have barely madeenough to live on."-Shoe Nailer.
"I am in a typographical Union. The organic law is sound enough, but the direction of affairs is as bad as it can be. A majority rules, and its methods often put one to shame. The question is never 'What are fair wages?' but 'How much can we get?'"-Newark Compositor.
"I think a reasonable pay for barbers is at least eight dollars weekly."-Barber.
"If I had not lost time by sickness and had had no doctor's bill to pay I would have come out just about even, and my earnings are rather above the average. But that is not square. A man should beremunerated sufficiently to be able to lay up something for old age or a rainy day."-Paterson Broad Silk Weaver.
"Here in Jersey City there is not enough school room."-Plumber.
"I don't think there are fifty of our Newark hatters who havesaved anything during the year."-Hatter.
"We ought to be paid by a sliding scale. The majority are industrious and sober, twenty-two out of forty-five owning their own houses."-Copper Roller.
"Drink is our great curse. An employer prefers a sober man, ever if a poorer mechanic, to one who cannot be depended on because intoxicated more or less frequently."-Compositor.
"Organization has given the women in Gloucester city the same pay as men get."-Cotton Weaver (Female).
"The condition of women wage-workers has been much improved lately."-Cotton Weaver.
"The Vineland co-operative shoe store has a large custom."-Shoe Burnisher.
"Co-operation is good in its place; but as the business men are now with us, it is questionable whether it would be better to risk throwing away this great help, which is likely if co-operation became general."-Shoe Operator.
"I don't think workingmen appreciate the benefits of co-operation enough. If a co-operative store can be organized, do so by all means; otherwise trade with a dealer who sells strictly for cash. My experience has been that the pass-book system works injury on customers. There are always some who don't pay their debts, and these are made up by the good customers."-Shoe Laster.
"Co-operation should be the aim now. Our wages are about as high now as they will ever get under the present system."-Machinist.
"Every employe should have, besides his wages, some share of the profits."-Machinist.
"The leaders of the labor movement should pay more attention to our means of education."-Blacksmith.
"We have reached a cash system in West Jersey. We now need an apprenticeship law compelling employers to teach their apprentices the full trade and make them responsible for their general educa-tion."-Machinist.
" We receive here (Williamstown) cash payments now. That was not the case a few years ago, when the company or 'pluck-me' store was in full blast. Our employers have their own store still, but now they are compelled to enter into competition for our trade, and sell as cheap and sometimes cheaper than elsewhere. The following are extracts from some of their advertisements during the year:

[^43]
## STRIKES AND LABOR TROUBLES.

"There is no reason why there should be any antagonism between the man whose money makes possible the extension of industrial enterprise and the man whose muscle is equally useful. They should meet upon a common platform and have frequent conferences, in order that there may be a complete mutual understanding."-Glass Blower.
"Co-operation and political action are the true methods to bring about reform. While wage-workers rely only on strikes they will fail to better their condition."-Glass Blower.
"Strikes as a general thing are unnecessary. If both sides show a disposition to act fairly, the trouble can be adjusted."-Glass Blower.
"In the future there will be fewer strikes, and a more rational way of settling disputes will become genenal."-Mould Maker.
"Strikes are no good. They work an injury to the laboring man." -Master Shearer (Window Glass).
"The labor troubles have done much injury to workingmen during the past year, but they may prove a benefit in the long run."-Master Shearer (Bottle House).
"Strikes have done good, but as a matter of dollars and cents the working people have not realized much from them. They should look to the ballot now."-Shoe Heeler.
"Have had steady employment; no strikes and no reduction in wages here (Burlington)."-Shoe Fitter.
"We have had no strikes in Wortendyke."-Car Carpenter.
"Strikes have had their day."-Shoe Operator.
"Strikes are an evil and should give way to arbitration."-S hoe Heeler.
"There has been one strike in the printing trade, in Newark, during the year, resulting in an increase of wages. The established rate, for time work, now is $\$ 17$ per week; and piece workers average about the same, on full time. The principal drawback in our trade is the lack of an apprentice system. Young men from the country, as soon they learn the rudiments of the business, strike out for the cities, where they are willing to work for much less than the regular wages. Workingmen everywhere spend too much in strong drink."-Com? positor.
"Had a strike in our shop (Newark) because of the refusal of ar increase in wages which had been promised. The result was a five per cent. advance, and the organization of a trades union in September, 1885. Another advance was granted in January, 1886, which made up the ten per cent. reduction of a year before."-File Cutter.
"There have been no strikes in our trade here (Paterson) during thepresent year, and I hope there will be none. I trust that in casethere is any trouble arbitration will prevail, because less suffering will result."-Machinist (Locomotive Works).
" No strikes have occurred in our neighborhood (Vineland). Our relations with our employer are amicable. The hands are organized, both men and women."-Moulder.
"No strike has taken place here (Florence)."-Iron Moulder.
"We have had no strike this year in our trade in New Jersey, and don't want any."-Bottle and Vial Glass Blower.
"The barbers are doing well, as a general thing, in Paterson. No strike."-Barber.
"There have been no strikes in Wortendyke."-Silk Picker.
"Strikes have been numerous here (Jersey City) during the year, most of them for a reduction in the hours of labor. Some were won, some lost. The failures were mostly due to lack of discipline in the unions. Give us night schools up here."-Carpenter.

[^44]
## STRIKES IN PASSAIC COUNTY.

"There have been two strikes-one for an increase in rates by the weavers. This lasted four days, and they went back without gaining their point, but four months afterwards got an increase of ten per cent."-Cotton Loom Fixer (Paterson).

[^45][^46]The silk ribbon weavers employed by Dexter, Lambert \& Co., Paterson, made a demand for an increase of prices paid on certain classes of goods. There were ninety engaged in the strike, which began on March 3d and continued two weeks, when the dispute was compromised at an advance of from eight to ten per cent. in wages.

The nine hundred silk dyers of Paterson, in May, stopped work for an average of three days, to compel the enforcement of a new schedule. They were successful. Under the old system one dyer could take charge of and superintend the work of from five to thirteen boxes. The new schedule limits a dyer's work to three boxes, thus necessitating the employment of at least double the number of workers, and makes wages uniform at $\$ 18$, minimum, per week, instead of the previous variation of from $\$ 12$ to $\$ 25$. Finishers now have a uniform rate of $\$ 12$; they used to get from $\$ 10$ to $\$ 12$. Helpers, who formerly received from $\$ 5$ to $\$ 7$, now make at least $\$ 9$. Overtime is paid at time and a half, the number of apprentices limited, Sunday work stopped and the mills close on Saturday at 2 p. m. in summer and 4 P . m. in winter.

At the Pioneer Mills, Paterson, the weavers struck for an apprenticeship system, in September. Eighty-five men were out for three months, when the employers gave in so far as to agree to accept the regulations adopted by other manufacturers. The compromise also provided that at least twenty-five per cent. of the strikers were to be put at work within a given time, and that preference was to be given to old hands when additional were engaged.

The hand silk winders, mostly girls, of Louis Franke, Paterson, in August, resisted a reduction of fifty cents per week in wages. The strike, in which about two hundred and fifty were engaged, lost a week and resulted in a failure. The hands returned to work at the reduction.

Thirty-five broad silk weavers, employed by A. Cardinal, requested an advance of ten per cent. in wages, and on refusal left their
looms, in April. They were unsuccessful. No satisfactory settlement was reached after a three months' strike, and the hands, with the exception of three, had to seek work elsewhere.

The flax dressers in the Barbour Flax Spinning Mills, numbering eighty-five men, struck, on April 16th, for an increase of ten per cent. in wages, and for the removal of a machine. The firm decided to transfer their dressing department to Canada, and offered those of their employes who wished to remove there the increase in wages asked for. About sixty took advantage of the offer and worked in Canada for six months, when they returned because their work was finished. At the close of the year there are only about twenty-one employed in the mills, the remainder working elsewhere or being idle.

The velvet dyers and their helpers, at the Greppo Dye Works, demanded an increase of $\$ 2$ per week in wages, and, being refused, quit work on September 3d. The strike continued two days, but was settled by a compromise of $\$ 1.50$ and $\$ 1$ increase. The number of strikers was twenty-five.

The firm of Doherty \& Wadsworth, silk manufacturers, in Paterson, refused to discharge an obnoxious employe at the demand of their forty-five hand-loom weavers, who, in consequence, quit work. On the fourth day of the strike this weaver was discharged, but the old employes were not taken back until thirteen weeks, the firm stating that they had no orders for the class of goods they were making. At the expiration of that time the weavers were asked to return.

A strike of the woolen weavers of the Rittenhouse Manufacturing Company, Passaic, lasting two weeks from February 17th, was caused by the refusal of the proprietors to increase wages. Sixteen men and three women were interested in the trouble, which was settled on the basis of the wages paid in Philadelphia, these being from $\$ 2$ to $\$ 3$ per week higher.

The iron moulders employed in the various locomotive and machine shops at Paterson submitted a new schedule of prices to the consideration of their employers in August. In some of the shops a strike ensued ; in others the men were locked out. The total number affected was three hundred and eighteen. After being out one hundred and twenty days the following compromise was arrived at, so far as two hundred and fifty were concerned, but no settlement has get been made with the balance:

Per day.
Moulders ..... \$2 25
Core makers ..... 200
Helpers. ..... 150
Laborers ..... 125
These are the minimum wages to be paid.
The average rates received before the strike were:
Per day.
Moulders ..... $\$ 206$
Core makers. ..... $167 \frac{1}{2}$
Laborers ..... 1 11 $\frac{1}{2}$

And the demand was for $\$ 2.50, \$ 2.00$ and $\$ 1.50$, respectively, per day.

Two weeks' time was lost in May by twenty employes of Graham \& Co., brewers, Paterson. They wanted a new schedule of prices, but submitted to arbitration, which resulted in an increase of wages of about $\$ 2$ per week.

In May fifty-nine hands in the Watson Bleachery, Passaic, struck work because of the refusal of the firm to reinstate four discharged women. The strike was unsuccessful, and few of the strikers were taken back.

In the Reid \& Barry Print Works, Passaic, in May, the co-employes of one discharged for alleged careless work, struck because the firm refused to reinstate him. The other departments refused to do the work of the strikers, when the establishment was shut down and six hundred men thrown out of employment. After refusal on the part of the firm to submit to arbitration, the employes, about June 1st, decided to return to work individually, but a large number were informed that they would not again be taken in. Those that did get back had their wages reduced, which had been increased just before the strike. It was the most disastrous strike that ever took place in Passaic.

Another failure occurred at the Ivanhoe Paper Mills, Paterson, the employes of which struck against an increase in the hours of labor from sixty-six to seventy-two per week and the discharge of six engineers. Forty persons were engaged in this strike which lasted three weeks. Many of the strikers had to seek work elsewhere.

## STRIKES IN SOUTH JERSEY.

"A number of strikes took place during the year in the South Jersey counties, under the jurisdiction of D. A. 2, Knights of Labor. One of the longest and most hotly-contested strikes occurred in the Bridgeton Nail Works, for an increase in wages. It began in April, 1885, and lasted six months. The strikers were successful and obtained a ten per cent. advance.
"The three months' strike in the Gloucester City Gingham Mills began in October, 1885, for an increase in wages of fifteen per cent. Settled by compromising at thirteen per cent. advance.
"The employes in the Gloucester City Cotton Mills, in August, 1886, became dissatisfied with a disagreeable boss and struck work. The strike had lasted one day, when the hands were ordered back by the Executive Board of the D. A. of K. of L.
"There was also some trouble at the iron works, Gloucester City. In May, 1886, a strike for an advance in wages took place. It lasted one day and ended in securing the men a ten per cent. increase. A month before there had also been an increase. In September the hands again struck to effect the re-instatement of an employe. This strike continued for eight days, when the strikers were ordered back to work by the Executive Board.
"The strike at the Dunn Oil Cloth Works, Camden, began on June 26 th, 1886 , and continued for three weeks. This was settled by a concession of a fifteen per cent. advance in wages, which made a difference of about $\$ 3,000$ to the whole number of employes.
"In July, 1886, the hands at the Camden Stove Foundry went out because of the discharge of one of the men. The strike was a failure and resulted in the discharge of thirty men.
"The gathering boys in one of the Bridgeton glass works, in October, 1886, struck for an increase of wages. After being out two days their demands were granted. In four glass works the tending boys also struck for more wages, and in the majority of cases succeeded in getting an advance."-Glass Blower.
"The window-glass workers of the United States had a six weeks" strike, beginning September 1st, 1886. It was mainly for an increase in wages of the gatherers, and resulted in a conference with the manufacturers. The demands of the workers were not acceded to. The window-glass workers' organization extends over the country, and there are a large number of men in New Jersey."-Glass Blower.
"The core makers (dry sand gang) of the Millville Iron Foundry were engaged in a strike for seven months. It began in this way: four extra pipes were crowded into our gang without an increase in
our wages, notwithstanding that we had been making twelve-inch pipes for about 69 cents, while in other places $\$ 1.02$ was paid. We asked an increase of from $\$ 1.42$ to $\$ 1.50$ per day (for our helpers). The proprietors were willing to grant this, provided there should be a proportionate increase of work, i. e., the hands to mould more pipe in a day. But this we refused and went out. When the strike had been in progress for about two months, we were told that the increased wages would be conceded, provided we severed our connection with the Knights of Labor. Several conferences were held, but the strikers again refused to comply with the conditions of the employers and were locked out in consequence. Subsequently a settlement was reached. This was brought about by a conference between a citizens' committee, representatives from the Knights of Labor and the employers. The increase of wages without increase of work was conceded in behalf of the proprietors, who agreed to take back the old hands, as far as practicable, without discharging those who had taken the places of the strikers. The latter, on their part, promised to withdraw from the Knights of Labor temporarily, but were not to be discharged because of their future connection with any labor organization they chose to join."-Core Maker.
"A strike took place and lasted for a short time. Our wages were increased ten per cent."-Camden Core Maker.
" There was a great strike, last year, in the Gloucester City Gingham Works. It began in October, 1885, and ended in January following. The result was very beneficial to the operatives, and has improved the mutual relations of employer and employe. Strikes are an evil, but, like war, sometimes a necessity. Our strike was for a fifteen per cent. increase in wages, and we got nearly all we asked for. During the strike, a co-operative store was started, where the strikers could get their goods. This proved a great help."-Loom Fixer.
"The Grand League of the Green Hollowware Glass Blowers, Eastern Division, U. S., comprising over eleven hundred members, met at Atlantic City, N. J., July 13th, 1886, and decided to become a District Assembly of the Knights of Labor (D. A. 149), and to re-organize their 'branches' into local assemblies. This matter had been considered for some time past, and the action taken met with the approval of a large number of the blowers, many of whom were already knights.* At this meeting, also, the following resolution, sent up by 'Branch No. 10,' was adopted by a vote of forty to twenty-three. Its passage caused much bitter feeling among the blowers, and resulted in a serious strike and much loss of time:
*The Western Division took similar action at about the same time.

[^47]"Soon after adjournment there was a conference between committees from the manufacturers and the Executive Board of District Assembly 149, when the following compromise was adopted, subject to the ratification of District Assembly 149 and the Manufacturers' Association: 'The manufacturers, during the blast of 1886 and 1887, to take only one apprentice to every twenty blowers, and the blowers to submit to a reduction of five per cent. in wages.' The proposed compromise was rejected by the District Assembly, at a meeting at Camden, on August 24th, and so the blowers did not go to work as usual on September 1st.
"On September 30th, the Millville blowers went to work under the following agreement: 'The firm are to pay the list of prices adopted by the Grand League, at Atlantic City, July 16th, 1886, and be allowed one new apprentice for each twenty journeymen blowers they employ. This agreement to be for the blast of 1886 and 1887. In case the League should make a reduction in the list, the blowers' wages shall be settled up and paid at the price, sixty-cent list, less ten per cent., as passed at Atlantic City, to the time such reduction is ordered by the constituted authority of the League.' The Clayton local assembly of blowers had previously offered to compromise with their employers by accepting two new apprentices to a factory and no reduction in wages, and, subsequently, a five per cent. reduction in wages. Both the Millville and Clayton 'branches' were censured for this course, at the meeting of District Assembly 149, at New York, on September 30th, when it was decided to compromise with the manufacturers at one apprentice to twenty journeymen, without any reduction in wages. But the manufacturers' combination refused to concede this, and offered a counter proposition of two apprentices to a furnace and a ten per cent. reduction in wages. The Clayton men, after this, went to work with two apprentices and a five per cent. reduction. As a number of other 'locals' followed this lead, the Executive Board of the District Assembly decided to authorize a general return to work on the Clayton terms. This action called forth much harsh criticism and resulted in a special meeting of the full District Assembly, at Camden, November 12th, when the proceedings of the Executive Board and those of the District Assembly, held at New York,

September 30th, were declared illegal, and the resolutions adopted at the July meeting, Atlantic City, reaffirmed, viz., 'No apprentices and no reduction in wages.' The vote stood twenty-seven yeas to five nays, fifteen delegates refusing to vote. All local assemblies, in places where apprentices had been taken and wages reduced, were, a short time afterwards, ordered by the Executive Board of District Assembly 149 to have such apprentices discharged and the old rate of wages restored, and, if such demand was refused by the manufacturers, to strike.
"In consequence of this order, near the close of the year, most of the New Jersey blowers and some from outside, being under agreement with the manufacturers, severed their connection with District Assembly 149, reorganized the old Glassblowers' League of the Eastern Division, and continued to work under the terms of the manufacturers' combination. The balance of the blowers, only a few of whom are employed in the New Jersey factories, for some time held out, but afterwards the Executive Board of District Assembly 149 offered to compromise at a seven and one-half per cent. reduction (or seventeen per cent. off the list) with no apprentices.
"The net result of this trouble for New Jersey workmen has been, therefore, a loss of at least one month in time and a reduction in wages. This reduction now amounts to fifteen per cent. on the 'list prices' adopted in 1864, but is not as low as it has been. During the financial crisis of 1873-79, twenty-eight per cent. 'off' prevailed for a time. For the past half dozen years the rates have been ten per cent. 'off.'
"Another result of this strike has been the disbandment of District Assembly 149, K. of L., so far as most of the New Jersey local assemblies are concerned, and the re-organization of the Eastern Glassblowers' League, which, for twenty years, controlled the wages of its members, educated the blowers in the principle of self-protection, and convinced the leading manufacturers in the glass business of the wisdom of conferring with their workmen."-Glass Blower.

## STRIKES IN MIDDLESEX COUNTY.

"Owing to depression in the trade, the terra cotta works of Messrs. Hall \& Putnam, at Perth Amboy, were closed on January 1st, 1885, for the space of three months, thus throwing one hundred and fifty men out of employment. On resumption of work the employes suffered a reduction of from seventeen to twenty-five per cent. in wages, without much opposition. After the lapse of a few months, trade again becoming brisk, the hands asked for the restoration of their former wages. The employers refused to concede more than a ten
per cent. advance, which was rejected by the employes, who submitted the dispute to their Local (4042) and District Assemblies (103). To the Executive Board of the latter, the general manager stated that competition in the trade did not allow a greater advance than ten per cent., but that he was willing to adopt a uniform scale of prices in connection with the other terra cotta manufacturers in the country. A meeting of manufacturers, consequently, was held at New York city, in March, 1886, who, after due discussion with representatives from the workmen, agreed on a uniform price list, which effected a full restoration of the wages previously received by the Perth Amboy workers. This outcome gave general satisfaction."-Terra Cotta Worker.

In April last there was considerable excitement in and around New Brunswick, because of a strike of about one hundred and fifty of the workmen employed in a brick-yard at Sayersville, a village a halfdozen miles distant. The disturbance lasted only a few days, but it was considered necessary to call upon the sheriff for a posse comitatus, or about twenty-five "deputy sheriffs," who guarded the yards during the trouble. Company D, of the State militia, of New Brunswick, was also ordered to hold itself in readiness, but its services were not required. There does not seem to have been any attempt at violence. The sheriff, on his arrival, closed up all the saloons, and the report in one of the local papers, which considered the matter "a labor excitement over a small matter," goes on to say :
"Daylight found everything quiet. As early as possible the firm commenced paying off the men. A watch was kept, and as fast as the ringleaders came up and got their pay they were beckoned into the back office, where the deputy sheriffs awaited them, and quietly taken into custody, handcuffed and shipped off to this city, where they were committed to jail for a hearing. The other men returned to work the next morning."

The cause of the strike, in the words of the men, was "better grab and a little money every two weeks." These brick-yard employes, Germans, French Canadians and Irish, numbered in all about four hundred, of whom but a half-dozen were married, the rest living in two boarding-houses owned by the firm. The newspaper mentioned above reports the proprietors as stating that "they have no regular pay days but give the men money, on demand, whenever it is believed that they will make a good use of it and not drink to neglect of their
work. Any man who wishes to leave can do so and get his money at any time by giving ten days' notice. The firm has a store, but the men are not required to deal at it unless they see fit."

The strikers' story was given as follows:
"They said that they had no complaint to make about the rate of wages paid or the number of hours they had to work, but that they did want and were determined to have food better prepared and a little money every two weeks. They could not eat the food in the way it was served to them, and they could get no money except on the fourth of July and in the fall when the yards closed ; and if they wanted to leave they had to give ten days' notice. There was no use in bringing the sheriff down there. They were not going to do any harm. They would be fools to tear things to pieces when they would have to pay for damages, as the company owed them $\$ 40$ apiece."

These men work seven months in the year, from April to November. They work ten hours a day, and their wages average below $\$ 175$ for the season.

In May, 1883, the shirt ironers employed in the shirt factory at Jamesburg, Middlesex county, who during the previous two years had suffered a considerable reduction in their wages, struck for an increase of ten per cent. Just before this they had been organized, by the advice of the Yonkers, N. Y., Shirt Ironers' Protective Union, as Protective Union, No. 2. After being out two days, the demand for an increase was granted, on condition of disbanding their newlyformed union, which had forty-nine members. This was complied with, and no other attempt at organization was made until the spring of 1886 , when thirty-two ironers and starchers were organized into a local assembly of the Knights of Labor, but secretly, as their employers were decidedly opposed to such a course of action.

The superintendent soon, however, discovered the existence of the new union and obtained a list of its members. These were summoned before him and ordered to leave the Knights of Labor or the employment of the firm. As they unanimously refused to disband their assembly, and a lock-out was the result, the employes immediately notified the Executive Board of the District Assembly 103, K. of L., under whose jurisdiction their local was, of the state of affairs. The District Board had various unsuccessful conferences with the proprietors and their agents, both at Jamesburg and New York; nor
did three members of the General Executive Board of the Order of the Knights of Labor succeed in effecting a settlement. The senior member of the firm only had one answer-he had determined never to allow any organization among his employes; that he proposed to carry on his own business without any outside assistance, and that, therefore, he could not arbitrate the trouble.

In the meantime the strikers were supported by an assessment of ten cents per member of the Order in the district, which includes Middlesex and a part of Union county, and contained, at that time, over two thousand members and fifteen local assemblies. An attempt was also made to interest the knights in the district in an effort to organize a co-operative shirt factory. A mass meeting was actually held to consider the project, when an expert statement of the large amount of capital required chilled the enthusiasm and caused the enterprise to be abandoned. Not long after this, as a number of the strikers had resumed work, the District Board, upon recommendation of the General Executive Board, ordered all to return. This was done, and the strike ended in a defeat of the strikers, who verbally agreed to accept the conditions of the manufacturers and disbanded their organization. The wages of these men averaged ten dollars per week, which was less than other shops paid.

## STRIKES IN ESSEX COUNTY.*

The industrial history for a year of a county like Essex, with its 213,645 people (estimate of 1885) and its multitude of diversified manufacturing enterprises, would fill a good-sized volume. A list alone of the articles manufactured and the number of people employed in the various crafts would occupy a great deal of space, and at best would be a dry record of facts. An effort is made here to give the principal events of the year, the growth of organization, the strikes and lock-outs and the other incidents of the life of working people in a great manufacturing centre. The various subjects are generalized considerably, but it is not thought that anything of importance has been omitted or that due prominence has not been given to occurrences bearing on the whole subject.

In the year just closed Essex county had its share of labor troubles. Strikes, large and small, were numerous, lock-outs were not infre-

[^48]quent, and boycotts, either open or secret, a matter of frequent occurrence. The scenes of disorder and of infraction of the law which have occurred in other sections were not, however, duplicated in Essex county, a condition of affairs due to the law-abiding spirit of the people themselves and the conservatism of the chosen leaders in the various bodies of organized labor. During the twelve months not one arrest made was due to labor troubles, although at times there were several thousand men on strike, and neither were the police authorities once appealed to for protection against damage that might be done by strikers.

## General Organization.

Organization of workingmen was most active in this county during the year; in fact, it made such rapid progress at times that the best thinkers in the movement saw that too much haste was being ${ }^{\circ}$ made and that troubles between employes and employers arose through a desire on the part of the newly banded to "show their strength." In some instances strikes were occasioned where they might have been avoided, with their irreparable losses in time and money. This condition of affairs was naturally followed by a reaction, which showed itself in the breaking away from labor organizations of men who were enthusiastic at the start but who became lukewarm when the novelty had worn off and dues were in arrears.

Prominent men in the movement estimate the strength of organized labor in the county at the close of the year at 20,000 , more than fourfifths of the number being men. The women in some of the trades are thoroughly organized, notably the cotton spinners, the tailoresses, shoe fitters and hat trimmers. In other trades at which women work there is partial organization through mixed assemblies of the Knights of Labor. The latest work done in the organization of working women was the foundation of a union of the employes in the laundries, of whom there are several hundred in the county, principally in the city of Newark. An incident in this connection was (in December) the discharge of thirty-five Chinamen employed in a laundry at Belleville-an event brought about by District Assembly 51, Knights of Labor, through an agreement with the proprietor of the laundry to furnish him with all the skilled white labor he might require. Some years ago two hundred Chinamen were employed in this laundry,
but white labor was gradually substituted until only thirty-five remained. No charge was made against the Chinese of working under wages; on the contrary, they were said to stick up for good wages in true American fashion. When they first went to Belleville, about fourteen years ago, they were paid $\$ 30$ per month, but their wages were gradually increased until, when they were dismissed, good ironers were earning $\$ 60$ per month. They lived by themselves in a building adjoining the laundry, and had their own store. At the close of the year it was said that a movement was on foot which would result in the practical abolition of the Chinese laundries in Newark and the Oranges, and it was intimated that this would be accomplished by the thorough organization of the women working in the steam laundries, and through an agreement with the proprietors of these establishments.

The Order of the Knights of Labor was the moving spirit in the organization of working people during the year. An official of high standing in that body states that in the twelve months the Knights had increased from about 2,000 to nearly 12,000 , or from about 20 to 90 local assemblies. The number of organized workingmen not members of the Order is set down at about 8,000 . The Essex County Trades Assembly, an open representative body composed of delegates from trades unions and assemblies of the Knights of Labor, nearly doubled its strength during the year. The body originated in 1879, with nine or ten trades represented. It languished for a time, but finally acquired vigorous life through such agitations as that for the abolition of convict labor in competition with free labor, the early closing question, and similar movements of general interest to wageworkers. In the Trades Assembly the Knights of Labor and the Trade Unionists are assimilated without friction, and the year closed without any such ruptures as were witnessed in other sections.

On September 6th, District Assembly 51 and the Essex County Trades Assembly united in a labor demonstration. A parade took place in the morning through the streets of Newark and in the afternoon and evening a picnic was held in Caledonian park. The number of men in the parade was estimated at from 15,000 to 18,000 , and it was said that 30,000 people were congregated in the park. Speeches were made at the picnic by Henry George, Rev. Dr. McGlynn, James Redpath and others, the key-note of all the utterances being that laboring men should take independent political action.

At a meeting in August the Trades Assembly adopted the following:
"We, the Trades Assembly of Essex county, do recommend the following platform of principles for the political guidance of workingmen this fall:
"1. We favor the abolition of all contracts upon all public works, national, State or municipal.
" 2. That we favor equal taxation of all property, corporate and individual, at the same rate, wherever located, by general laws, according to the constitution; and we. denounce as suicidal to free and equal government the idea that any corporation can have any contract to be forever exempt from equal taxation.
"3. We ask the passage of a general law to exempt individual citizens from taxation whose property does not exceed $\$ 200$ in value.
"4. We ask the amending of the 'law of consent' to the age of sixteen years.
"5. We favor the passage of laws to enforce compulsory education, both State and national.
"6. We favor the amending of the General Factories Act in order to make it more effective and beneficial in its interests and provisions.
" 7. And we call upon all working people, when casting their ballots, to scan them: closely and scratch every man that does not assure them that he will indorse their sentiments, or whose previous record, either political or social; is not pure and clean.
" 8. And we further call upon them to vote for all candidates of all parties whose names are known to be identified with labor organizations; and we further ask them toscratch from their tickets all lawyers and bankers, and prefer at all times workmen. and basiness men.
"9. We demand that the government alone shall issue the money of the country, and that we are opposed to national banks of issue ; that the United States bonds shall. be paid as rapidly as possible."

This platform was presented at the meeting of the State Federations of Trades, held in New Brunswick, August 30th, and was indorsed. by that body.

At a meeting of the Trades Assembly, held on September 22d, it was resolved to call a convention to nominate a Labor candidate forcongress in the Sixth Congressional district. The convention was held in Saenger Hall, Newark, October 18th. Every labor organization in the county had been asked to send three delegates to the: convention, and the organizations had also been asked to take a vote: in their respective meetings for their choice for congress, which vote: was to be announced in the convention by the delegates. It was thought by this plan to get a direct expression of the will of the various organizations. Eighty organizations sent delegates, representing, it was said, 10,000 workingmen. On the call of the roll, according to the original plan, over 9,000 votes were cast, the highest candidates being Henry A. Beckmeyer, who received 5,377 votes, and Patrick Collan, who received 1,631 votes. A vote was then taken by delegates, 231 of whom were present. Mr. Beckmeyer was elected, receiving 174 votes. The platform adopted was the Declaration of Principles of the Knights of Labor.

The result of the election on November 2d conclusively showed that the large number of votes announced in the convention could not be depended upon-that not one-half of the men who had been counted upon to support the Labor candidate voted the Labor ticket. Mr. Beckmeyer received 6,462 votes, and a large proportion of these, it was demonstrated, came from citizens outside of the ranks of organized labor.

The workingmen also placed candidates in the field in a number of Legislative districts, but none of them were elected. The venture into politics caused dissensions in the Trades Assembly and, after the election, several organizations withdrew their delegates. The number of organizations represented in the Assembly was also reduced by the formation of the Building Trades Council and the Central Labor Union of Orange. The unions forming these bodies withdrew their delegates from the Trades Assembly but sent delegates to represent them as a whole.

## The Eight-Hour Movement.

There was no general movement in Essex county to secure the recognition of eight hours as a day's work on May 1st. The only trades which actually adopted the eight-hour day were the cigar makers and the German printers. In the case of the cigar makers the International Cigar Makers' Union had six months before decided the question. All the cigar makers in the county, with few exceptions, are members of the International Union, and the change was made without any difficulty, especially as the work is all piece-work and the employes were the only people affected. The employers have found that the change works well, while the employes, although working one hour a day less than before, find themselves about as well off at the end of the week. A manufacturer, employing a number of cigar makers, said that he found the change to be a benefit. The hours are from 8 A. m. to 5 p. m., with an hour's recess for dinner. The only difference is that the men work a little quicker and spend less time in debating the affairs of the nation, as cigar makers are inclined to do while at work. There are about 300 cigar makers in the county, and their wages average from $\$ 10$ to $\$ 18$, according to their ability and speed. The lowest price paid is $\$ 8$ per thousand cigars and the highest rate $\$ 15$ per thousand.

## The Carpenters.

The Brotherhood of Carpenters and Joiners 119, of Newark, claiming a membership of over 1,200, on March 29th issued a demand asking for nine hours to constitute a day's work, and that the wages for nine hours' labor should be $\$ 2.75$. The employers held a meeting and decided to ask that the matter be postponed until June 1st, The men refused to accede to this, and the result was a general strike of the carpenters, on May 3d. A number of the employers gave in at once, but the majority refused to agree to the terms of the men. Thestrike lasted about a week, when an agreement was arrived at by which the nine-hour day was established, and it was decided that nocarpenter should receive less than $\$ 2.50$ per day, and that expert workmen should receive more, according to the class of work they were able to do. The carpenters belonging to the American Order of Carpenters and Joiners, numbering several hundred, also joined in the demand for a shorter day, and returned to work on about the basis mentioned. A Carpenters' Assembly of the Knights of Labor was organized in the spring.

## The Plumbers.

The plumbers struck, on May 3d, for a reduction of hours. They had been working ten hours per day. They demanded that their time should be reduced to nine hours per day and eight hours on Saturday, the wages to remain as before. The employers agreed to the nine-hour day, but refused to grant the additional hour on Saturday. Then the strikers attempted to compromise by asking for eight and one-half hours for Saturday. This the employers refused to accede to. After a two weeks' dead-lock on the Saturday question it was agreed to settle the matter by arbitration. Each side selected two men, and then a number of slips of paper bearing the names of wellknown citizens were placed in a hat, it being agreed that the first name drawn should be the fifth member of the board. The arbitrator thus selected decided that the men were asking too much. His decision was at once accepted, and the men returned to work on a basis of fifty-four hours per week, having lost about eighteen days by the strike.

## The Hatters.

It is estimated that there are in Essex county 5,000 people working in the various branches of the fur hat industry, including the women hat trimmers. There are three districts, as they are called in the trade, in the county-Newark, Orange and Watsessing. Each branch of the trade has its separate organization, namely, the formers, the makers or sizers, the pouncers, the finishers and the trimmers. The makers and finishers form the great body of the trade. Both of these have national organizations, which meet in joint council when occasion demands. The trade is solidly organized. Each district manages its own affairs, and the national directors do not interfere until called upon to do so. During the year a National District Assembly of the Knights of Labor was organized, which has jurisdiction over all the Hatters' Local Assemblies in the country. The label of the United Hatters' of North America was indorsed by the Knights, and it is placed under the sweat band of all hats made in union factories. All the hatters, however, are not knights of labor. The connection with the Order has in no way impaired the integrity of the open unions, and a hatter who is not a knight is under no disadvantage.

Strikes were numerous during the year among the hatters. A great many of them were shop troubles which were adjusted without much difficulty. In January a strike in the factory of Cummings, Matthews \& Barry, Orange, caused by the discharge of a woman who had been deputized by the Hat Makers' Union to inform another woman that she was violating the rules of the association in giving instructions to an apprentice in the trimming department. The union demanded the reinstatement of the discharged trimmer, and the firm refusing to comply with the demand the hands in all the departments, numbering about two hundred and fifty, quit work. The strike was ended in a few days by the firm agreeing to re-employ the girl who had been discharged.

This trouble had no sooner been settled, however, before there was a "turn-out" of the employes of the same factory and in those of E. V. Connet \& Co. and McGall \& Allen, caused by a refusal on the part of the firms named to use the union label. The strike affected about four hundred people, and lasted several weeks. The manufacturers finally agreed to use the label and the hands returned to work. The
fact that the jobbers in New York were receiving orders from all parts of the country for hats bearing the label convinced the manufacturers that it was policy to surrender.

The label question was finally settled at a conference of the National Boards of Directors of the Hat Makers' and Hat Finishers' Associations and the Board of Directors of the Hat Manufacturers' Association, held in New York early in February. It was decided to give labels for stocks on hand to all jobbers or retailers who would apply for them before February 20th, and who would guarantee not to deal in non-union hats in the future. No charge was made for the labels, but the persons applying for them were obliged to pay the expenses of the representatives of the journeymen who placed the labels in the hats.

The result of the conference was to secure the general recognition of the union label, and a large number of manufacturers in Essex county who had not previously used the label applied for it, and their factories were officially declared "fair" by the unions.

Matters in the trade ran along smoothly, with the exception of "shop" troubles, until May 10th, when the hat manufacturers of Newark, who had formed an association, locked out the sizers, or makers, numbering six hundred. The Hat Makers' Association had some months before resolved that no hat should be sized for less than ten cents. The manufacturers paid this minimum price until Saturday, May 8th. On the following Monday when the sizers went to work they found the make-shops closed. The manufacturers had previously attempted to have the Hat Makers' Association reconsider the ten-cent resolution, but had given no notice that they would shut down because of the failure of the negotiations. The manufacturers asked that the prices for sizing should compare with the prices paid in other districts. The makers would not agree to this, on the ground that the conditions were not the same in Newark as in other districts. They claimed that sizers in Danbury, Connecticut, could make more money at 60 cents per dozen than in Newark at $\$ 1.20$ per dozen, by reason of the fact that the mixture of fur was of an entirely different quality.

The locked-out hat makers were determined from the outset that they would not recede from their position. A committee composed of two men from each shop met and adopted the following resolution:

[^49]On the same day letters were received from two manufacturers that they were not concerned in the lock-out, and the men employed by these manufacturers returned to work. On the third day of the lockout the secretary of the Hat Manufacturers' Association sent for the Conference Committee of the journeymen. The committee was asked if it had any proposition to submit. The reply was that the Hat Makers' Association would neither submit nor receive any proposition until the lock-out was officially declared off and a written notice sent to that effect.

The manufacturers held several meetings to discuss the situation, and, on May 19th, sent the following letter to the Hat Makers' Association :
"Gentlemen-At a meeting of the Associated Fur Hat Manu-
facturers, held last evening, the following resolution was adopted :
"Having been assured by the committee of forty of the Hat Makers' Association that their committee of eight were ready to offer propositions lonking to the settlement of existing differences as soon as the Association of Hat Manufacturers declare their shops open in this district:

[^50]The sizers accordingly returned to work at the ten-cent rate pending the result of the joint meeting of the committees from the two associations. The meeting was held on the following evening. The manufacturers agreed to pay ten cents as the minimum price for sizing, and, to prevent further differences, the following propositions were signed :

[^51]"I. In case of any dispute between an employer and his men which they cannot settle, the same to be submitted to arbitrators, in the selection of whom each party shall have equal voice; the said Arbitration Committee to consist of three manufacturers and threejourneymen, the president of each respective association of the district of Newark, New Jersey, to appoint said committees, who must at all times be disinterested men and appointed when occasion requires; and if the said committee reach an agreement, said agreement to be final; but in case of a disagreement, said dispute to be left to one of the National Board of Directors of the Hat Makers' Association, and that one of the National Board be selected in the following manner: The names of the whole board to be put in a hat, the hat shaken up, a member of the committee blindfolded, the person so blindfolded to draw from the hat one name, the name so drawn to be the final arbitrator. If the name so drawn be an officer living out of the district, his expenses to be paid by the losing party. If a compromise beeffected, then the expenses to be divided and paid by both parties. And in the meantime the men to continue to work until the decision is obtained.
"II. To prevent all unnecessary shop calls a committee shall be appointed in each shop, to consist of five journeymen, to be appointed by the shop stewards, to settle any dispute that may arise; and in case of a disagreement it must then be submitted to arbitration.
"III. No member or members of the Hat Makers' Association of the District of Newark, appointed on a committee of any kind, shall be 'victimized,' or 'blacklisted,' or 'discharged' from any shop by any employer in the district for serving on said committee, and theremust be no disfavor or ill-treatment toward the journeymen by the 'foreman' or 'boss'-for instance, not passing work when his or their work passed all right before serving on said committee; and if any of the above should happen, the journeyman shall appeal for the protection of his association and it shall be afforded him, and action shall be taken by the officers of the association in the case as soon as notified by the journeyman."

On June 1st, the National Boards of Directors of the Hat Makers' and Hat Finishers' Associations held a joint meeting in Newark. Representatives were present from New York, Connecticut, Massachusetts, Pennsylvania and New Jersey. The principal business transacted was the adoption of the following resolution, over which there was a long debate:

[^52]It was at this meeting that steps were taken toward the organization of the National Hatters' District of the Knights of Labor.

## The Printers.

Typographical Union No. 103, of Newark, at a meeting held on February 16th, declared a boycott on the Newark Daily Advertiser, the only newspaper office in the city employing non-union men. Attempts had previously been made by a committee of the Essex County Trades Assembly to have the office made a union one. The negotiations failed because the union demanded the discharge of seven men who had deserted its ranks during a strike several years before. The proprietor of the paper was willing that his employes should join the union but he refused to discharge the objectionable men.

The boycott was indorsed by the Trades Assembly and by the various unions in the city, and was vigorously pushed. Circulars were issued to the business men advertising in the Advertiser asking them to withdraw their patronage from the paper, and resolutions were introduced into the Common Council of the city and the County Board of Freeholders that the paper should receive no further public printing while its employes remained non-union men. The boycott was raised after nine days, the difficulty being adjusted through a committee of the Typographical Union and the Trades Assembly. The union receded from its demand that the seven men be discharged, and adopted the following resolution :

[^53]The conditions were accepted by the eighteen employes of the Advertiser and they became members of the union, the fines aggregating nearly $\$ 1,000$.

In May, the Typographical Union decided to ask for a higher rate of pay. Up to that time composition had been paid for at the rate of thirty-two cents per $1,000 \mathrm{ems}$ for day work and thirty-six cents for night work. Committees were appointed to wait upon the proprietors of the various newspapers and submit this scale: For day work, thirty-
six cents per 1,000 ems; for morning newspaper work, forty cents per 1,000 ems; time work to be $\$ 17$ per week. The newspapers agreed to pay the new scale at once, but some of the proprietors of job and book offices objected to paying $\$ 17$ per week, the former price having been $\$ 15$. The employers offered to pay $\$ 16$, but the union refused to accept any compromise and finally carried its point.

## The Seabury Boycott.

On April 15th, a strike occurred in the pharmaceutical works of Seabury \& Johnson, East Orange, caused by the discharge of twenty girls. Altogether about seventy employes quit work, forty of them being women and the balance men and boys. The employes claimed that the twenty girls had been discharged because they had been active in forming a union. This the firm denied, stating that the girls had been discharged simply because they had not attended to their work. For two weeks before the strike occurred a committee of the Trades Assembly had endeavored to secure the reinstatement of the discharged employes but were unable to bring about the desired result. Under the name of the Lynmore Association the employes had been organized into a local assembly of the Knights of Labor, at that time working secretly.

At the meeting of the Trades Assembly held on April 14th, the following communication was read :
"At a special meeting of the Lynmore Association held on April 13th, it was unanimously resolved to request the Trades Assembly to place an official boycott on the Seabury plaster establishment, manufacturing Benson's and other porous plasters."

The Assembly, upon hearing the report of the Arbitration Committee, to the effect that it had failed in its negotiations with Mr. Seabury, declared the boycott and referred the matter to the Boycott Committee. The strike occurred the next morning.

The girls claimed that they had a substantial grievance in the fact that time work had been substituted for piece work, and that girls who were able to make $\$ 9$ per week under the old system were paid only $\$ 6$ under the new. The firm was notified that the strikers would return to work under these conditions:

First. All who had been at work to be taken back; no one to be victimized.

Second. Piece work at the same rates prevailing before December last, or $\$ 9$ per week for time work.

Third. The union to be recognized.
Fourth. The discharge of two objectionable girls who furnished information which led to the trouble.

The first step taken to enforce the boycott was the issuing of the following "special notice," published in the New Jersey Unionist:
"All trades unions, trades assemblies and assemblies of the Knights of Labor in North America are requested to read the following notice at their next meeting, and all Labor papers are desired to publish the same in their next issue:
"The Trades Assembly of Essex county, N. J., at a regular meeting held in the city of Newark on Wednesday evening, April 14th, declared a boycott on the goods manufactured by the firm of Seabury \& Johnson, of East Orange, N. J., at the request of the Lymmore Association, composed of employes of the factory who are now on strike. The Board of Arbitration of the Trades Assembly exhausted all reasonable means to adjust the difficulty. The grievances of the girls were found to be just, and there was no alternative when redress could not be obtained other than ordering a strike and declaring a boycott. The girls who were formerly able to make $\$ 9$ per week at piece work were compelled to work at an average rate of $\$ 6$ per week, and when they formed a union for protection, a number of them were discharged. The balance remained at work until they found that the firm was determined to crush out all efforts at organization, when they left the factory in a body.
"The firm of Seabury \& Johnson manufacture porous and other plasters and various surgical appliances. The Trades Assembly is in possession of a full list of the goods, but it has been decided to make a fight for the present against 'Benson's Capcine Porous Plaster' only, as it is controlled entirely by the firm. This plaster can be found in nearly every drug store throughout the country, and a boycott against it can be made effective in less than ten days. The organized labor of Essex county therefore calls upon its friends everywhere to lend their aid, so that Seabury \& Johnson may be taught that an injury to the seventy girls in their employ is the concern of every working man and woman in the land.
" Boycott Benson's Capcine Porous Plasters until further notice.

[^54]"Newark, N. J., April 16th, 1886."

Seabury \& Johnson entered into no negotiations with the strikers as a body to induce them to return to work, and it was resolved to make further efforts to enforce the boycott declared against their goods. Copies of the boycott notice were sent to labor organizations in different parts of the country, and correspondence was opened with firms for whom Seabury \& Johnson manufactured specialties, with the view of inducing them to cease business relations with the boycotted concern. At the same time a list of the principal goods manufactured by Seabury \& Johnson was published in the New Jersey Unionist, and workingmen were asked to place them under the bann. A number of local unions passed resolutions indorsing the boycott.

That the firm had been partially crippled by the strike was shown by its advertisements for help, two of which are subjoined :
"WANTED.-Twenty paper-box makers. Also twenty girls to work in factory. No objections to competent persons that have joined a union or are members of a labor union.
"Seabury \& Johnson,
"East Orange, N. J."
"WANTED.-Five paper-box makers, five feeders on small presses, also one feeder on Hoe cylinder who understands making ready.

> "SEA BURY \& Johnson,
> "East Orange, N. J."

The strikers remained firm, and Seabury \& Johnson adhered to their position not to treat with their former employes as a body. The various labor organizations in Essex county were appealed to for money for the relief of the strikers and many of them responded liberally, in all about $\$ 700$ being raised, besides the money appropriated by the District Assembly, Knights of Labor. The places of the strikers were gradually filled and the strike became an old story. Some few of the strikers returned to work as they could, but the majority secured employment elsewhere. Thus the strike was a complete failure. The firm deny that it has had any effect upon their business.

## The Harness Makers.

A long and expensive strike of the harness makers of Newark was begun on May 10th. The men numbered about 600 and were organ-
ized into a local assembly of the Knights of Labor. They claimed that they had been averaging only $\$ 6$ to $\$ 8$ per week. They had demanded that the book of prices made in 1870 and continuing until 1877, should again go in force. From 1877, it was claimed, the list had been discounted by the manufacturers from 10 to 40 per cent. It was afterwards decided by the men to allow 10 per cent. off from the book for machine work. A number of the smaller manufacturers agreed to restore the old prices, but the three largest in the city refused.

On April 13th a conference was held and prices for stitching were agreed upon, it being decided that the men should remain at work until a full scale should be adopted. On April 30th a second meeting was held and the new scale submitted. The manufacturers refused to accept the scale, but offered a general advance of 10 per cent. This the men would not agree to, and the negotiations, which had been conducted by the Executive Board of the District Assembly, Knights of Labor, ceased.

The District Assembly then ordered a general strike of all the harness makers in the city. The men in every factory obeyed the call, and one of Newark's largest industries was at a standstill. Within a day or two five of the smaller manufacturers reached an amicable settlement with their employes and resumed work, but the larger factories, employing more than two-thirds of the members of the trade, remained idle or only did a little work by aid of a few non-union hands procured from other cities. Advertisements for help were inserted in New York and other papers, but the applicants for situations were not many.

The strike lasted five weeks, the strikers being assisted by the Knights of Labor, who paid out to them over $\$ 6,000$ raised by assessment on the members of the Order within the district. The manufacturers refused at first to renew negotiations with the Executive Committee of the Knights, but in the third week of the strike they said that they were willing to pay an advance of 25 per cent. to the stitchers, and 10 per cent. to the fitters, gig-saddle and collar makers, which branches employed the great majority of the men. The strikers refused to entertain the proposition, and the strike continued with greater determination, pickets being posted in the neighborhood of all the factories to intercept applicants for work, and induce them to remain away.

The men claimed that the manufacturers were issuing "blacklist" circulars addressed to harness manufacturers in other cities, advising them of the strike and asking that no applicant for work from Newark should be given employment. This served for a time to determine the men not to give in unless their original demands were complied with, but at the end of the fourth week discontent arose within the ranks of the strikers and it was decided to make the best terms possible. The strikers had run into debt and had reached the end of their credit, those who were married being sorely straitened. The assistance given by the Knights of Labor, large as it was in the total, did not go far when divided among so many and stretching over so long a period of time.

The Executive Committee, seeing that further continuance of the strike would necessitate the expenditure of a large amount of money, with no sure prospect of success in the end, entered into negotiations to terminate the trouble. The result was that the men returned to work at an advance of about fifteen per cent. over the old prices, or about the same terms they could have secured from their employers before the strike was inaugurated.

## The Painters.

In April trouble occurred in the house-painting trade, owing to a demand made by the men that they should be paid $\$ 3$ per day-an increase of fifty cents. The trade had been considerably demoralized by the fact that men in other trades, when work became slack, secured employment as painters without ever having practically learned the business, and accepted such wages as they could secure. The regular painters formed a union in the early part of the year, and determined that after April 1st no member should work for less than $\$ 3$ per day.

The master painters who had contracts on hand paid the advance asked for, but as work became dull a number of men were discharged from the various shops. In June a strike was declared because the bosses refused to recognize $\$ 3$ per day as minimum wages, and desired to institute a sliding scale, paying the men according to their ability.

The strike was in the end a failure. A number of men remained out of work for several months, and were then willing to return at the old wages. The master painters employed such men as they needed, and while first-class mechanics were paid $\$ 3$ per day, and
even more, others received less than that sum. When the Building Trades Council was formed in July, the Painters' Union was one of the first bodies to join, and it is probable that in 1887 another effort will be made to secure higher wages for the members of the craft generally.

## The Leather Japanners.

The Leather Japanners' Union of Newark, at a meeting held or Sunday, May 9th, decided upon a general strike throughout the city. Consequently, the following morning the three hundred men engaged in the trade did not go to work. The trouble originated in the low wages paid and the prevalence of the sub-boss or contract system, through which the men claimed they were compelled to work at starvation wages while the sub-bosses grew rich. At a conference with the manufacturers, held two weeks before, the latter agreed to do away with the objectionable system, and asked the men to draw up a new price list. The union agreed upon a list and submitted it to the manufacturers, who refused to accept it, claiming that it was an advance of fifty per cent. The men denied this, holding that the advance was only eight per cent. in some instances and twelve in others. They said that the object was to make prices uniform throughout the city. They claimed that they averaged through the year only $\$ 8.75$ per week, the highest they could make being $\$ 12$ per week. The work, they said, was very laborious and injurious to health, the heat in the rooms in summer being from 105 to 120 degrees, because the windows must be kept closed, as the air would set the varnish, and in the winter from 90 to 105 degrees.

On the day following the strike the manufacturers held a meeting and passed the following resolutions:

[^55]During the first week of the strike three small firms, employing in all about twenty-five men, compromised at $\$ 15$ per week, but no agreement was reached with any of the larger firms until the fourth week when two of them agreed to pay an advance of twenty-five per cent. and abolish the sub-boss system. In the fifth week, the Executive:

Board of the Knights of Labor succeeded in reaching an agreement with the balance of the manufacturers on the same terms. Some of the firms adhered to the piece system, and others paid by the day, $\$ 15$ per week being the basis. Taking it all in all, the strike was one of the most successful of the year. It involved, however, a loss of abouts $\$ 3,000$ in wages, and at one time threatened to throw all the men engaged in the leather trade, numbering about one thousand, out of work.

## The German Printers.

In July, 1885, the National Executive Board of the GermanAmerican Typographical Union submitted to the local unions throughout the country a plan to change the em method of charging for composition to the alphabet system. The new plan was agreed to by two-thirds of the unions, the vote necessary to make a change in the constitution without calling a convention. German Typographical Union No. 8, of Newark, appointed a committee to take the necessary steps to introduce the new system, and to ask for the ninehour work day. While the matter was pending, a circular was received from the Executive Board, asking for a vote on an amendment to the constitution, involved in the following question :
"Shall we demand, on and after the first day of May, 1886, the eight-hour work day?"

This question was carried by Union No. 8, and by two-thirds of all the unions in the United States. Thereupon, Union No. 8 abstained from demanding the introduction of the alphabet system on January 1st, 1886, but notified the various offices that, on May 1st, they would demand both the new method of measuring work and the eighthour day.

On May 1st the union met to hear the report of the committees that had been appointed to wait upon the proprietors of the printing offices. The committees reported that they had received favorable answers from all the offices but two-one the Deutsche Zeitung, a daily morning newspaper, and the other a job office. A strike was immediately ordered in the two offices. After thirty-six hours the employers acceded to the demands of the men and they returned to work.

The alphabet system of measuring consists in charging for the actual letters set instead of the space occupied by the matter, as in the em system. The mode of measurement is, in brief, as follows :

Set one line of the respective width alphabetically and count the letters therein. Should a line, for instance, contain 40 letters, 25 lines would make "a thousand," while by the em method almost double the number of lines would be required. If, in the rotation of the alphabet, the ensuing letters be of such thickness as not to permit the same to fit in the space limited, the leanest letter (') filling up the space answers the same purpose. Should the compositor have 49 letters over 1,000 they are nil, but all over 50 are to be considered as 100. The scale of prices per 1,000 letters is as follows: Pica, 18 cents ; small pica and long primer, 17 cents ; bourgeois and brevier, 18 cents; minion and nonpareil, 19 cents; agate, 20 cents. For narrow width the idemnification is as follows: Width containing 29 to 26 letters, 10 per cent. advance ; width containing 25 to 21 letters, 20 per cent. advance; width containing 20 to 15 letters, 40 per cent. advance; width containing 14 to 10 letters, 100 per cent. advance. The German printers claim that the alphabet system is the most beneficial method of measurement the compositor can adopt, as it deprives the employer of the advantage of buying "bastard" type, and that it is the most equitable method because the compositor is paid for the actual work done, namely, the number of pieces of type handled.

## The Shoomakers.

In July trouble originated in the shoemaking trade of Newark, of such a nature that it could not be classed as either a strike or lock-out. About 600 people, one-third of the number being women, were affected. Both men and women were organized into local assemblies of the Knights of Labor. The difficulty originated through a feeling on the part of the manufacturers that their emyloyes were about to demand an increase of wages. As is customary in the trade, all the factories shut down on July 1st for stock-taking and general overhauling of the establishments. The employes removed their kits and went home with the expectation that work would be resumed at the end of a week or ten days, as had been the custom.

When the usual time of idleness had expired the employes were informed that work would not be resumed until the manufacturers were assured that no advance would be demanded and that certain reductions would be acceded to in some of the branches. In the
meantime the shoemakers had prepared a scale of prices which they submitted to the manufacturers as the basis upon which they would return to work. The result was that the shut-down was prolonged for six.weeks, as neither side was willing to accede to the demands of the other. Several of the smaller factories, however, did resume work in a less time, on the scale submitted by the employes, but no agreement was reached with the firms employing the greatest number of hands until the second week in August. One reason that a settlement was so long delayed was that some of the firms in the manufacturers' Association were adverse to treating with their employes as an organized body. This difficulty was finally overcome, and an agreement was reached by which the employes were granted an increase ranging from five to twenty per cent. in the various branches.

## The Tailors.

The two thousand people employed in the tailoring trade in Newark had no general trouble with their employers during the year. There were quite a number of shop strikes, but these were settled with little loss of time. About three-fourths of the persons working at the trade were organized into the Knights of Labor, the largest assembly being that of the women, which shortly after organization had nine hundred names upon its roll. The men were divided into two assem-blies-one for the English-speaking branch and another for the Germans. The unorganized members of the craft consisted of those working in the small shops, of which there are a large number in the city.

Early in the year a committee representing all the branches of the trade held a series of conferences with a committee representing the Manufacturers' Association, with a view of entering into an agreement which would prevent the frequent occurrence of shop troubles. The following was finally decided upon and was signed by both parties :

1. The abolition of the discharge system.
2. To employ union help.
3. Both parties are to give notice at the end of the week when change of place or discharge is to occur.
4. When either party discharges or leaves during the week, the active party shall bear the loss of the week's work.
5. In case an employe gets sick and the employer is notified at the time, the employe shall be reinstated upon recovery.
6. Where any dispute arises between employe and employer, the matter in dispute shall be referred to a joint committee for adjustment.

Under this agreement the tailors worked in almost complete harmony with their employers during the year. In the summer a little difficulty occurred which is worthy of notice. The employers, following the example of men in the same business in New York, inaugurated an "Honorable Discharge Card," without which a person looking for work would not be employed by any member of the Manufacturers' Association. The card bore the name of the employer, and stated that ——— had been honorably discharged or had quit work with the consent of the employer.

The tailors objected to the card as being too much in the nature of a "ticket of leave," and after several conferences between committees of both sides the system was abolished.

Clauses 3 and 4 of the agreement entered into between the employers and their employes are the most important, and are really parts of the same idea, which is that no peremptory discharges shall occur during the week, and that no employe shall quit work during the same time, and that either side breaking the agreement shall suffer the loss, the employe offending to lose pay for the whole week, or the offending employer to pay a full week's wages.

Clause 6, providing for the adjustment of difficulties by a joint committee prevented many troubles and served to settle quickly those that did occur.

## The Bakers.

The bakers of Newark organized a union early in the year. This body subsequently separated into two sectious, the English-speaking and the German. The next step was the adoption of a union label and a demand that the hours of labor should be reduced to twelve hours on ordinary days and fourteen hours on Saturday. The men had been working from about twelve hours to seventeen hours per day, according to the circumstances. The men also demanded that no journeyman should be compelled to board with his employer. Under the old rule the journeymen were paid from $\$ 6$ per week upward, and
were boarded upon the premises. The union asked that every journeyman should receive at least $\$ 12$ per week. The union label was to be placed upon every loaf of bread, to signify to the purchaser that it had come from a shop employing union hands.

A majority of the boss bakers acceded to the demands and began to use the union label. Within a few months, however, while continuing to pay union wages, they only used the label on bread going to stores where the customers were chiefly working people, and before the year ended the label had fallen into almost total disuse, the journeymen being unable to compel their employers to place it upon the loaves.

The boss bakers who refused to employ union men were subjected to a series of boycotts, some of which were successful and some of which failed. In several cases the offending employer paid a fine of from $\$ 40$ to $\$ 80$ to secure the favor of the union. In one case, that of a baker in an aristocratic section of the city, every effort failed to induce him to recognize the union. Men were placed on the streets in the neighborhood of his place of business, distributing circulars urging purchasers to discontinue their patronage, but without effect. In other sections of the city the mere notice of a boycott having been declared was sufficient to bring the employer to terms.

The boss bakers organized into an association, and an attempt was. made to reach an agreement by which the price of bread would be advanced in order to meet the increased cost of production, but this fell through, as the two or three employers employing the largest number of hands refused to enter into any combination.

The general result was that trouble constantly occurred throughout the year, and the Arbitration Committee of the Trades Assembly was frequently called upon to assist in settling difficulties. The main result of the organization of the bakers was that the hours of labor were considerably reduced, and that the boarding system was abolished except in a few instances.

## PART III.

## PHASES OF THE LABOR QUESTION.

Chafter I.-A Shorter Work Day.

Chapter II.-Common Sohools and the Labor Question.

## CHAPTER I.

## A SHORTER WORK DAY.

The recent revival of the agitation for a reduction in the hours of labor, to eight per day, induced the Bureau to seek some useful information from those interested in the movement in this State, hoping by such investigation either to justify the workingmen's demand or to show its impracticability. Many replies were received to our circular,* and these are summarized below. With few exceptions, they advocate the sought-for change and bring to bear arguments in its favor. These go to show the displacement of laborers by machinery, the great increase in production and the fact that the real remuneration of the worker has risen in a degree very far from commensurate with the general progress of industry. And the first annual report of the Commissioner of the National Bureau of Labor, giving a few illustrations, holds that the permanent good effects of machinery do not prevent the temporary displacement of labor, which cripples to that extent the consuming power of the community. One of Col. Wright's most telling illustrations shows the displacement of muscular labor by machinery in the manufacture of agricultural implements. In a single establishment in one of the Western States 600 employes are now doing the work which under former conditions would have required 2,145 hands-a reduction of 1,545 workers :

[^56]| 8 | NUMBER OF EMPLOYES |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { 呙 } \\ & \text { B } \\ & \text { O } \\ & \text { O } \\ & \text { ~ } \end{aligned}$ |
| Engine.... | 60 | 540 | 480 | 1 to 9 |
| Boiler......................................................................................................... | 70 | 210 | 140 | 1 to 3 |
| Founding....................................................................................................................... | 110 60 | 165 300 | 55 240 | 1 to $11 / 2$, |
| Setting up ................................................................................ | 50 | 50 |  | 1 to 1 |
| Blacksmiths.................................................................................... | 45 | 90 | 45 | 1 to 2 |
| Machinists. | 45 | 405 | 360 | 1 to 9 . |
| Erecting-room. | 35 | 70 | 35 | 1 to 2 |
| Paint shop... | 30 | 30 |  | 1 to $\frac{1}{2}$ |
| Teamsters.. | 10 | 20 | 10 | 1 to 2 |
| Pattern-making................................... ................... | 5 | 40 | 35 | 1 to 8 |
| Draft-room....................................................................................................................... | 15 10 | 150 10 | 135 | 1 to $10^{\circ}$ |
| Shipping and stock................................................................. | 30 | 30 | ...... | 1 to 1 |
| Lumber................ | 10 | 10 |  | 1 to 1 |
| Bolt and nut. | 5 | 5 |  | 1 to 1 |
| Bolt..... | 7 | 14 | 7 | 1 to 2 |
| Watch. | 3 | 6 | 3 | 1 to 2 |
|  | 600 | 2,145 | 1,545 | 1 to 3.57 |

"The mechanical industries of the United States," continues the Commissioner, "are carried on by steam and water-power representing, in round numbers, $3,500,000$ horse-power,* each horse-power equaling: the muscular labor of six men ; that is to say, if men were employed to furnish the power to carry on the industries of this country, it would require $21,000,000$ men, and $21,000,000$ men represent a population, according to the ratio of the census of 1880 , of $105,000,000$. The industries are now carried on by $4,000,000$ persons, in round numbers representing a population of $20,000,000$ only. There are in the United States 28,600 locomotives. To do the work of these locomotives upon the existing common roads of the country, and the equavalent of that which has been done upon the railroads the past year, would require, in round numbers, $54,000,000$ horses and $13,500,000$ men. The work is now done, so far as men are concerned, by 250,000 , representing a population of $1,250,000$, while the population required for the number of men necessary to do the work with horses would be $67,500,000$. To do the work, then, now accomplished by power and power machinery in our mechanical industries and upon our railroads, would require men representing a population of $172,500,000$, in addition to the present population of the country of $55,000,000$, or a total population, with hand processes and with horse-

[^57]power, of $227,500,000$, which population would be obliged to subsist on present means. In an economic view the cost to the country would be enormous. The present cost of operating the railroads of the country with steam-power is, in round numbers, $\$ 502,600,000$ per annum ; but to carry on the same amount of work with men and horses would cost the country $\$ 11,308,500,000$."

With this marvelous increase in the productive power, causing rapid changes in methods and the personnel of labor forces, the conflict between the employer and employe, between capital and labor, whichever way it may be stated, is not difficult to understand. That dissatisfaction exists among the working classes is evident by their attempts to organize and by concerted efforts to enforce their demands, resulting in lock-outs on one side and in strikes on the other. Whatever causes may be assigned for the existence of this state of affairs, however widely we may differ in regard to them, or their remedy, it must be admitted that the problem, how to adjust the relations between labor and capital so as to promote harmony between these forces in industry, is of paramount importance. And it will not suffice for those in authority who have the opportunity to aid in the solution to assume that all this dissatisfaction arises from the mere agitation of designing and reckless men, who seek, by inflaming the passions of the ignorant among the working classes, to gain some personal end. We believe that the sacrifices and sufferings endured by many who have engaged in these conflicts, and the zeal with which they are renewed after repeated failures, give assurance that something more than mere passion or forced enthusiasm urges them to wage the contest for better conditions and a more equitable distribution of wealth.

The facility with which capital can be concentrated by the formation of joint stock companies has resulted in making the prosecution of industrial enterprises little else than mere speculation ; the successive application of improved machinery has caused an abnormal development in place of the more steady growth of individual enterprise, without a corresponding improvement in the material condition of the wage-worker. Statistics indicate that the increase of wages has not kept pace with the increase of production. The United States census for 1850 gives the total wages in New Jersey at 23.5 per cent. of the value of product; in 1880 , at 18.3 per cent. For the whole country in 1850 and 1880 , these data were 23.23 per cent. and 17.65 per cent., respectively.

The whole tendency of industry has been to render employment more and more uncertain.

The report of the United States Commissioner of Labor, already referred to, is authority for the statement that there were, on July 1st, $1885,1,000,000$ unemployed, or 7.5 per cent. of the whole number engaged in the various industrial pursuits in the country, who would have been employed could they have found work to do.

It is easy to imagine the feelings of unrest such a condition of the labor market must excite when viewed from the standpoint of a wageworker, who is told that his employment and the amount of his wages are regulated by supply and demand. So long as there are unemployed seeking work, every workman experiences an impending danger of want and misery to himself and family. It is for this reason that the agitation for shorter hours -is not confined to those out of employment, but the most active and urgent demands for the change come from the most intelligent and prosperous, and from workmen in regular employment, who have only a remote interest in the question.

It is true that the general welfare of society has been promoted by the increased power of production within the past half-century, but it is contended that the laborer has not experienced that relief from over-exertion which a fairer distribution would bring about. His family has benefited by the use of labor-saving machinery to the extent of being able to procure more comforts in consequence of the reduced cost and improved quality of the articles consumed, but it is not so apparent that this improvement has been obtained at a proportionately less sacrifice.

Then, too, the wants of the wage-earner have kept pace with the general advance in civilization. He is to-day more intelligent than he was a generation ago; and the higher his intelligence the more manifest becomes his discontent to live under former conditions. With the appliances now in use, the productive capacity of mankind is far superior to the consumption of food, clothing and shelter, and sufficiently great to allow leisure for refinement and cultivation of the higher faculties. The policy which denies these opportunities to any part of society is unwise. "The human machine," said Dr. Elder, "like the inanimate, and for the same reason, yields results to the employer in the measure of its capabilities and conditions. Its highest condition is necessary to its highest working worth." * * * "The human producer has his most available force in his moral and
rational faculties."* There is no economy in so regulating the hours of labor that they encroach on the time requisite for the worker's improvement. The day has gone by when it was only thought necessary, in considering economic questions, to take into account the cost of mere bread and raiment. Something more than this is now required. Who would dispense with the public schools, scarcely thought of at the advent of our factory system? They cost time and money, but the expenditure is insignificent when compared with the net gain, in making better men and women, better citizens and greater producers of wealth. But the shorter work day means more than this. It will supplement the public schools, affording the leisure for culture which the few alone at present enjoy. It will lighten toil, elevate and dignify labor, make it an attraction and, consequently, a blessing, not a punishment and curse.

The objection frequently urged against a reduction of the hours of labor that the time gained would be spent in the grog-shop, or, as it has been phrased, " More time, more drunkenness," is too contemptible for refutation. The suggestion implies that workingmen are not susceptible to the same influences affecting other men. Numerous authorities concur that far less drunkenness is, as a rule, to be observed among short-time than among long-time workers. But of what use is a public library to the average man after ten or more hours of fatiguing toil? What use to institute night-schools for young men and women physically exhausted and so tired out that they have no thirst for mental acquirements? A few may get some benefit under such conditions ; those who are eager will go supperless to a night-school after twelve hours' toil ; but can it be said that there is any necessity or justification that requires culture at such a cost of vitality? Mental improvement at such a sacrifice of the physical powers is almost as great an evil to those who obtain it as the ignorance it seeks to remedy.

Experience has demonstrated that the reduction of the hours of labor has not curtailed production ; on the contrary, it has had the opposite effect-increasing the efficiency of labor and enlarging the product. In support of this the following authorities may be quoted:

Professor Fawcett says: "Manufacturers readily admit that the Factory Act has effected incalculable advantage-the physical deterioration of the operatives has been arrested. Young children who are

[^58]kept closely to work from ten to twelve hours a day, have a blight thrown over the freshness of youth, and they grow up with sickly constitutions and distorted limbs. The daily training of the mind helps the development of the body; and it has been conclusively proven that the children who are at school half the day and are at work the remaining half acquire vigor, energy and intelligence."

The efficiency of their labor is so much increased that they really do more work in a day than used to be done by those children who were employed whole time.

Some remarkable instances are given by Mr. Brassey in his book on Work and Wages.* On the Paris and Rouen line, the Frenchmen were in the habit of coming to work, in the summer, at 5 in the morning and they left off at 7 in the evening. The Englishmen never came to work before 6 , and always left off at $5: 30$, but the amount of work executed by the Englishmen in the shorter time was much greater than the amount executed by the Frenchmen, notwithstanding the longer hours in which they labored. During the construction of the Trent valley line, immense efforts were made to complete the work in the shortest possible time, and in order to expedite to the utmost degree the completion of the station at Atherston, two shifts of men were employed on the building, each of them working eight hours a day. It was found that each shift, although working only eight hours, did more work in a day than other men employed for the full number of hours which at that time constituted a day's work, viz., ten hours.

Another instance cited by Mr. Brassey is that of an establishment employing 1,200 artisans. The hours were reduced from fifty-eight and a half to fifty-four hours a week, without any diminution in production. Again he says: "Miners work, on the average, twelve hours in South Wales, and only seven hours in the North of England, and yet Mr. C. Elliott, M. P., has found that the cost of getting coals in Aberdare is twenty-five per cent. more than it is in Northumberland. * * * A reduction in the hours of labor does not necessarily involve a corresponding reduction of work performed."

In 1880 the Massachusetts Bureau of Labor Statistics, in compliance with a resolution of the legislature of that State directing that department to collect data in Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut and New York, relative to a uniform sys-

[^59]tem of laws to regulate the hours of labor in the States mentioned, secured data from 246 manufacturing establishments and corporations, and from 545 employes, or from 791 individual sources. These were published in the report of 1880 , in detail. The Commissioner, in his summary of the facts obtained, says: "It is apparent that Massachusetts, with ten hours, produces as much per man or per spindle, equal grade being considered, as other States with eleven and more hours ; and also that wages rule as high if not higher than in the States where the mills run longer time." And instances might be multiplied to show that where the hours have been shortened it has worked no injury to employers in lessening the product.

If, thirty years ago, the change from twelve to ten hours per day was made advantageously, may we not assume that the present material progress warrants a further reduction? Franklin held that if all men did their proper share of work, there only wou'ld be need for each to labor four or five hours daily. This is among the possibilities of the future. At all events, it will hardly be denied that the productive capacity of society to-day is greater than its consumptive capacity, and we have not yet reached the maximum of human capabilities as to the power of production, which, it is hardly an exaggeration to say, is only limited by the needs of society. Therefore, the question of production is not involved in the question of the hours of labor. It is simply a problem of the distribution of the wealth created. The workingmen hold that a much better distribution would be effected under eight hours than under a longer day's work, because affording more regular employment to a larger number and give more relaxation from onerous toil, made possible by labor-saving machinery, and it is but fair that the drudgery of those who work for wages should be made as light as practicable. Can we afford it? Will it pay? asks the capitalist and employer. It is a mere matter of profit to him, and he ordinarily protests that it will ruin him to lessen the hours of labor. To this the reply may be made that no measure looking to the amelioration of the conditions of the workers has ever been attempted that has not been met by opposition and the conservatism of employers.* During

[^60]the years of agitation to secure the ten-hour work day the friends of the reform were met by opposition from the same source, and the same arguments were used which now do service against the eight-hour rule, notwithstanding their fallacy has long since been exposed. In 1851 and 1852 those who advocated that ten hours should be a legal day's work were denounced as demagogues, and the ten-hour plan as a humbug which could only tend to reduce the wages proportionately, while all kinds of evil results were sure to follow its application, especially to agricultural labor. But we have seen ten hours become the rule; wages have not fallen, and many of those who prophesied disaster are now as loud in their praises of its beneficence as the friends. of the change.

We therefore are justified in asking whether the limit to which the hours of labor may be reduced has been reached, and, in view of the constantly augmenting power of production, aside from any humane consideration, whether such reduction would not prove beneficial. Even with the present facilities for production, the markets are constantly overstocked, which necessitates the periodical stoppage of industrial operations and consequent idleness of a great many hands, sometimes for months at a time. One million out of employment means one million underfed and ill-clothed non-producers, and this without reckoning the members of their families dependent on them for subsistence. "Three hundred million dollars per year lost in the consumptive power," observes the United States Commissioner of Labor, "is a sum sufficient to cause a reaction in business and a general curtailment of expenses, from which result apprehension and timidity among all classes." But while idle men are seeking employment, inventors are busily at work in the hope of securing a monopoly by cheaper processes of production. Thus a new invention may revolutionize a whole industry and displace a large part of those engaged in it, leaving them helpless to apply the skill they have spent years to acquire, and adding more recruits to the ever-increasing army of the unemployed.

No sensible person will decry machinery. It is the product of man's ingenuity ; its use has changed the course of civilization. The tunneling of mountains, the spanning of rivers, the annihilation of distance could not have been effected; the thousand and one modern conveniences could not have been placed at the disposal of men without it. It has multiplied enormously the amount of wealth which a given number of men can turn out. It has enabled us to create arti-
cles of the greatest utility with mathematical precision. Its tendency is to promote equality by facilitating interchange and generally diffusing knowledge of men and things. The reproach is not against the use, but abuse, of labor-saving machinery. It should be made the handmaid of labor and the benefactor of the laborer, lightening his toil and emancipating him from drudgery.*

The abuse consists in the avariciousness which takes no cognizance of the well-being of the laborer, using labor-saving machinery solely to obtain the greatest amount of dividends to be extracted under the highest pressure; in the threat to the worker to reject the terms proposed at the risk of being superseded by an inanimate machine; in the inhuman policy which reverses the order of nature, displacing the father, the natural bread-winner, by the wife and children because their labor can be had at a less price ; in the overstocking of markets, the derangement of trade, the creation of millionaires and multiplying. of tramps.

As before stated, we are not of the opinion that a reduction from ten to eight hours per day would result in materially lessening production even with the same number of hands. Where machinery ,is very largely used it may do so, but evidently where quickness of hand and mind is needed, as well as in those occupations which are very laborious, we believe that after a short time the laborer will be so much improved by the shorter working day that quite as much will be accomplished in the eight hours as is now done in ten. This is shown in the glass-blowing and in the pottery trades, where little or no machinery is used. The efficiency of labor, under shorter hours of labor, without these aids, has materially increased the product. And observation has convinced us that there are very few, if any, workmen who apply themselves continuously during the whole ten hours; nature could not endure such a strain. The argument generally advanced against a reduction of the hours of labor to eight, therefore, is not sound: Where there are now, under the ten-hour system, eight men employed to perform a given amount of labor, to reduce the work day to eight would necessitate the employment of ten men to turn out the same quantity of product. The leisure obtained

[^61]would, on the contrary, increase the demand for those things which are wanted by men of superior refinement. For it must be remembered that our great and manifold industrial establishments are not kept in active operation so much by the production of the actual necessaries of life as of those things which contribute to comfort and luxury. This is what distinguishes our time and civilization.

The demand for the regulation of the hours by legal enactment is not a new question. Many enactments relating to the hours of labor are to be found in the statute-books. In very early times the law fixed the hours from sun to sun. This was done in the interest of employers. In more recent years it is sought to shorten the hours of labor in the interest of the workingmen by the same method. But while we fully appreciate the advantage of having the law in harmony with the public sentiment, we have little faith in the efficacy of law to bring about a reform without the help of the workmen themselves.

In 1868, congress enacted a statute making eight hours a day's work for those in government employment, but it has been disregarded most of the time since, because those whose duty it was to see to its observance have not been in sympathy with it.

About the same time this act was passed by congress, the stonecutters of New York city, depending upon themselves alone, obtained the eight-hour rule and have since maintained it, working only eight hours per day and so far with satisfaction to both employers and workmen. Further, it is doubtful whether a law prescribing a uniform and rigid rule to every kind of employment would not produce great inconvenience and varying results. There are differences in the nature of employments which should not be overlooked in the regulation of the hours of labor; some kinds are far more enervating and injurious to health than others. Six hours spent in an illventilated factory or mine, involves a greater amount of physical exhaustion than many light out-door occupations.

There are occupations, also, that can be carried on at some seasons of the year to better/advantage than at others, as, for example, glass making. Again, there are trades where the business largely depends upon the changes of styles or fashions. These have their busy and dull seasons. The glass makers have for a number of years ceased operations entirely during the months of July and August. For some years not a factory has been in blast during those two months, and it has been found to operate to the advantage of both employer
and workmen. It allows the workmen time to recruit their strength, and also has had the effect to equalize the markets to the demand.

We believe that workmen have the right, as well as the power, within themselves, by organization, to regulate ${ }^{\circ}$ the hours of labor and the manner of employment. The organization of workmen and the combinations of employers for their mutual protection, afford a means of coming to a satisfactory agreement regarding this matter, and we look forward to the time when the question of shorter hours shall be given more effective attention than at present, when employers endeavor to curtail production by closing of mills, pooling and other expedients.

The following are some of the replies received from workingmen on this subject of reducing the hours of labor to eight per day :
"The improvements made in the art of printing have been very numerous of late years, but the demand has increased with the supply, so that machinery has been an advantage to the craft. The eighthour system would be a benefit, as there are now and always has been, since my connection with the business, more printers than could find steady employment. It would also be advantageous from the fact that the work is hard mentally and physically. Printers, as a rule, wear out very soon, an old man (in years) working at the business being so much of a rarity as to be regarded as a curiosity. Again, under an eight-hour system, even at a decreased rate of wages, printers would, in my opinion, earn as much per annum as they now do. It would be no disadvantage to employers, as there is now a large amount of time paid for which is really wasted, especially on afternoon newspapers. The eight-hour day would be of great service to workingmen generally, and in view of the fact that there are such large numbers constantly out of employment, should be advocated by all, if for no other reason than that it would increase the number employed and so give every one a chance."-Printer.
"The peculiarity of the printing craft is such as to preclude the practical operation of the eight-hour rule. Compositors require seven hours for composition, leaving one hour for dinner and two hours for distribution. Week hands, who are largely in the minority, might enjoy the pleasure of two hours less work, but it is doubtful if they would be benefited by the resulting loss of wages, which are low enough now."-Printer.

[^62]" I think any stated time for an agricultural laborer to work is a mistake. It has been tried here and failed, for the circumstances are so varied under which labor is done that it will do injury to all parties concerned. I know that the laborer is often imposed upon, but he has his say in the matter as well as the farmer, for if he does not like his place he can soon get another if worthy of it. I think, also, that if farmers were hampered by such a law it would cost more toproduce, consequently making the products of the farm cost more tothe consumer, without any benefit to the agriculturalist. I do not think that farm laborers are working ten hours now the year-through."-Farmer.
"Farm labor must depend upon the necessity of the occasion. Take berry picking, for instance, two hours one day, six hours thenext, and so on ; it must be done by the piece-price system. Haying and harvest require longer hours of labor, and always pay larger wages. My observation leads me to think that this should not be made a matter of law, for law cannot fix the value of labor any morethan it can fix the price of corn or wheat. Law can only say that eight hours are a day's work. Its advocates claim that it will takemore days to complete any work, and thus require more hands. But in a majority of cases it will not have this result, but will decreasethe amount of labor, because the pay will correspond to the work done. In factories it will make less work, because the machinery will stop at the expiration of the eight hours, and the manufacturer cannot put in any more hands. Instead of having, as now, ten hours. for 500 men, viz., 5,000 hours, it will be eight hours for the same number of men, viz., 4,000 hours. Employers will not pay as much for 4,000 hours' work as for 5,000 , and there will be 1,000 hours' wages lost to the workingmen. Such industries as are now run to their full capacity would be compelled to put in more machines, at the expenseof the manufacturer. He would be compelled to employ more hands, perhaps, but that would only take wages away from the eight men to give to the others that he must employ. His pay-list would beincreased but his pay-roll would be kept at about the same figures. These are my ideas."-Farmer.
"Some years ago, where I worked, the packers started early in themorning and finished about noon, making about seven hours per day. Since then the custom has changed, and now the same number of men work much longer time to do the same work. I know of instances where men are required to work for eighteen hours, and at the same time other good men who would be able to do the work are idle." Packer.
"I do not know of any business that could not be carried on to the advantage of the employes in a working time of eight hours per
day. As my trade has been established in the United States since 1857 on a manufacturing scale, and in New Jersey since 1873, I have no other knowledge than the sixty-hour system. The men here are organized into a union, and since September 1st the working hours have been fifty-eight per week, at full pay. It has been a benefit to about ten men who have found employment, and the piece-workers make the same wages they did before in the longer hours. I believe the eight-hour system would benefit both the workingmen and employers alike. It would employ many that are now idle, and make consumers of many who now live at the expense of others, and thus would increase the market for the goods of the employers."-Umbrella and Walking-stick Maker.
"In this trade it would be impracticable to apply an eight-hour rule to all departments. The master shearer, for instance, who looks after the melting of the glass, which requires from fifteen to sixteen hours out of the twenty-four, could not with the present furnaces get along with a shorter timc. The very nature of his work is such that he is compelled to continue until the melt is completed. Neither could the duties of the engineers, watchmen or shearers be performed in eight hours, except by means of relays. But the number of hands engaged in those departments is very few, or only about two of every twenty employed for a factory. The blowers work by the piece, and there is nothing connected with the trade that makes it imperative that they remain at work more than eight hours, except in the matter of quantity produced, and this difficulty could be met by regulating the size of the pots and amount of glass to be worked to the number of hands. I see no economic reason why the eight-hour rule cannot be applied to all the employes in glass factories except those referred to. The earliest method of production was for each blower to gather the glass and complete the bottle without either assistance or subdivision of labor. This system, universal for all kinds of bottles of halfpound size and under, continued until about 1864, when shop-work was instituted. Prior to 1852 a large proportion of ware was made in clay moulds, especially for druggists' ware. But about that time the box punty came into use, and also the system of double work in making large sizes. This was deemed advantageous because keeping the mould hotter and securing a better polish and smoother surface than farmerly. The change necessitated larger furnaces and pots to hold a greater amount of glass. This, for a time, was a difficult matter, as wood was the only fuel then used in the State. But, in 1853, this was overcome by the substitution of anthracite coal, with the blast for natural draught. Another change that had a material influence in increasing production, introduced with double-work and general use of iron moulds, was the adop.tion of the stone in place of the wooden block. The double system has within a few years been largely
superseded by the shop system in making all kind of ware less than one quart. While there has been no machinery applied to bottle making, the improvement in hand work and efficiency of the workmen, I estimate to be, from 1864 to 1875, thirty-nine per cent. ; from 1875 to 1886, seventeen per cent. The reduction of hours of daily labor has been from $9 \frac{1}{2}$ to $10 \frac{1}{2}$ hours in 1864 to $8 \frac{1}{2}$ to 9 hours in 1886 . The following table will show the number of dozens for a day's work per man, and the per cent. increase since 1864:

| Size. | 6 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-ounce vial. |  | 65 | 100 | 112 | 53 | 12 |
| 2-ounce vial.. |  | 60 | 96 | 106 | 60 | 10 |
| 3 -ounce vial.. |  | 55 | 75 | 96 | 36 | 28 |
| 4 -ounce vial... | ...... | 50 | 72 | 90 | 44 | 25 |
| 6 -ounce weight. |  | 45 | 65 | 80 | 44 | 23 |
| s-ounce weight. |  | 40 | 60 | 65 | 50 | 8 |
| 12-ounce weight. |  | 36 | 45 | 56 | 25 | 24 |
| 16 -ounce weight. |  | 30 | 40 | 48 | 33 | 20 |
| 28 -ounce weight.. |  | 26 | 36 | 40 | 38 | 11 |
| 32 -ounce weight.. |  | 23 | 30 | 36 | 30 | 20 |
| 36 -ounce weight.. |  | 20 | 26 | 30 | 30 | 15 |
| 40 -ounce weight.. | .............. | 18 | 24 | 26 | 33 | 8 |

"I take the year 1850 as a starting point. In looking over my books I find that I then worked $10 \frac{1}{2}$ hours; in 1865, 9 hours, and in 1886, $8 \frac{1}{2}$ hours, and produced the following :

"In the factory in 1850, an extra-fast man made 48 doz. mineral bottles, others about 40 ; while now three men, working in shop, produce 165 doz . in $8 \frac{1}{2}$ hours."-Blower.
"In 1858 I was able to blow 30 doz. of quart fruit jars; in 1866, 40 doz. ; in 1875, 45 doz., while in 1886, by double work, two men produced 120 doz. in a day."-Blower.
"In stoppering bottles the application of steam power for foot power has increased the production per man 60 per cent.; in box making, 25 per cent. In making and repairing mouldş 90 per cent. has been added to the power of production by machinery. A master
shearer, with one less assistant, now melts more than double the amount of glass he did in 1852. In pressing fruit jar lids and stoppers for bottles, one presser and a gatherer produce 100 per cent. more than in 1860."-Bottle Glass Worker.
"In 1852 one window glass blower made from 140 to 150 boxes of glass per month, working seven hours per day and six days in a week. The custom was to work whenever the glass was ready to be worked, commencing at one o'clock on Monday morning, and at times being compelled to.work some part of the following Sunday to make the six days. From 1862 to 1865 the amount was increased to 165 to 175 boxes per month, without much change in working hours. In 1870 the furnaces were enlarged and the sizes of cylinders were so much increased that 180 boxes per month became the standard. Five years later the production had advanced to 250 to 260 boxes per month. In 1876 the blowers' organization fixed the limit at fifty boxes per week and five days' work, or blowing, in a week. In 1878 this limit was reduced to forty-eight boxes per week, which is the standard now. The hours now worked are nine per day, or forty-five per week, while the product per hand has been increased since 1852, about 28 per cent."-Window Glass Blower.
"There has been but little improvement in tools or machinery in. the pottery trade, but the amount produced in a day is much more than ten years ago, mostly due to the greater efficiency and skill of the workmen. In the three branches with which I am familiar the increase has been: Plate making-in 1876, 60 dozen per day; in 1886, 80 dozen. Saucer making-1876, 150 dozen ; 1886, 200 dozen. Cup making-1876, 150 dozen ; 1886, 200 dozen. Handlers-1876, 80 dozen ; 1886, 100 dozen. Turners-cup, 1876, 75 dozen ; 1886, 100 dozen ; mugs, 1876, 30 dozen ; 1886, 40 dozen; egg cups, 1876, 30 dozen ; 1886, 40 dozen. Average increase, 25 per cent."-Potter.
"In the town in which I now live the manufacture of shoes was begun in 1873 . At that time it took five skilled men and one boy to sole a case of 60 pairs in a day. In 1875 the McKay machine for sewing on soles was introduced, with which one man produced 5 cases or 300 pairs daily ; in 1880 steam power was added, by which one man and the machine turn out 13 cases, or 780 pairs per day. In 1882 a tacking machine was introduced, and this enabled one man to do 25 per cent more work. Before 1883 heeling was done by hand, and it took 3 men to do $2 \frac{1}{2}$ cases, or 150 pairs in a day. A heeling machine then came to be used, and made it possible for one man and two boys to heel 15 cases, or 900 pairs in a day. In 1882 one man could only trim by hand $2 \frac{1}{2}$ cases, or 150 pairs in a day; a machine now permits one man to trim 8 cases, or 480 pairs in a day. Prior to 1882 heel shaving was done by hand, and one man produced 150 pairs in a day;
with a machine one man can now turn out 300 pairs in a day. A few years ago one man at edge setting, working by hand, could do 150 pairs in a day; with the machine, a day's work is now 480 pairs. Before 1883 heel burnishing was done by hand, and one man did but 150 pairs in a day; with the machine introduced in 1883 the product of one man's work was increased to 300 pairs, and in 1884 an improvement was made by which one man can now burnish 600 pairs in a day. In 1882 the price received for burnishing a case of 60 pairs was $\$ 1.20$; the present price for the same quantity is 25 cents. In 1882 the Goodyear machine for sewing on the welts was introduced here, increasing the amount of the product per man 100 per cent. In beating-out by hand one man could do 180 pairs in a day; with a machine introduced in 1882 one man and boy turn out 720 pairs in the same time. In 1883 one man in pasting by hand was equal only to 480 pairs per day; with the machine one man now works off 900 pairs daily."-Shoemaker.
"The earliest method of making cotton cloth was carding by hand, spinning a single thread, and weaving by a hand loom. By this method it required ten operatives-four carders, four spinners, and two weavers-ten hours' work, to produce ten yards of cloth per day. Now, with the improved machinery in use, the same number of hands can turn out fully 700 yards of standard sheeting of far better quality, and it is probable that this will be much improved upon in the near future. The mill in which I am employed was started in 1854, with the best machinery then known. For several years but little improvement was made, but commencing in 1866 the total increase has beenfully 25 per cent., or $2 \frac{1}{2}$ per cent. each year all round. In 1866 the revolutions of the shafting were 250 per minute; at present (1886) the speed is at the rate of 400 revolutions per minute. In 1866 the looms wove 100 picks per minute; at present they weave 180 picks per minute, and all of this increase has been reached with a reduction of the number of hands which amounts to fully 25 per cent. In fact, this saving has been effected entirely by improved machinery. By it the yarn has been improved in strength and durability, and made to bear the strain of this high rate of speed. Until 1874 old-style dressers were used; in that year slashers were put in, displacing the dressers, nine in number, and now two hands with slasher machines do the work formerly done by those nine dressers. In 1880 a trimming machine was substituted for the old method of trimming by hand, and displaced three girls and increased production. In 1882 a sewing-measuring machine was introduced, which entirely dispensed with the work of two women."-Cotton Operative.
"I know of no industry where the eight-hour rule could not be applied with advantage. From 1830 to 1850 production increased fully 50 per cent.; from 1850 to 1866,25 per cent., and from 1866
to 1886,30 per cent. The mill in which I work has not changed the machinery to any great extent for a number of years, except in the matter of speed. Sixteen years ago the speed was at the rate of 200 revolutions per minute. This has been gradually increased until now it is run at 350 per minute. I have had forty years' experience as a cotton operative."-Cotton Operative.
"The eight-hour rule could very well be applied to the cotton industry, as the operatives formerly worked thirteen to fourteen hours per day. This was reduced to eleven and twelve hours, and within the past two years to ten hours per day ; and, certainly, the production of individual workmen has been increased three-fold since 1840, when the hours of labor were thirteen per day. In twenty years the productive capacity of machinery, through the increase of speed, has been about one-half more in quantity in the mill in which I now work, but if we take into account the improvement in the quality of goods now produced, as compared with those of that period, it would be much greater."-Cotton Mill Operative.
"I know of no industry that the eight-hour rule could not be applied to with advantage. The earliest method used in my business was by machinery. Formerly, goods were worn unbleached, and at first the art of bleaching was considered as a finish to the goods. The establishment in which I work is fairly representative of all others in the State, and within the past twenty years the improved processes have increased production fully 60 per cent., without any increase in the number of hands. Within eight years a hooker machine has been added, which enables two boys to do the work formerly requiring four women. In the drying department a machine has been introduced, within five years, by which one man and a boy now accomplish what four men did before."-Bleachery Empploye.
"I have had an experience of 20 years in the silk industry and give you the change of methods and quantity produced in one quality of ribbon and one of dress goods. A lot of ribbon 7,200 yds., N. G., 18 lines width, 24 spaces, using 80 lbs . of silk, required in 1870, with 1 loom, 1 soft silk winder ( 25 days' work, or $\$ 40$ ), one hand warper ( 12 days' work, or $\$ 32$ ), 1 weaver ( 34 days' work, or $\$ 150$ ). With improved winding machine (introduced in 1882) and steam warping (in 1886) it requires for the same amount, 1 soft silk winder ( 7 days' work, or $\$ 10.46$ ), 1 steam warper ( 9 days' work, or $\$ 16.60$ ), 1 weaver ( 34 days' work, or $\$ 99.60$ ). We have a great many so-called Fisher or circle looms, with which to turn out 10,800 yards of the same quality, requiring 120 lbs . of silk, 1 soft silk winder ( $10 \frac{1}{2}$ days, or $\$ 15.50$ ), 1 steam warper ( $13 \frac{1}{2}$ days, $\$ 25.20$ ) and 1 weaver ( 40 days, $\$ 142.50$ ).
"To manufacture in 1870, 100 yds . of dress goods, requiring 14 lbs . of silk with hand warp and winding, it took 1 soft silk winder 4 days' work (or $\$ 7$ ), 1 hand warper $1 \frac{1}{2}$ days' work (or $\$ 3.30$ ), 1 warp picker 2 days' work (or $\$ 6$ ), 1 weaver 12 days' work (or $\$ 26$ ). The same is now done with new winders, steam warps, and power looms by 1 soft silk winder in $1 \frac{1}{3}$ days' work ( $\$ 1.80$ ), 1 steam warper in $1 \frac{1}{2}$ days' work (or $\$ 2.50$ ), one weaver in 6 days' work (or $\$ 8$ ), and no picker. These two branches are representative of the changes that have taken place in almost all the other branches of the trade."-Silk Operative.
"Thirty-two years ago I learned the fur hat-making trade in all its branches in France and worked at it for ten years. Then I came to this country, and for eight years worked in a co-operative society as a commission manufacturer, and for the last 14 years at the plank as a sizer. To give an idea of the difference in production between now and thirty-two years ago, I here describe the various branches which are now almost as many trades: Thirty-two years ago one man by hand could form 8 to 12 hats in 10 hours' work; now 2 men and 1 boy with a machine can do from 35 to 50 dozen hats in the same time. Then one man could size 8 to 12 hats in 10 hours; now he does with hand work 12 to 30 , and with a machine from 36 to 60 dozen in 10 . hours. In 1854 one man shaved by hand 50 to 60 hats in ten hours; now by hand 150 to 200 in a day, and with machine from 36 to 50 dozen in the same time. Formerly one man at second sizing did from 5 to 7 dozen in 10 hours' work; to-day with machine one man does. 50 to 60 dozen in the same time. At the old method by hand 1 man could stiffen 60 to 80 hats; now with machine 1 man does 50 to $60^{\circ}$ dozen in the same time. At blocking 1 man could do 40 to 60 hats in 10 hours by hand; now, with machine, 1 man can do 40 to 50 dozen in the same time. At pouncing 1 man could do 30 to 40 hats in a day by hand; with a machine 1 man now does 45 to 60 dozen in 10 hours' work. The forming machine was invented about 40 years ago, but owing to the royalty charged for the patent they did not come into general use until about 10 years since. The sizing machines have been so improved within the past 5 to 7 years that they are now mostly used in all coarse and medium grades of hats. The shaving machine has come into use within the last 4 or 5 years for middle and coarse grades also ; the second-size machine about 10 years ago, and the stiffening machine has been used for about 25 years. The blocking machine was introduced 18 years ago, but has recently been very much improved, so that they are now generally used, except for very fine grades of hats. The pouncing machine was introduced 20 years ago, but has been improved until now it is in general use."-Hatter.

A flax and jute mill operative sends the following statement, showing what has taken place within a few years :

Flax Mills.-"At bundling, in 1883, six men did sixty-three bundles per day, and received $\$ 8$ per week, each. In 1886, four men turn out seventy bundles per day, and received $\$ 7.50$ per week, each. In 1886, one man does the same work for $\$ 7.50$ per week as two batchers, in 1883 , did at $\$ 8$ per week. In 1883, three pressmen got $\$ 8$ per week; in 1886 , two men, at $\$ 7.50$ and one boy at $\$ 5$, do the same work. In 1883, there was one extra pressman who received $\$ 7.50$; in 1886 , same work is done by one boy at $\$ 5$ per week. In 1883 , one oiler at $\$ 6.50$ per week ; in 1886, $\$ 5.50$. In 1882, one setboy at $\$ 8$ per week; in $1886, \$ 6.50$ per week. In 1882 , four boys at $\$ 7.50$; in $1886, \$ 6$ per week. In 1882, overseer, $\$ 14$ per week; in 1886 , for the same work, $\$ 10$ per week. In 1882 , oiler at $\$ 1.10$ per day; in 1886, for same work, 64 cents per day. In 1882, two overseers, one at $\$ 10$ and one at $\$ 9.50$ per week; in 1886 , one man at the same work, for $\$ 9.50$ per week."

Dye-House.-"In 1882, two men at bleaching, $\$ 9$ per week, each, and one at $\$ 7.50$; in 1886, three men at $\$ 8$ per week, each. In 1882 (sour tubs), two men at $\$ 7.50$, and one at $\$ 6$ per week; in 1886 , two men at $\$ 7.50$ per week, each. In 1882 (soap tubs), two men at $\$ 7.50$; in 1886 , one man at $\$ 8$ per week. In 1882, day's work for dyers, one box; in 1886, one and a half boxes for same pay. In 1882, thirty-one men were employed in the dye-house ; in 1886, the number was twenty-three men, doing more work."

Drying Yard.-"In 1884 and 1885, there were eleven men em-ployed-nine received $\$ 8$ per week, each, and two $\$ 7.50$ per week. In 1886 , seven men did the same work for $\$ 7.50$, each, per week. In 1885, full work, forty pounds; three-fourths work, fifty-one pounds; one-half work, seventy-six pounds. In 1886, full work, forty-four pounds; three-fourths work, fifty-five pounds, and one-half work, eighty pounds-a difference of one and a half hours per day more work for the same pay."

Jute Mill.-"In 1884, at bundling, four men did fifty-three bundles per day, at $\$ 8$ per week, each; in 1886 , three men did 70 bundles at $\$ 7.50$, each. In 1883 , boys tying up yarn got $\$ 7$ per week ; in 1886 , for same work, $\$ 3.60$ per week. In 1883, boys, for taking up, were paid $\$ 5.50$ per week; in 1886 , for same work, $\$ 4.80$ per week. In 1883 , boys at card breakers and tapping machine, $\$ 5.50$ per week; in $1886, \$ 3.60$. In 1883, boys at tapes and bands, $\$ 5$; in $1886, \$ 3.12$ per week. In 1882, two oilers were employed-one at $\$ 7.50$ and one at $\$ 5.50$ per week; in 1886 , one man at $\$ 6$ per week. In 1883, two men at flyers-one at $\$ 9$ and one at $\$ 6$ per week; in 1886 , one at $\$ 5$ and one at $\$ 3.50$ for same amount of work."

Box Makers.-"In 1885, three men and one boy got a total wage of $\$ 37.50$ per week; in 1886 , one man and two boys did the same work for $\$ 24$ per week."

Females. Spreaders.-"Two years ago, nine cans per day at $\$ 10$ each every two weeks; at present they work all day for same pay." Winders.-"Two years ago one girl to one frame at $\$ 9$ for two weeks' pay ; at preseat, three girls on four frames at $\$ 10$ for two weeks' pay." Drawers.-"In 1884, two fronts, one back, with seventy ends each, $\$ 9.60$ for two weeks' pay ; at present one-half more work and only sixty cents more." "Rack winding has also increased work by the increase of speed." Wet Twisting.-"In 1884 for one side, $\$ 10$ for two weeks' work; in 1886, double the work, or for tending two sides of frame, $\$ 11.40$." Winding.-"In 1884, one frame, $\$ 10$ for two weeks' work ; in 1886, three girls on four frames at $\$ 10$ for two weeks' work. In 1884, for putting up flax on four boards, $\$ 10$ for two weeks; in $1885, \$ 9$ for same work. Winding one spread board two years ago, $\$ 10$ for two weeks' work ; in 1886, $\$ 9$ for same work. Winding two drawing frames in 1884, $\$ 11$ for two weeks' work; in 1886 for winding three frames, $\$ 9.60$ every two weeks." Jute Twisting.-" In 1884, with three on a side, each received $\$ 10$ for two weeks' work; now two do the same work and receive $\$ 10.55$ for two weeks' work."

## CHAPTER II.

## COMMON SCHOOLS AND THE LABOR QUESTION.*

It would be carrying coals to Newcastle if I should undertake to enlighten the distinguished body to which I speak on any of the phases of the labor question. The utmost which I can hope from this paper is to furnish a text from which some of the experienced gentlemen before me may give enlightenment to me, or to one another. To this end I propose to consider, very briefly, one of the many relationships. of Labor and the Common School System.

I must begin by admitting that the aid and support of the mechanical or other industry of the country is by no means the main purpose of the common school system; that that system is primarily and mainly designed to furnish American citizens, to act as a mill, into one end of which goes a heterogeneous raw material, while at the other end comes out a product quite homogeneous and very well up to the normal American standard. Any treatment of the common school system must, of course, bear continually in mind its fnndamentally political nature; and any argument which comes in contact with this fundamental feature must there find its final decision. But there may be propositions which, if established or admitted, may work a very great change from the present nature of our common school system, without in any wise touching the political nature of the system, or making themselves amenable to objections drawn from it. It seems to me that at least one such proposition may be found in the relations of the common school system to labor.

Let me assume your entire acquaintance with the "Wages Fund Theory," as expounded by Mr. Mill during his active life and surrendered by him not long before his death, and take up the modification or derivative suggested by Professor Cairnes, which is as familiar to you, commonly called his "Theory of Non-Competing Groups." For the sake of clearness, let me take his own terms:

[^63]"What we find, in effect, is not a whole population competing indiscriminately for all occupations, but a series of industrial layers superimposed on one another, within each of which the various candidates for employment possess a real and effective power of selection, while those occupying the several strata are, for all purposes of effective competition, practically isolated from each other." Leading Principles, p. 66, American edition.

Under the hands of Professor Cairnes the groups are limited to four ; (1) the unskilled class; (2) the artisan class; (3) the higher industries; and (4) the professions. He assumes that competition is very complete within each class; that, for example, in the second or artisan class, to use his own words, "the man who is brought up to be an ordinary carpenter, mason or smith may go to any of these callings, or a hundred more, according as his taste prompts, or the prospect of remuneration attracts him; while he practically has no power to compete in those higher departments of skilled labor, for which a more elaborate education and larger training are necessary, for example, mechanical engineering." There are two ways of looking at this part of Professor Cairnes's theorem.

In the first place, I think the latter part of it is self-evident. The lawser who demands twice as large a fee as his prospective client desires to pay stands in very little apprehension of the competition of 'longshoremen or horse-car drivers. There is no competition from the lower groups upward. I am sorry that Professor Cairnes has not turned the glass around, to see whether there may not be seriously effective competition from the upward groups downward. I am as sure as I can be of anything that the failures which the law annually contributes to the country's stock of labor do compete very seriously with strata below. A car-drivers' strike, for example, may be very seriously affected as to its results by hard times among lawyers, teachers and journalists. While it is true, therefore, that there is no general competition, upward or downward, between groups, and very little competition upward among individuals, it seems to me that Cairnes's phrase, that the groups " are practically isolated from each other," is a trifle too sweeping, in that it ignores the fact that individual competition downward is far larger and more of a disturbing element than individual competition upward.

In the second place, and as more especially relating to this subject, it seems to me that Professor Cairnes is altogether too sweeping in
assuming that competition is full and complete within a group; that, as he puts it, the "ordinary carpenter, mason or smith may go to either of these callings, or a hundred more, according as his taste prompts, or the prospect of remuneration attracts him." It seems to me that this statement of facts is not close or accurate enough to do anybody any practical service. I am not dealing now with the familiar and often-stated problem of the Mobility of Labor, the social or legal, natural or artificial, obstacles which prevent the workman from passing with freedom from one place or occupation to another. I am only questioning whether, even with perfect freedom of passage, it is so likely that "the ordinary carpenter, mason or smith" will pass at will to any one of a hundred occupations in his group as to make his possible self-transfer an important factor in the problem of wages. I doubt it very much, and it seems to me that a presentment of an opposing view will hardly need argument to sustain it.

Is it not true that Professor Cairnes has stopped too soon, that this analysis of the whole field of labor into groups is not enough, and that he should have carried the same process of analysis into the groups themselves? There are still, here and there in outlying districts, mechanics who are relics of the old time when men were obliged to turn with facility from one employment to another. My Connecticut carpenter of years ago could do almost anything for me, from building me a set of book cases to repairing the kitchen range. He was an expert in nothing, but an exceedingly handy man to have in the neighborhood in almost any case. The time for such men is past. The training demanded for any great success in a modern trade is such as to almost unfit a man for anything very far removed from it by the nature of the trade. The facts are that the trained modern artisan is competent for complete competition in the trade which he has mastered, for incomplete competition or for competition after some additional instruction in certain groups of cognate trades, and is "practically isolated" from the other trades, even of his own group. An increase of wages in the art and mystery of sash and blind making would not go very far before attracting house carpenters, and then, perhaps, carriage makers. It would have to go very far indeed before the tinsmiths or blacksmiths would become available as a relieving force; while the miners or fishermen would have to be left out of consideration altogether, although all these trades belong to
the same one of Cairnes's groups, the artisan class. So, taking a reverse view and considering a possible strike, barring Trades Unionism in all its forms, the striking sash and blind makers would have. much to fear from the house carpenters, a little less from the carriage makers, very much less from the tinsmiths or blacksmiths, and nothing at all from the miners or fishermen. It seems very evident from such considerations as these, which might be multiplied to almost any extent, that the Cairnes Theory of Non-Competing Groups requires at least this modification to make it conform to facts.

Now, it is an evident misfortune that the facts should be as they are. It would be much better for labor if the Cairnes assumptions were correct, if the " ordinary carpenter, smith or mason" could turn with facility to any one of a hundred other employments ; if, when oppressed in one trade, he could turn with a minimum of preparation to jewelry or plumbing, or some other occupation, as an easy recourse. And it is just here that I wish to make the connection between the actual condition of labor and the common school system.

Modern times have been marked by the rise of comparative studies : comparative philology, comparative theology, comparative law, and almost any number of similar sciences. In these, the great principles which underlie and are common to philology, theology or law, in all ages and countries, have been collected and reduced to scientific order, so as to form a new science, unknown before. My point is, and I think those who know workmen and their methods will bear me out in it, that the trades have never had anything like this comparative method applied to them by those who learn them. While it is impossible for modern necessities to tolerate the artisan who is jack of many trades and master of none, there are, I think, principles of a technical education which prepare a boy for no trade in particular, and yet give him the rudiments of any or all of the trades for which his natural capacity fits him. The experiment has been tried, I understand with success, in at least one of the New Haven public schools. It is for such a training that I would prefer the name of a Common School Technical Training. It would differ from the phrase technical training, as commonly used and understood, in that it would prepare for no special trade or calling. It would be a common school system in that it would aim simply to enable any and all boys to become good mechanics and to save a very considerable amount of time and waste in apprenticeship.

So far as this system is allowed to enter and make a place for itself in the common schools, it must be confessed that it would, to some extent, militate against what I might call education for culture. It would not, in the rudimentary branches of any course, militate against it. Reading, writing and arithmetic are very necessary to make a man a good citizen, to make him a good mechanic, and for general culture as well. But, as we go above the rudimentary branches, the agreement disappears. Free-hand drawing is hardly a neeessity for good citizenship, but may be taken as a study for culture, and as no mean mechanical advantage. But the study of the piano in the public schools, of Latin and Greek, of psychology and etymology; of all the branches which abler and more ambitious teachers love to encourage, and which are yet essential neither to good citizenship nor to the advancement of industry-what are we to say of these? It is a question with some whether they should not be eschewed altogether. Without entering upon that debatable ground at all, and without making the slightest attempt to trench on the studies whose aim is purely the cultivation of good citizenship, it is surely no radical proposition to assert that education simply for culture ought to yield a considerable percentage of the field which it now occupies in our common school education, to an education which shall be technical in its nature, and shall prepare a larger number of our boys to become good mechanics, of wider mental horizon than heretofore, and furnished with a stronger power of self-defence and selfpreservation than most Trade Unions can supply. It is in this way, it seems to me, that our common schools could be made very efficient instruments in removing or simplifying some of the difficulties which now beset the labor question.


## PART IV.

THE BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEY.

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In 1880, when the Bureau first endeavored to collect information from the building and loan associations in this State, there were reported to be in existence 106 of these societies, but less than onehalf (51) favored us with returns. These aggregated, in net assets, $\$ 4,002,647$ and about 47,000 shares, or an average of $\$ 78,483$ assets and 921 shares to the association. Previous to the year mentioned, no such statistics had been available, and, except in the immediate localities where they flourished, no one had any idea of the extent or condition of the New Jersey co-operative building enterprises-something which had much to do with intercepting their development.

Our publication, incomplete as it was, met with much favor, and attracted considerable attention throughout the State to this form of co-operation. And when, two years later, in 1882, we again investigated the subject, one hundred and eighteen secretaries, without exception, cheerfully sent in their replies. According to our estimate, there were during that year 128 New Jersey building and loan associations, of which twelve "terminating" ones were reported to be closing up, that is, their shares had matured. The aggregate returns from the 118 organizations, of which the majority were serial or perpetual, gave 102,075 shares, owned by 20,000 members, of whom fully 6,000 were borrowers. The assets amounted to $\$ 6,748,775$. The averages were, therefore, 864 shares, 170 shareholders and $\$ 57,192$ of assets-an apparent decrease, easily accounted for by the fact that very many small societies, not reporting in 1880, made returns.

In 1884 there were said to be in existence 129 building and loat associations, a number of which had been organized since the statements for 1882 appeared, while several of the terminating societies
running at that time had been "wound up." In Camden there were 20, of which 17 belonged to Camden city; Middlesex had 18 ; Essex, 15 ; Burlington, 9 ; Hudson, 9 ; Gloucester, 8 ; Monmouth, 6 ; Cape May, 6 ; Atlantic, 5 ; Passaic, 4 ; Union, 4 ; Salem, 3 ; Mercer, 3 ; Hunterdon, Somerset and Warren, 2 each, and Bergen, 1. Complete reports were received from 121, whose net assets amounted to $\$ 6,956,351$, or an average of $\$ 57,490$. The capital was divided into 133,300 shares, distributed among 25,000 individuals, or an average of 1,100 shares and 205 shareholders to an association. This showing undoubtedly would have been much better but for the industrial depression during that period. It was estimated that the net assets of all the New Jersey associations in 1884 amounted to $\$ 7,000,000$, and that of our wage-workers who had secured homes, at least 4,000 were then engaged in paying off mortgages with assistance obtained as shareholders.

The fourth census of our building and loan enterprises was made by the Bureau at the close of the present year. On October 1st, a circular was sent to the various associations, the names of the newly organized ones having been obtained from the county clerks, asking for the information tabulated in the tables below, which give the statistical details of 156 organizations in active operation at that date, although the 1884 data do service for two which made no returns. We have omitted two terminating associations in New Brunswick, Middlesex county, the "Union" and "Empire," from which, also, no replies were received. Neither has been closed up, but the members of the former several years ago ceased to pay dues and are simply waiting to realize on their assets. The other "is nearly wound up," reported the secretary. The number stated, 156, therefore, includes all the active societies at the beginning of the fall. Since then and up to the close of the year, several more have been incorporated, so that the total at present cannot be far from 170-a very rapid increase within the past two years. From the reports which have been forwarded to the Bureau, these New Jersey associations are generally in a very prosperous condition, and a great benefit, not only to the individual members, but to the community at large, for they are increasing the number of tax-paying, property-owning citizens, and making it comparatively easy for an industrious workingman to own a home. The improvement has been noticeable in the northern part of the State, especially in Essex and Hudson counties, where the number of the
associations has doubled since 1884, and both Jersey City and Newark now each support a building and loan journal-the News and Advocate-the only newspapers of the kind published in the State. From the editor of the former, Mr. C. F. Southard, 13 Astor Place, Jersey City, we received the following letter in reply to someinquiries:
"After becoming a member of the Lafayette Loan and Building Association, I was struck with the general lack of knowledge on the subject, and the blind faith of the great body of investors in those elected to run the organization. Being a journalist, I determined to start a loan and building journal, similar to those published elsewhere, addressed a circular to all the New Jersey organizations I could learn of, asking support and reports, and was delighted with a general response. I issued the first nomber of the Loan and Building News in February, 1886, and my first subscriber wasMr . ——, of New Brunswick, who informed me he had just closed up two of the associations, and paid over $\$ 200$ a share.
"The News awakened a wide-spread interest at once, and the result is several of the new and flourishing organizations in Hudson county and elsewhere. Soon bankers, brokers, clerks, salesmen, bricklayers-men, women and children-wanted to learn all about the institutions, and not only was I besieged with letters, but I had callers at all hours of the day and evening, asking for information.
"I find that the associations are run in all shapes and ways, the 'interest question" figured to suit the majority of the officers, and accommodations of all kinds held out by associations with stock undisposed of, by votes and otherwise, in order to get the stock off their hands.
"In some parts of the State the success of the organizations is phenomenal, while in others they drag along. The 'serial plan' seems to be fairly well understood, except in Hudson county.
"The 'serial' is proven beyond question to be the best plan to organize upon, and the 'division of profits' is easily and clearly arrived at, as, per example, in the June number of the News, which the Lafayette Association paid $\$ 25$ to have explained to it.
"One of the great troubles with the associations is that the idea for which they are formed is reversed. For instance, speculators go into them, take from thirty to fifty shares, borrow the full amount, build tenement-houses and flats and fill them with tenants, thus placing people in a position where the idea of a home of their own is not possible. On the other hand, small investors do not understand the first principles about these enterprises, and therefore fail to become borrowers and to stop paying rent. If the membership of associations generally were fully instructed in the ranning of the organizations and how to borrow, the advantages of borrowing, etc., the number would double in a year, thousands of people would be drawn into the State and thousands of new homes erected.
"One of the evils is their organization by men simply to get elected secretary, for the salary. These institutions will, unless a miracle happen, be wound up by the Chancellor.
"Now for a few suggestions as to what I think is needed in New Jersey:
"A bill limiting the shares to be held by a single person to twenty-five.
"A State league, in order to compare experiences, exchange views and give an impetus to building and selling property.
"A uniformity in organizing them, so as they may be run without new ones copying the errors of old ones, as is now done to an alarming extent.
"A law compelling them to report to the State Burean of Labor Statistics once a year.
"I have given the negative side of the subject, but will sum up the other side by saying that they are and will continue to be a great help and blessing to the State. The moral influence they wield is most wonderful and striking. Illustrations might be given which would read like fiction.
"I would say, in conclusion, that I intend to go into the work of attempting to organize the State through the News, and will appreciate any information, reports, experiences, or other encouragement secretaries or members may see fit to mail me. If secretaries will aid me in forming a State league, $I$ am sare the results will redound in great good to all."

A summary of the statistics of the 156 New Jersey associations shows the following results: 37,730 shareholders holding 204,653 shares, or an average of 242 members and over 1,300 shares $-5 \frac{1}{2}$ to each shareholder. The net assets foot up $\$ 9,349,517.46$, or nearly $\$ 60,000$ to an association. Of the members, nearly two-thirds (or $-26,123$ ) are wage-earners, and 8,562 , or over one-fifth, are borrowers. Of the latter, 5,354 , or over sixty per cent., are workingmen. Over one-fifth of the shares, or 42,373 , have been borrowed on. The profits of 142 associations (net assets, $\$ 8,915,120$ ) were $\$ 1,706,649$, or an average of $\$ 12,018$ for $\$ 50,764$ paid in in dues, that is, 23.7 per cent. for the average time ( $2 \frac{1}{2}$ years) the shares have run-about $9 \frac{1}{2}$ per cent. a year. The incidental expenses have averaged, for 110 associations, $\$ 353$ annually. The totals, by counties, are given in the following table, after which are added a few statements by the secretaries about the condition of many of their associations. These should be read in connection with the details summarized further on:


## REMARKS BY SECRETARIES.

Hammonton.-"Workingmen's" 1886 report: "Average rate of sales for the year, 63.82 cents; average rate on unpaid loans to date, 61.60 cents." 1885 report: "Average rate of sales, 68.93 cents; average rate on unpaid loans to date, 62.15 cents."

Pleasantville.- "Our society is doing very well. We keep all of our money invested. The average bonus for a year was about forty cents. When a member bide for a loan, we do not deduct the bonus, which and the interest is paid monthly with his dues, so that whenever he pays off any part of the loan, the bonus and interest stop pro rata. That is the fairest way to run a society."

Rutherford.-"Since 1884 we have successfully matured our first and second series. In one, the shares reached a value of $\$ 200.26$, whereupon a dispute arose as to the legality of paying anything over $\$ 200$, that is, the extra 26 cents. It was decided to do so. The total amount of loans for the year ending May, 1886, aggregated $\$ 28,720$, of which $\$ 25,175$ are secured by bond and mortgage on real estate, and $\$ 3,545$ by stock and bonds. The rates of premium are as follows:

| Par. | Bond and Mortgage. | Stock. |
| :---: | :---: | :---: |
| $\ldots$ | $\$ 1,20000$ | $\ldots \ldots \ldots$ |
| .05 | 7,07500 | $\$ 50000$ |
| .10 | 3,10000 | 71500 |
| .15 | 1,00000 | 33000 |
| .20 | 7,70000 | 70000 |
| .25 | 1,20000 | 35000 |
| .30 | 1,00000 | $\ldots \ldots \ldots$ |
| .35 | $\ldots \ldots \ldots \ldots$ | 95000 |
| .40 | $\underline{2,900} 00$ | $\ldots \ldots \ldots$ |
|  | $\$ 25,17500$ | $\$ 3,54500$ |

Ridgewood.-"Our first series (1885) has earned, for the average time invested, 17.5 per cent.; second series (1886), 16 per cent."

Riverton.-"The average premiums since our organization have been: First year, 10.7 per cent.; second year, 10.5 per cent.; third year, 9 per cent.; fourth year, 9.6 per cent.; fifth year, 9.3 per cent.; sixth year, 10 per cent.; seventh year, 8.2 per cent. ; eighth year, 11.4 per cent."

Tuckerton.-"The twelfth annual report (March, 1886,) states: 'The first series will be settled in a short time. It has paid $7 \frac{3}{4}$ per cent. on the money invested, and averaged a yearly gain of over $\$ 2.79$ per year. The second series, though small, has paid for this last year nearly 10 per cent., and made an average yearlv gain of over $\$ 1.13$ per share. The third series has made 34 per cent. for every dollar invested in it.' "

Beverly.-"Average premium on loans sold during last association year 9 per cent., or $\$ 18$ on each loan of $\$ 200$. A seventeenth series was issued on November 1st, 1886. The Beverly Building and Loan Association was organized on January 13th, 1868. Its charter contained the names of persons who were at that time among the foremost of Beverly's citizens. In the first series the record shows that 114 shares matured in nine years and two months. In the second series 122 shares matured in nine years and three months. In the third series 80 shares matured in ten years and
four months. In the fourth eeries 57 shares matured in ten years and nine months. In the fifth series 58 shares matured in eleven years and one month. In the sixth series 56 shares will be matured in about 11 years, and 4 months.
"In the foregoing statement one's attention is at once attracted to the increased number of years taken by the present series to mature as compared with the first and second series. Naturally the question is asked, 'Why is it that the first series matured in nine years and two months while the fifth series required eleven years and one month to mature '' A moment's thought answers that question: From 1868 to 1878 money was in demand, and the rate of interest was very high. Borrowers were numerous, and heavy premiums were paid for priority of loans. Frequently stock sold from $\$ 50$ to $\$ 75$ premitum, the average being about $\$ 60$. At the present time, if the average is $\$ 18$, it is considered good. Thus, it will be seen that, although it takes longer now for stock to mature than it did ten or fifteen years ago, the actual cost to the borrower is in reality about the same as it was when high premiums prevailed.
" The importance of joining an association of this character is not appreciated by the working people as a class. There are hundreds of owners of happy homes to day all over this country-homes that, had it not been for building and loan associations, would never have been built, and whose owners would have been paying rent to day, as they were doing before they joined the association."

The following is an extract from the 1885 report of this association:
"If anybody has doubts whether building associations do ever pay the full two hundred dollars on their shares matured, the record for the past seventeen years ought to be convincing that at least this association does. The record shows that 114 shares matured in the first series in 9 years 2 months, to the value of $\$ 200.05$ per share, for which was paid the sum of $\$ 22,805.70$. 122 shares matured in the second series in 9 years 3 months, to the value of $\$ 200.37$ per share, for which was paid the sum of $\$ 24,445.47$. 80 shares matured in the third series in 10 years 4 months, to the value of $\$ 200$ per share, for which was paid the sum of $\$ 17,800$. 57 shares matured in the fourth series in 10 years 9 months, to the value of $\$ 2 C 0$ per share, for which was paid the sum of $\$ 11,4 C 0$, making the entire amount received on matured stock in the four series by the shareholders $\$ 76,451.17$.
"Your board of directors have the pleasure to congratulate the members of the fifth series in now arriving at the period when each share of this series is about to mature to the value of $\$ 200$ per share, which on 58 shares will distribute among its members $\$ 11,600$ in cash and real estate. You in this series having paid in $\$ 133$ on each share in 11 jears 1 month will now recelve $\$ 200$, a profit of $\$ 67$, showing that the difference between welfare and poverty consists in knowing how to save and invest a dollar advantageously.
" Membership is acquired simply by subscribing and paying one dollar per share each and every month for such a number of shares as you may wish; this may be done at any time on application to the secretary. If the series has run any length of time the subscriber for shares must pay back to the commencement of the last series issued. The series you subscribe to will terminate or mature when the assets amount to $\$ 200$ per share in that particular series. And this will depend upon the amount of business done.
"The stockholders are of two classes-the non-borrowers and the borrowers. The first class has the advantage of being able to save money in small sums as their surplus earnings will allow, and of receiving an equal portion of all the profits on the whole sum saved without waiting to accumulate a large sum before receiving interest on it. If your series should terminate in ten years you will have paid in the sum of $\$ 120$ and received $\$ 200$-a gain on one share of $\$ 80$, or $13 \frac{1}{3}$ per cent. for your money for the time invested. No such profit can be obtained of any savings bank now in existence.
"The borrowing members can borrow $\$ 200$ on each share. The money is put up at auction every monthly stated meeting, and awarded to the member giving the highest premium for the preference or priority of right for the loan. This amount of premium is what the borrower estimates the value to him beyond simple interest, of an advance on the ultimate value of his shares; having by this means the present and continued use of the money, enables him to gain back this premium he has paid for the preference, and a considerable profit besides, by the time his shares arrive at the ultimate value of $\$ 200$.
"The source of these profits by which the premiums are returned, the manner of its increase and its effect on profit account are astonishing. Suppose you borrow $\$ 200$ on one share at 30 per cent. premium, you would receive the net amount of $\$ 140$, and there would remain in possession of the association $\$ 60$ as a profit. This profit is loaned again, at say 30 per cent. premium, this still leaves a gain of $\$ 18$ on the first gain of $\$ 60$. The $\$ 18$ is still loaned at 30 per cent., and there remains a profit of $\$ 5.40$. Thus it will be seen (if followed no further) that the first sum of $\$ 200$ actually produced a tripled profit of $\$ 33.40$, or 41.7 per cent., while the average premium was only 30 per cent. If 30 per cent. continued to be the average premium, the series would mature in a little over eight years. An average premium of 10 per cent. will mature a series in twelve years. Again, the monthly compounding of the interest received on the loans. This is received monthly, and is a large source of profit by being immediately loaned and premium and interest received thereon. The fines are also a source of profit. The fines also induce members to be punctual in their monthly payments, and thus harmony and regularity are maintained in the interest of the association. It is often asked if high premiums are advantageous to the borrowers. There is no denying the assertion that the heavier the premiums the sooner the shares will mature to the value of $\$ 200$ per share; also the borrower will have to pay a less time. If you analyze the example given on the profit of premium by comparing the amount of money received, the time of payment, the ratio of difference will be found slightly in favor of high premiums, and if calculation is made by compounding the monthly payments, it will predominate very largely in favor of high premiums. The reason is the rapidity with which the amounts double up during the last few years.
"A careful examination of the subject will show that the premium, which is such a stumbling-block to those who do not understand the principles of building associations, is a myth; the borrowers never pay the worth of the use of the money, and the accumulated profit during the run of the association makes it up for them. This fact is susceptible of a very clear explanation."

Bordentown.-"No money is loaned to a member at a less premium than 5 per cent."

Riverside - "We do not dejuct any premium, but loan the full amount to the one bidding the highest monthly preminm in addition to the interest. So far, our expenses of starting have almost consumed all profits."

Mount Holly.-"Industry:" "Our shares are $\$ 100$ each. The association during the past year has paid each stockholder 5 per cent interest on the value of his stock, and, in addition, has divided (to each share of $\$ 100$ ) 48 cents as profits, also paid off the first series of $\$ 36,500$, of which $\$ 23,000$ was stock not borrowed on."

Camden City.-"Camden:" "I wish to call your attention to the decrease in profits, accounted for by the changed condition of the money market in general. The premiums are not one fourth what they used to be, and as a great deal of money is loaned at par, a series now takes about twelve years to mature. This is much longer than formerly. Money can now be got from private parties at 5 per cent.; but a great mistake is made by borrowers who think that a 5 per cent. mortgage from individuals is better for them than a building association loan, especially when the association runs twelve years. In the latter case they are much better off, and not only pay on easy terms, but do not run the risk of being called upon at any time to settle the principal of the debt.
"These associations, nevertheless, are still growing in favor in this city. This summer the demand for new stock has been far in excess of the supply. A new society has been organized here, with about a thousand shares. It began receiving dues in September and has a very good start.
"The Camden Association has matured eight series, seven of which have been entirely paid off and the eighth has but thirty-nine shares left to be settled. The total profits of matured stock amounted to $\$ 97,759.68$ :

"Franklin:" "Average premium for the year, $5 \frac{1}{3}$ per cent.; year's profits, $\$ 9,062.19$, or $\$ 8.74$ for every $\$ 100$ paid in."
"City:" "Average premium on seventy-six shares, $7 \frac{8}{\mathrm{I} 5}$ per cent. ; loaned at par, twenty-two shares."
"Mechanics' and Workingmen's:" "The new sizteenth series of five hundred shares was all sold at the annual meeting. The average premium received during the year was $7 \frac{1}{7}$ per cent. ; year's profits, $\$ 5,718.82$, or $\$ 7.31$ for every $\$ 100$ paid in."
"People's:" "Oar new series (four hundred shares) was all purchased the second meeting-night, and of the one hundred shares reserved for borrowers one-half was taken. Average premium for the year, $3 \frac{2}{7}$ per cent.; year's profits, $\$ 8,235.76$, or $\$ 10.89$ for every $\$ 100$ paid in."
"North Camden:" "Average premium for the year, \$10.\%0."
"Newton Township:" "The face of bond of loans now outstanding is $\$ 12,000$; premium paid, $\$ 1,822$; money astually advanced, $\$ 10,178$. In $1875, \$ 53$ premium was paid for a face loaz of $\$ 200$, or $\$ 147$ actually advanced; in $1882, \$ 24$ for $\$ 176$ actually advanced."
"Homestead:" "The amount of loan granted by this association to a borrower is
the par value of the stock ( $\$ 2$ ) 0 per share), less the premium bid, but when the stock of any series matures, the borrower, as well as the non-borrower, receives its par value, $i . e$, he receives from the association the securities (bond and mortgages) given for his loan and cash for the difference betweon the amount loaned and the par value of his stock. This association, unlike all others in this vicinity, excludes from its profits all premiums bid for loans, and by so doing relieves it of all estimates in the calculation of profits, and enables it at any time to ascertain its exact financial standing. The plan adopted by this assocration for the division of the profits is the one known as the 'Partnership Plan,' and is acknowledged by building association experts to be the only plan that distributes the profits equitably among all the series, giving to each series the same percentage of profits for the actual time the money has been inyested. Borrowers wishing to do so, may return to the Association the net amount received by them at the time of purchase, the amount of premium bid being in no way considered. We believe it to be the duty of building and loan associations to have a special care for the interest of the borrowers; this, we believe, is done by the Homestead Association, without prejudice to the non-borrower. We are now issuing the third series."

Gloudester City.-"United Mutual:" "Average premium for the past year, 20 per cent."

Mebchantville.-"We loan the full $\$ 200$, interest and premium payable monthly."
Berlin.-"Oar shares mature at $\$ 300$. In this village we have had two other associations, which matured at $\$ 100$, and paid 11 and 6 per cent, respectively, in very dull times."

Vineland - "The first series matured January 10th, 1887, at $\$ 197.67$, and the second, February 14th, 1834, at $\$ 201.60$. These two series have been very unfortunate. A dishonest secretary stole over $\$ 90$ ), and they were unable to realize the amount loaned when they first started - at a time of high values. The last two series (eighth and ninth) have done very well, having gained $\$ 140$ and $\$ 3.27$ on $\$ 24$, and $\$ 12$ paid in. We have some moneg-lenders who use their influence against us, but they cannot deny that there is no batter way of a young man securing a home than through a building association. Siace I have been secretary, for the past three years, we have helped sixteen young married men to buy or build houses for themselves, and all are to-day better off than they would have been had they borrowed money outside."

## "Institute:" "Average premium charged $\$ 0.27 \frac{1}{2}$."

"Hope:" "Building associations, considering the number, are doing well in this city. They sell about $\$ 5,000$ per month, thus making it possible for members to get a home for about what it costs to pay rent."
"Having been connected as officer with the Millville associations for twenty-five years, and given much of my time to them, I think I may be able to offer some suggestions to those contemplating starting new ones: Avoid the old terminating assoclation. The serial plan is far superior, as it gives perpetual borrowers. New stockholders, coming in every year, give life to the society, and mature stock sooner than it otherwise would.
"Adopt the monthly premium plan, by which the borrower gets his full $\$ 200$; the Loan is more convenient to him, and when partly paid off the premium is also extinguished pro rata.
"Shareholders should bs allowed to withdraw not only the amount paid in, but a reasonable proportion of the gain, say 45 per cent, at the end of the first year, and
then an additional one-half of one per cent. of the month's profits. Thus, the shares will be gradually withdrawn before they mature, and the older series will not be a drag on the later. In perpetaal associations success depends on the earlier series keeping out of the way when the time for payment comes.
"A very important matter is also the revision of our laws governing building and loan associations, which have grown very numerous. These laws, perhaps good enough when there were only a few societies in existence, are entirely insufficient now. A person who has bid in a loan in the monthly association at a high premium, desiring to reduce it by a second bid at a more favorable occasion, is forced to pay double premium and interest and go to the additional expense of having a second set of papers prepared. This benefits neither borrower nor association. Relief in the matter of foreclosure of small properties might be granted. Now, though the debt is ever so small, it must go through the Court of Chancery, and takes at least $\$ 150$ and a year to settle it up. All of this comes out of the poor borrower and makes it unsafe to lend on small properties. A very poor man thus has little chance to take advantage of a loan with which to build."

Tuckafoe.-"Our association is seventeen years old, has matured six series and is giving satisfaction. The accounts are audited every six months."

Glassboro.-Our profits for the average time of payment during 18 months were $12 \frac{7}{17}$ per cent. The premiums during the year varied from $1_{4}^{\frac{1}{4}}$ to 11 per cent."

Mullioa Hill-After the March payment the first series was declared matured ( 134 months). The association has been a great benefit to wage-earners. It has induced them to save in many instances from $\$ 2, \mathrm{CO}$ to $\$ 800$, when they otherwise would not have saved as many cents. We are now beginning our twelfth series."

Clarksboro. -The profits fer the nine years of our existence, as per last report, have been $\$ 5,969.54$; expenses for the same time, $\$ 1,346.06$, or net profits, $\$ 4,622.48$. But part of these profits has been paid to those who have withdrawn, or $\$ 1,862.10$ This leaves a balance of $\$ 2,760.38$, which divided by our 95 shares gives to each $\$ 29.05$ with $\$ 5.34$ undivided. The amount of business done during the nine years has been : Received from all sources, $\$ 93,305.40$; loaned on bond and mortgage, $\$ 11,200$; temporarily, $\$ 51,030$; paid on withdrawals, $\$ 13,507.91$; for expenses, $\$ 1,346.06$; on hand, $\$ 6,171.43$."

Clayton-"Number of loans put out during the year, 47⿺辶 ; average premium, \$9.33; last year, $\$ 11.35$."

Williamstown-"Our association has been doing much better this than last year. We are untable to supply the call for loans. Interest and bonus are paid monthly. The preminm is very small to what it used to be."

Swedesboro-"Issued a new series (11th) in May. In November our 5th series matured. Our money is all loaned and in demand at a premium of $\$ 18$."

Woodbury. - "Almost sixteen years of service, instead of lessening my interest and enthusiasm, yearly convinces me of the good these associations are doing. The present year is a more successful one than any of its predecessors. The sixteenth series, in its regular succession, has been issued, and 1,007 shares taken-a larger number than in any preceding series. The receipts now average $\$ 4,200$ monthly. On eight months' business, investments amounting to $\$ 23,300$ have been made, and the balance used in paying withdrawals, matured stock, etc. In November the fifth series was declared matured, after running eleven years and six months. $\$ 5,200$ in cash will be paid to - eleven shareholders, and $\$ 4,800$ of mortgages canceled on the properties of nine other stockholders, all of whom, with one exception, are wage-earners. The premiums this
year averaged $10 \frac{3}{4}$ per cent. This is the previous record: Average premium during $1885, \$ 9.57$; $1884, \$ 8.35$; $1883, \$ 7.76$; $1882, \$ 7.21$; $1881, \$ 6.53$; $1880, \$ 2.13$; 1879, $\$ 4.50 ; 1878, \$ 6.93 ; 1877, \$ 10.52 ; 1876, \$ 14.07$; $1875, \$ 16.21$; $1874, \$ 17.02$; 1873 , $\$ 16.86 ; 1872, \$ 18.89 ; 1871, \$ 19.73$; average premium since organization, $\$ 9.87$.
"The record of business done during sixteen years ending April, 1886, was as follows: Mortgages matured and paid, $\$ 105,000$; four series matured and paid; money invested (A pril, 1886), $\$ 140,000$. Receipts and disbursements since organization:

## REOEIPTS

Dues...................................................................... \$288,711 18
Interest................................................................. 62,239 07
Fines..................................................................... 1, 80609
Advance on new shares ............................................... 29266 .
Loans paid before maturity.......................................... 58,440 38
Loans collected by foreclosure....................................... 3, 900 72
Rents .................................................................... 72233
Sales of real estate .................................................... 4, 4, 00
Miscellaneous............................................................. 8362
Cash overdrawn on this report..................................... 35046
$\$ 420,70361$

## EXPENDITURES.

Loans................................................................... \$226,218 21
Withdrawals ........................................................... 140,955 78
Expenses............................................................... 7,289 20
Taxes................................................................... 8,166 51
Return of premiums................................................... 2,605 74
Interest on advance payments...................................... 64040
Foreclosure purchases................................................. 2,067 41
Furniture................................................................ 28050
Matured stock and interest.......................................... 32,479 76
$\$ 420,70351$
Newark.-"Excelsior:" "Actual running expenses are less than $\$ 500$ per year. Our members are mostly Germans, only a few wage earners, mostly small tradesmen. We have only a small number of well-to do people, who generally are not borrowers."
"Mutual:" "This association was organized June 20th, 1867, on the terminating plan. At this time 1,370 were taken. The first annual statement was made July 1st, 1868 : Amount paid on each share, $\$ 11$; value of each share, $\$ 16.10$; average rate of premium for the year, $34 \frac{1}{3}$ per cent. Second annual report, July, 1869: Amount paid on each share, $\$ 23$; value of each share, $\$ 35.23$; average rate of premium for the year, $30 \frac{1}{4}$ per cent. At this meeting the stockholders amended the constitution, allowing members to hold as many shares as they desired, without limit. At the commencement of the association no stockholder was allowed to hold more than twenty-five shares.
"At the October meeting, 1873, in accordance with notice given, the stockholders. unanimously decided to change to a permanent association and receive new stock:
every three months, commencing October, 1873. This amendment was also adopted, that any stockholder wishing to withdraw from the association in the second, third, or following series, would be paid off as follows: If his stock was worth less than $\$ 10^{\circ}$ per share he would receive the amount actually paid in; if worth more than $\$ 10$ hewould reseive 5 per cent. of the profits; if worth more than $\$ 20$ per share he would receive 10 per cent. of the profits ; and for every $\$ 10$ increase in the value of the stock he would receive 5 per cent. of the profits thereof, the borrowers to receive the full value of their stock if they desire to pay off their mortgages, and the non-borrowers. in the first or old series to receive the full value of their stock less 10 per cent.
"At the June meeting, 1877, the first series of stock was worth $\$ 200.14$ per share. The board of directors declared the first series closed, and that stockholders who had borrowed would receive their mortgages and have them canceled of record; the nonborrowers to receive the amount due them in cash, which closed up the first series in nine years and ten months, or one hundred and eighteen payments. Cash was paid for surrendered stock in the first series amounting to $\$ 19,268.87$ during the year. Up to this time the amount loaned on bond and mortgage in Essex county, from the commencement of the association, was $\$ 156,800$, and $\$ 125,600$, bond and mortgage, canceled of record. From the commencement to the close of the first series the association foreclosed on three pieces of property; all other loans were paid up in full and canceled of record; these three pieces of property were sold, the association receiving all back balances, costs, etc., with interest up to date of sale. There was no loss to the association.
"Nineteenth annual report, July, 1886: Number of shares, 2,520; $\$ 12$ paid; value of same, $\$ 15.61$; average rate of premium, $7 \frac{1}{3}$ per cent. Loaned this year on bond and mortgage, $\$ 27,50$ ) ; and paid off surrendered shares to amount of $\$ 10,001.56$. The first and second are paid off; and the third, fourth and seventh will run out before the next statement. The stock in the third series with one hundred and fifty payments is worth $\$ 195.19$.
"It should be taken into consideration that, with the large number of surrendered shares to be paid off, and no money to sell for three years, and one year at a loss, we have done remarkably well. There have been no foreclosures or conveying of any property to the association in eight years. Last year we did a business of $\$ 36,057.67$, and there is due from stockholders the sum of $\$ 98.06$. The total amount up to date loaned on bond and mortgage by this association in Essex county is $\$ 268,900$; canceled of record, $\$ 175,400$; amount held by this association, $\$ 93,550$; total amount. cash received, $\$ 420,222.74$; total amount expenses, nineteen years, $\$ 9,487.10-\$ 499.32$ each year. This includes officers' salary, rent of room, stationery and a new set of books. Total amount of fines received, $\$ 4,710.71$; total amount of interest, $\$ 79$,929.07 ; total amount paid on surrendered shares, $\$ 169,346.96$. Two per cent. is the lowest premium money has ever been sold for in this association, the highest having been 401 per cent."
"Howard:" "Average premium, $5 \frac{2}{5}$ per cent."
"Reliable:" "This association has made more profits than any other society herer considering the time it has run and the small number of shares $(1,197)$."
"Enterprise:" "Average premium during the year, 2 per cent."
"Protection:" "Average premium, $3 \frac{5}{8}$ per cent., or varying from 7 to $\frac{7}{8}$ per cent."
"Woodside:" "Average premium, $3 \frac{1}{3}$ per cent."
"Security:" "Average premium, $2 \frac{3}{4}$ per cent. The association is in a very flourishing condition. Money is sold as fast as received."

Belleville.- "Net earnings for the year, $12 \frac{1}{2}$ per cent."
Harrison.-"People's:" "Gain equal to $9 \frac{1}{3}$ per cent. on the investment for the average time invested. The fourteenth series issued in September. The average premium has been: 1874, 27.97 per cent.; 1875, 28.21 per cent.; $1876,30.88$ per cent.; 1877, 17.42 per cent.; $1878,18.25$ per cent.; $1879,12.36$ per cent.; 1880, 13.57 per cent.; 1881, 9 per cent.; 1882, 4.72 per cent.; 1883, 5.47 per cent.; 1884, 5.12 per .cent. ; 1885, 4 per cent. ; 1886, 1.25 per cent."

BAYONNE.-"A statement is issued every month, bringing forward assets, liabilities and number and value of shares. All loans are at 6 per cent. per annum interest, excepting $\$ 4,000$ at 5 per cent. The total issue of shares (over 1,200 ) is now reduced to 622 . The total loans made were about $\$ 110,000$, but within the last year members, both investors and borrowers, have taken advantage of liberal withdrawal values to close up their shares and loans. It has never been necessary to foreclose a mortgage. B rrowing demand has practically ceased, and the association is likely to be closed up by withdrawal of members, as withdrawal value may be advanced. $\$ 26,000$ have been paid since January, 1886, for withdrawals.
"The experience of this association proves the beneficial operation of building and doan associations for the mass of wage earners; it is a sure method for a working man to provide himself with a home of his own. In benefiting him it also benefits the commanity. All associations should be conducted liberally toward the borrower, and should be allowed to manage their own affairs in their own way without legislative interference.
"Experience will demonstrate that excessive premiums are detrimental to the success of these associations, and that small and moderate ones will in the main prove most advantageous to both borrowers and investors, in poor and moderate circumstances. Large premiums are likely to induce speculative investment by the wealthier classes."
"The following are extracts from the 1886 report:
"The seventh annual report herewith completes six years and eight months from the first payment of dues, and the exhibit at the present time is quite favorable for the association. Shares are worth upon the books $\$ 121.12$, a total earning of $51 \frac{8}{8}$ per cent. upon the amount of dues paid in, of which $\$ 7.67$ are earnings during the past year, and nearly equal to the profit realized for the year ending January, 1881, the best year thus far during the existence of the association. The aggregate business of the year foots up $\$ 32,644.67$.
"The borrowing demand from members upon real estate security, bonds and mortgages, has practically ceased, only $\$ 1,800$ having been so loaned during the year, and the amount of premium realized is only $\$ 22$. The item of premium is unlikely to occur in future computations of profit, and if the account must be closed it will be done reluctantly, as the premiums have been a source of much of the prosperity of the association.
"Amount of interest received is about equal to last year, and is larger than any year previous to the last. The total delinquency on interest account is $\$ 147.78$; no one is six months in arrears. Bank interest on deposit balances is a trifling item this year, $\$ 15.47$, indicating that the funds of the association have been kept actively employed. The association owns no real estate, and every dollar of its funds is loaned and bearing 6 per cent. per annum interest, mostly on bond and mortgage; the outstanding loans on dues paid in are now reduced to $\$ 1,495$. Monthly income from interest is $\$ 511.50$.
"Members' mortgages to the amount of $\$ 9,200$ were canceled during the year, and $\$ 4,400$ were loaned on bond and mortgage to non-members. Members who have fully paid to date may be assured that $\$ 85$, or less, per share, will cancel their mortgages. This showing must be a solid satisfaction to borrowers, in that it has proved to be a good thing to borrow from the association.
"The notable feature of the year has been the withdrawals by investing members. "Two hundred and twenty•six shares have withdrawn in eleven months, and of these seven shares are still to be paid for, $\$ 805$. Disbursements for the two hundred and nineteen shares have been $\$ 22,82 \mathrm{t}$. This has been brought about by the liberal policy of the board of directors to offer large inducements for the withdrawal of investing shares, and those who 'know a good thing when they see it' are taking advantage of the generous bonus that has been offered. Present withdrawal value is $\$ 115$ per share. Total assets are $\$ 102,708.36$."

Bayonne.-"No. 2:" "The demand for money is quite brisk at present. We loan :about $\$ 5,0 C 0$ per month, at 10 per cent. premium."

Jersey City.-" Bergen :" "Net profit on amount paid in, $24 \frac{1}{8}$ per cent., or $\$ 15.88$ per share. Basing the calculation on shares not borrowed on, as is customary with other associations, the profit will show $\$ 26.38$ per share, or $40 \frac{2}{5}$ per cent. One bad feature in some of our associations is the continual discounting of notes to peet payments on loans, instead of using the funds of members."

Jersey City - "Pavonia:" "Began business in June, 1885, when 1,000 shares had been subscribed for. The association has been very careful of the security taken. Money has sold very low - $\$ 39,200$ selling at an average of $\$ 15.75$ per share, or less than 8 per cent. Our lowest premium was $\$ 11.50$, and our highest $\$ 20.50$."

Greenville.-"No. 2:" "Our cash has at all times met with a ready sale, and at premiums very satisfactory to the welfare of the association. During the past year we have disposed of the sum of $\$ 18,500$ by appropriation sales, at an average premium of almost $\$ 130$ per share, which, to say the least, is very gratifying. In the course of the year some very important changes have been made in our constitution and by-laws, one of which-allowing all members purchasing at appropriation sales a credit on their loan of all sums paid as dues in excess of one jear's payments on each and every share appropriated by them-cannot but fail to be of interest to each and every member of the association. The association now numbers 314 members, holding 984 unappropriated shares and 58 appropriated shares. Paid up shares, $\$ 25.75$; gain to date, $\$ 8.54$; value of working stock, $\$ 0.26$; gross value of paid up shares, \$34.55."

Greenville.-"No. 1:" "At the end of the first year our membership numbered 83 , representing 242 shares. Cash receipts, $\$ 3,277.47$; expenses, $\$ 353$. At the termination of the eleventh year our membership numbered 952 , representing 3,381 shares. Cash receipts, $\$ 82,035.17$; expenses, $\$ 1,457.32$. The business of this association has been conducted with economy and for the best interests of all concerned, and has been (with only two exceptions) a voluntary offering on the part of the officers who have been selected to transact its business, and thus prove an incentive to each and every member to do his part in the good work, as it cannot be expected that a few should labor for the many, the spirit of co-operation demanding that all should bear their equal share of the labor, and thereby derive an equal share of the profits.
"This year we have canceled seven mortgages, under the same rules as in former years. The number of withdrawing shares paid this year has been as follows:

"We have canceled two shares of the third series, upon which we have paid preminm, $\$ 64$, and subscription, $\$ 150.40$; six shares of fifth series, subscription, $\$ 126$; fifty-one shares of the sixth series, subscription, $\$ 23.75$, making a total of fifty-nine shares, and have returned as premium, $\$ 54$, and subscription, $\$ 3 C 0.50$. We have had a greatly-increased demand for loans this year over former years, the amount loaned being $\$ 57,500$, at an average premium of $\$ 110.12$ per share.
"The following resolutions were adopted by the board of management:
"Resolved, That all members of the first series wishing to liquidate their appropriations, can do so on the basis of twelve years' subscriptions-that is, two years' subscriptions either before or after mortgage.
"Resolved, That all investing members of each series may at any time after the term of ten years of such series, by a majority of said members of such serits, decide on closing said series and receive from the association the accrued profits to the date of their action. Provided that said members agree among themselves to be paid by theassociation from the returns of appropriation from the members of all the series.
"Resolved, That the premiums on withdrawals of shares be as follows: First series,. $\$ 124$ per share; second series, $\$ 63$ per share; third series, $\$ 32$ per share; fourth series, $\$ 6$ per share.
"There is a standing rule which makes it obligatory on the part of our solicitor toforeclose all mortgages which are six months or more in arrears.
"Our annual tabulated statements are prepared with great care and labor. In all there are eight tables. No. 1 shows the subscriptions paid on each share, by book number; No. 2, the appropriation sales during the year, number of shares borrowed on, premium, description of property hypothecated, \&c.; No. 3, original and current. amount of mortgages outstanding; No. 4, 'cash statement;' No. 5, 'profit and loss;' No. 6, exclusive profits of the various series for the year; No. 7, the number of members, number of shares appropriated and unappropriated, and the profits and current. values of one share of each series, and, No. 8, 'assets and liabilities.' Table No. 7 is. here annexed:

## FIRST SERIES.


$\$ 1,013.31$ divided by 50 unappropriated shares, equals (undivided, 31 cents).. ..... $\$ 2026$
First and second series ..... $58 \quad 60$
First, second and third series ..... 4898
First, second, third and fourth series ..... 1688
First, second, third, fourth and fifth series ..... 808
First, second, third, fourth, fifth and sixth series ..... 244
Profit on 1 share ..... $\$ 15514$
Subscription on 1 share ..... 14300
Present value of 1 paid up-share of first series. ..... $\$ 29814$
SECOND SERIES.
47 members representing 127 shares.
11 members appropriating ..... 34 shares.
Leaving 36 members investing. 93 shares.
17 members investing 50 shares in 1st series.
53 members investing. 143 shares in 2 d series.
Exclusive profit to December 1st, 1885 ..... $\$ 8,65165$
Exclusive profit to December 1st, 1886 ..... $761 \quad 36$
$\$ 9,41301$
Ratio of premium on shares withdrawn. ..... $\$ 97026$
Liquidation of registers Nos. 119_and 161 ..... 6239
1,03265
$\$ 8,38036$
$\$ 8,380.36$, divided by 143 unappropriated shares, equals per share (undi- vided, 56 cents) ..... $\$ 5860$
First, second and third series ..... 4898
First, second, third and fourth series ..... 1688
First, second, third, fourth and fifth series ..... 808
First, second, third, fourth, fifth and sixth series ..... 244
Profit on 1 share ..... $\$ 13498$
Subscription on 1 share
Subscription on 1 share ..... 11700
Present value of 1 paid-up share of second series ..... $\$ 25198$
THIRD SERIES.
114 members representing ..... 316 shares.
31 members appropriated ..... 68 shares.
Leaving 83 members investing. ..... 248 shares.
53 members investing 143 shares in 2d series.
136 members investing. 391 shares in 3d series.
Exclusive profit to December 1st, 1885 \$17,971 44
Exclusive profit to December 1st, 1886 ..... 2,733 65$\$ 20,70509$
Ratio of premium on shares withdrawn ..... \$1,271 77
Liquidation of register No. 259 ..... 28170$\$ 19,15162$
$\$ 19,151.62$, divided by 391 unappropriated shares, equals per share (undi- vided, 44 cents) ..... $\$ 1898$
First, second, third and fourth series ..... 1688
First, second, third, fourth and fifth series ..... 808
First, second, third, fourth, fifth and sixth series ..... 244
Profit on 1 share ..... $\$ 7638$
Subscription on 1 share ..... 9100
Present value of 1 paid-up share of third series ..... $\$ 16738$
FOURTH SERIES.
209 members representing 717 shares. 36 members appropriated...................... 132 shares.
Leaving 173 members investing 585 shares.
136 members investing 391 shares of 3d series.
309 members investing 976 shares of 4th series.
Exclusive profit to December 1st, 1885\$14,286 14
Exclusive profit to December 1st, 1886 ..... 3,493 00
Rebate on premium of shares withdrawn\$17,779 14
Reinstatement of register 655 ..... 1700
Liquidation of register 430 ..... 9879
$\$ 16,48103$
$\$ 16,481.03$, divided by 976 unappropriated shares, equals per share (undi- vided, \$5.35) ..... $\$ 1688$
First, second, third, fourth and fifth series ..... 808
First, second, third, fourth, fifth and sixth series. ..... 244
Profit on 1 share ..... $\$ 2740$
Subscription on 1 share ..... 6500
Present value of 1 paid-up share of fourth series ..... $\$ 9240$
FIFTH SERIES.
275 members representing 1,027 shares. 33 members appropriating ..... 116 shares.
Leaving 242 members investing 911 shares.309 members investing
976 shares of 4th series.
551 members investing 1,887 shares of 5 th series.
Exclusive profit to December 1st, 1885 ..... $\$ 11,79056$
Exclusive profit to December 1st, 1886 ..... $4,436 \quad 20$
$\$ 16,22676$
Ratio of premium on shares withdrawn. ..... $\$ 70937$
Liquidation of registers Nos. 898 and 1020. ..... 23224
Return of forfeit, register No. 1152 ..... 4430
98591
$\$ 15,24085$
$\$ 15,240.85$, divided by 1,887 unappropriated shares, equals per share (un- divided, \$5.89). ..... $\$ 808$
First, second, third, fourth, fifth and sixth series. ..... 244
Profit on 1 share. ..... $\$ 1052$
Subscription on 1 share. ..... 3900
Present value of 1 paid-up share of fifth series ..... $\$ 4952$
SIXTH SERIES.
286 members representing 1,132 shares.22 members appropriated.................... 109 shares.
Leaving 264 members investing. 1,023 shares.
551 members investing. 1,887 shares in 5 th series.
815 members investing. 2,910 shares in 6th series.Profit to December 1st, 1886.$\$ 7,11373$
$\$ 7,113.73$, divided by 2,910 unappropriated shares, equals per share (undi- vided, \$13.33). ..... $\$ 244$
Subscription on 1 share. ..... 1300
Present value of 1 paid-up share of sixth series. ..... $\$ 1544$
New Brunswick.-"Excelsior:" "Profits amount to 10 per cent. per annum on dues paid."
"American:" "No shares have ever been canceled. We have run over five years."
"Workingmen's:" "We cannot sell for less than 2 per cent. premium, and have sold at $4 \frac{3}{4}$. The average premium since our organization (two years) has been $2 \frac{5}{8}$."
"Merchants':" "Our profits equal $12 \frac{1}{2}$ per cent."
Perth Amboy.-"Centennial:" "Expect to close, in April, or in eleven years."
Asbury Park. - "Since the organization of the association there has been paid for shares matured, in cash and on payment of mortgages in first, second and third series, $\$ 51,200$."
Passaic City.-"Our association has been very successful. The demand for shares, especially for a year and a half, has been greater than the supply. At our annual May meeting a new series of one thousand shares was issued. They were taken within a week, and another thousand could easily have been sold. The loans have swallowed up the money as fast as it came in, and at a premium averaging 4 per cent,

A large number of our members are employed in the mills and are making use of the association to secure themselves homes. Almost every loan made has been of that character."

Paterson.-" Mutual:" "Rate of profit during 1886 on average amount invested, 6 ${ }_{10}^{5}$ per cent."
"Union:" "Rate of profit during the year on average amount invested, $9 \frac{2}{3}$ per cent. During the eight years the association has been in existence the receipts have been over $\$ 450,000$, and not a dollar of loss has been sustained. It has no preferred shareholders, but each member shares ratably in all earnings. All officers that handle money are under heavy bonds for the faithful performance of their duties. All its meetings are public, and any member can investigate the books of the association and know the disposition of every dollar from month to month. Members can withdraw from the association any day of the year and get interest at the rate of 6 per cent. per annum to the date of such withdrawals, and members have availed themselves of this privilege during the year 1886 to the amount of $\$ 27,605$, and every one has received his money on demand. A member can borrow at any regular monthly meeting as much as he has actually paid in, by merely assigning his pass-book as security. The association has proved scores of times that any stockholder with a few hundred dollars' start can borrow on mortgage from the association, and, by the monthly payment of no more than he previously paid rent, can, in about ten years' time, own his own home free of all debt; and this association has provided homes for many families who to-day would be homeless but for its help. Loans can be repaid any month to suit the borrower's convenience, in sums from $\$ 1$ to the full amount of the loan. The amount of money paid in on shares, together with dividends earned, can at any time be applied by a mortgage borrower, at his option, towards payment of his mortgage, thus reducing his debt as well as his interest and monthly payments. All shares are exchangeable for any later shares, free of cost, the member receiving the difference in value in cash. Members can pay their dues or interest from six months to five years in advance, and for all such prepayments a rebate of 6 per cent. per annum is paid the member in cash, at the end of each year. This association has not one cent of unpaid interest at this time. All these advantages prove that the building and loan associations meet the wants of the age."
"Mechanics' :" " Rate of profits amounted to $11 \frac{1}{3}$ per cent. during 1886."
Rabitan.-"There is not sufficient demand from the stockholders for money accumulating. Hence, outside loans to the amount of $\$ 15,000$. It will be proposed at the next annual meeting to apportion funds on hand among the stockholders, on their notes, bearing interest until maturity of the association; or that they may withdraw, receiving amount of payments with 4 per cent. interest. The annual tax bills are a heavy burden on the association. So far we have been able to clear but $5 \frac{8}{8}$ per cent."

SALEM.-" Franklin:" "Since our last report we have paid to the shareholders of fourteenth series, $\$ 28,252.17$; and since the organization there has been distributed to stockholders about $\$ 450,000$. Members are allowed to withdraw any time the amount paid, with 4 per cent. interest, up to the tenth year, when the full gains are added. Our loans are sold in open market to members of all series alike, and we grade the per cent. premium bid according to age of stock proposed to be hypothecated. Upon accumulation of series, we frequently pay cash to every holder of stock not hypothecated."

Elizabetr.-" Harmonia:" "We have canceled mortgages to the amount of
$\$ 24,000$, and paid about same amount to shareholders on matured shares, since our organization in 1872. Ours is a perpetual association and each share runs by itself."
"Elizabethport Mutual:" "Profits never have been less than 9, and have reached 11 per cent. They are divided on the partnership plan, unearned premiums being set aside as liabilities, \&c. A borrower pays his full premium, and if he settles his loan before eleven years, he is allowed a proportionate rebate. Members may withdraw their money at any time, but only after three years ean they claim any share of the profits, which increase with the age of the shares. We have made 170 loans on bond and mortgage, but have been compelled to foreclose only once."
"Elizabeth:" "Shares are started every month at will; there are no series. A 'savings fund' is connected with the association. Members may deposit therein moneys, on which they are paid 3 per cent. interest. Thirty-eight thousand seven hundred dollars were due these depositors on March 1st, 1886. Our assets, including this amount, were $\$ 159,877.37$."

Phillipsburg.-"No. 4:" "Premiums paid during the year: highest, $\$ 14.75$; lowest, $\$ 5$; average, $\$ 11.74$."

Camden.-" Liberty Park Mutual Homestead Association:" "Our organization is looked upon, at home and abroad, as the pioneer of modern homestead associations. The superiority of our system over the old style of land associations is proved by the existence of three other like associations, two in Camden county, 'Liberty Park, No. 2,' and 'Dudley Homestead,' and one in Paterson, 'Workingmen's,' which have adopted our rules. When our association will have reached its maturity and our members are enjoying the benefits derived, our example will show all industrious citizens an easy way to procure a home of their own, clear of encumbrance, within a few years.
" Our association was organized in May, 1884, and controls a tract of land, which, divided into lots, was sold to shareholders for $\$ 200$ a lot, payable in weekly installments. A lot was allotted as soon as $\$ 25$ had been paid in, but a deed will not be given until the share ( $\$ 200$ ) has been paid up in full. Members who have paid up in full may borrow the whole or part of money necessary to build a house. The loan must be paid in sixty monthly installments, with interest at 6 per cent. The profits accruing from this means and the original purchase are divided among the shareholders. The association has purchased from the trustee and paid for 220 lots within two year. Seventy shares are now paid up in full, and their owners have a clear title to their lots.
"The net assets make a good showing; $\$ 37,704.56$ have been collected on installments due on 329 shares, which have enabled us to buy from the trustees all the lots we need."
"Liberty Park No. 2:" "The association was incorporated on Aprll 20th, 1885. The first share was bought on May 6th, 1885. The first drawing and allotment of lots took place on June 6th, 1885, the latter being the day on which the first business year began. This association, enabling its members to procure a lot at Liberty Park by weekly installments of $\$ 1$, and to build a house thereon with money loaned at 6 per cent. interest, to be refunded in sixty monthly installments, made an agreement with the proprietor of Liberty Park, whereby he agreed to convey the title to 286 lots to the trustee, for the period of five years, to assure its members that they shall receive a clear deed for their lots purchased through the instrumentality of the association, whenever they have paid their shares in full. We sold 186 shares during the
first year, of which 25 shares were suspended. The result of the first business year, therefore, is the sale of $\$ 32,20$ ) worth of stock. Eighty-three shares had lots allotted to them. Eight shares were paid in full and the lots thereto were conveyed by the association to the holders thereof.
"The receipts were $\$ 1,545.75$ in the first, $\$ 1,189.75$ in the second, $\$ 1,343.75$ in the third and $\$ 2,149$ in the fourth quarter. The board of directors did not impose any fines upon delinquent shares during the year; and they did not suspend shares for non-payment of dues until just before the close of the year, the delinquents being first notified several times to continue payments or stand suspended. Nineteen shares, which changed ownership, were transferred upon the books of the association without cost."

Paterson.-"The Paterson Workingmen's Homestead Association has obtained control of 320 plots, $50 \times 150$ feet each, (a size equal to three city lote, ) in North Paterson, Passaic county. These plots were secured at a cheap a verage price, much lower than their present value, and are offered upon the following easy terms to shareholders of the association only. Everybody may take as many shares as he desires. Thepar value of each share is $\$ 150$, payable $\$ 1.25$ down, and $\$ 1$ a week. A shareholder may pay more than $\$ 1$ a week on any share. Each shareholder will receive a plot, $50 \times 150$ feet, for each share paid in full. Whenever a shareholder has paid $\$ 25$ upon any share, a plot will be allotted to him un der a certificate of the association, entitling: the shareholder to use or improve such plot. Whenever a share is paid up in full, the shareholder will receive a deed for his plot, clear of encumbrance, upon paying $\$ 2$ additional per plot for drawing the deed. Plots cannot be selected, but are to be drawn by their numbers by a disinterested person, sworn to impartiality, at the public meetings of the association. Each plot is to day worth at least $\$ 150$; many plots in the tract are worth considerably more, but everybody, be he rich or poor, stands. the same fair chance to get a plot more valuable than the par value of his share.
"Shareholders holding several shares of stock, and desiring adjoining plots, must express such desire before the commenc ement of the drawing. Any shareholder may. transfer his stock upon the books of the ass ociation without any expense to himself. This rule enables retiring shareholders to dispose of their stock without any loss. Any shareholder withdrawing his shares from the association is entitled to draw the amount of money paid into the treasury, less $\$ 25$. Each share of stock, paid up in full within the first business year of the association, is entitled to a rebate of $\$ 25$. In such casea plot does not cost more than $\$ 125$.
" The association does not pay more than $\$ 100$ for each plot, but will receive $\$ 150$ (or $\$ 125$ ) for the same. The profits, after deducting the current expenses of the association, which are no greater than in any building association, will be divided among the shareholders. Therefore each shareholder will receive his plot for less than $\$ 150$.
"The association has made arrangements to have advanced money for building purposes. Members having paid their plots in full can borrow, through the instrumentality of the association, the whole or part of the money for building homes, at 6 per cent. interest, the capital to be refunded in easy installments."

## THE PLAN OF OPERATION.

These associations are very simply organized ; the officers, consisting of a president, vice-president, secretary, treasurer, three auditors.
and a certain number of directors, are elected at the annual meeting of the members, who generally are allowed only one vote each, no matter how many shares may be represented by it. Admission to membership is obtained by applying to the secretary, subscribing for one or more shares, and paying, besides a small initiation fee, one dollar per share monthly. These payments continue until the shares are worth $\$ 200$ each, when they are said to have " matured," or reached their "ultimate value." If the member wishes to withdraw before this time, and is not a borrower, he may do so, and is allowed the "withdrawing values" of his shares, or the amount paid in, a fair per cent. interest, and, according to the length of time the share has been running, a proportion of the other profits. In many associations there is a very excellent custom of a monthly valuation of shares; in the majority, this only takes place once a year. At this time the accounts are made up, and the net gains credited to the respective shares. These credits help mature the shares, when each non-borrowing shareholder is entitled to receive $\$ 200$ per share held by him, having had the advantage of being able to save money in such small sums as his earnings permitted, and of getting fair interest for it. It is plain that if no profits or interest were added, it would take 200 months ( $16 \frac{2}{3}$ years) to pay up each share; but these materially reduce the date of maturity, which depends on the success of the association, but generally averages from ten to eleven years. If a series* terminate in ten years, the holder will have paid in $\$ 120$, and, receiving back $\$ 200$, gained $\$ 80$-an average of over 13 per cent. per year on the investment. In case the shareholder neglects to pay his dues, he is subject

[^64]to a monthly fine of a few cents per share, and if he continue in default, and holds "free" shares, he is "dropped," a certain proportion of the value of his shares being returned to him.

But there is another class of shareholders and a most important, the borrowing members. The ready cash of the association is sold at the monthly meetings to the one bidding the highest premium. This premium is a bonus, in addition to the regular 6 per cent. interest charged for the use of the money, and as both go to increase the value and lessen the maturity of the shares, the borrower thus gets back his proportion, not only of his own premium, but of all those bid during the life of the association. The profits help to minimize or extinguish the bonus charge, and he will thus have to pay but little more, if anything, than if he had borrowed outside of the association at a simple interest rate; unless, of course, he has bid a very high premium, and even in the latter case he probably will get a chance at a füture day to repay his first loan by means of another, bid in at a lower premium.

There are two systems in vogue in regard to paying the premium on loans. In one, the Massachusetts plan, it is bid in the form of a monthly payment of a certain number of cents per share, for example, twenty-five cents, which would amount to $1 \frac{1}{2}$ per cent. interest on $\$ 200$. This, in connection with the regular interest on the loan, would bring the total up to $7 \frac{1}{2}$ per cent., or $\$ 1.25$ a month, besides $\$ 1$ in dues. On a $\$ 2,000$ loan that would make $\$ 22.50$ in charges per month, until his shares (10) mature, when they, being worth $\$ 2,000$, will just offset his debt. In the Pennsylvania system, followed by most of the New Jersey associations, the total premium is bid at once, say $\$ 30$ per share, or $\$ 300$ in all, which is then deducted from the loan $(\$ 2,000)$, and the borrower gets but $\$ 1,700$, but gives his obligation for the full amount, on which he pays 6 per cent. interest ( $\$ 10$ a month). The Massachusetts method seems to be decidedly the best for the borrower, especially where no part of the premium is returned when the borrower pays up his debt, a practice followed in many societies. When a "rebate" is allowed, the debtor is not unfairly treated, but there will be trouble in dividing profits. On this point the following letter, written to the editor of the Jersey City Loan and Building News, is very pertinent:

Rutherford, N. J., June 30th, 1886.
Dear Sir:-Upon reading the various building and loan journals, one is struck with the great diversity of opinion there exists among associations as to the best and fairest method of sharing profits and expenses. One says to another, "You are on the wrong track, and if you continue, you will come to grief." Another says, "You are dividing profits that are not yet earned." Still another makes the assertion that the profits of some other association are entirely too great to be legitimate. And so the dispute goes on.

The plan that has been in successful operation for over ten years at Rutherford, N. J., seems to be one with which no fault has yet been found, and as regards a fair and equitable division of profits to the different series, it is perfection and simplicity combined. It has certain advantages over the "partnership plan," one of which is that it permits an exact statement of the values of shares to be published every month. Another advantage is that the great bugbear, "unearned premiums," a stumblingblock in many associations, is entirely done away with.

Without going into details, the Rutherford plan, briefly stated, is this: Firstly, collect the premiums bid for priority of loan in monthly installments, and not all in one sum at the beginning of a loan, thus giving the borrower the full amount bid for. This permits an exact computation to be made of each month's earnings, which is then distributed permanently every month, according to capital, instead of being carried to an open profit account to be divided at some future time. Profit account is closed up every month.

Secondly, keep the "Expense and Loss" account permanently open, to be closed only in proportion to the withdrawing or maturing capital, each member's share of the expense, however, to be figured up every month, so as to permit any wishing to withdraw to go out by paying their share of expense to date. It is a great mistake in building and loan associations on the serial plan to close up expense account annually or semi-annually. These are the two main features of a plan which, taken as a whole, has the effect of giving to each dollar invested, whether in an old series or a new, an equal share of the earnings every month, and charges them the same percentage of expenses at the time of maturity or withdrawal. Each member thus receives just what he is entitled to, no more or no less. Having been secretary of the Rutherford Association for seven years, I feel confident that this plan, when looked into, will commend itself for adoption. Yours, \&c.,

Jos. W. Burgess.

This suggests the subject of the make-up of the annual reports. In the great majority of cases they are prepared in a very slipshod way, and give but little information about the actual condition of the association. A model report is prepared by the secretary of the Greenville (Jersey City) Association, referred to in the preceding "remarks." One of the features might be copied easily and with advantage-the table showing in detail the amounts paid on each account or book number. Thus, each member is made the auditor of his own account, and if it is omitted from the list or incorrectly stated, he will be sure to call attention to the error. The aggregates of these individual
accounts furnish the basis of the general account. This will prove a very effective safeguard against fraud. Another good practice is publishing the "summary of shares," like the following from the "People's Building and Loan Association of Harrison":

| Seri |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Third. | 91/2 | $81 / 2$ | 1/2 | 8 | 8132 | \$67 68 | \$19968 | \$1,697 28 | \$179 94 | 8196 30 |
| Fourth. |  |  | 13 |  | 120 | 5594 | 17594 | 2,287 22 | 1565 | 17315 |
| Sixth. | 142 | 1281/2 | $52^{61 / 2}$ | $761 / 2$ | 108 | 4530 35 80 | 13180 | 3,293 16,936 30 | 13436 113 37 | 14877 <br> 126 <br> 18 |
| Seventh | 191 | 116 | 24 | 92 | 84 | 2741 | 11141 | 12,923 56 | 9358 | 10593 |
| Eighth.. | 2731/2 | $2151 / 3$ | 75 | 1401/2 | 72 | 2012 | ${ }^{92} 12$ | 19,851 86 | 74 | 8709 |
| Tenth.. | ${ }_{622}^{325 / 4}$ | ${ }_{484}^{281 / 2}$ | 75914 | 295 | 48 |  | 7400 5694 | 20,73850 27,587 4 | 5760 4139 | 6980 5382 |
| Eleventh... | 1,0941/2 | 856 | $1111^{2}$ | $7441 / 2$ | 36 | 503 | 4103 | 35, 12168 | 2640 | 3924 |
| Twelrth........... | 1,505/2 | 1,181 | 1913 |  | 24 | 224 | ${ }^{26} 24$ | 30,989 44 | 1260 | ${ }^{25} 20$ |
| Thirteenth....... |  | 1,713 | 1961/2 | 1,5161/2 | 12 |  | 1256 | 21,515 28 |  | 1224 |
| Total. | 4,2083 ${ }^{\text {d }}$ | 5,0173/4 | 9351/4 | 4,0821/2 |  |  |  | $\left.\begin{array}{\|r\|} \hline \$ 192,944 \\ \hline \end{array} 5_{0} \right\rvert\,$ | ................... |  |
| Undivided gain. |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | \$192,917 31 |  |  |

The constitution of this association is reproduced below, and as it is generally considered to be a very good one, may serve as a model for new enterprises. Those desiring further information on the history, cuccess and methods of building and loan societies, are referred to the former reports of this Bureau, and to the many valuable publications on the subject published recently, among others, Edmund Wrigley's "Building Associations: What They Are and How to Use Them;". and "How to Manage Building Associations," published by J. K. Simon, Philadelphia; Ed. E. Hale's "Workingmen's Homes," Boston; a pamphlet on the "Co-operative Banks" (building associations), of Massachusetts, by J. Q. A. Brackett (Metcalf \& Co., Boston), and Prof. Bemis' "Co-operation in New England," and Dr. Shaw's "Co-operation in a Western City," publications issued by the American Economic Association,* Baltimore. Besides this, the various building and loan journals, including the "Home Journal," of which Mr. M. J. Brown, $\dagger$ of Philadelphia, is editor and publisher, may be read with

[^65]profit. As already stated, two of these periodicals (monthlies) are published in New Jersey, and give the latest news from the State associations, besides many useful hints.

CONSTITUTION OF THE "PEOPLE'S• BUILDING AND LOAN ASSOCIATION OF THE TOWN OF HARRISON, N. J."

## ARTICLE I. -TITLE AND OBJEOT.

This association shall be denominated "The People's Building and Loan Association of the Town of Harrison." Its object is to provide a means for the regular, safe and profitable investment of the savings of its members; and by these savings to accumulate a fund for the purpose of making loans to stockholders, whereby they may be enabled to build or provide for themselves dwelling-houses, or to purchase buildinglots or other real property.

## ARTIOLE II.-STOCKHOLDERS.

Sec. 1. The members of this association shall be residents of the United States. Minors may hold stock in this association by guardians. A parent procuring stock for a minor child may, during the minority of such child. represent him or her in all the rights of membership except that of holding office. When such child shall have attained the age of twenty-one years, he or she shall be dealt with as the absolute owner of the stock, and be considered a member.

Sec. 2. A payment by any stockholder, trustee, guardian or representative for a minor, of one or more installments of one dollar on a share of stock, shall constitute such stockholder, trustee, guardian or representative for a minor a member of this association, and as such shall be subject to all fines and penalties imposed by this constitution, and entitled to all the privileges of membership.

Sec. 3. Each and every stockholder, trustee, guardian or representative for a minor, for each and every share of stock held by him or her in this association shall pay the sum of one dollar, as installments, on the third Tuesday of each and every month; these payments shall be made to the treasurer, or such other person or persons as shall from time to time by the laws or regulations of this association be authorized to receive the same, at such hour as provided for in this constitution, and at such place

[^66]as the board of directors shall provide, the said payments to continue until it shall be ascertained that the value of the whole stock of their respective series be sufficient to divide to each share of stock in sueh respective series the sum of two hundred dollars. The time for payments for each month shall terminate as soon as the secretary shall have waited on all present and left the place of meeting.
SEc. 4. In case any stockholder, trustee, guardian or representative for a minor, shall neglect or refuse to pay his or her monthly dues, each and every such person so neglecting or refusing shall incur a monthly fine of five per cent., which shall be charged on all sums remaining unpaid.
SEC. 5. In case any stockholder (not having taken a loan) shall neglect or refuse to pay his or her monthly installments or fines for the space of six months, each and every stockholder so neglecting or refusing shall be tendered by the treasurer the amount of installments actually paid by him or her, without any allowance for interest, first deducting all fines and forfeitures that may be charged against him or her, and from that time he or she shall cease to be a member of this association; provided, that such action shall not be taken against a defaulting stockholder unless he or she shall have been notified by the secretary one month previously.
Sec. 6. Any non-borrowing stockholder wishing to withdraw from this association may do so by giving a written notice to the secretary five days prior to the meeting of the board of directors, which shall be held on the evening of the third Tuesday of each month, of such intention to withdraw, etc., etc. During the first year of his or her respective series of stock, he or she shall be entitled to receive the actual amount of installments paid in, less any fines he or she may owe. After the expiration of the first year, he or she shall receive the actual amount of installments paid in, less any fines he or she may owe, with interest at the rate of four per cent. per annum ; after the expiration of the second year, five per cent. per annum; after the expiartion of the third year, six per cent. per annum; after the expiration of the fourth year, such percentage for the average time of investment as shall be shown by the last annual report to be the net earnings of the association, less the following percentage of discount off said net earnings, according to age of the respective series. of stock, to wit: After the fourth year, thirty five per cent. ; after the fifth year, thirty per cent.; after the sixth year, twenty five per cent.; after the seventh year, twenty per cent.; after the eighth year, fifteen per cent.; after the ninth, ten per cent., and after the tenth year and until the respective series mature, five per cent. It is provided, however, that at any time not more than one-half of the monthly receipts shall be appropriated to such redemption of stock without the consent of the board of directors.

Sec. 7. Upon the death of a stockholder who has not received a loan or loans, his or her legal representatives shall be entitled to reeeive from this aesociation the actual amount of installments paid in on his or her stock, less any fines he or she may owe, with interest added to the same at rates in accordance with section six of this article; then his or her interest in this association shall terminate, unless the legal representatives of such deceased shall continue the payments of installments on such stock for three months after his or her decease, thereby assuming the fature payments on the stock.
SEc. 8. When it shall be ascertained through the auditors that the value of each share of stock in any series amounts to two hundred dollars, a meeting of the stockholders in such series shall be convened, at which time a division shall take place; every stockholder of the matured series shall receive the sum of two hundred dollars for each share of stock held by him or her in such series, or his or her securities of that amount, with the same fully satisfied or canceled of record, and then that series. shall cease or determine.

## ARTICLE III.-SERIES OF STOCK AND DISTRIBUTION OF EARNINGS.

Sec. 1. A new series of stock may be commenced on and at the annual meeting of the association, held on the third Tuesday of September in every year; provided the same be determined on by the board of directors at least one month prior to the annual meeting of the association, and public notice given thereof.
SEc. 2. It shall be the duty of the secretary to assist the auditors in settling and adjusting the accounts of the association, and determining the value of the shares in
each respective series prior to the annual meeting, or at any other time, as occasion may require; and, in order that no series of stock may be given a greater percentage of the earnings of the association than is due thereto, they shall distribute the net earnings of the association, and determine the value of the shares in accordance with the following rules: Each series' investment to be multiplied by the average time invested, the results to be added together for a sum of results, each sum to be multiplied by the total net earnings of the association, the product divided by the sum of results, the quotient in each case showing each series' share of the net earnings. Divide each series' share of the net earnings by the number of shares in that series, and the result will be the net gain per share.

## ARTICLE IV.-CERTIFICATE OF STOCK.

Each stockholder shall be entitled to a certificate of stock issued in the name of the association, under the corporate seal thereof, signed by the president thereof and attested by the secretary; which certificate may be transferred by assignment in person or by attorney in presence of the secretary, and shall be recorded in the proper book kept by the secretary for that purpose, and indorsed on the certificate, which shall be surrendered and a new one issued therefor to the party to whom transferred. It is provided, however, that no stock shall be transferred while any fines, installments or other liens remain charged against the same, nor until the transferee shall have assumed all the obligations of the original stockholders.

## ARTICLE V.-OFFICERS.

The officers of this association shall be a president, vice-president, treasurer, secretary, eleven directors and three auditors, all of whom must be stockholders.

## ARTICLE VI.-PRESIDENT.

The president shall be elected by the stockholders at the annual meeting. It shall be his duty to preside at all meetings of this association and of the board of directors, to preserve order therein, to sign all orders on the treasurer for the payment of money when ordered by the board of directors, and to perform all other duties usually appertaining to the office of president. It shall be his duty, when so ordered by the board of directors, to give releases and acquittances for all moneys which shall be paid to the association upon any bond, bill, note, mortgage, or other security, and if necessary acknowledge satisfaction of the same on record.

## ARTICLE VII.-VICE PRESIDENT.

The vice-president shall be elected by the stockholders at the annual meeting. It shall be his duty, in the absence of the president, to preside at all meetings of stockholders and of the board of directors, and discharge all duties appertaining to the office of president, It shall be his duty, in the event of the death or resignation of the president, to perform all the duties of that office until the next succeeding annual meeting.

## ARTICLE VIII.-TREASURER.

The treasurer shall be elected by the board of directors. His duty shall be to receive all money paid into the association from all sources whatsoever; to deposit the same to the account of the association in a regular bank of deposit designated by the board of directors, and to pay all orders drawn upon the treasurer by order of the board of directors, when signed by the president and attested by the secretary, the said orders to be paid by checks drawn on the same bank, and the said checks to be signed by himself together with the president and secretary, with the seal of the association stamped thereon. It shall also be his duty to receive and hold in trust for the association all bonds, mortgages and other securities on which money may be loaned by the association. He shall give bond with such security and for such sum as the board of directors may direct, for the faithful performance of his duties, and at the expiration of his office, he shall deliver all money, bonds, mortgages, bills, notes, books, papers and all other property belonging to the association in his possession or under his control to his successor in office.

## ARTICLE IX.-SECRETARY.

The secretary shall be elected by the board of directors. It shall be his duty to keep accurate minutes of the proceedings of this association and of the board of directors, and to record the same in books to be kept for that purpose. He shall keep accurate accounts. with all the stockholders, and attest all orders drawn on the treasurer for the payment of money when so ordered by the board of directors, and also keep all policies of.insurance transferred to the association as collateral, and see that they are kept renewed. He shall (at the expense of the association) notify the -stockholders of the annual meetings by public notice conspicuously placed and advertisement in a newspaper published in the town. He shall be prepared at all times to inform the stockholders of the state of the financial concerns of the association, and at the yearly meetings furnish a detailed statement of the finances. He shall receive such salary as the board of directors may direct. At the expiration of his term of office, he shall deliver all books, papers and property belonging to the association in his possession to his successor in office. It shall be his duty, at each regular meeting of the board of directors, to present to said board a list of all premiums on policies of insurance held as collateral security by this association, that may be coming due during the subsequent month, and it shall be the duty of the board of directors to order a draft issued on the treasurer for a sum sufficient to pay such premium, unless the same shall have been paid by the owners or agents of such owners; and the renewals of such polices as shall be so paid by the secretary shall be his vouchers for the amount paid by him, and the balance, if any, he shall pay into the treasury of this association.

## ARTIOLE X.-DIREOTORS.

Sec. 1. The directors, together with the president and vice-president, shall constitute the board of directors. The directors shall be elected by the stockeolders at the annual meeting of the association. Immediately after the first election they shall meet and divide themselves into three classes, and draw lots for one, two and three years. Those drawing one year shall have their places supplied at the next annual election ; those drawing two years shall have their places supplied at the second annual election thereafter, and those drawing three years shall have their places supplied at the third annual election thereafter. At each succeeding election directors shall be chosen to supply the places of those whose terms expire.

Sec. 2. The board of directors shall meet regularly on the third Tuesday in each and every month, at such place as they, or a majority of them, shall appoint, to receive from the stockholders their monthly installments, interest and fines, and pay the same into the treasury; to loan out the funds and see to their safe investment, and to attend to the financial concerns of the association generally. But if there be no quorum present, then any three or more of the directors in attendance shall be authorized to receive the aforesaid monthly installments, interest and fines, and offer the money for loan as specified in Article XIII., Sec. 1.

The board of directors shall also meet on the evening of the second Monday following the regular meeting, for the purpose of transacting such other business of the association as may be necessary.

Sec. 3. The time of the meeting of the board of directors from the first of May to the first of September, inclusive, in each and every year, shall be 8 o'clock P. M., and during the other months of the year, 7:30 o'clock P. M.

Sec. 4. A quorum shall consist of not less than seven. The president or any director being absent without sufficient excuse for three monthly meetings successively, his office as president or director shall be declared vacant.

The board shall have power to fill all vacancies that may occur until the next annual meeting. In case of the absence of the president and vice-president, the directors shall have power to elect a president pro tem. Officers of their own appointment may be removed by them at pleasure.

SEC. 5. It shall be the duty of the board of directors to purchase at foreclosure any property mortgaged to the association, if such action shall be considered by them, or a majority of them, for the benefit of the association.

## ARTICLE XI.-AUDITORS.

The auditors shall be elected by the stockholders at the annual meeting of the association. Immediately after the first election they shall meet and draw lots for their terms of office, viz.: for one, two and three years, respectively. The one drawing for one year shall have his place supplied at the next annual election; the one drawing for two years shall have his place supplied at the second annual election, and the one drawing for three years shall have his place supplied at the third annual election. At each succeeding annual election auditors shall be chosen by the stockholders to supply the place of those whose terms expire, or of a vacancy in an unexpired term.

Their duty shall be to settle and adjust the accounts of the association prior to the annual meeting, and to report to the stockholders, with a faithful and ample exhibit of the financial affairs of the association, the state of the treasury and the value of the shares ; which exhibit they shall have printed at the expense of the association.

In the event of their neglect or refusal to furnish to the stockholders at their annual meeting a detailed exhibit of the finances, as hereinbefore provided, they shall be fined five dollars each.

They shall have power at any time to inspect the accounts of the treasurer and secretary, and upon five days' due notice call a meeting of the stockholders.

They shall have power to fill any vacancy that may occur in their number, until the next annual election; but in the event of their inability to agree upon a choice, the vacancy shall be filled by the board of directors.

They shall superintend all elections but theirs (which shall be conducted by a committee from the board of directors).

## ARTICLE XII.-SOLIOITOR.

The board of directors shall appoint a solicitor for the association, who shall examine all title deeds, and make the necessary searches for ascertaining the title for all property offered to this association as mortgage security, and give his written opinion thereon. He shall prepare all bonds, mortgages, agreements and all other writings to be taken or given by this association in the course of its business, and also transact all other law business of this association whenever required by the board of directors, for which he shall receive a fair compensation.

His charges for fees and disbursements in making searches, recording and proving papers, for preparing all mortgages and other written instruments, and for examining papers, titles and other matters shall be borne by the party applying for the loan. He is required to give such security for the faithful performance of his duties as the board of directors shall determine. In all disputes as to the amount of his charges, the same shall be determined by the board of directors.

## ARTICLE XIII.-LOANS.

SEc. 1. Whenever and as often as the sum of two hundred dollars may be in the treasury, it shall be loaned out in open meeting at auction to the highest bidder; providing, homever, the said money shall not be sold at less than one per cent. premium. Every stockholder who is not in arrears with his or her monthly installments, interest or fines, shall be entitled to receive a loan of two hundred dollars, less the premium bid by him or her, for each share of stock held by him or her in this association.

Seo. 2. In addition to the premium bid for a loan (which must be paid or deducted from the amount of the loan at or before receiving the same), every stockholder shall be held as contracting to pay all taxes that may be assessed at any time upon said loan.

SEc. 3. Whenever a stockholder shall be declared to be entitled to a loan or loans, and before receiving the same, he or she shall secure the payment thereof to the association by bond and mortgage for the full amount of the sum loaned, and for the payment of such fines as may be imposed for the failure of paying installments and interest when due, and by the deposit of the policy of fire insurance, and for every loan of two hundred dollars made to a stockholder at least one share of stock, in the series in which he or she shall borrow, shall be assigned as collateral security to said bond and mortgage. In case of failure to give satisfactory security for each loan within one month, the month's interest shall be charged to the borrower and the loan
revert to the association. No money shall be loaned on any property already encumbered. Each stockholder shall be entitled to borrow to the full amount of his or her shares actually held by him or her at that time; and in case there should not be a sufficient amount in the hands of the treasurer, he or she will be entitled to the balance of their loans at the same rate from the first money that comes into the treasury.
SEc. 4. It shall be the duty of the president to sell the money in the treasury, in the manner aforesaid in section first of this article, at a regular monthly meeting. Loans shall be granted to such stockholders as shall offer or bid the highest premium therefor.
SEO 5. Each stockholder of this association, on receiving a loan or loans therefrom shall be entitled to a deduction upon the premıum bid of one-tenth for each, and every full year that has expired since the series of stock in which he or she borrows was issued.
Sec. 6. Stockholders taking loans from this association shall pay interest monthly, to the treasurer, at the rate of one-half of one per cent. per month. Borrowers refusing or neglecting to pay the interest on their loans shall incur a monthly fine of fiveper cent. for each monthly neglect on each loan of two hundred dollars by them held. If the interest is suffered to remain unpaid more than six months, the board of directors may compel payment of principal and interest by ordering proceedings on the bond and mortgage according to law.
Sec. 7. Stockholders shall be entitled to borrow to the amount of their installments actually paid in, after the series in which they shall borrow shall have been issued at least one year, on their bond, with interest for the same, and on transferring their stock to the association as security; and in case any stockholders borrowing upon their bond shall neglect or refuse to pay their installments, interest and fines for the space of six months, then the stock to the association shall be forfeited.
Sec. 8. No security for a loan or loans shall be deemed sufficient unless approved of by at least two-thirds of the directors present at a meeting of the board.
Skc 9. Any borrower who is not in arrears to the association may repay a loan at any time, and in case of the repayment thereof before the expiration of the eighth year after the series in which his or her stock was issued, such borrowers shall be allowed the following credit, viz: The amount of installments actually paid into the association on the respective series, and one eighth of the premium paid for said loan, for every full year of the said eight years unexpired, together with whatever interest he or she may be entitled to receive, as provided in Article II., Section 6; provided, that notice of such repayment shall be given in like manner as provided for stockholders withdrawing.
SEc. 10. This association shall have power to insure all buildings upon which loans are made, and also to renew the same and collect the amount paid therefor, in the saree manner and with like fines as installments and interests are collected, unless the mortgagors shall give policies thereon and keep the same renewed in good and responsible insurance companies.

## ARTICLE XIV.-REDEMPTION OF STOCK.

In the event of the money in the treasury of the association not selling at or over one per cent. premium, in accordance with Article XIII., Section 1, the board of directors shall retain the same in the treasury until the next regular monthly meeting. when it shall be applied to the redemption of stock in the oldest series and in the following mannier: They shall autborize the secretary to notify the stockholders in the said series of their intention of redeeming such number of shares as the money in the treasury will permit, and at the time and place of meeting.
At the meeting so held, the present value of the shares in said series shall be announced by the secretary, whereupon the president shall proceed to receive from the stockholders present, by auction, bids of premium on the announced value of the stock; and the stockholder bidding the highest premium shall be entitled to receive the announced value of his or her shares of stock redeemed, less the rate of premium bid. For each share of stock so redeemed, the stockholder selling the same shall surrender to the association his or her certificate of stock.

## ARTIOLE XV.-MEETINGS.

Meetings of the stockholders shall be held on the third Tuesday of September in each and every year. Twenty members shall constitute a quorum. Special meetings shall be called by the secretary when requested by ten members, but the object of such meeting so called must be inserted in the notice.

## ARTICLE XVI.-ELECTIONS.

The annual election for officers shall be held on the third Tuesday of September of every year, and one week's notice of the place, object and time of meeting shall be given by the secretary, as hereinbefore provided. Each member present at an election shall be entitled to one vote. No stockholder shall be eligible to office nor entitled to vote until he or she shall have been at least three months a member.

## ARTICLE XVII.-FINES.

All officers neglecting to attend any annual meeting shall be fined $\$ 1$ each.
The treasurer (or deputy), for non attendance at any monthly meeting, shall be fined fifty cents.

The secretary forfeits five dollars for neglecting to pay premiums on any insurance policy which is not paid by the owner.

The secretary, for neglecting to attend any meeting of the board of directors, or of the stockholders, shall be fined one dollar. All fines shall be charged by the secretary with the monthly dues, or deducted from the salary or compensation of such officers as receive any at the time of receiving the same.

## ARTICLE XVIII.-BY-LAWs.

The board of directors may enact by-laws for their own government not conflicting with this constitution.

## ARTIOLE XIX.-PLACE OF MEETING.

The board of directors, or a majority, are to select a place of meeting for themselves and the association.

## ARTICLE XX.

This constitution shall not be altered or amended except at an annual or special meeting, of which due notice shall have been given, and by a vote of two-thirds of the stockholders present.

## ARTICLE XXI.-SALARIES AND EXPENSES.

The salaries and fees of the officers of this association shall be fixed by the board of directors. All other expenses incurred for books, printing, ete, must be sanctioned by the board of directors.

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEY.


[^67]BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEY.


[^68]
## BUILDING AND LOAN ASSOCIATIONS-Continued.



[^69]BUILDING AND LOAN ASSOCIATIONS-Continued.


[^70]
## BUILDING AND LOAN ASSOCIATIONS-Continued.



## BUILDING AND LOAN ASSOCIATIONS-Continued.



[^71]
## BUILDING AND LOAN ASSOCIATIONS-Continued.

| $\begin{aligned} & \dot{0} \\ & \text { i } \\ & \text { 日 } \\ & \text { \# } \\ & 0 \\ & \text { © } \end{aligned}$ | Location, Name and Secretary of Association. |  | Date of organization. |  |  | Number of shareholders. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | mercer county. |  |  |  |  |  |  |  |  |
| 111 | Trenton-Mercer, P. W. Cr | S. | 1854 | Dec., | 1886 | * 226 | 200 | 60 | 40 |
| 112 | Trenton-Mechanics', P. W. Crozer | S. | 1862 | Aug. | 1886 | +256 | 210 | 58 | 35. |
| 118 | Hopewell-J. S. VanDike. | T. | 1883 | June, | 1886 | 109 | 50 | 26 | 20. |
|  | MIDDLESEX COUNTY. |  |  |  |  |  |  |  |  |
| 114 | $\ddagger$ New Brunswick-Excelsior, T. E. Townsend... | T. | 1877 | Jan., | 1886 | 147 | 117 | 115 | 100 |
| 115 | New Brunswick-People's, D. F. R. Runyon...... | T. | 1880 | Feb., | 1887 |  |  | 100 |  |
| 116 | New Brunswick-American, P. G. Polhemus...... | T. | 1881 | June, | 1886 | 194 | 90 | 88 | 70. |
| 117 118 | New Brunswick-Workingmen's, P. Hagerty..... | T. | 1884 | May, | 1886 1886 | 306 406 | 280 | 54 | 45 |
| 119 | New Brunswick-Homestead, Nahum Kent....... | T. | 1886 | March, |  | 406 | 345 | 8 |  |
| 120 | Z Perth Amboy-Centennial, J. E. Chapman...... | T. | 1876 | Appril, | 1886 | 64 | 24 | 48 | 18 |
| 121 | Perth Amboy-City, J. E. Chapman................... | T. | 1880 | A pril, | 1886 | 159 | 63 | 81 | 36 |
| 122 | Perth Amboy-Crescent, J. E. Chapman. | T. | 1882 | April, | 1886 | 138 | 65 | 43 | 25. |
| 123 | Perth Amboy-Workingmen's, G. W. Parisen..... | T. | 1882 | Feb., | 1886 | 124 | 66 | 44 | 29 |
| 124 | Perth Amboy-Bi-Centennial, J. E. Chapman ... | T. | 1885 | May, | 1888 | 201 | 91 | 14 | 7 |
| 125 | South Amboy-South Amboy, Tobias Grace....... | T. | 1882 | Jan., | 1886 | 291 | 250 | 86 | 86 |
| 126 | South Amboy-Enterprise.. | S. | 1873 | - ${ }^{1}$ |  |  |  | 54 | 54 |
| 127 | Kingston-A. T. G. Colby... |  | 1879 | April, | 1886 | 63 | 35 | 51 | 30. |
| 128 | Jamesburg-J. D. Courter................................ | S. | 1869 | Oct., | 1886 | 276 | 52 | 93 | 25. |
|  | MONMOUTH COUNTY. |  |  |  |  |  |  |  |  |
| 129 | Freehold-Mutual, A. C. Hartsho | S. | 1869 | June, | 1886 | 229 | 119 | 34 | 18 |
| 130 | Long Branch-Mathias Woolley........................ | S. | 1869 | Dec., | 1886 | 231 | 109 | 59 | 81 |
| 131 | Asbury Park-H. C. Winsor. | S. | 1874 | Feb., | 1886 | 267 | 49 | 81 | 32. |
| 132 | Manasquan-J. W. Borden .............................. | S. | 1874 | Dec., | 1886 | 65 | 34 | 14 | 11 |
| 133 | Keyport-B. B. Ogden..................................... | T. | 1880 | Nov., | 1886 | 180 | ........ |  |  |
|  | MORRIS COUNTY. |  |  |  |  |  |  |  |  |
| 184 | Morristown-I. R. Pierson................................ | T. | 1886 |  | .... | 101 | 50 | ..... |  |
|  | ocean county. |  |  |  |  |  |  |  |  |
| 135 | Toms River-Dover, Wm. J. James, .................. | T. | 1883 | March, | 1886 | 746 | ........ | 46 | ...... |
|  | PASSAIC COUNTY. |  |  |  |  |  |  | - |  |
| 136 | Paterson-Mutual, W. L. Berdan...................... | S. | 1878 | Dec., | 1886 |  |  |  |  |
| 137 | Paterson-Union, Sydney Farrar...................... | S. |  | Dec.; | 1886 | 560 | 530 | 149 | 149. |
| 138 | Paterson-Celtic, Hugh Sweeney. | S. | 1883 | March, | 1886 | 192 | 180 | 39 32 | 39 30 |

[^72]BUILDING AND LOAN ASSOCIATIONS-Continued.


IIncluding notes. ** Including loans on shares, bonds, etc. † Including money in trust company. $\ddagger \ddagger$ Including loans on stock.

## BUILDING AND LOAN ASSOCIATIONS-Continued.


[^73]
## BUILDING AND LOAN ASSOCIATIONS-Continued.


$\ddagger$ Including loans on stock. ${ }^{3}$ No data given by which this can be calculated. TThere is also connected with the association a "savings fund," wherein members deposit money at three per cent. interest ; $\$ 38,700$ was due these depositors on March 1, 1886 . ๆ For year ending. March 1, 1886; no data given showing total gains. ** Profits are divided every year.

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES.

| Location and Name of Association. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ATLANTIC COUNTY. |  |  |  |  |  |  |
| Atlantic City-Building and Loan. | 242 | \$108 00 | 816612 | 85812 | \$26,136 00 | 840,284 10 |
|  | 1711/2 | 8400 | 12032 | 3632 | 14.70600 | 20.63488 |
|  | 388 | 7200 | 9956 | 2756 | 27,936 00 | 38,679 06 |
|  | 530 | 6000 | 7646 | 1646 | 31,80000 | 41,053 80 |
|  | 458 | 4800 | 5926 | 1126 | 21,984 00 | 27,141 08 |
|  | 248 | 2400 | 2717 | 317 | 5,832 00 | 14,398 6,602 81 |
|  | 4661/2 | 1200 | 1305 | 105 | 5,598 00 | 6,087 82 |
|  | ( 2,838 |  |  |  | \$146,160 00 | \$194,916 52 |
| Hammonton-Loan and Building. | 241/2 | \$108 00 | \$178 65 | \$70 65 | \$2,646 00 | 84,376 93 |
|  | 72 | 9600 | 14957 | 5357 | 6,912 00 | 10,769 04 |
|  | 109 | 8400 | 12553 | 4153 | 9,156 00 | 13,682 77 |
|  | 821/2 | 7200 60 | $\begin{array}{r}10395 \\ 80 \\ \hline 02\end{array}$ | 31 20 20 | 4,461 5,370 00 | 6,444 710 |
|  | 101 | 4800 | 6121 | 1321 | 4,84800 | 6,182 21 |
|  | 194 | 3600 | 4543 | 943 | 6,984 00 | 8,81342 |
|  | $3081 / 2$ 341 | 2400 1200 | 3024 1486 | 624 286 | 7,404 4,092 4 | $\begin{aligned} & 9,329 \\ & 5,067 \\ & \hline 27 \end{aligned}$ |
|  | 1,3011/2 |  | ... |  | \$51,876 00 | \$71,827 37 |
| Hammonton-Workingmen's.. ..... | 132 | \$120 00 | §185 99 | \$65 99 | \$15,840 00 | \$24,551 24 |
|  | 14 | 10800 | 16513 | 5713 | 1,512 00 | 2,31183 5,149 |
|  | 151 | 96 84 00 | 11275 | 39 28 75 | $\begin{array}{r}1,648 \\ 12,684 \\ \hline 00\end{array}$ | 5,149 17,025 |
|  | 72 | 7200 | ${ }^{93} 23$ | 2123 | 5,184 00 | 6,712 76 |
|  | 164 | 6000 | 7429 | 1429 | 9,840 00 | 12,183 90 |
|  | 203 | 4800 3600 | 5667 40 40 | 8 4 4 | 9,744 <br> 9,036 <br> 00 | 11,50492 10,12443 |
|  | 354 | 2400 | 2606 | 206 | 8,496 00 | 9,224 51 |
|  | 352 | 1200 | 1245 | 45 | 4,224 00 | 4,383 23 |
|  | 1,731 |  |  |  | \$80,208 00 | \$103,171 68 |
| Pleasantville-Building and Loan. |  | 88400 | \$119 71 | \$35 71 | \$8,232 00 | \$11,731 58 |
|  | 35 | 7200 | 9909 | 2709 | 3,520 00 | 3,468 15 |
|  | 241 | 4800 <br> 24 <br> 0 | 5947 2605 | 1147 205 | 11,568 5,472 000 | 14,332 5,939 40 |
|  | -602 |  |  |  | \$28,792 00 | \$35,471 40 |
| bergen county. |  | \$114 00 | $\$ 19507$ | 88107 | \$1,254 00 | \$2,145 77 |
| Rutherford - Mutual Loan and Building. | 23 | 10800 | 17594 | 6794 | 2,484 00 | 4,046 62 |
|  | 16 | 10200 | 15878 | 5678 | 1,682 00 | 2,540 48 |
|  | 10 | 9600 | 14243 | 4643 | , 96000 | 1,424 30 |
|  | 23 | 8800 | 12345 | 3545 | 2,024 00 | 2,839 35 |
|  | 47 | 78 7200 | 10358 | 25 208 20 84 | 3,666 360 3 | 4,868 26 |
|  | 9 | 6000 | 7340 | 1340 | 54000 | 66060 |
|  | 25 | 5300 | 6297 | 997 | 1,325 00 | 1,574 25 |

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

| Location and Name of Association. |  | 'əIrys səd pird sənd |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BERGEN COUNTY-Continued. |  |  |  |  |  |  |
| Rutherford - Mutual Loan and Building. | 36 | \$4800 | \$55 90 | \$790 | \$1,728 00 | \$2,012 40 |
|  | 43 | 4200 | 4773 | 573 | 1,806 00 | 2,052 39 |
|  | 46 | 3600 | 3993 | 398 | 1,656 00 | 1,836 78 |
|  | 44 | 3000 | 3255 | 255 | 1,320 00 | 1,432 20 |
|  | 76 | 2400 | 2551 | 151 | 1,824 00 | 1,938 76 |
|  | 37 | 1800 | 1874 | 74 | 66600 | 69338 |
|  | 57 | 1200 | 1223 | 23 | 68400 | 69671 |
|  | 160 | 600 | 599 | ............ | 96000 | 98236 |
|  | 668 |  |  |  | \$24,889 00 | \$32,188 70 |
| Ridgewood-Building and Loan... | $\left\{\begin{array}{l}391 \\ 170\end{array}\right.$ | $\$ 11$ 3 3 00 | $\$ 1196$ 308 | $\begin{array}{r}\text { S } \\ \hline\end{array}$ | \$1,811 00 | 85,205 06 |
|  | 561 |  |  |  |  |  |
| Beverly-Building and Loan....... | * 58 | \$133 00 | * $\$ 20000$ | 86700 | 87,714 00 | * $\$ 11,60000$ |
|  | 56 | 13200 | 19390 | 6190 | 7,392 00 | 10,858 66 |
|  | 56 | 12000 | 16568 | 4568 | 6,720 00 | 9,278 18 |
|  | 57 | +9600 | 12318 | 35 25 25 | 4,320 <br> 5,472 | 5,729 53 |
|  | 14 | 8400 | 10366 | 1966 | 1,176 00 | 1,451 20 |
|  | 48 | 7200 | 8672 | 1472 | 3,456 00 | 4,162 79 |
|  | 110 | 6000 | 7087 | 1087 | 6,600 00 | 7,795 38 |
|  | 81 87 | 4800 3600 | 55 40 40 | 7 <br> 4 <br> 4 <br> 19 | 3,888 00 | 4,478 64 |
|  | 249 | 2400 | 4572 25 | 172 | 3,132 <br> 5,976 | 3,51419 6,404 |
|  | 243 | 1200 | 1241 | 41 | 2,916 00 | 3,016 62 |
| Bordentown-Building and Loan.. | $\left(\begin{array}{r}1,099 \\ \dagger 1,041\end{array}\right.$ | ............. | ... | ........ | \$58,762 00 | $\begin{aligned} & \$ 75,231 \quad 29 \\ & +63,631 \quad 29 \end{aligned}$ |
|  | 694 | \$79 00 | \$100 20 | \$21 20 | \$54,826 00 | \$69,538 80 |
| Burlington-City........................ | 21 | $\$ 11900$ | \$165 10 | \$4610 | \$2,499 00 | \$3,467 12 |
|  | 59 87 | 10700 9600 | 14184 12185 | 34 25 25 85 | 6,313 8,352 800 | 8,338 85 |
|  | 65 | 7200 | 12185 87 87 | 2585 1587 | 8,352 <br> 4,680 | 10,60133 5,711 |
|  | 62 | 6000 | 7054 | 1054 | 3,72000 | 4,373 74 |
|  | 90 | 4800 | 5394 | 594 | 4,32000 | 4,854 61 |
|  | 68 | 3600 | 4022 | 422 | 2,448 00 | 2,734 62 |
|  | 263 260 | 2400 1200 | $\begin{array}{ll}26 & 28 \\ 12 & 48\end{array}$ | 228 48 | 6,312 3,120 | 6,91132 |
|  | 260 | 1200 | 1248 | 48 | 3,120 00 | 3,244 02 |
|  | 975 |  |  |  | 841,764 00 | \$50,236 84 |

[^74]
## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.



[^75]
## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

| Location and Name of AssocIation. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tuckerton-Mutual Benefit.......... | $\left\{\begin{array}{r}176 \\ 56 \\ 605\end{array}\right.$ | $\begin{array}{r} \$ \$ 150 \\ 3050 \\ 650 \end{array}$ | $\begin{array}{r} \$ 10435 \\ 3618 \\ 761 \end{array}$ | $\begin{array}{r} \$ 32 \\ 5 \\ 5 \\ 1 \end{array} 11$ | $\begin{array}{r} \$ 12,58400 \\ 1,708 \\ 3,932 \\ 3 \end{array}$ | $\begin{array}{r} \$ 18,35960 \\ 2,026 \\ 4,60408 \end{array}$ |
|  | 837 | .......... | .......... |  | \$18,224 50 | \$24,989 73 |
| Riverton-Cinnaminson.............. | ¢ 330 | \$9600 | \$138 02 | \$42 02 | \$31,680 00 | \$45,546 60 |
|  | 163 | 8400 | 11890 | 3490 | 13,692 00 | $19.3 \times 0$ |
|  | 107 | 7200 | 10046 | 2846 | 7,70400 | 10,749 22 |
|  | 128 | 6000 | 8275 | 2275 | 7,680 00 | 10,79200 |
|  | 117 | 4800 | 6506 | 1706 | 5,616 010 | 7,612 62 |
|  | 401 | 36 <br> 2400 <br> 0 | 4761 <br> 31 <br> 17 | 11 7 47 | 8,324 9,60 | 12,619 47 |
|  | 553 | 1200 | 1572 | 372 | 6,636 00 | 8,693 16 |
| Riverside-Building and Loan...... | 2,031 | ........... | ............. | .......... | \$90,984 00 | $\$ 126,23869$ |
|  | 293 | \$825 |  | .... | \$2,417 25 | \$2,402 15 |
| Camden City-Camden................ |  | \$132 00 | \$182 31 | \$50 31 | \$17,424 00 | \$24,064 92 |
|  | 103 | 12000 | 16129 14250 | 41 <br> 15 <br> 34 | 12,360 00 | 16,612 87 |
|  | 111 | 10800 9600 | 14250 12412 | 34 <br> 28 <br> 28 <br> 12 | 11,988 7,220 00 | 15,81750 9,309 |
|  | 139 | 8400 | 11021 | 2621 | 11,676 00 | 15,319 19 |
|  | 168 | 7200 | 9490 | 2290 | 12,096 00 | 15,943 20 |
|  | 240 | 60 <br> 4800 <br> 00 | 80 65 65 | 20 17 175 | 14,400 10 10 18800 | 19,262 40 |
|  | 313 | 3600 | 4932 | 1332 | 11,268 00 | 15,437 16 |
|  | $3761 / 2$ | 2400 | 3326 | 926 | 9,036 00 | 13,522 39 |
|  | 4961/2 | 1200 | 1556 | 456 | 9,958 00 | 8,222 04 |
|  | (2,385 | .......... | ........ |  | \$127,614 00 | \$167,654 97 |
| Camden City-Franklin............... |  | \$132 00 | \$205 31 | \$73 31 | \$6,732 00 | \$10,470 81 |
|  | 35 | 120 10800 | $\begin{array}{lll}182 & 19 \\ 160 \\ 84\end{array}$ | 6219 52 84 |  | $\begin{array}{r} 6,37665 \end{array}$ |
|  | $1811 / 2$ | 10800 9600 | 16084 <br> 141 <br> 1 | 5284 <br> 45 <br> 57 | 19,602 <br> 12,672 <br> 18 | $\begin{aligned} & 29,19246 \\ & 18,687 \quad 24 \end{aligned}$ |
|  | 142 | 8400 | 12426 | 4026 | 11,928 00 | 17,644 92 |
|  | 75 | 7200 | 10387 | 3187 | 5,400 00 | 7,790 25 |
|  | 1261/2 | 60 00 | 8084 | 2084 | 7,590 00 | 10,226 26 |
|  | ${ }_{3561} 21$ | -4800 | 5897 | 1097 | 10,080 00 | 12,383 70 |
|  | ${ }_{310} 3561 / 2$ | 3600 2400 | 42 2761 27 | $\begin{array}{ll}6 & 46 \\ 3 & 21\end{array}$ | 12,834 00 | 15,136 99 |
|  | 429 | 1200 | 1305 | 105 | 5,148 00 | 5,602 89 |
|  | 2,0481/2 |  |  |  | \$103,626 00 | \$141,947 27 |

[^76]
## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

| Location and Name of Association. |  | Dues paid per share. |  |  |  | Total value of shares. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CAMDEN COUNTY-Continued. |  |  |  |  |  |  |
| Camden City-People's................ |  | \$120 00 | \$195 95 | $\$ 75$ <br> 64 <br> 10 | \$9,720 00 | \$15,871 95 |
|  | 85 96 | 10800 9600 | 17270 <br> 150 | 6470 <br> 54 <br> 00 | 8,544 00 | 13,297 <br> 13,350 <br> 00 |
|  | 104 | 8400 | 12965 | 4565 | 8,736 00 | 13,483 60 |
|  | 119 | 7200 | 11019 | 3819 | 7,488 00 | 11,459 76 |
|  | 147 | 6000 | 8856 | 2856 | 6,480 00 | 9,564 48 |
|  | 1641/2 | 4800 | 6703 | 1903 | 7,656 00 | 10.69128 |
|  | ${ }_{343}{ }^{1 / 2}$ | 3600 2400 | 4376 2790 | 776 390 | 8,190 <br> 7,128 | 9,955 8,286 30 |
|  | 310 | 1200 | 1331 | 131 | 3,354 00 | 3,722 17 |
|  | 1,701 |  |  |  | \$75,612 00 | \$109,682 84 |
| Camden City-South Ward........... | $\int \begin{aligned} & 91 \\ & 75\end{aligned}$ | \$132 00 | \$181 50 | 849 39 39 42 | \$12,012 00 | $\$ 16,51650$ 11,95650 |
|  | 74 | 10800 | 14167 | 39 <br> 39 | 7,992 00 | 10,483 58 |
|  | 66 | 9600 | 12600 | 3000 | 6,336 00 | 8,316 00 |
|  | 59 | 8400 | 11109 | 2709 | 4,956 00 | 6,554 31 |
|  | 101 | 7200 | 9594 | 2394 | 7,272 00 | 9,689 94 |
|  | 152 | 6000 | 8127 | $\begin{array}{ll}21 & 27 \\ 17\end{array}$ | 9,120 7800 | 12,353 04 |
|  | 156 | 4800 3600 | 65 49 49 | 1706 1812 | 7,488 <br> 8,100 <br> 00 | 10,14936 11,052 00 |
|  | 2581/2 | 2400 | 3293 | 893 | 6,201 60 | 8,512 41 |
|  | 246 | 1200 | 1661 | 461 | 2,952 00 |  |
|  | 1,5031/2 |  |  | . ...... | \$81,432 00 | \$109,677 68 |
| Camden City-Mechanics' and Workingmen's. | 21 80 | \$132 00 | $\$ 193$ 05 <br> 170  | $\$ 61$ 505 50 50 | 82,77200 9,600 | 81,054 <br> 13,644 <br> 100 |
|  | $821 / 2$ | 10800 | 14888 | 4088 | 8,910 00 | 12,282 60 |
|  | 46 | 9600 | 12686 | 3086 | 4,416 00 | 5,835 56 |
|  | 97 | 8400 | 10836 | 2436 | 8,148 00 | 10,510 92 |
|  | 77 | 7200 | 9241 <br> 75 <br> 1 | 2041 | 5,544 00 | 7,11557 14,20913 |
|  | $1881 / 2$ | 60 <br> 48 <br> 00 | 7538 5787 | 15 9 98 88 | 11,310 7,632 00 | 14,20913 9,20133 |
|  | 2471/2 | 3600 | 4100 | 500 | 8,910 00 | 10,147 50 |
|  | 2191/2 | 2400 | 2667 | 267 | 5,268 00 | 5,854 06 |
|  | 473 | 1200 | 1288 | 88 | 5,676 00 | 6,095 48 |
|  | 1,691 | ........ |  | ........ | \$78,186 00 | \$98,950 20 |
| Camden City-City..................... | $571 / 2$ | \$132 00 | \$192 11 | \$60 11 | \$7,590 00 | \$11,016 321/2 |
|  | 8 | 12000 | 17000 | 5000 | 960 00 | 1,360 00 |
|  | 16 39 | 108 9600 | $\begin{array}{lll}152 & 11 \\ 135 & 59\end{array}$ | 4411 <br> 39 <br> 9 | 1,728 3,744 00 | 2,433 76 |
|  | 32 | 8400 | 119 93 | 3593 | 2,688 00 | 3,837 76 |
|  | $341 / 2$ | 7200 | 10206 | 3006 | 2,484 00 | 3,521 07 |
|  | $901 / 2$ | 6000 | 8338 | 2338 | 5,430 00 | 7,545 89 |
|  | 611/2 | 4800 | 6271 | 1471 | 2,952 4 00 | 3,856 5,317 29 |
|  | $1801 /$ | 2400 | 2779 | 379 | 4,332 00 | 5,016 $091 / 2$ |
|  | 2821/2 | 1200 | $13 \quad 35$ | 135 | 3,390 00 | 3,773 11/22 |
|  | 925 |  |  |  | \$39,726 00 | \$52,995 98 |

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Location and Name of AssoCIATION. \&  \&  \&  \& Profits per share. \&  \&  <br>
\hline \multicolumn{7}{|l|}{Camden county-Continued.} <br>
\hline \multirow{8}{*}{Camden City-Tradesmen's..........} \& 49 \& \$156 00 \& \$184 92 \& \$28 92 \& \$7,644 00 \& \$9,061 08 <br>
\hline \& 62 \& 14400 \& 16377 \& 1977 \& 8,928 00 \& 10,153 74 <br>
\hline \& 48 \& 13200 \& 14403 \& 1203 \& 6,336 00 \& 6,913 44 <br>
\hline \& 18 \& 12000 \& 12652 \& 652 \& 2,160 00 \& 2,277 36- <br>
\hline \& 68 \& 1080 \& 11452 \& 652 \& 7,344 00 \& 7,787 36 <br>
\hline \& $$
\begin{array}{r}
54 \\
1
\end{array}
$$ \& 9600
84
84 \& 10252
9052 \& 652
652 \& 5,184
8400

576 \& $\begin{array}{r}5,536 \\ 90 \\ \hline 92\end{array}$ <br>

\hline \& $$
\stackrel{1}{8}
$$ \& 7200 \& 7792 \& 6

5
592 \& 57600 \& 62336 <br>
\hline \& 308 \& \& \& \& \$39,256 00 \& \$42,442 94 <br>
\hline \multirow{10}{*}{Camden City-Mutual........ ........} \& 56 \& \$132 00 \& \$189 54 \& \$57 54 \& \$7,392 00 \& \$10,614 24 <br>
\hline \& 35
20 \& 120
108
100 \& 17098
152
24 \& 5098

4424 \& | 4,200 |
| :--- |
| 2,160 |
| 1 | \& 5,984

3,044
80 <br>
\hline \& 20 \& 9600 \& 13368 \& 3768 \& 1,920 00 \& 2,673 60 <br>
\hline \& 4 \& 8409 \& 12166 \& 3766 \& 33600 \& 48664 <br>
\hline \& 25 \& 7200 \& 10965 \& 3765 \& 1,800 00 \& 2,741 25 <br>
\hline \& ${ }^{96}$ \& 6000 \& 9191 \& 3194 \& 5,760 00 \& 8,826 24 <br>
\hline \& $1561 / 3$
150 \& 4800
3600 \& 7379
5645 \& 2579

2045 \& | 7,512 |
| :--- |
| 5,400 |
| 1800 | \& 11,54814

8,46750 <br>
\hline \& 156 \& 2400 \& 3902 \& 1502 \& 3,74400 \& 6,087 12 - <br>
\hline \& 155 \& 1200 \& 1918 \& 718 \& 1,860 00 \& 2,978 76 <br>
\hline \& 8731/2 \& \& ...... \& ...... \& \$41,084 00 \& \$63,452 59 <br>
\hline \multirow{12}{*}{Camden City-Excelsior...............} \& 50
39 \& $\$ 96$
90
90
00 \& $\$ 17875$
16820 \& $\$ 8275$
78
78 \& $\begin{array}{r}\$ 4,800 \\ 3,510 \\ \hline 100\end{array}$ \& $\$ 8,93758$
6,56013 <br>
\hline \& 19 \& 8400 \& 15845 \& 7445 \& 1,596 00 \& 3,010 66 <br>
\hline \& 28 \& 7800 \& 14640 \& 6840 \& 1,794 00 \& 3,367 25 <br>
\hline \& 12 \& 7200 \& 13319 \& 6119 \& 86100 \& 1,598 39 <br>
\hline \& 17
17 \& 6600
6000 \& 11935
10686 \& 53
46
46
86 \& 1,122
1,020

1,00 \& | 2,029 |
| :--- |
| 1,816 |
| 189 | <br>

\hline \& 22 \& 5400 \& 9157 \& 3757 \& 1,188 00 \& 2,014 56. <br>
\hline \& 18 \& 4800 \& 8247 \& 3447 \& 86400 \& 1,484 60 <br>
\hline \& 64 \& 4200
3600 \& 6887
55
55 \& 26
19
19
50 \& 1,890
2,300
00 \& 3,09939
3,555 <br>
\hline \& 44 \& 3000 \& 4711 \& 1711 \& 1,320 00 \& 2,073 25 <br>
\hline \& 85 \& 2400 \& 3758 \& 1358 \& 3,010 00 \& 3,194 87 <br>
\hline \& 183 \& 1800 \& 2765 \& 965 \& 3,294 00 \& 5,051 51 <br>
\hline \& 257
682 \& 1200
600 \& 18
88
88 \& 608
289 \& 3,084

4.092 \& | $4,646.81$ |
| :--- |
| 6,068 | <br>

\hline \multirow{8}{*}{Camden City-North Camden.......} \& 1,577 \& ......... \& ......... \& ........ \& \$35,782 00 \& \$58,505 60. <br>
\hline \& 699 \& \$84 00 \& \$119 43 \& \$35 43 \& \$58,716 00 \& \$83,461 57 <br>
\hline \& $391 / 3$
$501 / 2$ \& 7200

6000 \& | 9858 |
| :--- |
| 78 |
| 8 | \& 26

18
18 \& 2,84400 \& 3,893 91 <br>
\hline \& $104{ }^{\text {2/2 }}$ \& 4800 \& 5979 \& 1179 \& 3,980 4 00 \& 3,950
61218
616 <br>
\hline \& 288 \& 3600 \& 4278 \& 678 \& 10,368 00 \& 12,320 64 <br>
\hline \& 236 \& 2400 \& 2693 \& 293 \& 5,664 00 \& 6,355 48 <br>
\hline \& 471 \& 1200 \& 1282 \& 82 \& 5,652 00 \& 6,038 22 <br>
\hline \& 1,888 \& \& \& \& \$91,266 00 \& \$122,260 85. <br>
\hline
\end{tabular}

BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.


## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

| Location and Name of AssoCiation. |  |  |  |  | Total dues paid. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CAMDEN COUNTY-Continued. |  |  |  |  |  |  |
| Camden City-Economy.............. | 545 | 86000 | \$79 78 | \$19 78 | \$82,700 00 | \$43,480 10 |
|  | 53 | 4800 | 6021 | 1221 | 2,544 00 | 3,191 13 |
|  | 306 | 3600 | 4300 | 700 | 11,016 00 | 13,158 00 |
|  | $\left\{\begin{array}{l}155 \\ 434\end{array}\right.$ | 2400 1200 | 2714 1285 | 314 85 | 3,720 5,208 5, | 4,20670 5,57690 |
|  |  |  | 1285 | 85 | 5,208 00 | 5,576 90 |
|  | 1,493 |  | ........... |  | \$55,188 00 | \$69,615 79 |
| Camden City-Fidelity................ | 238 | \$1800 | \$20 33 | \$2 33 | \$4,284 00 | \$4,838 54 |
|  | 113 | 1200 | 1397 | 197 | 1,356 00 | 1,578 61 |
|  | 550 | 600 | 696 | 96 | 3,300 00 | 3,828 00 |
|  | 961 | ......... | ............. | ............ | \$8,910 00 | \$10,245 15 |
| Camden City-Homestead............ | $\int \begin{aligned} & 623 \\ & 249\end{aligned}$ | $\$ 24$ 120 12 | $\$ 2503$ 1226 | $\$ 103$ 26 | $\begin{array}{r}\$ 14,952 \\ 2,988 \\ \hline\end{array}$ | $\begin{array}{r}\$ 15,593 \\ 89 \\ 3052 \\ \hline\end{array}$ |
|  | 872 |  |  |  | \$17,940 00 | \$18,645 48 |
| Gloucester City-United Mutual.... | 12 | \$130 00 | \$181 93 | $\$ 5193$ | \$1,560 00 | \$2,183 16 |
|  | 144 82 | 10600 94 00 | 14182 12166 | 3582 <br> 27 <br> 66 | $\begin{array}{r}15,264 \\ 7 \\ 7 \\ \hline\end{array} 0800$ | 20,422 08 |
|  | $841 / 2$ | 82000 | 12166 | 2766 2013 | 7,708 <br> 6,929 <br> 00 | 9,97612 8,629 |
|  | 73 | 7000 | 8476 | 1476 | 5,110 00 | 6,187 48 |
|  | 59 | 5800 | 6915 | 1115 | 3,422 00 | 4,079 85 |
|  | 74 81 | 46 34 34 | 5292 | 692 | 3,404 00 | 3,916 08 |
|  | 94 | 34 2200 120 | 3890 23 | 490 126 | 7,754 <br> 2,068 | 3,15090 <br> 2,186 <br> 14 |
|  | 107 | 1300 | 1350 | 50 | 1,391 00 | 1,444 50 |
| Haddonfield-Mutual Loan and | 8101/2 |  | ............ | ........... | \$54,610 00 | \$62,176 59 |
|  |  | \$132 00 | \$195 92 | \$63 92 | \$9,327 00 | \$13,910 32 |
|  | 67 | 12000 | 16996 | 4996 | 8,040 00 | 11,387 32 |
|  | 55 40 | 108 9600 | 14586 12561 | 3786 2961 | 5,940 3,840 00 | 8,022 30 |
|  | 31 | 8400 | 10724 | 2324 | 2,604 00 | 5,024 40 |
|  | 97 | 7200 | 9003 | 1803 | 6,984 00 | 8,732 91 |
|  | 100 189 | 60 4800 | 7211 | 1211 | 6,000 00 | 7,211 00 |
|  | 189 | 4800 | 5468 | 668 | 9,072 00 | 10,334 52 |
|  | 411 | 3600 | 3970 | 370 | 14,796 00 | 16,316 70 |
|  | 753 924 | 24 <br> 1200 <br> 0 | 2567 1246 | 167 46 | 18,072 <br> 11,088 <br> 100 | 19,32951 11,513 |
| Merchantville-Building and Loan | 2,738 | .......... | ............. | ........... | \$95,763 00 | \$115,106 46 |
|  | 565 | \$7400 | \$90 69 | \$16 69 | \$41,810 00 | \$51,239 85 |
|  | 83 235 | 4200 <br> 30 <br> 00 | $48651 / 4$ 33 791 | $\begin{array}{ll}6 & 651 / 4 \\ 3 & 791\end{array}$ | 3,486 <br> 7,050 <br> 00 | 4,038 16 |
|  | 220 | 1800 | 194814 | $\begin{array}{ll}3 & 79814 \\ 1 & 4814\end{array}$ | 7.050 <br> 3,960 <br> 00 | 7,94123 3,28560 |
|  | 469 | 600 | 632 | -32 | 2,814 00 | 3,964 08 |
|  | 1,572 |  |  |  | \$59,120 00 | \$70,470 02 |

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

| Location and Name of AssoCIATION. |  |  |  |  |  | Total value of shares. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capk May county.Cape May City-Saving Fund....... |  |  |  |  |  |  |
|  |  | \$132 00 | \$202 06 | \$70 06 | \$7,788 00 | 811,921 54 |
|  | 81 | 12000 | 17695 | 5695 | 9,720 00 | 14,332 95 |
|  | 29 | 10800 | 15469 | 4669 | 3,132 00 | 4,486 01 |
|  | 31 97 | 9600 | 13412 112 | ${ }_{28}^{3816}$ | 2,976 00 | 4,15772 10,87952 |
|  | 75. | 7200 | 9291 | 2091 | 5,400 00 | 6,968 25 |
|  | 78 | 6000 | 7610 | 1610 | 4,680 00 | 5,985 80 |
|  | 165 | 4800 | - 5938 | 1138 | 7,920 00 | 9,797 70 |
|  | 118 | 3600 | 4281 | 681 | 4,068 00 | 4,837 50 |
|  | 257 169 | 2400 1200 | 2706 1265 | 306 65 | 6,168 2,028 2 | 6,95442 2,18785 |
|  | 1,154 |  |  |  | \$62,038 00 | \$82,409 26 |
| Tuckahoe-Building and Loan..... | 39 | 812000 | \$172 19 | \$52 19 | \$4,680 00 | \$6,715 41 |
|  | 23 | 10800 | 14438 | 3638 | 2,448 00 | 3,320 74 |
|  | 19 | 9600 | 12259 | 2659 | 1,824 00 | 3,329 21 |
|  | 50 56 | 8400 7200 | 10380 83 28 | 1980 | 4,200 4,032 4 | 5,190 <br> 4,663 <br> 8 |
|  | 28 | 6000 | 7001 | 1001 | 1,680 00 | 1,960 28 |
|  | 28 | 4800 | 5556 | 756 | 1,344 00 | 1,555 68 |
|  | 35 65 | 3600 2400 | 4176 28 28 | 576 425 | 1,260 1,560 1,00 | 1,46160 1,836 |
|  | 52 | 1200 | 1331 | 131 | 1,62400 | 1,692 12 |
|  | 395 | .... | ............. | ....... | 823,652 00 | \$30,704 97 |
| Cape May Court House-Mechanics' and Laborers'. | 7 | .. ...... | \$192 81 | ... | ............ | \$1,349 67 |
|  | 1 | ........ | 16880 145 34 | .......... | ............. | 16880 726 |
|  | 11 | . | 12351 | ...... |  | 1,859 16 |
|  | 11 |  | 10068 | . | ............. | 1,107 48 |
|  | 24 |  | 84 69 60 |  | ................... | 2,02152 904 80 |
|  | 83 | \$24 00 | 2575 | 8175 | $\$ 1,99200$ | $2,18725$ |
|  | 89 | 1200 | 1261 | 61 | $1,068 \quad 00$ | $1,122 \quad 29$ |
|  | 244 | . | ....... | ........ | ............. | \$10,971 91 |
| South Seaville-Loan and Building. | 1 | \$132 25 | \$197 93 | \$65 68 | \$132 25 | \$197 93 |
|  | 7 | 10825 | 15102 | 4277 | 75775 | 1,057 14 |
|  | 10 | $\begin{array}{ll} 96 & 25 \\ 84 & 25 \end{array}$ | 12959 <br> 11074 <br> 1 | 33 2649 26 |  | 1,29590 <br> 2,104 <br> 1 |
|  | 19 | $8425$ | $\begin{array}{r} 11074 \\ 91 \\ 93 \end{array}$ | $\begin{aligned} & 26 \\ & 19 \\ & 19 \end{aligned}$ | $\begin{aligned} & 1,60075 \\ & 1,372 \quad 75 \end{aligned}$ | $\begin{aligned} & 2,104 \quad 06 \\ & 1,74097 \end{aligned}$ |
|  | 19 18 | 7225 6025 | 9163 74 96 | 1938 <br> 14 <br> 1 | 1,372 75 | 1,74097 <br> 1,349 <br> 18 |
|  | 18 | 4825 | 5801 | 1476 9 | 1,25450 | 1,508 26 |
|  | 34 | 3625 | 4247 | 622 | 1,232 50 | 1,443 98 |
|  | 21 | 2425 | 2806 | 481 | 50925 | 58926 |
|  | 28 | 1225 | 1390 | 190 | 34500 | 38920 |
|  | 183 |  |  |  | \$9,251 75 | 811,676 86 |

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

| Location and Name of Association. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cape may county-Continued. |  |  |  |  |  |  |
| Sea Grove-Building Association... | 40 | \$115 00 | \$190 76 | \$75 76 | \$4,600 00 | \$7,630 40 |
|  | $\cdot 13$ | 7800 | 10698 | 2898 | 1,014 00 | 1,390 74 |
|  | 43 | 5800 | 6749 | 949 | 2,494 00 | 2,902 07 |
|  |  | - 4600 | 5118 | 518 | 2,162 00 | 2,405 46 |
|  | $\left\{\begin{array}{l}25 \\ 42\end{array}\right.$ | - $\begin{array}{r}3400 \\ 2200\end{array}$ | 3677 2267 | $\begin{array}{r}277 \\ \hline 67\end{array}$ | 2, 850 92400 80 | 2,91925 95214 9 |
|  | 80 | 1000 | 1000 |  | 92400 800 | 800 00 |
|  | 290 |  |  |  | \$12,844 00 | \$17,000 06 |
| Bridgeton-Savings Fund............. | 194 | \$121 00 | \$17190 | \$50 90 | \$23,474 00 | \$33,348 60 |
|  | 219 | 9700 | 12958 | 3258 | 21,243 00 | 28,378 02 |
|  | - 450 | 7301 | 8841 | 1541 | 32,850 00 | 39,964 50 |
|  | 735 592 | 4900 2500 | 5690 2786 | 790 286 | 36,015 <br> 14,800 <br> 100 | 41,82150 16,49562 |
|  | 2,490 |  |  |  | \$128,382 00 | \$160,008 24 |
| Bridgeton-Merchants' and Mechanics'. | 99 | \$133 00 | \$194 63 | \$61 63 | \$13,167 00 | \$19,268 37 |
|  | 76 | 12000 | 17242 | 5242 | 9,120 00 | 13,103 92 |
|  | 97 | 10800 | 14797 | 3997 | 10,476 00 | 14,353 09 |
|  | 161 | 8400 | 12620 104 | ${ }_{20} 2093$ | 9,696 13,524 100 | 12,74620 <br> 16,893 |
|  | 252 | 7200 | 8702 | 1502 | 18,144 00 | 21,929 04 |
|  | 274 | 6000 | 7201 | 12 01 <br> 8  <br> 1  | 16,440 00 | 19,730 74 |
|  | 283 | 3600 | 4109 | ${ }^{8} \mathrm{C} 9$ | 10,188 0 | 11,083 11,628 47 |
|  | 530 | 2400 | 2702 | 302 | 12,720 00 | 14,320 60 |
|  | 608 | 1200 | 1352 | 152 | 7,296 00 | 8,224 (6 |
|  | 2,678 | .......... | ....... | ...... | \$130,227 00 | \$163,281 44 |
| Vineland-Mechanics' ................ |  | \$138 00 | \$189 87 | $\$ 5187$ | 882800 | 84,936 79 |
|  |  | 138 7200 | 18621 | 4821 | 2,070 00 | 2,793 22 |
|  | 6 3 | 7200 6000 | 9476 7189 | 2276 1189 | $\begin{aligned} & 43200 \\ & 780 \\ & 780 \end{aligned}$ | 53859 93467 |
|  | 48 | 3600 | 4132 | 532 | 1,728 00 | 1,983 66 |
|  | 417 | 2400 | 2840 | 440 | 10,008 00 | 11,843 44 |
|  | 214 | 1200 | 1427 | 227 | 2,568 00 | 3,055 85 |
| Millville-Hope .......................... | 719 | ......... | ....... | ....... | \$18,414 00 | \$26,086 22 |
|  |  |  | \$87 68 | \$16 68 | \$34,186 50 | \$42,218 92 |
|  | 1881/3 | 4700 8500 | 54 39 39 17 | $\begin{array}{lll}7 & 30 \\ 4 & 17\end{array}$ | 8,859 50 | 10,235 55 |
|  | 2438 | 3500 2300 | $\begin{array}{ll}39 & 17 \\ 24 & 82\end{array}$ | $\begin{array}{ll}4 & 17 \\ 1 & 82 \\ & 48\end{array}$ | 6,606 5 5 606 | 7,393 35 |
|  | $4311 / 2$ | 1100 | 1148 | + 48 | 5,746 50 | 6,04987 4,95162 |
|  | 1,534 |  |  |  | \$80,005 00 | \$70,849 31 |

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.


*Thirty-five series in all.

BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

| Location and Name of Association. |  |  | Present value of share. |  |  | Total value of shares. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| essex county-Continued. <br> Newark-German |  |  |  |  |  |  |
|  | $\left\{\begin{array}{l}1,470 \\ 1,8451 / 2\end{array}\right.$ | $\begin{array}{r}\$ 60 \\ 3600 \\ \hline 6\end{array}$ | $\$ 7155$ 4037 | $\begin{array}{r}\$ 1155 \\ 437 \\ \hline\end{array}$ | $\begin{array}{r} \$ 88,200 \\ 66,438 \\ 00 \end{array}$ | $\begin{array}{r} \$ 105,17850 \\ 74,50283 \end{array}$ |
|  | [3,3151/2 |  |  |  | \$154,638 00 | \$179,681 33 |
| Newark-Central........................ | $\left\{\begin{array}{r}1,262 \\ 134\end{array}\right.$ | $\$ 60$ 1200 1200 | 86903 1259 | 89 <br> 9 <br> 59 | $\begin{array}{r} \$ 75,320 \\ 1,608 \\ 1,00 \end{array}$ | 888,80451 |
|  | 1,396 |  |  | ............ | \$76,928 00 |  |
| Newark-Mechanics' ................... | 745 | \$24 00 | \$25 93 | \$1 93 | \$17,880 00 | \$19,317 85 |
| Newark-Howard....................... | $\left\{\begin{array}{c}958 \\ 1,1161 / 2\end{array}\right.$ | $\$ 24$ 1200 1200 | $\begin{array}{cc} \$ 26 & 521 / 2 \\ 12 & 991 \mathrm{p} \end{array}$ | \$2 $521 / 2$ | $\begin{array}{rr} \$ 22,992 & 00 \\ 13,398 & 00 \end{array}$ | $\begin{array}{r} \$ 25,41095 \\ 12,51310 \end{array}$ |
|  | 2,0741/2 |  |  | .......... | \$36,390 00 | \$39,924 54 |
| Newark-Savings........................ | 2,091 | \$12 00 | \$12 50 | S0 50 | \$25,092 00 | \$26,153 10 |
| Newark-Reliable....................... | 1,197 | \$30 00 | \$33 12 | \$3 12 | \$85,910 00 | \$40,013 87 |
| Newark-Enterprise................... | $\left\{\begin{array}{l}1,095 \\ 7651\end{array}\right.$ | $\begin{array}{r}\$ 36 \\ 24 \\ \hline 0 \\ \hline\end{array}$ | \$10 $061 / 8$ | \& $406^{1} / 8$ | \$39,420 00 | \$43,871 30 |
|  | ( $2341 / 2$ | 24 <br> 1200 | 12585\% | 1921/2 | 18,372 2,814 | $\begin{array}{r} 19,846 \\ 2,951 \end{array} 12$ |
|  | 2,095 | $\cdots$ | ........... | .......... | \$60,606 00 | \$66,668 86 |
| Newark-Home........................... | 2,886 | \$24 00 | \$25 61 | \$1 61 | \$69,264 00 | \$73,912 70 |
| Newark-Newark. | 1,757 | \$36 00 | 839 64 | \$3 64 | \$63,252 00 | \$69,639 24 |
| Newark-Protection..................... | 1,300 | \$1200 | \$13 08 | 8108 | \$15,600 00 | \$17,000 16 |
| Newark-Passaic........................ | 1,333 | \$30 00 | \$32 44 | \$2 44 | \$39,990 00 | \$48,245 55 |
| Newark-Security........................ | $\left\{\begin{array}{r}1,564 \\ 537\end{array}\right.$ | $\begin{array}{r} \$ 24 \\ 00 \\ 12 \\ 00 \end{array}$ | $\begin{gathered} \$ 2583 \\ 12661 / 2 \end{gathered}$ | $\left\|\begin{array}{c} 8183 \\ 661 / 2 \end{array}\right\|$ | $\begin{array}{r} 837,536 \\ 6,44400 \\ \hline \end{array}$ | $\begin{array}{r} 840,39767 \\ 6,80084 \end{array}$ |
|  | 2,101 | ......... | ............. |  | \$14,080 00 | \$47,198 51 |
| Newark-Woodside...................... | $\left\{\begin{array}{r}1,104 \\ 619\end{array}\right.$ | $\begin{array}{r}824 \\ 1200 \\ \hline\end{array}$ | $\begin{array}{r}\$ 2624 \\ 12 \\ \hline 15 \\ \hline\end{array}$ | $\$ 224{ }_{75}^{70}$ | $\begin{array}{r} \$ 26,469 \\ 7,428 \\ 00 \end{array}$ | $\begin{array}{r} \$ 28,97675 \\ 7,89240 \end{array}$ |
|  | 1,723 | ......... |  | ...... | \$33,924 00 | \$36,869 15 |
| Newark-Eighth Ward................ | 1,852 | \$12 00 | \$12 831/2 | \$0 831/2 | \$22,224 00 | \$23,770 59 |

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

| Location and Name of AssocIation. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ESSEX COUNTY-Continued.Newark-Fourteenth Ward..........Newark-Knights of Pythias........ | $\int \begin{array}{r}1,334 \\ 657\end{array}$ | $\$ 6$ 300 300 | $\$ 645$ 3 | $\begin{array}{r}\$ 0 \\ 45 \\ \\ \hline\end{array}$ | 88,004 1,971 000 | $\begin{array}{r} \$ 8,60095 \\ 2,14839 \end{array}$ |
|  | 1,991 |  |  |  | \$9,975 00 | \$10,749 34 |
|  | 1,209 | $\$ 1100$ | $\$ 1160$ | s0 60 | \$13,299 00 | \$14,024 40 |
| GLOUCESTER COUNTY. |  |  |  |  |  |  |
| Williamstown-Monroe............... |  | \$12000 | 816675 | \$1675 | \$1,500 00 | \$2,167 75 |
|  | 54 <br> 39 | 10800 9600 | 14246 118 74 | 34 24 22 74 | 5,832 <br> 3,744 <br> 100 | 7,69284 4,63086 |
|  | 64 | 10000 | 10006 | 1606 | 6,400 00 | 6,403 84 |
|  | 64 | 7200 | 8311 | 1111 | 4,608 00 | 5,319 04 |
|  | 61 131 | 6000 4800 | 6742 5250 | 742 450 | 3,660 <br> 6,288 <br> 100 | 4,112 6,878 60 |
|  | 156 | 1200 | 1242 | 450 42 | 1,87200 | 1,937 52 |
| Swedesboro-Loan and Building... | -582 | - | .............. | ........... | \$33,904 00 | \$39,143 99 |
|  | 27 | \$133 00 | \$187 95 | \$54 95 | \$3,591 00 | \$5,074 65 |
|  | 5 | 12100 | 16712 | 4612 | 60500 | 83560 |
|  | 20 216 | 9700 2500 | 14052 30 | 4352 508 | 1,940 5,400 500 | 2,810 <br> 6,497 <br> 10 |
|  | 130 | 1300 | 1428 | 128 | 1,690 1,60 | 1,856 40 |
|  | 398 | .......... | .............. | ......... | \$13,226 00 | \$17,087 50 |
| Woodbury-Real Estate................ |  | \$13200 | \$190 12 | \$58 12 | \$6,732 00 | \$9,696 12 |
|  | 77 | 10800 | 14145 | 44 34 45 | 6,840 8,316 00 | 10,891 55 |
|  | 60 | 9600 | 12146 | 2546 | 5,760 00 | 7,287 60 |
|  | 1391/2 | 8400 | 10279 | 1879 | 11,718 00 | 14,339 21 |
|  | $130{ }^{-2}$ | 7200 | 8624 | 14.24 | 9,360 00 | 11,211 20 |
|  | 182 | 6000 | 7067 | 1067 | 10,920 00 | 12,861 94 |
|  | 401 393 | 4800 3600 | 5586 4188 | 786 588 | 19,248 14,256 00 | $\begin{array}{lll}22,399 & 86 \\ 16,458 \\ 84\end{array}$ |
|  | 513 | 2400 | 2785 | - 385 | 12,312 00 | 14,287 05 |
|  | 674 | 1200 | 1386 | - 186 | 8,088 00 | 9,341 64 |
|  | 2,6871/2 | ...... | .......... | $\ldots$ | \$113,550 00 | \$138,153 67 |
| Mullica Hill-Building and Loan.. | 92 | \$132 00 | \$196 06 | \$64 06 | \$12,144 00 | \$18,037 52 |
|  | 30 | 12000 | 17014 | 5014 <br> 38 <br> 8 | 3,600 00 | 5,103 90 |
|  | 14 | 108 9600 | 14678 | 3878 28 28 | 1,512 00 | 2,054 92 |
|  | 20 | 8400 | 10607 | 2207 | 1,680 00 | 2,121 40 |
|  | 19 | 7200 | 8690 | 1490 | 1,368 00 | 1,651 10 |
|  | 19 | 6000 | 7060 | 1060 | 1,140 00 | 1,341 40 |
|  | 14 | 4800 | 5471 | 671 | 55200 | 76594 |
|  | 54 | 2400 | 2576 | 176 | 1,296 00 | 1,901 04 |
|  | 76 | 1200 | 1263 | 63 | 91200 | 1,959 88 |
|  | 376 |  |  |  | \$26,472 00 | \$36,209 07 |

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.



## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.

| Location and Name of AssoCIATION. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HUDSON COUNTY-Continued. Jersey City-Bergen Mutual No. 1.. | 561 | \$75 00 | \$95 78 | \$20 78 | \$41,729 49 | \$53,446 18 |
| Jersey City-Bergen Mutual No. $2 .$. | 2,500 | \$39 00 | \$46 88 | \$788 | \$97,878 50 | \$125,183 61 |
| Jersey City-Greenville No. 2........ | 1,042 | \$25 75 | \$34 55 | \$880 | \$26,831 50 | \$36,047 50 |
| Jersey City-Excelsior No. 1.......... | 2,375 | \$39 00 | \$4871 | 8971 | \$95,215 00 | \$112,478 44 |
| Jersey City-Excelsior No. 2.......... | 2,500 | \$13 00 | \$1492 | \$192 | \$32,871 75 | \$37,323 64 |
| Jersey City-Pavonia................... | 2,142 | $\$ 1300$ | \$14 52 | \$152 | \$27,846 00 | \$31,134 98 |
| Jersey City-Jersey City.. | 2,281 | 81200 | \$13 53 | \$153 | \$27,235 00 | \$30,745 76 |
| Jersey City-Garfield. | 2,209 | \$11 00 | \$1298 | \$198 | \$24,086 00 | \$28,466 06 |
|  | $\left\{\begin{array}{l}1,944 \\ 1,164\end{array}\right.$ | $\$ 3600$ 1200 | $\begin{array}{r} \$ 44 \\ 1293 \\ 1291 \end{array}$ | $\$ 8$ <br> 8 <br> 91 | \$83,686 85 | \$102,702 70 |
|  | 3,108 |  |  |  |  |  |
| Jersey City-Star......................... | 1,057 | \$900 | \$10 16 | \$116 | \$9,513 00 | \$13,732 11 |
| Jersey City-Monticello.............. | 2,625 | \$875 | \$10 00 | \$125 | \$22,369 00 | \$38,975 50 |
|  | 514 | \$120 00 | \$ 6584 | \$45 84 | \$61,680 00 | \$82,242 05 |
|  | 106 | 10800 | 14355 | +35 55 | 11,340 11,616 00 | 15,21650 14,70642 |
|  | 129 | 96 <br> 84 <br> 00 | 103 103 | 25 19 19 | 14,196 00 | 14,469 04 |
|  | 139 | 7200 | 8609 | 1409 | 10,008 00 | 11,967 64 |
|  | 327 | 6000 | 6982 | 982 | 19,620 00 | 22,830 94 |
| Lambertville-Centennial............ | 531 | 4800 | 5307 | 507 | 25,488 00 | 28,182 17 |
|  | 78 | 3600 | 3859 | 2 2 1 | 2,808 2,832 00 | $3,00976$ |
|  | 118 105 | 24 1200 1200 | $\begin{array}{ll} 25 & 05 \\ 12 & 17 \end{array}$ | $1 \begin{array}{r}105 \\ 17\end{array}$ | $\begin{aligned} & 2,83200 \\ & 1,260 \end{aligned}$ | $\begin{aligned} & 2,95549 \\ & 1,27830 \end{aligned}$ |
|  | 2,208 |  | ......... | ........... | \$160,848 00 | \$202,858 31 |
| Flemington-Building and Loan... | 700 | \$24 00 | \$25 12 | \$1 12 | \$16,800 00 | \$17,585 43 |

## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.



## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.



## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.



## BUILDING AND LOAN ASSOCIATIONS OF NEW JERSEYVALUE OF SHARES-Continued.



[^77]
## PART V.

## CO-OPERATION.

CO-OPERATIVE STORES IN NEW JERSEY.

DISTRIBUTIVE AND PRODUCTIVE CO-OPERATION IN NEW ENGLAND.

## PART V.

## CO-OPERATION.

Considerable attention has been paid by this Bureau to the subject of co-operation, especially in the 1885 report, which contained a chapter on the "Development of the Co-operative Movement"-a detailed account of its progress in different countries. The more advanced leaders are everywhere persuading their fellow wage-workers of the importance of co-operative effort, which, faithfully and earnestly carried out, is big with promise for the future of the laboring classes, and one of the most encouraging features of the present labor agitation is the fact that a large number of workingmen is studying this question, with the idea of subjecting co-operation to a practical test. The declaration of principles of the Kuights of Labor states that the efforts of the Order are directed " to establish co-operative institutions, such as will tend to supersede the wage system by the introduction of a co-operative industrial system," and its chiefs are never tired of trying to enlist the sympathies of the members in the movement. "We cannot discuss this question too much, nor can we encourage the growth of a sentiment favorable to co-operation too much."* So important has this matter been considered by other State labor bureaus that a large space of their annual reports is given up to this subject. The oldest of these departments, the Massachusetts bureau, in 1886 devoted one hundred and eighty-five pages, or two "parts," to "Co-operative Distribution" and "Profit Sharing;" while the second annual report of the Wisconsin bureau treats these topics even more exhaustively. Both reports show that much has already been accomplished in cooperation in those two States. In our own State the movement is attracting increased attention, and many stores for distribution have already been established, which are generally doing a prosperous business. As these stores educate the workingmen interested in them in practical business methods, they are extremely valuable in giving the

[^78]necessary preparatory training for the more advanced work of productive co-operation-something which is much more important than the saving effected in expenditures. The following co-operative associations have been incorporated, and have received the approval of the Chief of this Bureau, under the acts passed by the State Legislature, entitled "An act to encourage the organization and regulate co-operative associations of workmen," approved March twentysecond, one thousand eight hundred and eighty-one; also "An act to provide for the formation and regulation of co-operative societies of workingmen," approved March tenth, one thousand eight hundred and eighty-four :

| Date of approval. | Name of Organization. | Location. | Authorized capital.* |
| :---: | :---: | :---: | :---: |
| July 22,1881 | New Brunswick | New Br | \$10,000 |
| Dec. 28, 1881 | Bloomfield Co-operative Association |  | 2,000 |
| July 4, 1883 | Phillipsburg Co-operative Association | Phillipsburg | 000 |
| Feb. 16, 1884 | Fruit Growers' Union Co-operative So | Hammonton | 0,000 |
| April 25,1884 | The Kingsland Co-operative Association | Kingsland. |  |
| March 16, 1885 | Trenton co-operative Society. | Trenton | 20,000 |
| May 5, 1886 | The Workingmen's Co-operative Society | Trenton.. |  |
| May 6, 1886 | The Rutherford Co-operative Association | Rutherford | 10,000 |
| May 24,1886 | The Co-operative Brick Manufacturing Society. | Trenton. | 20,000 |
| May 26,1886 | Co-operative Business Associa | Trenton. |  |
| Aug. 23, 1886 | Prosperity Co-operative Associa | Ca | 5,000 |
|  | The Brotherhood of the Union Co-operative Association | Ca | 5,000 |
| Dec. 6, 1886 | D. A. No. 2, K. of L., Co-operative Association. | Camden. | 20,00 |

* In most cases this has not yet been all subscribed.

It will be observed that very few of these organizations have been in operation a full year, and, therefore, have not yet presented a report. The reports received from some of the older organizations are reproduced here :

FIFTH ANNUAL REPORT OF THE NEW BRUNSWICK CO-OPERATIVE ASSOCIATION,
For the year ending November 30th, 1886.
cash account.
Receipts.
Share capital.............................................................................. $\$ 13136$
Fixture and organization account...................................................... 400
Cash sales..................................................................................... 21,896 10
Deposit order account................................................................... 4,131 91
Expense....................................................................................... 88
Balance November 30th, 1885.......................................................... 46714
Expenditures.
Merchandise ..... $\$ 21,24565$
Salary ..... 2,544 50
Expense ..... 75175
Fixture and organization account ..... $13500^{\circ}$
Dividend ..... 84963
Scrip ..... 18430
Share capital ..... 36578
Deposit order account ..... 14207
Balance on hand ..... 42065 .
\$26,639 33;
MERCHANDIBE.
Debits.
Inventory November 30th, 1885 ..... $\$ 2,99083$ :
Purchases for year ..... $21,245 \cdot 65$
Total debits ..... \$24,236 48
Gross profit for year ..... $4,74189^{\circ}$
Credits. ..... $\$ 28,97837$
Cash sales ..... \$21,89.6 10
Deposit order sales. ..... 4,04147
Total sales for year ..... \$25,937 57
Inventory November 30th, 1886 ..... 3,040 80
Total credits ..... $\$ 28,97837$
DISTRIBUTION OF GROSS PROFIT.
Salary account for year ..... $\$ 2,54450$
Sundry expense account ..... 74293
Fixture and organization account charged to expense account. ..... 8211
Net profit for year ..... 1,372 35
Gross profit ..... $\$ 4,74189$
DISTRIBUTION OF NET PROFIT.
Interest on capital ..... $\$ 18945$
Reserve fund ..... 5914
Educational fund ..... 2810
Dividend on salary account. ..... 11465
Dividend on sales to stockholders ..... 58064
Dividend on sales to non-stockholders ..... 23071
Fixture and organization account ..... 16966
Net profit ..... $\$ 1,37235$

## SHARE OAPITAL ACCOUNT.

Dr.
Withdrawn during year ..... \$367 70 ..... \$367 70
Present balance account ..... 3,185 06
\$3,552 76
Cr.
Balance November 30th, 1885 ..... $\$ 3,34836$
Cash added during year ..... 7304
THIRD ANNUAL FINANCIAL STATEMENT OF THE FRUIT GROWERS' UNION AND CO-OPERATIVE SOCIETY,
For the year ending January 3d, 1887.
OASH ACCOUNT.
January 4th, 1886, cash on hand ..... $\$ 42540$
January 4th, 1887, cash received during year. ..... 52,269 92
\$52,695 32
Cash paid during the year ..... \$52,372 57
Cash on hand to balance. ..... 32275Assets.
Amount of stock in store ..... $\$ 7,25751$
Book accounts ..... 1,735 41
Due on notes and accounts ..... 41912
Dwelling-house and land. ..... 1,10000
Store-house and store ..... 3,00000
Three and one-third acres land. ..... 60000
Horse sheds. ..... 24000
Fertilizer house ..... 16000
Coal shed and dumps. ..... 74000
Fixtures as per inventory ( 10 per cent. deducted) ..... 41825
Cash in treasury
Cash in treasury ..... 32275 ..... 32275
\$15,993 04
Liabilities.
Interest due on stock, January 28th, 1886 ..... $\$ 1928$
Interest due on stock, January 29th, 1887 ..... 38205 ..... 38205 ..... 400 C0 ..... 400 C0
Mortgage on house and lot
Mortgage on house and lot
Unpaid store bills. ..... 55645 ..... 55645
Due W. L. Snyder, overpaid com ..... 2181 ..... 2181
Due National State Bank ..... 1,00000
Due on store dividends. ..... $\$ 20000$
Due on cash advanced. ..... 70000
Due on labor for improvements. ..... 8631
Due finance committee. ..... 1800
Due on salary and clerk hire. ..... 6833
$\$ 3,45223$
Total assets. ..... \$15,993 04
Total liabilities. ..... 3,452 23
Net assets ..... \$12,540 81
Net assets 1886 ..... 8,096 60
Net gain ..... $\$ 4,44421$
STORE ACCOUNT.
Due on accounts and notes at last report ..... $\$ 39545$
Goods on hand January 4th, 1886 ..... 4,34520
Amount fixtures on hand ..... 39355
Amount fixtures bought during year ..... 3400
Goods purchased during year ..... 40,88870
Amount paid for freight ..... 2,362 62
Amount paid for labor. ..... 1,823 12
Amount paid for postage and car fare ..... 8832
Amount paid for hauling coal, etc ..... 6417
Amount paid for insurance ..... 2625
Rent of store ..... 15060
Taxes on goods. ..... 2120
Unpaid bills ..... 55645
Interest on stock ..... 25000
Paid finance committee. ..... 2150
Due on salary. ..... 6863
Printing ..... 2198
Net profit to balance. ..... 2,105 07
$\$ 53,61621$
Cr.
\$43,910 92By cash received on sales.
By book accounts ..... 1,735 41
By due on notes. ..... 29412
By goods on hand. ..... 7,257 51
By fixtures on hand ..... 41825
$\$ 53,616$ ..... 21
Number shares issued 1884. ..... 531
Number shares issued 1885 ..... 479
Number shares issued 1886. ..... 354
1,364
Number withdrawn ..... 43
Total ..... 1,321
1885. Invested in loan association ..... $\$ 13275$
1886. Invested in loan association ..... 24625
1887. Set aside ..... 22221
$\$ 60121$
Number members received during year. ..... 48
Number members at last report. ..... 233.
Total ..... 281
ESTIMATED IMPROVEMENTS.
Amount expended on coal dump and shed ..... $\$ 74000$
Amount expended on store house ..... 1,00000
Amount expended on dwelling-house ..... 10000
Amount expended on horse sheds ..... 24000
Amount expended on grading. ..... 5000
$\$ 2,13000$

The third annual meeting of this society was held at Union Hall, Hammonton, January 29th, 1887. The president, E. R. Sproul, in his address, made the following statement:
"Our total shipments have been as follows: Berries, $1,817,803$. quarts, or 56,806 bushels ; pears, 5,065 bushels ; grapes, 128 tons. We have paid for picking this fruit, $\$ 31,000$; for freight, $\$ 20,000$; for cartage, $\$ 4,458$.
"But large as the shipments have been, and well though the work has been done, the year has been a discouraging one for the shippers. We cannot, alas, control either the elements or the markets, and both seem to have conspired against us. Continuous rains so saturated the fruit as to put it in the worst possible condition for market, while the great depression in business, combined with labor troubles and contentions, prepared the weakest market for its reception. The necessaries of life must first be had, and fruit being regarded as a luxury, the producers are at once affected by the condition of the mass of consumers, participating in their prosperity or suffering in their adversity. The happier few, who want for nothing which money can purchase, count for little when the masses must economize."

We quote the following pertinent sentences from the same address:
"To an organization formed to promote the interests of the people, and honestly conducted to that end, increasing age brings strength, character and dignity, and inspires that confidence in its permanence which was withheld in the days of its youth. Be it our care, then, that each year's reckoning shall find us on the true course ; that the conduct of our affairs shall be such as to redound to the advantage of
all whose earnest support has thus far borne us bravely up, as well as for those who may hereafter lend us that energy and zeal, which is our just due, from the whole people of this vicinity. But do not forget that our Union is still on trial ; that the questions involved are farreaching. Can the common people successfully manage their own business? Can they so combine their capital and abilities that such co-operation shall insure happier results, greater material prosperity, than was reached by former methods? To men of fair intelligence and average ability, the answer ought not to be doubtful. This is not an age of repose, but of intense activity, and the watchword of the hour is 'Organization!' The whole country is stirred with the cry, and everywhere labor is being organized to resist the oppression of monopolies; while capital swiftly organizes against interference and disorder. Serious charges are made by each against the other, and these great forces, which ought to be friendly, seem now to be arrayed in hostile camps. But we, who occupy a position midway between the two, can never be led to believe that all combinations of labor mean discord and anarchy, or that all organization of capital means oppression and monopoly. For we are both capitalists and laborers. We are the owners of our farms and their appurtenances, and, literally putting our own hands to the plow, earn by our labor the bread that we eat and the comforts which we enjoy. We hail, then, with gladness this disposition for organization of those whose interests tend in the same direction, and especially of those who, individually weak, find strength and safety in combining their powers ; the wisdom of such union being well illustrated by the old story of the sticks, which singly were broken and destroyed by the slightest force, but firmly bound together resisted great pressure."

## SECOND ANNUAL REPORT OF THE KINGSLAND CO-OPERATIVE ASSOCIATION,

For the year ending January 31st, 1887.
CAPITAL STOCK.
January 31st, 1886, 398 shares at $\$ 5 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \$ 1,990 ~ 00 ~$

Total ............................................................................. \$2,575 00
Withdrawn during year, 83 shares at $\$ 5 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 41500$

CASH ACCOUNT.
Dr.
Amount on hand January 31st, 1886................................................ $\$ 7524$
Received for merchandise sold during year........................................... 18,660 34
Received for rentals........................................................................ 18200

Cr.
Cr.
Paid for merchandise bought during year ..... 16,381 30Paid for salariesPaid for rent30000
Paid for insurance ..... 1500
Paid for township taxes ..... 1148
Paid for dividend and interest ..... 76088
Paid for new fixtures ..... 3000
Paid for horse feed and bedding ..... 9600
Paid for sundry expenses. ..... 4861
Paid for 83 shares stock withdrawn ..... 41500
Cash on hand January 31st, 1887. ..... 3501
general statemert.Resources.
Accounts due Association January 31st, 1887. ..... \$1,813 57
Merchandise, per inventory January 31st, 1887 ..... 1,890 74
Fixtures, per inventory January 31st, 1887 ..... 36241
Paid for dividend and interest, August 1st, 1886 ..... 30174
Cash carried to redemption fund August 1st, 1886. ..... 3353
Cash on hand January 31st, 1887. ..... 3501
Liabilities.
$\$ 4,43700$
432 shares stock at $\$ 5$. ..... $\$ 2,16000$
To sundry persons for merchandise
Interest on capital stock for six months ..... 7560
Redemption fund account. ..... 21254
Net profit August 1st, 1886 ..... 33527
Net profit February 1st, 1887 ..... 50485
$\$ 4,43700$
Division of Net Profit. ..... $\$ 33527$Net profit August 1st, 1886
Less 10 per cent. to redemption fund ..... 3353
Balance to divide. ..... $\$ 30174$
Sales to stockholders, $\$ 7,000$, at 4 per cent ..... $\$ 28000$
Sales to non-stockholders, $\$ 1,500$, at $\frac{9}{10}$ per cent. ..... 1350
Salaries, $\$ 676$, at $\frac{9}{10}$ per cent ..... 603
Undivided balance ..... 221
Net profit February 1st, 1887 ..... $\$ 50485$$\$ 30174$
Less 10 per cent. to redemption fund. ..... 5048
Balance to divide. ..... $\$ 45437$
Sales to stockholders, $\$ 7,000$, at 6 per cent ..... $\$ 42000$
Sales to non stockholders, $\$ 1,500$, at $1 \frac{2}{7}$ per cent. ..... 1929
Salaries, $\$ 688.30$, at $1 \frac{2}{7}$ per cent. ..... 885
Undivided balance. ..... 623
BECOND ANNUAL STATEMENT OF THE TRENTON CO-OPERATIVE SOCIETY,
For the year ending December 31st, 1886.
GENERAL STATEMENT.
Resources.
Inventory of merchandise ..... \$3,794 17
Less 10 per cent. ..... 37941
Fixture and organization account ..... 1,95748$\$ 3,41476$
Real estate ..... 10,00000
Cash balance January 1st, 1887 ..... 1,993 70
Liabilities.
\$17,365 34
Share capital ..... $\$ 5,78712$
Interest and dividend ..... 2,634 02
Reserve fund ..... 49175
Educational fund ..... 19667
Land fund ..... 25000
Mortgaged real estate ..... 7,50000
Balance carried forward ..... 50578
$\$ 17,36534$
CASH ACCOUNT.
Receipts.
Balance January 1st, 1886 ..... $\$ 83311$
Sales in store. ..... 49,958 20
Entrance fees ..... 5500
Cash on shares ..... 4,196 63
Rent from halls ..... 55035
Expenditures.
$\$ 55,59329$
Merchandise purchased. ..... \$39,946 53
Salary account ..... 3,589 86
Rent account ..... 60000
Expense account ..... $917 \quad 79$
Fixture and organization ..... 1,229 62
Real estate account ..... 2,500 00
Interest and dividend ..... 4,010 94
Withdrawn capital ..... 80545
Balance December 31st, 1887 ..... 1,993 10$\$ 55,59329$
MERCHANDISE ACCOUNT.
Receipts.
Sales in store ..... $\$ 49,95820$
Inventory of merchandise ..... \$3,794 17
Less 10 per cent. ..... 37941
Expenditures.
Merchandise, January 1st, 1886 ..... \$1,673 33
Merchandise purchased since ..... 39,946 53
Gross profits ..... 11,753 10
\$53,372 96
DISTRIBUTION OF GROSS PROFITS.
Salary account ..... \$3,589 86
Expense account ..... \$1,651 86
Less rent from halls ..... 55035
Net profits1,101 51
Gross profits ..... \$11,753 10
DISTRIBUTION OF NET PROFITS
Reserve fund ..... $\$ 35295$
Educational fund ..... 16370
Interest on capital ..... 20395
Appropriated to land fund. ..... 25000
Dividend account ..... 5,950 42
Balance carried forward ..... 50578
\$7,426 80
Net profits this year ..... \$7,061 73
Brought forward ..... 36507
Net profits ..... $\$ 7,42680$
SHARE CAPITAL.
Share capital January 1st, 1886 ..... \$2,395 94
Received since ..... 4,19663$\$ 6,59257$
Withdrawn capital. ..... $\$ 80545$
Balance January 1st, 1887 ..... 5,787 12$\$ 6,59257$
REAL ESTATE ACCOUNT.
$\$ 10,00000$
Property value.00By cash paid$\$ 2,50000$By mortgage7,500 00$\$ 10,000$ C0
The directors made the following comments on this report:
"The statement for the first eight months showed a business of$\$ 15,210.17$, at an expense of 14.29 per cent., netting a dividend tomembers on their purchases of 7 per cent., September 30 th, and of 8per cent., December 31st. During the past year the sales have been$\$ 49,958.20$, at a cost of 9.1 per cent., enabling the society to pay onedividend of 12 per cent., two of 14 per cent., and one of 15 per cent.
to members on every dollar's worth of goods purchased, and half of that amount to non-members.
"During the eight months of 1885 the net profits were $\$ 1,473.70$, while during the year 1886 they amounted to $\$ 7,061.73$. At the close of 1885 the reserve fund was $\$ 111.42$; at the close of 1886 it was $\$ 491.75$. The educational fund, December 31st, 1885 , amounted to $\$ 32.97$; on December 31st, 1886, it had increased to $\$ 196.67$. At the end of 1885 the membership was 193 ; at the end of $1886,420$.
"At the close of 1885 the paid-up share capital was $\$ 2,430.94$; at the close of $1886, \$ 5,787.12$; during the latter year the articles of association have been amended so as to increase the share capital from $\$ 5,000$ to $\$ 15,000$.
"It is also gratifying to report that the premises now occupied have been purchased by the society for the sum of $\$ 10,000$, the terms of purchase being, $\$ 2,500$ cash payment, $\$ 2,500$ on January 1st, 1888 , and the balance $\$ 1,000$ per year, or at the option of the society."

## CO-OPERATION IN NEW ENGLAND.

Prof. Edward W. Bemis, Ph.D., in his exceedingly valuable pamphlet, "Co-operation in New England,"* has compiled with much care the statistical tables given below. From these it appears that the twenty productive co-operative associations in New England can boast of a business of $\$ 1,000,000$ a year, and that the co-operative stores have a trade of over $\$ 1,750,000 . \dagger$ The bulk of these societies are located in Massachusetts, which is the only New England State where there is a co-operative general law.

All large companies and as many smaller ones as possible have been included in the following summary, but only those which give an equal vote to all stockholders, without regard to the number of shares owned by them. From the returns given, and in view of the enterprises necessarily overlooked, and taking into account the increase of trade of those reported, Prof. Bemis estimates the entire business of co-operative distribution in New England at $\$ 2,000,000$, and of the twenty industrial co-operative companies at $\$ 850,500$. The present rate of business of the latter associations, in addition to what may be done in those just organized, gives promise of a business exceeding $\$ 1,000,000$ in 1887.

[^79]
## DISTRIBUTIVE CO-OPERATION.

| Name. | Location. |  |
| :---: | :---: | :---: |
| New Bedford Industrial Co-operative Associa |  |  |
| Co-operative Store Company of Silver Lake. | Silver Lake, Kingston, Mass............. | 75 |
|  |  |  |
| Adams Co-operative Associa | Adams, Mass |  |
| Arlington Co-operative Associatio | Lawrence, Mas | 1881 |
| New Britain Co-operative Store... | New Britain, Conn | 376 |
| Danvers Co-operative Union Soci | Danvers, Mass. | 65 |
| First Swedish Co-operative Store Company of Quinsigamond | Quinsigamond, Worcester, Mass... | 1882 |
| Gardner Sovereigns Co-operative Association.. | Gardner, Mass. |  |
| Riverside Co operative Association of N | Maynard, Mass |  |
| Sovereigns Co-operative Association of | Webster, Mass |  |
| Progressive Co-operative Associa | Worcester Ma |  |
| Lisbon Falls Co-operative Associ | Lisbon Falls, M | 188 |
| Lewiston Co-operative Society | Lewiston, Me |  |
| Dexter Co-operative Store | Dexter, Me |  |
| Grange Store of Lebanon | Lebanon, Conn |  |
| Birmingham Co-operative Store | Birmingham, Co |  |
| Beverly Co-operative Association. | Beverly | 18 |
| Harvard Co-operative Society | Cambridge, Mass. |  |
| Yale co-operative | New Hav |  |
| Natick Protective Union. | Natick, Mass. |  |
| Co,operative Store of Rochester | Rochester, N. | 1876 |
| Carrol Co-operative Association. | Carrol, Me |  |
| Norway Co-operative Trade Assoc | Norway, Me | 1877 |
| Foxcraft Co-operative Association. | raft, Me.. |  |
| Belmont Co-operative Association. | Belmont, Me.. |  |
| Patrons Co operative Corporation | Portland, Me | 1877 |
| Torrington Co-operative Sto | Torrington, |  |
| Torrington Grange Store.. | Torrington, C | 1879 |
| Samoin Grange ${ }^{\text {S }}$ | Samoin, Me. |  |
| Morrill Grange Store...... | South Paris, Me......................... |  |
| South Paris Grange Store | South Paris, |  |
| Topham Grange Store.. | Torway, Me............................ |  |
| West Bath Grange Store | West Bath, Me................................... |  |
| Freedonia Grange Store. | Freedonia, Me... |  |
| Dixmont Grange Store... | Dixmont, Me........ |  |
| Swedish Mercantile Co-operative Associatio | Worcester, Mass. | 1884 |
| Old Spain Co operative Society | Weymouth, Mas | 1882 |
| Division $42 .$. | Worcester, Mass. |  |
| Amherst Co operative Associatio | Amherst, Mass |  |
| Acushnet Co-operative Associatio | New Bedford, Mas | 1859 |
| Danvers Co operative Association | Danvers, Mass. |  |
| Brockton Co operative Cash store |  | 1886 |
| K of Co-operative Store Association. | N. Brookfield, Ma | 86 |
| Industrial Co-operative Association.. | Oineysville, R. I............... |  |
| Union Co-operative. | Lowell, Mass.. |  |
| Canadienne de Lowell | New Bedfo |  |
| Central Union Associati | New Bedfora, |  |

DISTRIBUTIVE CO-OPERATION.

*Lately increased to nearly $\$ 10,000$. .Per cent. of dividends on purchases to non-members henceforth will be only one-half that to members. †Unofficial. 千Lately increased to nearly
$\$ 10,000$.

| NAME. | Location.* |  |  |  | $\text { 'səгвपs ј0 } 1 ө q u n_{N}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| American Co-operative Shoe Co. | Stoneham................... | 1882 | \$50,000 00 | \$30,000 00 | 120 | 91 | 22 | 23 |  |
| Athol Co-operative Furniture Co............ | Athol. ........................ | 1879 | 15,000 00 | 5,000 00 | 80 200 | 38 | 8 |  |  |
| East Templeton Co-operative Chair Co. | East Templeton.......... | 1872 | 45,000 00 | 20,000 20 | 200 40 | 38 69 | 14 | 9 | 8183 |
| Franklin Co-operative Shoe Co...... | Stoneham ..................... | 1883 | 50,000 20,000 | 11,900 00 | 119 | 56 | 11 | 9 |  |
| Kingston Co-operative Foundry Co. | Taunton........................... | 1877 | 75,000 00 | 25,000 00 | 250 | 51 | 40 | 10 | 362 |
| Leonard Co operative Foundry | Stoneham | 1875 | 90,000 00 | 15,000 00 | 40 | 47 | 24 | 18 | 1035 |
| Somerset Co-operative Foundry Co | Somerset...................... | 1867 | 75,000 00 | 30,00000 | 300 | 48 | 30 | 10 | 760 14 |
| Stoneham Co-operative Shoe Co................................................... | Stoneham | 1873 | $\begin{array}{r}150,000 \\ 55,000 \\ \hline\end{array}$ | 20,000 <br> 15,000 | 80 150 | 57 80 | 25 | 35 8 | 14.15 800 |
| Wakefield Co-operative Shoe Co............................................... | Wakefield | 1883 | 55,000 00 | 15,000 00 | 150 | 80 | 12 | 8 | 800 |
| - Aggregate, 10 companies. |  |  | \$605,000 00 | \$166,900 00 | 1,375 | 570 | 212 | 135 | . |

*The statistics of these ten associations were tabulated from facts and tables in the Massachusetts Labor Bureau Report of 1886 , giving the figures for 1885. $\dagger$ Losses by fire.

All profits go to stockholders.
The business for 1886, allowing the same rate of interest-ten per cent.-as in recent years, was in all probability as much as $\$ 665,500$ in the above ten companies.
Two companies outside of Massachusetts-at Nashua, N. H., and South Ryegate, Vt.-report a trade for 1886 of about $\$ 50,000$, and returns as follows have been received from co-operative productive companies other than those in the above table that were in business during all or part of 1886 :

| Name. | Location. | E゙ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Co-operative Granite Works <br> of South Ryegate. $\qquad$ | South Ryegate, Vt..... | \$2,900 00 | 20 | 23 | 14 | 1885 | \$8,000 00 | 88,000 00 | $\left\{\begin{array}{l}\text { All profits go to stockholders. Nine } \\ \text { stockholders are workmen. }\end{array}\right.$ |
| Rhode Island Co-operative Printing and Publishing Company | Providence, R. I........ | 1,800 00 | 300 | 200 | ...... | 1886 | 6,000 00 | 7,200 00 | $\left\{\begin{array}{l} \text { All profits go to stockholders. Labor } \\ \text { organizations own part of the stock. } \end{array}\right.$ |
| South Norwalk Co-operative <br> Hat Company. | $\left\{\begin{array}{l} \text { South Norwalk, } \\ \text { Conn................ } \end{array}\right\}$ | * 5,000 00 | 50 | 35 | 90 | 1885 | 30,000 00 | 30,000 00 | $\left\{\begin{array}{l}\text { All workmen must be stockholders. } \\ \text { All profits go to stockholders. About } \\ \text { one-third of workmen own stock. }\end{array}\right.$ |
| Co-operative Iron Foundry..... | Nashua, N. H............ | 22,000 00 | 220 |  |  | 1881 | 42,000 00 | 42,000 00 | All profits above 6 per cent. interest on |
| $\left.\begin{array}{l}\text { North Dighton Co-operative } \\ \text { Store Company }\end{array}\right\}$ <br> Store Company.................... | Taunton, Mass......... | 11,500 00 | 175 | 27 |  | July, 1886 |  |  | All profits go to stockholders. Seventeen workmen own stock. <br> About thirty-five workmen own stock; |
| $\left.\begin{array}{l}\text { Lynn K. of L. Co-operative } \\ \text { Boot and Shoe Company.... }\end{array}\right\}$ | Lynn, Mass.............. | $\dagger 8,00000$ | 80 | 60 | 40 | 1886 | 35,00000 | 60,00000 | $\left\{\begin{array}{l}\text { A } \\ 10 \text { per cent. of net profits go to } \mathrm{K} .\end{array}\right.$ |
| Spencer Co-operative Boot and Shoe Company........... | Spencer, Mass.......... | 6,200 00 | 620 | 100 | 15 | 1886 | 12,000 00 | 30,00000 | After payment of 6 per cent. interest on capital, and reserving 20 per cent. of net profits for sinking fund, rest goes to labor and capital in proportion borne by year's wages and capital. <br> 10 per cent. net profits goes to labor; 5 |
| Co-operative Printing and Publishing Company of Boston. $\qquad$ | $\left\{\begin{array}{c} 25 \text { Beach Street, } \\ \text { Boston, Mass.... } \end{array}\right\}$ | 5,000 00 | 500 | 40 | 25 | 1886 |  |  | per cent. net profits goes to District 30 , K. of L. ; 10 per cent. net profits is reserved as surplus; 25 per cent. net profits is reserved for contingencies; 50 per cent. net profits goes to propaganda. |
| Co-operative Granite Works .... Haverhill Printing and Pub- | West Quincy, Mass.... |  |  |  |  | 1885 |  |  |  |
| lishing Company | Haverhill, Mass........ |  |  |  |  |  |  |  |  |
| Aggregate, 10 companies... | ...... ...................... | \$62,400 00 | 2,034 | 545 | 206 | . | \$133,000 00 | \$177,000 00 |  |

## PART VI.

## THE PATRONS OF HUSBANDRY.

THE ORIGIN AND PROGRESS OF THE GRANGE-DECLARATION OF PURPOSES-RESULTS-CO-OPERATION-A GRANGE BANK—FIRE INSURANCE-SOME NEW JERSEY REPORTS-POLITICS-HIGHER LESSONS.

## PART VI.

## PATRONS OF HUSBANDRY.*

There is no one class-organization among all the many that havegrown up in our country during the past fifty years in which so many persons have been directly or indirectly interested, about which so much has been said, of which, in many quarters, so little has been really known, and against which, therefore, so much prejudice has existed, as the Grange, or the Patrons of Husbandry, an organization of farmers-local, state and national in its character.

After more than twenty years of existence it still grows and prospers. It has outlived prejudice. It has made itself known and felt. It has won the respect and confidence of all classes. It is stronger to-day, and accomplishing more good, than at any time in its history. It is one of the permanent institutions of our land-as permanent as are our schools, our churches, or our farms.

Unlike all other class-organizations, the Grange confers its benefits not alone upon its own membership, neither do farmers only reap its rewards. It extends around and beyond its own class, and advances the interests of all. When farmers are prosperous we never hear of hard times in the cities or anywhere else. But when from any reasonshort crops, low prices, hard times-agriculture is depressed, then it is that manufacturers talk of "overproduction," merchants of dull trade, and mechanics, artisans and laborers complain that they cannot find work. The preamble to the constitution of the National Grange reads: "Individual happiness depends upon general prosperity. The prosperity of a nation is in proportion to the value of its productions. The soil is the source from whence we derive all that constitutes wealth; without it we would have no agriculture, no manufactures, no commerce. Of all the material gifts of the Creator, the various productions of the vegetable world are of the first importance. The art of agriculture is the parent and precursor of all arts, and its prod-
ucts the foundation of all wealth." All history proves that where agriculture has prospered, that nation has prospered. The Grange seeks "the greatest good to the greatest number," and so benefits manufactures, trade and commerce, as well as the farmer and his family.

In common with all other forward steps in the world's history, the earlier days of the Grange were days of struggle, of opposition, of misrepresentation. Even farmers sometimes opposed it. Mistakes were made in its earlier work. Its own members did not always understand it. It sometimes fell into improper hands. Still the child grew and waxed strong, for "Truth is mighty, and will prevail."

## THE START OF THE GRANGE AND ITS GROWTH.

A pioneer farmer in Minnesota, because of drouth and failure of crops, was compelled, in the interests of his family, to look for outside employment. He found a place in the Agricultural Department, at Washington. It was in 1865, the war was just over and President Johnson was looking about him to see what could be done to place the South once more on its feet, wrecked, almost ruined, as it was by the late conflict. P. H. Kelly, this Minnesota farmer, was selected to go South, as a representative of the Agricultural Department of the government, to visit its farmers and see what could be done to advance their interests. Early in January, 1866, he started, and spent several months on his mission, and while thus engaged he became impressed with the advantages to the farmers of this country of having an organization above and beyond sectional and party lines-something that would unite them by the "strong and faithful ties of agriculture." Returning to Washington, he laid his plans before William Saunders, then, as he is now, at the head of the government experimental gardens and grounds, a man known and honored among the fruit growers, florists, gardeners and farmers of this country. Mr. Saunders favored the ideas of Mr. Kelly; others in Washington, the sons of farmers themselves, became interested, and the Grange was born. Its seven founders were P. H. Kelly, William Saunders, J. R. Thompson, Rev. A. B. Gresh, F. M. McDowell, I. M. Trimble and William M. Ireland. Another who also should be classed among its founders was Miss Carrie A. Hall. She it was who first proposed the admission of women, and that they be entitled to the same rights and privileges as the men.

The first circular sent out about the new organization was written by Mr. Saunders, who was elected the first Master of the National Grange. A few extracts here given apply as well to the Grange to-day, after twenty years, as on the day they were penned: "We solicit attention to an organization now being established for the purpose of increasing the general happiness, wealth and prosperity of the country. It is based upon the axioms, that the products of the soil comprise the basis of all wealth; that individual happiness depends, in a great degree, upon general prosperity, and that the wealth of a country will depend altogether upon the general intelligence and mental culture of the producing classes. The best mode of securing a diffusion of knowledge, with a view to its application to the increase of the products of the soil, is, therefore, one of the most important questions that can be propounded, and we hope to greatly facilitate its solution by the results that will follow the work of the organization to which we allude, and concerning which we ask you to favor us with your considerate opinion, suggestions and advice. All existing popular modes of creating an interest in agricultural and kindred pursuits have been carefully scanned and studied. Agricultural fairs enlist attention, and, to a certain extent, excite competition ; but it is becoming a matter of history that these associations are gradually losing their influence. The novelty and excitement of horse-racing, and other scenes still less commendable, are looked upon as essential to their success, if not to their very existence. Clubs for mutual instruction and friendly interchange of ideas seem to lose their interest as soon as the first excitement of organization is past. Even fruit growers' societies, with all their attractions, only enlist a few enthusiasts whose efforts are scarcely felt by the great producing masses of the country. The incentive for the formation of these societies results from a recognition of the well-known principle, that unity of action is necessary to secure success; but to encourage and maintain progressive success, this unity must be made solid and permanent, not trivial and spasmodic, and from a preponderance of the latter we may trace the failures in these organizations." Hence, Mr. Saunders thus argued, we must have a more significant organization where discipline would obtain and unity of action would be enforced. And so the Grange was organized as a complete system, with local, state and national bodies, that could be used for local, state or national purposes, as occasion might require.

Its first few years were years of struggle, but at last it grew rapidly, too rapidly for its own good. More than 13,000 subordinate granges were organized in one year, 1873. It became a power in the land. Politicians tried to use it for their own purposes. Wild schemes of business in some States were entered into. Then came the reaction that its best friends felt sure would come; but, within a few years past, it has recovered its foothold. It is now really stronger than ever before. More new granges were organized last year than for several years previously. Maine added 1,100 to its membership, and 11 new granges; New Hampsire, 700 new members and 9 new granges; Massachusetts more than doubled its strength and organized 10 new granges; Connecticut increased its members 150 per cent., and 16 new granges ; Pennsylvania, 1,700 new members and 18 new granges; Texas had a large and California, Oregon and Idaho Territory a fair increase. It is at present one of the largest and most powerful organizations in the land-powerful always for good and not for evil; powerful to build up all that is good and pure and true in this free land of ours.

## THE GRANGE PLATFORM.

Political parties have their "platforms," churches have their "creeds," our forefathers had their "Declaration of Independence," so the farmers have their Grange platform, their creed, their "Declaration of Purposes;" and it is given here as the foundation, the starting point of this great organization. It contains not the words of an individual alone, but it is the "official" language of the Order itself. This is what it always has been, what it is now, and what it proposes to be and do in the future. We would commend it to all careful readers and thinkers, and would ask them, Are not its contents words of truth and soberness? If these principles are put into practice will any injury result to individuals or our country? but rather, will they not advance the welfare of the family, the neighborhood, the State and the nation?

## DECLARATION OF PURPOSES.

Profoundly impressed with the truth that the National Grange of the United States should definitely proclaim to the world its general objects, we hereby unanimously make this Declaration of Purposes of the Patrons of Husbandry :

## General Objects.

1. United by the strong and faithful tie of agriculture, we mutually resolve to labor for the good of our Order, our country, and mankind.
2. We heartily indorse the motto, "In essentials, unity ; in nonessentials, liberty ; in all things, charity."

## Specific Objects.

3. We shall endeavor to advance our cause by laboring to accomplish the following objects:

To develop a better and higher manhood and womanhood among ourselves. To enhance the comforts and attractions of our homes, and strengthen our attachments to our pursuits. To foster mutual understanding and co-operation. To maintain inviolate our laws, and to emulate each other in labor, to hasten the good time coming. To reduce our expenses, both individual and corporate. To buy less and produce more, in order to make our farms self-sustaining. To diversify our crops, and crop no more than we can cultivate. To condense the weight of our exports, selling less in the bushel and more on hoof and in fleece; less in lint, and more in warp and woof To symtematize our work, and calculate intelligently on probabilities. To discountenance the credit system, the mortgage system, the fashion system, and every other system tending to prodigality and bankruptcy.

We propose meeting together, talking together, working together, buying together, selling together, and, in general, acting together for our mutual protection and advancement, as occasion may require. We shall avoid litigation as much as possible by arbitration in the Grange. We shall constantly strive to secure entire harmony, good will, vital brotherhood among ourselves, and to make our Order perpetual. We shall earnestly endeavor to suppress personal, local, sectional and national prejudices, all unhealthy rivalry, all selfish ambition. Faithful adherence to these principles will insure our mental, moral, social, and material advancement.

## Business Relations.

4. For our business interests, we desire to bring producers and consumers, farmers and manufacturers, into the most direct and friendly relations possible. Hence, we must dispense with a surplus of middlemen, not that we are unfriendly to them, but we do not need them. Their surplus and their exactions diminish our profits.

We wage no aggressive warfare against any other interests whatever. On the contrary, all our acts and all our efforts, so far as business is concerned, are not only for the benefit of the producer and consumer, but also for all other interests that tend to bring these two parties into speedy and economical contact. Hence we hold that transportation companies of every kind are necessary to our success, that their interests are intimately connected with our interests, and harmonious action is mutually advantageous, keeping in view the first sentence in our declaration of principles of action, that "individual happiness depends upon general prosperity."

We shall, therefore, advocate for every State the increase, in every practicable way, of all facilities for transporting cheaply to the seaboard, or between home producers and consumers, all the productions of our country. We adopt it as our fixed purpose to "open out the channels in nature's great arteries, that the life-blood of commerce may flow freely."

We are not enemies of railroads, navigable and irrigating canals, nor of any corporation that will advance our industrial interests, nor of any laboring classes.

In our noble Order there is no communism, no agrarianism.
We are opposed to such spirit and management of any corporation or enterprise as tends to oppress the people and rob them of their just profits. We are not enemies to capital, but we oppose the tyranny of monopolies. We long to see the antagonism between capital and labor removed by common consent, and by an enlightened statesmanship worthy of the nineteenth century. We are opposed to excessive salaries, high rates of interest, and exorbitant per cent. profits in trade. They greatly increase our burdens, and do not bear proper proportion to the profits of producers. We desire only self-protection, and the protection of every true interest of our land, by legitimate transactions, legitimate trade, and legitimate profits.

## Education.

We shall advance the cause of education among ourselves, and for our children, by all just means within our power. We, especially, advocate for our agricultural and industrial colleges that practical agriculture, domestic science, and all the arts which adorn the home, be taught in their courses of study.

## The Grange not Partisan.

5. We emphatically and sincerely assert the oft-repeated truth taught in our organic law, that the Grange-national, state, or sub-
ordinate-is not a political or party organization. No grange, if true to its obligations, can discuss political or religious questions, or call political conventions, or nominate candidates, or even discuss their merits in its meetings.

Yet the principles we teach underlie all true politics, all true statesmanship, and, if properly carried out, will tend to purify the whole political atmosphere of our country. For we seek the greatest good to the greatest number.

We must always bear in mind that no one by becoming a Patron of Husbandry gives up that inalienable right and duty which belongs to every American citizen, to take a proper interest in the politics of his country.

On the contrary, it is right for every member to do all in his power legitimately to influence for good the action of any political party to which he belongs. It is his duty to do all he can in his own party to put down bribery, corruption and trickery; to see that none but competent, faithful and honest men, who will unflinchingly stand by our industrial interests, are nominated for all positions of trust ; and to have carried out the principle which should characterize every Patron that "the office should seek the man, and not the man the office."

We acknowledge the broad principle that difference of opinion is no crime, and hold that " progress toward truth is made by differences of opinion," while "the fault lies in bitterness of controversy."

We desire a proper equality, equity and fairness; protection for the weak ; restraint upon the strong ; in short, justly distributed burdens and justly distributed power. These are American ideas, the very essence of American independence, and to advocate the contrary is unworthy of the sons and daughters of an American republic.

We cherish the belief that sectionalism is, and of right should be, dead and buried with the past. Our work is for the present and the future. In our agricultural brotherhood and its purposes we shall recognize no North, no South, no East, no West.

It is reserved by every Patron, as the right of a freeman, to affiliate with any party that will best carry out his principles.

## Outside Co-operation.

6. Ours being peculiarly a farmers' institution, we cannot admit all to our ranks.

Many are excluded by the nature of our organization, not because they are professional men, or artisans, or laborers, but because they have not a sufficient direct interest in tilling the soil, or may have some interest in conflict with our purposes. But we appeal to all good citizens for their cordial co-operation to assist in our efforts toward
reform, that we may eventually remove from our midst the last vestige of tyranny and corruption.

We hail the general desire for fraternal harmony, equitable compromises, and earnest co-operation, as an omen of our future success.

## Conclusion.

7. It shall be an abiding principle with us to relieve any of our oppressed and suffering brotherhood by any means at our command.

Last, but not least, we proclaim it among our purposes to inculcate a proper appreciation of the abilities and sphere of woman, as is indicated by admitting her to membership and position in our Order.

Imploring the continued assistance of our Divine Master to guide us in our work, we here pledge ourselves to faithful and harmonious labor for all future time, to return by our united efforts to the wisdom, justice, fraternity and political purity of our forefathers.

These, then, are the declared "purposes," the aims and objects of this farmers' organization. Each and every one of these various purposes have been and are being put into practice. Let us look at some of its

## RESULTS.

It will be seen that in a single word the Grange means education. It teaches the farmer that he has mind as well as muscle, brains as well as land, and that it pays him to cultivate the one as well as the other, for " knowledge is power." It educates him as a producer, as a man and as a citizen. It teaches him not only how to be a better farmer, how to get better returns from his labor, how to grow a crop, but how to sell it. Not only how to earn his money, but how to spend it to the best advantage. By organized effort and on business principles he knows the cost of goods and the value of his products; how to open up the channels of trade so as to reach the best markets. Grange banks, Grange fire and life insurance companies, Grange co-operative stores, creameries and schools, organized and run by farmers as a part of their business, have been in successful operation for years. Grain elevators, grain warehouses, freight lines, fruit growers' and other "exchanges," and dozens of other organized business helps are springing up more and more in all parts of the country.

The Master of the Deleware State Grange in his report at the

National Grange in 1885 said: "Our co-operative enterprises are still working well, and have done more to place the Grange on a solid foundation than anything else that has been done since its organization. We have a State Grange Fire Insurance Company, which insures only for Patrons; a fruit exchange for the sale of peaches, and a plan for the purchase of fertilizers. Of the latter we use large quantities, last year aggregating the sum of $\$ 30,000$ with one firm. This results not only in a saving on the cost, but those purchased being bought on contract, after asking for bids from a dozen or more manufacturers, subject to a certain analysis, we always have our money's worth. This plan has been followed for several years, and by making our terms for close cash, our trade has become so valuable that it is being sought for by manufacturers all over the country; consequently we have been enabled to make very satisfactory contracts."
A. J. Rose, Master of the State Grange of Texas, in reporting on Grange business in that State, says: " Business co-operation continues successful where co-operative rules are not violated. Where failures have occurred, buying and selling on time is their chief cause. In fact, I have not been able to discover a co-operative store that is not a success where they have conducted their business in strict conformity with our co-operative rules." [The National Grange seven years ago prepared and sent out a complete set of rules for co-operative business.] Texas has 132 co-operative associations, all represented in a central organization known as "The Texas Co-operative Association, Patrons of Husbandry." The total capital in these 132 stores is $\$ 629,640$. The total purchases for one year amounted to $\$ 1,612,812$, with a reported saving of $\$ 229,014$.

The Master of the Michigan State Grange, Hon. C. G. Luce, now Governor of the State, reports: "Our co-operative stores are doing well. We have succeeded in our patent right suits in the courts of the United States, thus saving to the people of the State and country large sums of money sought to be obtained by means that seem very much like extortion."

The Master of the Alabama State Grange affirms that "our cooperative bodies, such as schools, mills, gins and stores are doing a good business." And to the same effect the Master of the Pennsylvania State Grange: "Our business enterprises have been reasonably successful. The co-operative stores started under the Rochdale sys-
tem (National Grange plan) are successful when conducted strictly on business and cash principles. As far as I know, four co-operative banks have been started and conducted under the control of our Order. Many co-operative stores and produce 'exchanges' are now doing business under the management of the Grange."

Nearly 1,000 granges have been organized in Canada, and good work has been accomplished for agrieulture. Here are some of its results: A wholesale supply company established in Toronto, with a branch in Halifax, for purchase of supplies and sale of farm products ; a fire insurance company, running nearly ten years, with risks amounting to about $\$ 8,000,000$, entirely satisfactory ; a loan company, with co-operative features, the money being procured in the cheap money markets of England on land security, and loaned at cheap rates to the members; a life insurance company for members of the Grange. To get the better of a monopoly, a salt company was organized and one of the largest salt "blocks" in the province was put in operation, with the effect of breaking the ring; salt may now be had at one-third its former price. Through Grange effort the Commissioner of Agriculture of Canada is a member of the cabinet of the Governor-General.

## A GRANGE BANK.

As before stated, Grange banks are an outgrowth of this farmers' organization. Besides those mentioned in Pennsylvania, others are in existence. A very successful one is located at Olath, Johnson Co., Kansas, in connection with other successful co-operative business at that point. As a sample of the success of these banks the following item will be of interest:
"The twelfth dividend of the Grangers' bank of California has been declared, showing the net profits of the bank for 1886 to have been $\$ 45,500$, equal to $9 \frac{1}{4}$ per cent. on the capital paid in. The farmers who originated this bank had to fight against a strong combination of capitalists at San Francisco, whose profits had been chiefly derived from the grain producers of the State, but the farmers were equal to the undertaking, making a grand success of it. Says the California Patron: 'The great test of the usefulness of the new institution was during the time of the distressing depression in the wheat market, when capitalists were engaged in forcing the price to the lowest ebb.'
"The manager of the bank, Mr. Montpelier, by a constant and critical investigation of the condition of the wheat market of the world, upheld the price, and guarded against disaster to the farmers of California by loaning nearly $\$ 3,000,000$ to them to enable them to await the inevitable favorable change. The change came and the bank has been well rewarded for the guardianship it assumed.
"The co-operative feature of the bank has been persistently and guardedly followed by its officers, and the efficient management has placed it in the rank of the most responsible and conservative banking institutions of the country."

## FIRE INSURANCE.

Grange mutual fire insurance companies have been formed and are running successfully in all parts of the country, and the savings in this direction alone amount to millions of dollars in a single year. Here are a few items from a report submitted to the State Grange of New York on the business of sixty-one co-operative companies. Number of policies in force, 31,143 ; amount of risks in force, $\$ 61,761,715$; average amount of each policy, $\$ 1,983.16$; average cost of $\$ 1,000$ for three years, $\$ 1.84$; cost of insuring $\$ 61,761,715$ three years, $\$ 113$,641.66 ; cost of insuring the same amount for three years in stock companies at $\$ 8$ per $\$ 1,000$, including survey and policy, $\$ 494,093.72$; difference in cost, $\$ 380,452.16$; interest on difference in cost for three years, $\$ 68,481$; total saving to the policy holders in the co-operative companies for three years, $\$ 448,933.55$.

Similar companies have been in successful operation in the States of Ohio, Michigan, Indiana, Illinois, Wisconsin, Iowa, Pennsylvania, Maine, New Hampshire, Vermont, Delaware and New Jersey for several years, and others are being formed in other States, as the savings to be effected in this direction become known. New Jersey has two of these Grange fire insurance companies managed entirely by members of the Grange. The oldest of these companies, the "Farmers Reliance," (President, I. W. Nicholson, Camden; Secretary, Chalkley Duell, Wenonah,) has been running several years, and the figures of its last annual report show the economy of such companies. Whole amount insured, $\$ 1,298,550$; running expenses, one year, $\$ 131.35$; increase of business for the year about $\$ 150,000$. In his report of 1886, the Massachusetts Insurance Commissioner says : "The country suffers itself to be taxed annually an immense sum

*     *         * for the support of a numerous army of insurance brokers and superserviceable agents, who produce nothing and serve no valuable use whatever. I believe that the people of Massachusetts pay each year for fire insurance a sum beyond its fair cost under an economical administration of the business upon correct methods equal to the annual State tax."

A number of life or aid societies have also been organized, and are 'being successfully managed by members of the Grange, and with good substantial savings over ordinary cost of life insurance.

## SOME NEW JERSEY REPORTS.

Among many that might be given, a few reports from subordinate or local granges in our snug little State will prove the practical value of the Grange to our farmers. Columbus Grange, No. 58, Burlington county, through the Chairman of its Executive Committee, reports its business for 1885: "Have made purchases through our co-operative fund to the amount of $\$ 2,075.12$, as follows : one hundred and fifty-three tons of coal, costing $\$ 752.97$; timothy seed, $\$ 55.13$; clover seed, $\$ 387.58$; seed potatoes, $\$ 182.25$; plaster, one car load, $\$ 105$, and the balance $\$ 592.19$ in sundries. A large amount has been purchased in Philadelphia by 'trade card,' of which we have no account. We are fully assured by experience that co-peration and combination are a success."

Mount Holly Grange, No. 37, says: "By co-operation in buying grass seeds, amounting to over 100 bushels of clover and nearly the same quantity of timothy, an advantage of quality and price is realized of about 15 to 20 per cent. Other co-operative dealings by members saved in some articles a greater and some a less percentage."

Medford Grange, No. 36, reports: "Our co-operative association sold in groceries the past year $\$ 1,641.08$, and saved to the members and purchasing fund 22 per cent. Bought 120 tons of coal, 3 cars of bran, 65 bushels of timothy seed, at a saving of $\$ 250$."

The Pomona Grange of Mercer county gives the amount of purchases of fertilizers as between $\$ 6,000$ and $\$ 7,000$.

Burlington county farmers have made, through the Grange, a single purchase of clover seed to the amount of over $\$ 7,000$.

Livingston Grange, No. 104, reports: "Since the inauguration of our grange, in 1879 , great improvement is noted in the manner of
farming and in the quality and quantity of crops produced. The advantages arising from an interchange of ideas, and the intelligent diseussion of various subjects brought before the grange, are plainly perceptible, and farmers are learning to think better of their calling and of each other. In short, the grange has come to stay, and is doing a good work in this community."

Several Grange fairs are held every year in New Jersey, and its members are among the most active members of the State and county boards of agriculture, the State Horticultural Society and all movements pertaining to progressive agriculture. "And now, Patrons, cherishing in our hearts every kind feeling towards all Orders and associations which seek to promote human welfare, let us strive with them, working hand in hand for the good of our fellow-beings," is a Grange injunction.

## NO PARTISAN POLITICS-NO SECTARIAN RELIGION.

While the discussion of questions of partisan politics or of sectarian religion is prohibited in Grange meetings, "yet the principles we teach underlie all true politics," all true religion. In "a government of the people, for the people and by the people," all must have some knowledge of politics, "the science of government." As an organization, the Grange is not a political organization, still it is having a grand good effect upon all parties-an effect for good, and one that should and does receive the hearty commendation of all good citizens. Why is it that farmers have been almost entirely ignored in the affairs of government? Why is it that they have not been properly represented in legislatures and in congress? Why is it that laws have been made in the interest of other classes, and farmers have had not only their own but the burdens of others to bear? Simply because farmers, as a class, have allowed their interest in the politics of the country to extend but little further than depositing a ballot, and it too often influenced by others and not the result of their own thinking and investigation. Farmers are studying political economy, and understand the rights and duties of citizenship better than ever before. Farmers are learning to get upon their feet in the Grange and express their ideas; are learning parliamentary rules and usages, and now, when sent as delegates to conventions or meetings of "their own party," no longer take a back seat and allow rings and cliques and
other interests to take a forward position and run the whole machine. Farmers are discussing all questions of political economy. At the annual session of the National Grange in 1885, the following was adopted :
"Resolved, That the Worthy Lecturer of the National Grange be instructed to continue the distribution of subjects for discussion, quarterly, to subordinate granges, and that questions of political economy be given prominence, such as gold, silver, greenbacks, national banks, corporations, interstate and transcontinental transportation, and the tariff as it relates to agriculture."

These questions have been and are being discussed, and an intelligent public opinion has been and is being created on all these important question. Grange agitation more than all other causes combined has secured the passage of the interstate commerce law, the oleomargarine law, the Hatch experimental station law, the bill making the Commissioner of Agriculture a cabinet officer. It headed off the efforts of the express companies to double the postage rates on fourthclass mail matter; also the attempt advocated in both the great political parties of taking the tariff duties off of "raw materials." Everything a farmer produces is a raw material-wool, hides, hay, hemp, sugar, rice, flax, potatoes, \&c., \&c. The Grange teaches the farmer independent voting, to carry out reforms inside our own party, if we can, but outside of it if we must. Good men from "districts" where "the other party" was in the majority are now in congress and State legislatures, where a strict party vote would have sent the inferior representative.

## ITS HIGHER LESSONS.

It is plainly to be seen that it is impossible to give in a brief space all the good points claimed for this farmers' organization. It has and is making the farmer and his family more social. It makes brighter and happier homes. It benefits its members, mentally, morally, socially and financially. More than 750 "reading circles" are now established in as many granges, all reading and studying the same books and lessons at the same time, as in the International Sunday School Lessons, or the Chatauqua reading circles, of which literary society many granges also are members, and support local "ciroles." No better or more effective temperance organization exists than the

Grange. Charity is a prominent characteristic. It makes the farmer better to himself, better to his neighbor, better to his country and better to his God. It has by none of its teachings ever made a man or woman worse, but it has made hundreds of thousands better. Its lessons all develop the good, the beautiful, the true. The half has not been told of its good work, and it can and will do more and better in the future. Every farmor and his family should become members. The Rev. Thomas K. Beecher, of Elmira, N. Y., in an address before the National Grange, in 1879, said: "Already in the various lessons and lectures to which I have listened with profit again and again, I discern that we have a savor of true religion or outlook toward God. This outlook is the life, in my judgment, of the Grange. * * * I recognize the Grange as I do any other church. There are qualities in the church which I serve that I long to see illustrate the Grange. There are qualities in the Grange which I long to transfer to the church. I speak to you this evening of a theme which has been the meditation of my lifetime. 'We are God's husbandry,' says the apostle. That is to say, God intends to grow a crop of men and women, and of all the crops that can be raised upon a farm I know of none more worthy of attention." The Rev. A. B. Gresh, one of the seven founders of the Grange, now dead, once said: "Let us then show our gratitude to God by conformity to His law, by obedience to His will, by praying, speaking and working to make our Order His agent in the improvement of society and in promoting the welfare of our nation and our race. Let us make it a divine institution for the blessing of the laborer, of women, of childhood, that they may make it yet nobler, greater and better in all good ways and words and works."

## PART VII.

## SPECIFIC STATE INDUSTRIES.

Chapter I.-The Silk Industry.
Chapter II.-The Produotion and Consumption of Malt and Other Liquors.

## CHAPTER I.

## THE SILK INDUSTRY.

During the year ending July 1st, 1886, 120 firms were engaged in the silk industry in New Jersey ; 106 being in operation during the whole twelve months. Of the total number, 93 firms were manufacturers of silk goods, 28 throwsters, dyers and finishers, and 3 made spun silk. There were regularly employed an average of 18,183 hands, of whom 7,282 were males over 20 years of age, 1,109 from 15 to 20 , and 1,168 from 12 to 15 years, and 5,290 females over 18 years of age, 1,853 from 16 to 18 , and 1,461 from 14 to 16 years. This was an increase of 1,279 over the number regularly working in 1883. The relative proportion of men, women, boys and girls employed to the whole number of employes, was as follows, viz. : Men (over 20 years of age), 40.09 per cent. ; women (over 18 years of age), 29.13 ; males, 15 to 20 years, 6.11 , from 12 to 15 years, 6.43 ; females, 16 to 18 years, 10.19 ; from 14 to 16 years, .08 .

Ten new firms began business here, but 5 removed out of the State: 4 to Pennsylvania and 1 to Massachusetts. Ten firms operate 2, four, 3 , and three, 4 mills each. This makes the whole number of establishments 136. Nine firms also have branches in Pennsylvania. Some of these annexes are used for throwing silk, which is then returned to the main establishments in our State to be woven. If the silk used in the annexes were thrown in New Jersey, the number of hands employed would be greatly increased, as also the amount paid for wages, although there would be no material change in the value of production.

The capital invested in the business is $\$ 11,543,000$ while the value of the product turned out was $\$ 28,321,400$, or $\$ 2.46$ for every dollar invested, which is a little less than the amount shown by our statistics of 1881 and 1883 , when $\$ 1$ of invested capital reproduced $\$ 2.50$.

The market value of silk goods has been considerably reduced, still the improvements in machinery have enabled the manufacturers to increase greatly the output at less cost. Since 1882 the introduction
of what is known as the "Grant system" of reeling tram and organzine has effected a saving in cost of labor for soft silk winding of from 62 cents per pound to twelve cents. One of our largest manufacturers observed on this point that " the introduction of this system of, reeling in our factory has resulted in a reduction of cost of labor in this department amounting to $\$ 40,000$ per annum, and the silk is received in much better condition than formerly, being free from snarls." Another result of these improvements is, that a large number of hands are transferred to the weaving department, thus adding to the production of goods. Weavers now operate two looms, where a few years ago one man was constantly employed on each loom. The close competition for trade and consequent reduction in values have thus been provided for. •

The rates of wages paid to the different classes of help (such as spinners, twisters, warpers, doublers, \&c.,) employed in silk mills will be found in the returns from establishments, Part I. ; but the following memoranda from the reports of manufacturers will be of interest in this connection, showing the rates usually paid to employes. Office Number 5 states that "weavers (men) earn from $\$ 2$ to $\$ 5$ per day, women from $\$ 5$ to $\$ 10$ per week, or an average for women of $\$ 6$."

Number 7: "Average for finishers, $\$ 12$ per week; for helpers, $\$ 9$, and for girls, \$7."

Number 9 : "Wages average $\$ 2.25$ per day; dyers (in colors) average $\$ 18$ per week; finishers, $\$ 12$; helpers, $\$ 9$; girls, $\$ 7$; foremen, \$25."

Number 24: "Men earn $\$ 3$ per day, women earn $\$ 1.50$ per day."
In a late number of the United States Consular Reports, Consul J. F. Potter gives the following information about the average wages paid per week to silk dyers in Crefeld, Germany :

AVERAGE AMOUNT OF WAGES PAID PER WEEK TO DYERS IN CREFELD; ALSO AVERAGE WAGES PAID PER WEEK PER PERSON ; ALSO THE NUMBER OF POUNDS OF MATERIAL DYED PER PERSON PER YEAR, AND THE AVERAGE YEARLY WAGES PAID PER PERSON DURING THE YEARS 1882, 1883 AND 1884.*

| Items. | 1882. | 1883. | 1884. |
| :---: | :---: | :---: | :---: |
| Total wages per week........................................................................ | $\$ 6,65488$ | \$6,828 53 393 | $\begin{array}{r} \$ 7,12881 \\ 408 \end{array}$ |
| Average weekly wages per person........................... Average weight of silk, chappe and cotton dyed per |  | $\text { 3,065 } 59$ |  |
| Average wear per person ............................................... $\}$ |  |  |  |

[^80]| OcCuPation. | を发 | \#̈ \% \% |  |
| :---: | :---: | :---: | :---: |
| First master dyer. | *\$857 |  |  |
| Second master dyer | 571 |  | , |
| Expert workmen... | 500 |  |  |
| Common workmen................................................ | 428 | .............. | ... |
| Apprentices: <br> First year |  |  |  |
| Second year..................................................................... | .. | ................. | \$0 71 |
| Third year........ | .............. | ........... |  |
| Packing girls............................................................................................ |  | \$2 62 |  |
| t collector and deliverer of goods....................................................................................... | 464 | . | ... |
| Fireman and engineer.. | 464 <br> 4 |  |  |

*And one-fourth cent commission per pound.
$\dagger$ Uniform and shoes free.
Of our New Jersey firms 94 report an increase in wages: One of 25 per cent.; five, 20 per cent.; eighty-one from 10 to 17 , and seven less than 10 per cent. Seventeen firms pay wages weekly, and 105 semi-monthly. 23.93 per cent. of the value of the production of our mills was disbursed to the employes, or a total of $\$ 6,786,000$, exclusive of office or selling expenses. The average amount of wages was $\$ 373.62$ for each man, woman, boy and girl employed, either as a skilled mechanic or ordinary laborer. In 1879 the percentage of wages to total value of product was 26.46 ; in $1880,26.37$; in 1881, 26.5 ; in 1883, 25.2 ; and in $1886,23.96$ per cent.

Although a general increase in wages during the past year is reported by the manufacturers, the rate of wages is about the same as was reported in 1883, the reduction for the years 1883 and 1884 simply having been made up. The decrease in percentage of product paid out for wages during the past year is due, principally, to the fact that a large amount was disbursed in wages in the annexes, outside of our State, of which we make no account in our tabulation. For the same reason the number of hands actually employed in the production of the silk goods is considerably larger than reported, as we only have stated the number employed in our State.

The following table shows the relative improvement in production, number of employes, and amount paid in wages for each year that the Bureau has collected statistics of this industry:

|  | 1879. | 1880. | 1881. | 1883. | 1886. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments..... | 66 | 106 | 105 | 116 | 121 |
| Average number of men employed | 3,600 | 4,852 | 5,458 | 6,812 | 7,282 |
| Average number of women employed.. | 3,176 | 4,065 | 5,175 | 6,674 | 5,290. |
| Average number of boys and girls employed. | 3,648 | 3,763 | 3,489 | 3,348 | * 5,591 |
| Wages paid..................................... | \$3,625,166 | 84, 168,335 | \$4,787,500 | \$5,592,189 | \$6,786,200 |
| Value of product......................... | 13,700,846 | 15,808,424 | 18,053,210 | 22,183,346 | 28,321,400 |

In this State the principal products of the silk mills consist of ribbons, broad goods, handkerchiefs, braids and bindings, and silk yarns or thrown silk. The value of silk ribbons, as reported by our manufacturers for the past year, was $\$ 5,500,000$; broad goods, $\$ 12,271,500$; handkerchiefs, $\$ 3,621,300$; braids and bindings, $\$ 1,207,500$; thrown silk (for consumption out of the State), $\$ 3,111,000$; sewings and twist, $\$ 464,000$; tie silks, $\$ 474,000$; spun silk, $\$ 300,000$. The raw silk consumed in the New Jersey mills amounted to $2,875,440$ pounds, $\dagger$ worth about $\$ 13,000,000$. The number of looms operated was as follows: Hand looms (broad), 628; power looms (broad), 5,685; power looms (narrow), 1,233 ; total, 7,546 . Most of the mills have not been operated to their full capacity at any time during the year. It is estimated that contracts for making over $\$ 1,000,000$ worth of silk goods were sent to Europe because the Paterson manufacturers declined to make contracts of any importance for the delivery of goods, without a proviso that the "time for delivery be extended in case of strikes" on the part of the employes. The statistics in detail of the silk industry in New Jersey for the year ending July 1st, 1886, are given at the close of this chapter.

In the report of the Chief of the Bureau of Statistics, Washington, D. C., the invoice values of silk goods imported during the past fiscal year (ending June 30th, 1886), are stated as follows: Clothing, ready-made, and other wearing apparel, $\$ 476,078$; dress and piecegoods, $\$ 14,634,667$; laces, $\$ 1,979,696$; ribbons, $\$ 1,353,437$; all other silk goods, $\$ 9,514,061$, making a total of $\$ 27,957,939$. If we add to this amount 50 per cent. (the duty levied on manufactured silk goods), we get the value of the imported silks in our own market, viz., $\$ 41,936,908$.

By adding to the market value of the imported goods the value of our own manufactures (estimated for the fiscal year ending June 30th,

[^81]1886 , at over $\$ 50,000,000$ ), we have $\$ 92,000,000$ (approximately) as the value of silk goods consumed in the United States during 1886. The value of the imports of raw silk and manufactured silk goods for the years 1875-1886 are given in the "annual statements of the imports and exports of the United States," prepared under the direction of the Secretary of the Treasury. These figures are for the fiscal years ending June 30th :

| Year. | Value of goods. |  | 篔 |
| :---: | :---: | :---: | :---: |
| $\overline{1875}$ | \$24,380,923 00 | \$4,501,306 00 | ............ |
| 1877......................................................................... | $23,745,967$ <br> 21,839 <br> 159 <br> 00 | $5,424,40800$ $6,792,937$ 00 | ..................... |
| 1878.................................................................... | 19,837,972 00 | 5,103,084 00 |  |
| $1879 .$. | 24,013,39800 | 8,371,025 00 |  |
|  | $32,188,690$ $32,056,701$ 00 |  | $2,562,236$ $2,550,108$ |
| 1882.............................................................. | 38,985,567 00 | 12,890,392 00 | 2,879,402 |
| 1883. | 36,764,2i6 00 | 14,043,340 00 | 3,233,370 |
| 1884. | 38,030,574 00 | 12,481,614 00 | 3,222,555 |
| 18866................................................................. | $28,957,939$ | $12,421,685$ $17,232,505$ 00 | 3,424,059 $4,754.626$ |

The importations of cocoons, waste silk, \&c., for 1884, are given at $1,036,601$ pounds, valued at $\$ 717,617$; in $1885,884,791$ pounds, at $\$ 464,469$, and in $1886,2,063,434$ pounds, valued at $\$ 1,021,763$.

In his "American Silk Manufacture," Mr. W. C. Wyckoff calls attention to the very large importation of raw silk during the past fiscal year :
"The increase in the amount of raw silk imported during the past year (ending June 30th, 1886) is remarkable. The statistics of the previous twelve months gave no indication of a grewth of the industry. In fact, there was scarcely any difference between the totals of importation for the year ending June 30th, 1884, and those of June 30th, 1885 ; each summing up 23,000 to 24,000 bales, valued at nearly $\$ 14,000,000$. But in the twelve months now just elapsed, the imports have risen to 33,000 bales, valued at nearly $\$ 20,000,000$. This increase, though at a decidedly greater rate in the last six months, was fairly distributed throughout the year. Measured by quantity, i. e., \#bs. avoirdupois, the advance beyond the preceding year is 38 per cent. ; estimated by values, it is 41 per cent.
"The greatest quantity of raw silk ever brought to this country by one vessel, was carried by the steamer 'Belgic,' which arrived at San Francisco February, 10th, 1886, with 2,300 bales, valued at $\$ 1,400,000$. The imports of December, 1885, and January, 1886, each about 5,000 bales, exceeded any previous months in the records of our industry.
"Within two years the relative proportions of raw silk received from different sources have somewhat changed. One-fourth of the whole supply continues to be of European production. The shipments from Japan have increased so that nearly one-half of the whole value of raw silk, received at this market, now comes from Yokohama. China furnishes the remaining fourth of our supply. Imports from Hong Kong have fallen off actually as well as relatively; scarcely more than one-twelfth of all our raw silk is sent from that quarter, which two years ago supplied a sixth. From Shanghai the increase has been greater than from any other source; it has doubled since 1884, and its ratio to the whole supply has risen from a seventh to nearly a fifth.
"To save detail in the following table, since the imports of 1884-5 did not differ largely from those of 1883-4, an average of the two years is used as a basis for showing the increase or decrease of 1885-6 from each source of supply:

[^82]| Description of Silk. | proportion of each kind in the year named. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1885-6. |  | 1884-5. |  | 1883-4. |  |
|  | $\stackrel{4}{\circ}$ <br>  | 4 |  |  |  | $\stackrel{\square}{\circ}$ |
| Strictly European........................ | 25 | 25 | 25 | 28 | 26 | 30 |
| Reshipped Asiatic........................................................ | $\stackrel{2}{43}$ | 3 49 | 1 43 | ${ }_{46}^{1}$ | 41 | 14 |
| From Hong Kong............................... | 9 | 7 | 10 | 8 | 17 | 13 |
| From Shanghai.......................... | 21 | 17 | 21 | 17 | 15 | 12 |
| Total.................................. | 100 | 100 | 100 | 100 | 100 | 100 |



The following tables were also compiled by Mr. Wyckoff, as Secretary of the Silk Association of America:

IMPORTS OF RAW AND WASTE SILK, ETC., AT ALL PORTS IN THE UNITED STATES, FOR THE YEAR ENDING JuNe $30,1886$.

IN POUNDS AVOIRDUPOIS.


IMPORTS OF RAW SILK AT THE PORTS OF NEW YORK AND SAN FRANCISCO，
IN THE FISCAL YEARS ENDING JUNE 30.

|  | 1885－86． |  | 1884－85． |  | 1883－84． |  | 1882－83． |  | 1881－82． |  | 1880－81． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 家 | 官 | ま゙ | $\xrightarrow{\text { ® }}$ | 器 | 邑 | ま゙ | － |  | ¢ | ¢ | $\frac{\text { é }}{\text { 己 }}$ |
| July． | 1，174 | \＄751，210 | 586 | \＄448，896 | 1，008 | \＄669，522 | 1，301 | 8886，681 | 1，171 | \＄610，609 | 957 | \＄472，827 |
| August．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 666 | 401，209 | 1，907 | 1，048，583 | 685 | 487，182 | 1，105 | 742，590 | 967 | 529，978 | 649 | 360,043 |
| September．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 3，236 | 1，770，414 | 2，762 | 1，646，195 | 1，715 | 1，089，091 | 1，658 | 1，097，839 | 2，141 | 1，182，135 | 2，391 | 1，352，478 |
| October．． | 1，803 | 1，116，807 | 3，235 | 1，766，089 | 2，783 | 1，726，741 | 2，940 | 1，817，893 | 1，177 | 737，238 | 2，242 | 1，280，170 |
| November．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 3，573 | 1，816，365 | 2，656 | 1，516，186 | 3，250 | 1，877，811 | 2，569 | 1，575，134 | 3，859 | 2，131，334 | 1，234 | 732，364 |
| December．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 5，012 | 2，916，486 | 1，926 | 1，120，199 | 3，294 | 1，772，054 | 2，056 | 1，304，132 | 2，107 | 1，370，065 | 2，455 | 1，311779 |
| January．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 5，168 | 3，040，647 | 2，317 | 1，310，555 | 1，893 | 1，042，439 | 2，843 | 1，675，982 | 1，582 | 974，471 | 1，948 | 1，031，400 |
| February．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 3，792 | 2，469，434 | 1，504 | 917，740 | 1，272 | 727，106 | 1，637 | 1，003，903 | 1，756 | 1，115，482 | 1，644 | 837，823 |
| March．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 3，200 | 2，070，338 | 2，031 | 1，243，723 | 966 | 657，663 | 2，023 | 1，175，896 | 1，712 | 1，083，017 | 2，080 | 1，142，204 |
| April．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 2，708 | 1，647，151 | 1，237 | 804，364 | 1，835 | 1，241，062 | 1，584 | 1，023，490 | 2，165 | 1，422，861 | 1，716 | 938，512 |
| May ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 1，931 | 1，182，447 | 1，902 | 1，052，048 | 2，953 | 1，711，472 | 2，666 | 1，488，700 | 1，711 | 1，158，570 | 1，445 | 706，916 |
| June． | 734 | 500，482 | 1，851 | 1，056，544 | 1，413 | 852，018 | 1，545 | 895，344 | 1，334 | 862，138 | 1，437 | 718，651 |
| Totals．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 32，997 | \＄19，682，990 | 23，914 | \＄13，981，122 | 23，067 | \＄13，854，161 | 23，927 | \＄14，687，584 | 21，682 | \＄13，1：7，898 | 20，198 | \＄10，885，167 |

IMPORTS OF RAW SILK AT NEW YORK AND SAN FRANCISCO，
CLASSIFIED BY COUNTRIES OF EXPORT，FOR THE FISCAL YEAR ENDING JUNE $30,1886$.

| Mo | SHIPMENTS FROM EUROPE． |  |  |  | SHIPMENTS FROM ASIA． |  |  |  |  |  | Totais： |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | STRICTLY EUROPEAN |  | RESHIPPED ASIATIC． |  | Japan． |  | HONG KONG． |  | SHANGHAI． |  |  |  |
|  |  | $\stackrel{\dot{3}}{\underset{\sim}{x}}$ |  | $\stackrel{\dot{9}}{\stackrel{\text { ® }}{\dagger}}$ | $\begin{aligned} & \text { 号 } \\ & \text { \#̈n } \end{aligned}$ |  | 寧 | $\stackrel{\text { ¹ }}{\substack{\text { ¢ }}}$ | $\begin{aligned} & \text { gig } \\ & \text { ® } \end{aligned}$ | $\stackrel{\text { ® }}{\substack{\text { ¹ }}}$ | ゆ゙ | $\stackrel{\text { ® }}{\text { ® }}$ |
| July．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 1885. | 334 | \＄331，530 | 44 | \＄26，632 | 421 | \＄247，007 | 190 | \＄71，598 | 185 | \＄74，443 | 1，174 | \＄751，210 |
| August．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 218 | 199，796 | 69 | 38，258 | 181 | 99，062 | 170 | 52，642 | 28 | 11，451 | 666 | 401，209 |
| September．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 383 | 350，611 | 64 | 31，398 | 1，716 | 1，004，729 | 470 | 141，563 | 603 | 242，113 | 3，236 | 1，770，414 |
| October．．．．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 598 | 541，508 | 71 | 25，181 | 591 | 351，087 | 195 | 59，497 | 345 | 139，534 | 1，803 | 1，116，807 |
| November．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 441 | 395，797 | 5 | 3，347 | 1，186 | 709，219 | 759 | 236，259 | 1，182 | 471，743 | 3，573 | 1，816，365 |
| December．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 828 | 779，477 | 87 | 34，496 | 2，703 | 1，592，940 | 591 | 186，796 | 803 | 322，777 | 5，012 | 2，916，486 |
| January．．．．．．．．．．．．．．．．．．．．．．．．．．．． 1886. | 338 | 368，078 | $\bigcirc 44$ | 19，781 | 3，111 | 2，004，567 | 485 | 167，862 | 1，180 | 480，359 | 5，168 | 3，040，647 |
| February．．．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 578 | 570，933 | 46 | 17，511 | 1，854 | 1，305，282 | 471 | 172，164 | 843 | 403，544 | 3，792 | 2，469，434 |
| March ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 446 | 463，430 | 52 | 27，049 | 1，432 | 1，012，796 | 179 | 66，651 | 1，091 | 500，412 | 3，200 | 2，070，338 |
| April．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 357 | 376，417 | 12 | 5，833 | 1，134 | 740，646 | 558 | 207，950 | 647 | 316，305 | 2，708 | 1，647，151 |
| May．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 341 | 368，599 | 50 | 20，327 | 557 | 349，906 | 230 | 85，595 | 753 | 358，020 | 1，931 | 1，182，447 |
| June．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．＂ | 251 | 243，311 | 79 | 29，731 | 204 | 136，727 | 25 | 9，312 | 175 | 81，401 | 734 | 500，482 |
| ．Totals．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 5，113 | \＄1，989，487 | 623 | \＄279，544 | 15，093 | \＄9，553，968 | 4，333 | \＄1，457，889 | 7，835 | \＄3，402，102 | 32，997 | \＄19，682，990 |

$\stackrel{\oplus}{\rho}$

IMPORTS OF SLLK MANUFACTURES ENTERED AT THE PORT OF NEW YORK,
in fiscal years ending juńe 30-invoice values.

| Articles. | 1885-86. | 1884-85. | 1883-84. | 1882-83. | 1881-82. | 1880-81. | 1879-80. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Silk piece-goods.................................... | \$11,431,840 | \$12,423,750 | \$18,432,599 | \$18,585,896 | \$19,429,606 | \$16,167,056 | \$16,696,145 |
| Satins. | 432,789 | 291,317 | 173,784 | 109,666 | 200,763 | 272,641 | 263,591 |
| Crapes................................................... | 403,763 | 404,730 | 473,568 | 479,962 | 536,277 | 489,560 | 457,071 |
| Pongees................................................. | 82,374 | 35,497 | 24,667 | 30,938 | 8,651 | 16,477 | 3,212 |
| Plushes. | 1,414,727 | 1,485,902 | 1,260,706 | 875,785 | 1,121,990 | 495,496 | 212,176 |
| Velvets................................................. | 2,747,736 | 2,786,045 | 2,831,410 | 1,940,015 | 1,402,663 | 1,575,715 | 2,207,296 |
| Ribbons. | 1,253,717 | 1,243,974 | 2,618,463 | 2,229,226 | 2,707,693 | 3,103,564 | 2,975,147 |
| Laces | 1,820,692 | 1,614,374 | 2,126,979 | 3,126,597 | 4,073,891 | 1,883,236 | 1,295,017 |
| Shawls. | 106,590 | 138,495 | 63,654 | 6,810 | 7,790 | 17,466 | 13,908 |
| Gloves.................................................. | 503,823 | 610,950 | 652,942 | 333,716 | 170,151 | 204,703 | 223,265 |
| Cravats. | 33,015 | 18,763 | 21,095 | 69,455 | 60,341 | 69,914 | 117,996 |
| Handkerchiefs | 169,948 | 158,298 | 120,743 | 59,786 | 75,671 | 53,727 | 65,135 |
| Hose... | 270,735 | 327,649 | 317,861 | 297,960 | 179,254 | 110,277 | 106,596 |
| Threads and yarns................................ | 159,189 | 129,996 | 193,782 | 155,282 | 128,790 | 175,627 | 303,215 |
| Braids and bindings............ .................. | 697,938 | 697,327 | 1,334,692 | 1,087,416 | 1,191,140 | 1,323,437 | 1,707,114 |
| Silk and worsted................................... | 357,800 | 253,202 | 180,801 | 90,786 | - 123,939 | 174,390 | 135,434 |
| Silk and cotton..................................... | 4,259,052 | 3,486,258 | 3,207,943 | 4,486,836 | 5,011,843 | 4,366,921 | 3,813,793 |
| Silk and linen........ ................................ | 1,907 | 1,663 | 4,008 | 1,039 | 2,253 | 1,644 | 398 |
| Totals.......................................... | \$26,147,635 | \$26,108,190 | \$34,039,697 | \$33,967,171 | \$36,432,706 | \$30,501,851 | \$30,596,509 |

The values of the imports of manufactured silk goods given in these tables are those of the invoices from which all charges have been deducted, and are made as low by the importer as the Castom House authorities will permit. In fact, official reports of investigating committees appointed by the United States government have estimated the average undervaluations at about 25 per cent. Then the duty paid on the goods ( 50 per cent.), as well as invoice charges and importers' profits, must be added, in any calculation of the value of these goods in our markets.

It is estimated that 95 per cent. of the silk goods imported come to the port of New York. In 1882 the importations of silk piece-goods at this port were valued by the Custom House officers at $\$ 19,429,606$, and four years later at $\$ 11,431,840$. If we add the duty imposed to the latter figure, the market value of the imports for 1886 would be $\$ 17,147,760$. The piece-goods made in New Jersey during that year were valued at $\$ 12,271,500$.

There were $\$ 2,707,693$ worth of ribbons imported in 1884 ; in 1886 , only $\$ 1,253,717$, or an estimated market value of $\$ 1,880,575$. The production of ribbons in our State in the past year amounted to $\$ 5,500,000$, or about three times the value of the New York importations; $\$ 75,671$ worth of handkerchiefs were imported in 1884 ; in $1886, \$ 169,494$, or a market value of $\$ 254,922$. The value of the handkerchiefs made in New Jersey in 1886 was $\$ 3,621,000$.

In a review of the manufacture of silk goods for the year 1886, Mr. Byron Rose, of the American Silk Journal, estimated the production of sewing silk and machine twist in the United States at about the same amount as in 1885, while there was an increase in tailors' silks, satin sleeve linings, \&c., of from 10 to 20 per cent., an increase of 50 per cent. in handkerchiefs, a fair increase in ribbons, and a larger amount of broad silks turned out than in any previous year. In this connection he says :
"Generally speaking, black goods have been in better demand than colors. Prices, however, have been low, and have borne no proportion to the increased cost of raw material and the higher wages prevailing; here and there some slight advances have been obtained, but only with difficulty.
"The dress trimming business has not been satisfactory. The demand in the spring was better than in the fall, when it was very poor. Throughout the year the use of bead trimmings, and of ribbons for dress purposes, operated to the disadvantage of the business.

[^83]Referring to the branch (or annex) mills built by some of our largest manufacturers in-other States, he says:
"The past year has been notable for the number of establishments which have been located at points away from recognized manufacturing centres. Large investments have been made in Eastern Pennsylvania especially, and at least a dozen cities and towns in that State, outside of Philadelphia, now boast of one or more silk mills, which furnish employment to hundreds of people and add materially to the prosperity of the communities in which they are located. A mill has also been erected in Michigan, the first in that State, and will begin operations early in the new year. In this connection we may also refer to the generally sound financial condition of manufacturers, and to the fact that no failure of consequence has occurred during the past year."

It is impossible to ascertain, with reasonable accuracy, the actual value of the production of silk goods in the United States for the last fiscal year.

The silk business has become one of our most important industries, and particularly so in New Jersey, whose factories produce one-half of all the silk goods manufactured in the United States.

In his last annual report of the Silk Association of America, Mr. Wyckoff, the Secretary, says: "Judging from the amount of raw silk imported, the finished goods made from it in the United States exceed in value $\$ 50,000,000$ per year ; * * * it seems clear that of all the silk goods nsed in this country, one-half in value is now contributed by our factories." In his book on American Silk Manufacture, before mentioned, he estimates the production of finished goods manufactured in the United States in 1886 at $\$ 60,000,000$; capital invested, $\$ 30,000,000$; number of operatives employed in mills, 50,000 . Referring to the above estimate he observes :
"The production may be divided as follows: Nearly three-fifths, broad goods and ribbons; somewhat more than a fifth, sewings and twist ; one-fifth, trimmings, etc., and mixtures. No approach to accurate statistics on these points can be attained except from actual
returns taken by such methods as were used in the last census, supplemented by careful scrutiny to correct errors of accident or design. The above figures may, however, serve to meet a demand which has been frequently made within recent months for such information."

The industry received a great impetus from the tariff, which was imposed to meet the extraordinary expenses of the country, growing out of the civil war, and since the war the business has been matured by the protective policy of the general government. Still, notwithstanding the substantial assistance given to the American manufaoturers, for many years most of the silk goods sold in our markets were manufactured in Europe, and it is only within a very few years that the home production has in any degree equaled the importations.

The prejudice against domestic goods was for a long time very strong. Our manufacturers found it necessary to use foreign labels on their productions, or keep them on their shelves; and so it happened that many people, while wearing silk goods woven in Paterson, which gave perfect satisfaction, were certain that we could not produce goods equal in quality or durability to the imported. After awhile it became evident to our manufacturers that the deception should be dispelled, and they resolved to use American labels only on their goods. The result proved the wisdom of the action, and to-day the products of our own mills are as frequently called for as European goods. The raw silk used here is bought in the same market as that used by the foreign manufacturers, and is worth from $\$ 4$ to $\$ 5$ per pound. In some cases woven goods are sold for no higher rate per pound than is paid for the raw materials; this is accounted for by the fact that those goods are heavily weighted-in the process of dyeing, by direction of the manufacturer. In this way, silk weighing 16 ounces, when received at the dye-house, is returned to the factory weighing from 30 to 50 ounces; by this process some silks of an inferior quality are made to appear heavy, rich and substantial. But weighting silks is much more generally practiced in Europe than in this country.

## SOME OF OUR MANUFACTURERS.

John Ryle, known as the "father of the silk industry in Paterson," commenced work in a silk mill in Macclesfield, England, in 1822, at five years of age, and learne the business thoroughly in all its
departments. Coming to the United States in the spring of 1839, he worked in a silk mill in Northampton, Mass., from April until the winter of 1839-40, when he went to Paterson and took charge of the manufacture of silk goods for George W. Murray, in the old Gun Mill. It is said that the first skein of sewing silk made in this country was made by Mr. Ryle in this mill. Skeins sold at that time for $\$ 2$ per 100 , wholesale, retailing at 5 cents each. The manufacturers were obliged to send all silk to Philadelphia to be dyed, as there was no silk dye-house east of that city. Mr. Ryle became a partner in the business in 1843, the firm being known as Murray \& Ryle.

In 1846 the upper floor of the mill was fitted up and filled with plant for weaving goods. During that year Mr. Ryle purchased Mr. Murray's interest in the business, and soon after bought the mill and occupied the first floor. Then an addition was built to the old mill, and a new mill, $167 \times 100$ feet. The production at that time consisted of tram, organzine, sewings, twist and trimmings; about 300 hands were employed until 1850, when the number was increased to 500. In 1854 Mr. Ryle built the Murray Mill, (200x73 feet, two stories,) which was burned down in 1869, involving a loss of over $\$ 400,000$, without insurance. It was rebuilt by the Ryle Silk Manufacturing Company, with John Ryle, President. This company became insolvent in 1872, and the firm of John Ryle \& Sons was established.

In 1876 this firm became a part of the Pioneer Silk Company, which is still doing business in the Murray and Gun Mills, with John Ryle, President; Wm. Ryle, Vice-President, and Thos. M. Ryle, Superintendent and Manager.

Next to John Ryle, Dexter, Lambert \& Co., who began weaving silk ribbons in Coventry street, Boston, Mass., in 1853, and removed to Paterson in 1866, are the oldest manufacturers of silk ribbons now in that city. They erected at that time a three-story brick building on the east side of Straight street, $220 \times 50$ feet, with engine and dyehouses detached.

In 1878 a two-story brick building, $100 \times 75$ feet, and a one-story building, $181 \times 227$ feet, was built on the west side of Straight street. The value of production of these mills has increased from $\$ 150,000$ to $\$ 1,500,000$ per annum.

In 1880 the firm started a mill at Hawley, Pa.; the building was
$380 \times 44$ feet, five stories at one end and three stories at the other. The production of the Pennsylvania mill in 1886 was $150,000 \mathrm{Hs}$. of thrown silk and about 2,000 yards of dress silks per day. During the past year another mill has been erected at Honesdale, Pa., with about the same capacity as the mill at Hawley. The total amount of floor space used in Paterson is about 107,000 square feet, including a two-story building for finishing silks, $100 \times 20$ feet; a one-story dyehouse, $60 \times 34$ feet; a two-story machine shop, $163 \times 30$ feet, and a onestory boiler and engine-house, $75 \times 25$ feet. The principal products consist of ribbons and dress silks.

When Mr. B. B. Tilt came to Paterson, in 1860, he occupied the top floor of the Phoenix Mill (then operated as a cotton mill), and began throwing silk. In 1862 Albert Tilt was admitted to the firm, and the business was carried on under the firm name of B. B. Tilt \& Son. In 1866 a controlling interest was secured in the Phœnix Manufacturing Company, which was changed from a cotton to a silk manufacturing company. The capacity of the mills has been greatly increased, by adding new buildings and plants, until it now has a capacity of over $\$ 1,400,000$ in silk goods per annum, operating 500 looms, employing about 800 hands, and occupying 130,000 square feet of floor space. While making all classes of silk goods, the principal products are broad silks, handkerchiefs and ribbons. In 1881 the company established an annex at Allentown, Pa., and removed their throwing plant to that place ; about 500 hands are employed there in throwing silk, which is woven into goods in the principal mills in Paterson.

Three brothers, John, George, Jr., and David H. Grimshaw, natives of Macclesfield, England, and practical silk workers, left that country in 1860, at the time when the French treaty (known as the Cobden treaty) ruined many branches of silk manufacture there, by admitting French silk goods free of duty. Soon after they arrived in Paterson they began manufacturing with five looms, under the name of Grimshaw Bros. ; afterward they occupied a portion of the Arkwright Mill. In 1879 the Greppo Mill, on Slater street and Dale avenue, was purchased ; many additions were made, until the size of the buildings now occupied by the firm are $100 \times 50$ feet on Dale avenue, $200 \times 50$ feet on Slater street, and 100×50 feet on Prince street, all three stories high ; a one-story dye-house, $100 \times 50$ feet, is also used. They now operate about 400 looms, employ 900 hands, and produce about
$\$ 1,000,000$ worth of silk goods annually. The principal products are handkerchiefs and dress goods, both plain and figured.

In 1855 Robert Hamil and James Booth, both employes of John Ryle, formed a partnership under the firm name of Hamil \& Booth, hired a portion of the Beaver Mill and commenced work as throwsters, with 20 hands and $\$ 5,000$ worth of machinery. For fifteen years they continued in this branch of the industry, most of the time in a portion of the Murray Mill, which belonged to John Ryle. In 1862 they purchased the Passaic Mill on Ward street, $40 \times 180$ feet, raising it one story and adding 80 feet to its width. In 1868 the manufacture of gros-grain and black dress silks was begun, and in 1874 a building, $75 \times 80$ feet, was added. In 1872 the old Goodwin Cotton Mill, on the corner of Mill and Market streets, size $58 \times 200$ feet, four stories, was purchased. The firm now use a floor spaee of about 75,000 square feet, operate 400 looms, employ over 1,100 hands, and produce about $\$ 1,500,000$ per annum in value of manufactures, when busy throughout the year. Dress silks and ribbons are the principal products.

Mr. Hamil died in 1880, but the business is continued by his heirs and Mr. Booth, under the same firm name.

In 1863, the New York importers, Strange \& Brother, began manufacturing ribbons with 40 looms, in Williamsburg, New York. In 1868 the firm of Wm . Strange \& Co. was formed, and removed to Paterson. When first established there they employed 200 hands and operated 50 looms, continuing the manufacture of ribbons as the chief product. Since then the capacity of the mills and plant has been greatly increased, and at the present time over 350 looms are in operation, producing goods valued at about $\$ 1,500,000$ annually. More than 1,000 hands are employed, who receive $\$ 350,000$ per annum in wages.

The firm of Pelgram \& Meyer began work in 1873 in the Industry Mill, on Ward street. In 1875 they removed to their present location, and in 1876 they erected a brick building, $160 \times 50$ feet, four stories. In 1877 the old mill was enlarged and one story added. Engine and dye-houses were built in 1878, also the mill on Temple street, $100 \times 50$ feet, four stories, and in 1879 the mill on Lane street, $100 \times 50$ feet, four stories, was put up. In 1880 the firm purchased an unoccupied mill at Boonton and enlarged it to $180 \times 40$ feet, twò stories, adding, in 1881, a new brick mill. The mills at Boonton, in

1886, consisted of one $200 \times 52$ feet, four stories, and one $160 \times 50$ feet, one story, giving a floor space of 52,000 square feet. In Paterson the frontage on Matlock street is 310 feet, and 100 feet on Lane and Temple streets, with a floor space of 110,000 square feet; a dyehouse was also built in 1877, 200x50 feet.

The capacity of the works in value of finished silk ribbons and dress goods is over $\$ 1,500,000$ per annum, giving employment to 1,000 hands.

Henry Doherty and Joseph Wadsworth were employed as foremen in silk mills, in Paterson, up to 1879, at which time they began manufacturing on their own account in a room in the Arkwright Mill, with eight looms, under the firm name of Doherty \& Wadsworth.

In 1881 they had increased their plant to 51 hand and 80 power looms, with the necessary machinery for throwing and winding the silk for their looms. The value of their products amounted to over $\$ 400,000$ in that year.

In 1882 they purchased the Arkwright Mill, and increased their plant each year until they now occupy the whole mill, 211x50 feet, four stories, operate 250 looms and produce about $\$ 1,000,000$ worth of millinery and dress silks, ribbons and handkerchiefs per annum.

The firm of R. \& H. Simon began weaving silk dress goods in New Jersey in 1874. They built a mill on Union Hill (Town of Union, Hudson county), $100 \times 50$ feet, three stories, and operated 100 looms. No dyeing or throwing was done on the premises. In 1878 they built an extension, $175 \times 80$ feet, one story, and $120 \times 50$ feet, three stories, and soon after added two one-story extensions, $77 \times 86$ feet and $60 \times 56$ feet, respectively. In 1882 an annex was established at Easton, Pa., 145x52 feet, three stories, where they employ 200 hands in throwing silk for the mills on Union Hill. They now operate 400 looms, on dress goods only, and employ 800 hands.

George Morlot was born in Lyons, France. When only 17 years of age he was the superintendent and general manager of the extensive dye works of Vignat Freres, St. Etienne. At 21 years of age (1857) he became superintendent of the works of Savigny \& Bernard, of Lyons, where he remained until he departed for this country, in 1864. He began work in New York, but removed to Paterson in 1869. Extensive works were erected at Riverside, on the Passaic river, which he is now operating. More than an acre of ground is covered with buildings.

Jacob Weidmann began dyeing silks in Paterson in 1874, at the corner of Ellison and Paterson streets. He was a practical dyer and soon acquired the confidence of the manufacturers, and established a large and profitable business. The works have been extended from time to time, until they now have a frontage, on one side of Paterson. street, of $200 \times 100$ feet in depth, and $25 \times 100$ feet on the other side, with an extension $60 \times 175$ feet. Beginning with 20 hands they now employ about 400 men .

## SILK CULTURE.

The Women's Silk Culture Association obtained from Congress, at the session of $1886-87$, an appropriation of $\$ 5,000$ "to advance the interests of silk culture in the United States as a national industry."
From the 1st of July to the 31st of December, 1886, the association reports receipts of cocoons amounting to $3,136 \frac{1}{2}$ pounds, " of which 2,108 pounds were reelable, $127 \frac{1}{2}$ pounds pierced, and $901 \frac{1}{4}$ pounds imperfect, or in some way injured, most of them by bad handling." The amount paid to the growers was $\$ 2,408.71$, or an average of about 77 cents per pound; 93 cents was the maximum for the reelable cocoons. The association has made an application to Congress for an additional appropriation of $\$ 5,000$ for the year 1887-88. Accompanying the petition is a statement in brief of the result of the past year's work. Referring to the cocoons received, they say :
"In all this crop there is a perceptible improvement, as shown in the quality of silk reeled. At the end of six months of the fiscal year, we find ourselves confronted with such quantities of cocoons that steps have been taken to double our reeling power, by setting up three more reels of American build, which we hope soon to run with American reelers-a necessity to rid us of the crop and prepare it for the manufacturer ; this is done in accordance with Clause 5th of our plans, submitted to your body in April, 1886: 'For enlarging the work in any department, as may be determined by the increase of the industry.' In accordance with Clause 1st, for planting mulberry trees in different sections of the United States, we have this autumn sent out upwards of 3,000 trees, as follows :

| Pennsylvania | 400 | Alabama......................... 75 |
| :---: | :---: | :---: |
| West Virginia. | 25 | Arkansas ......................... 125 |
| Oregon | 430 | New York......................... 50 |
| New Jersey | 50 | Minnesota......................... 10 |
| Nebraska | 105 | Georgia............................ 100 |

Kansas. 600 Massachusetts ..... 125
Wyoming Territory. 10 Indiana. ..... 50
Maine 25 North Carolina. ..... 25
Texas 200 Delaware ..... 55
Louisiana 110 Colorado ..... 50
Michigan 200 Florida. ..... 125 "

It is claimed on the part of the association that at least two-thirds of all the silk raised in the United States passes through their hands.

In production of cocoons, Ohio is far ahead of the other States, furnishing 1,063 pounds; Illinois second, with 780 pounds, and Missouri third, with 267 pounds. Only four of the Eastern or Middle States appear as producers, viz., Massachusetts, $4 \frac{1}{2}$ pounds; New York, $3 \frac{1}{3}$ pounds; New Jersey, $8 \frac{1}{2}$ pounds, and Pennsylvania, $54 \frac{1}{4}$ pounds.

There will be no difficulty in finding a home market for all the silk that can be raised in this country for many years.*

[^84]SILK.


## SILK.


$\dagger$ Added value.

SILK-Continued.


* New. $\dagger$ Added value.

SILK-Continued.

| WAGES AND HOURS OF |  |  |  |  | MONTHS IN OPERATION. |  |  |  |  | $\begin{aligned} & \text { Si } \\ & \text { O } \\ & \text { B } \\ & \text { O } \\ & \text { B } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | On one-half time only. | $\stackrel{\oplus}{0}$ |  |  | Office number. |
| 8 | 3040 | 20 | 10 | $\$ 36,000$ | . 12 | $\bar{\ldots}$ | $\bar{\ldots}$ | $\ldots$ | $\$ 81,000$ | $\$ 140,000$ | 61 |
| 30 |  | 60 | 10 | $450,000$ | 12 | $\ldots$ | $\ldots$ | $\ldots$ | $850,000$ | $1,600,000$ | 62 |
|  | 40 8 | 10 | 10 |  | 12 | ... | ... | ... | 1,500 | +9,500 |  |
|  | 6 |  | 10 | 9,500 | 12 | $\ldots$ | ... | ... | 2,000 | 22,000 | $\begin{aligned} & 63 \\ & 64 \end{aligned}$ |
|  | 10 |  | 10 | 19,000 | 12 | $\ldots$ | $\ldots$ | $\cdots$ | 62,000 | 104,000 | $\begin{aligned} & 65 \\ & 66 \end{aligned}$ |
|  | 10 | $\cdots \cdots$4 |  | 12,500 | 12 | .... | $\ldots$ |  | 137,000 | 175,000 |  |
| 4 | 73 |  |  | 15,600 | 12 | ... |  | $\ldots$ | 130,000 | 170,000 | 6768 |
|  |  | 6 | 10 | 10,500 |  |  |  | $\ldots$ | 25,000 | 45,000 |  |
| .......... | 5 | ............ |  | 12,000 | 12 |  | ... | 3 | 27,000 | 50,000 | 68 69 |
|  |  | 4 | 10 | 15,500 | 12 | ... | $\ldots$ | ... | 32,500 | 60,000 | 70 |
| 100 |  | 110 | 10 | 200,000 | 12 | ... | ... | ... | 554,750 | 750,000 | 71 |
| 45 | 25 | 50 | 10 | 250,000 |  | ... | ... | ... | 450,000 | 1,000,000 |  |
| 100 | 100 | 150 | 10 | 330,000 | 12 | $\ldots$ | , | ... | $610,000$ | 1,200,000 | $\begin{aligned} & 72 \\ & 73 \end{aligned}$ |
|  |  | $\begin{array}{r} 120 \\ 6 \end{array}$ | 10 | 50,000 | 12 |  | $\ldots$ | ... | 50,000 | 200,000 | $\begin{aligned} & 73 \\ & 74 \end{aligned}$ |
| 4 | ............ |  | 10 | 23,000 | 12 | ... |  | $\cdots$ | 43,000 | 82,00034,000 | 75 |
| 2 | ........ | ........ | 10 | 8,500 | 12 | ... <br> ... | $\cdots$ |  | 18,000 |  | 7677 |
| 30 |  | 50 | 9 | 245,000 | 12 |  | $\ldots$ | ... | 525,000 | 1,000,000 |  |
| 10 |  | 20 | 9 | 110,000 | 12 | $\cdots$ | ... | $\ldots$ | 260,000 | 450,000 | 77 78 |
|  |  |  | 10 | 12,500 | 12 | ... |  |  | $\begin{aligned} & 26,000 \\ & 22,000 \end{aligned}$ | 45,000 | 79 |
|  |  | .......... | 10 | 10,000 | 12 | $\ldots$ | ... | $\cdots$ |  | 40,000 | 8081 |
|  |  | .......... | 10 | 3,500 | 12 | ... | $\ldots$ | $\ldots$ | 8,500 | 200,000 |  |
| 4 | .......562$\ldots \ldots \ldots .$. | $\begin{array}{r} 6 \\ 10 \end{array}$ | 9 | 52,000 | 12 | . | $\ldots$ | $\ldots$ | 90,000 |  | 81 |
| 6 |  |  | 10 | 14,000 | 12 | ... | $\ldots$ | $\ldots$ | 100,000 | 125,000 | 83 |
| 10 |  | 14 | 10 | 34,000 | 12 | $\ldots$ | $\ldots$ | ... | 50,000 | 150,000 | 84 |
| 2 |  | 6 | 10 | 12,500 | 12 | $\ldots$ | $\ldots$ | $\ldots$ | 23,000 | 55,000 | 85 |
| 2 |  |  | 10. | 10,000 | 12 |  | $\ldots$ | ... | 25,000 | 45,000 | 86 |
| 40 | 40 | -100 | 9 | 200,000 | 12 |  | . | $\ldots$ | 380,000 | 800,000 | 87 |
| 2 |  |  | 9 | 135,000 | 12 |  | $\ldots$ | ... | 400,000 | 850,000 | 88 |
| 10 | 5 | esesesex4 | 10 | 62,000 | 12 | $\ldots$ | $\ldots$ | ... | 165,000 | 250,000 | 89 |
| 2 |  | 3 | 10 | 12,000 | 12 | $\ldots$ | ... | $\ldots$ | 80,000 | 90,000 | 90 |
|  | ... | 6 | ..... | 14,500 | 12 | ... | ... | ... | 52,000 | 75,000 | 91 |
| 5 |  | 5 | 10 | 90,000 | 12 | ... | $\cdots$ | ... | 200,000 | 320,000 | 92 |
|  |  |  | 10 | 31,200 | 12 | . | , | $\ldots$ | 38,000 | +75,000 | 93 |
| 3 | 6 | 4 | 10 | 5,000 | 12 | ... | $\cdots$ | $\cdots$ | 500 | +9,000 | 94 |
|  |  |  | 10 | 2,200 | 12 | $\ldots$ | $\ldots$ | $\ldots$ | 5,600 | 8,500 | 95 |
| 2 | 3 | 5 | 10 | 10,000 | 12 | $\ldots$ | ... | $\ldots$ | 45,000 | 70,000 | 96 |
|  | 1 | ......... | 10 | 3,600 | 12 | $\ldots$ | ... | ... | 9,000 | 18,000 | 97 |
| 1 | 1 |  | 10 | 2,850 | 12 | ... | ... | $\ldots$ | 8,000 | 18,000 | 98 |
|  |  |  | 10 | 120,000 | 12 | $\ldots$ | $\cdots$ | ... | 150,000 | + 290,000 | 99 |
|  | 6 | ......... | 10 | 62,500 | 12 | ... |  | $\ldots$ | 80,000 | 250,000 | 100 |
|  | 18 | ......... | 10 | 65,000 | 12 | $\cdots$ | $\ldots$ | ... | 185,000 | 270,000 | 101 |
|  | - 5 |  | 10 | 35,000 | 12 | $\ldots$ | , | $\ldots$ | 70,000 | 162,000 | 102 |
|  | . |  | 10 | 6,500 | 12 | ... | ... | $\ldots$ | 8,500 | $\dagger 17,500$ | 103 |
| ... | ......... | .......... | 10 | 7,000 | 12 | ... | ... | $\ldots$ | 17,500 | 30,000 | 104 |
| .... | ......... |  | 10 | 7,500 | 12 | $\cdots$ | $\cdots$ | $\cdots$ | 16,000 | 30,000 | 105 |
|  | 53 | 70 50 | 10 | 25,000 | 12 | ... | $\cdots$ | $\cdots$ | 268,000 | 300,000 | 106 |
| 4 16 | *....... | 50 | 10 | 20,000 | 12 | $\cdots$ | ... | ... | 53,500 | 85,000 | 107 |
| $16$ | 35 | 39 | 10 | 92,000 | 12 | $\ldots$ | $\ldots$ | $\ldots$ | 105,000 | 360,000 | 108 |
| 20 | 20 | 25 | 10 | 125,000 | 12 | $\cdots$ | ... | $\cdots$ | 285,000 | 500,000 | 109 |
| -........ | ......... | $\cdots$ | 10 | 10,000 | 12 | $\ldots$ | $\ldots$ | \% | 12,000 | +25,000 | 110 |
| 2 | ......... | ......... | 10 | 6,500 60,000 | 12 | $\cdots$ | \% | $\cdots$ | 19,000 | 28,000 | 111 |
| .......... | 10 10 | *......." | 10 | 60,000 12,500 | 12 | ... | $\cdots$ | ... | 70,000 | 190,000 | 112 |
| $\qquad$ | 10 | 15 | 10 | 12,500 | 12 | $\ldots$ | $\ldots$ | $\ldots$ | 1,500 | 20,000 | 113 |
| 4 28 | -........ | *....... | 10 | 8,500 52,000 | 12 | $\ldots$ | . | . | 3,500 | +14,000 | 114 |
| 28 150 | 6 50 | 37 175 | 10 | 52,000 349,000 | 12 | \% |  | $\cdots$ | 185,000 | 225,000 | 115 |
| 150 | 50 | 175 | 10 | 349,000 | 8 | 2 | 2 | $\ldots$ | 515,000 | 1,100,000 | 116 |
| $20$ | 15 | $30$ | 10 | 40,000 | 12 | $\ldots$ | $\cdots$ |  | 80,000 | 150,000 | 117 |
| $\begin{array}{r}3 \\ \\ \hline 15\end{array}$ |  |  | 10 | 15,000 | 3 | .. | ... | 9 | 28,000 | 50,000 | 118 |
| 15 | 10 | 25 | 10 | 19,000 | 12 | $\cdots$ | $\cdots$ | $\cdots$ | 2,000 | $\dagger 26,000$ | 119 |
| 6 | ..... | 8 | 10 | 26,000 | 12 | ... | $\cdots$ | $\cdots$ | 60,000 | 120,000 | 120 |
| .......... | .......... | ......... | 10 | 1,400 | 4 |  | 6 | 2 | 3,300 | 5,500 | 121 |

Note.-The total value of "raw materials and supplies" does not include the amount paid for dyeing and throwing silk when it is done by contract off the premises.
(anchen

## CHAPTER II.

## THE PRODUCTION AND CONSUMPTION OF MALT AND OTHER LIQUORS.

During the year ending July 1st, 1886, forty-seven establishments were engaged in our State in brewing ale, weiss and lager beer. The capital employed amounted to $\$ 5,409,600$, and the value of product, $\$ 7,884,137$; of the latter amount $\$ 3,919,260$ was expended for materials used.

The average number of hands employed was 1,210 , to whom $\$ 886,725$ was paid for labor. The product consisted of 652,894 barrels of lager beer, 375,257 barrels of ale and 1,623 barrels of weiss beer - a total of $1,029,774$ barrels. The rate of wages paid to employes was: Drivers, $\$ 14$ to $\$ 18$ per week; brewery men, $\$ 12$ to $\$ 15$; helpers, $\$ 12$. The maximum wages here given were the compensation in most cases. The actual average annual receipts per man amounted to $\$ 732.82$, or $\$ 14.09$ per week. As a rule the brewers donot make deductions from wages of employes on account of absencecaused by sickness.

The question of wages heretofore caused considerable trouble and dissatisfaction on the part of employes, but was settled to the satisfaction of all parties interested, by agreements entered into April 1st, 1886, between the United States Brewers' Association and the Brewers' Workingmen's Union and the Beer Drivers' Union. The agreements provide that all employes (excepting one foreman) shall be members of the Union; no workman recommended by a saloon keeper shall be employed; no workman or driver shall lose his position by reason of sickness, unless such sickness lasts more than two months, and that workmen and drivers shall be allowed to liveor board where they choose. A day's work consists of twelve hours, inclusive of two hours for meals, six working days constituting a
week. Sunday work has been abolished entirely, or does not exceed two hours, and only such work as is necessary is done; extra trips for delivery of beer on Sunday not to be permitted. Wages to be as follows: A route driver, $\$ 18$ per week, formerly $\$ 60$ per month; extra driver, $\$ 15$ per week, formerly $\$ 50$ per month; watchmen and helpers, $\$ 13$ per week, formerly $\$ 35$ to $\$ 45$ per month; first stableman, to be fixed by employer, at not less than $\$ 15$ per week, formerly $\$ 60$ per month; brewing apprentices, $\$ 10$ per week, formerly left to employer ; workmen in wash-house and firemen, $\$ 15$ per week, formerly $\$ 12$; in cellar, fermenting-room and at kettles, $\$ 18$, formerly $\$ 16$, coopers and malt millers being included under this head. Wages paid to head workmen to be fixed by employer, but not less than $\$ 18$ per week. Sunday work at double usual rate per hour. These rates to be continued the whole year, payable weekly.

A system of arbitration is also provided for, consisting of four foremen and four members of the Union, to whom all differences must be referred. If this board fails to agree, " then a committee is to be organized, to be composed of four brewery proprietors and a court of the Knights of Labor, also composed of four members. Four members of the Brewers' Workingmen's Union can meet with the committee 'for the purpose of information,' but will not be entitled to a vote." The agreement was signed by representatives of the Unions and the leading brewers in New York, Brooklyn, Staten Island, Newark, Paterson and the Town of Union.

For the year ending May 1st, 1882, the production of malt liquors in New Jersey amounted to 783,931 barrels, worth $\$ 5,798,330$, of which $\$ 662,886$ was paid in wages to 1,095 employes. The increase in production for the past year, over 1882, was 245,843 barrels, or 31 per cent., and an increase in value of product of $\$ 2,085,807$, or 36 per cent., and in wages of $\$ 223,839$, or $33 \frac{2}{3}$ per cent. The average amount paid in wages to each employe in 1882 was $\$ 605.39$; in 1886 it had increased 21 per cent. The increase in production of beer for the year 1886 , over the year 1885 , was 90,524 barrels. The detailed statistics from the New Jersey brewing establishments for the past year are given at the end of this chapter.

Through the courtesy of the internal revenue collectors, Messrs. Ferrell, Vanderveer and Klotz, we learn that there were 84 fruit distilleries in this State during the past fiscal year, producing 149,545 proof gallons of whiskey. Most of these distilleries are operated
from three to eight months of the year. One grain distillery in the third district (the only one in this State) was in operation over six months, and produced $2,242,906$ gallons of whiskey ; the raw materials consumed consisted of 13,540 bushels of malt, 27,080 bushels of corn, and 27,080 bushels of rye, or a total of 67,700 bushels.*

The consumption of raw materials in all the distilleries throughout the country was as follows:

| Mal | 1,823,758 bushels. |
| :---: | :---: |
| Wheat. | 55,179 |
| Barley | 19,891 |
| Rye | 3,285,959 |
| Corn | 13,821,193 |
| Oats. | 58,652 |
| Mill feed. | 130,700 |
| Molaszes | 2,308,130 gallons. |

The production of whiskey was $78,544,428$ gallons from grain, and $1,799,952$ gallons from molasses. The average yield per bushel of grain was 4.091 gallons of spirits; from molasses, .779 gallon.

From the special tax list we find there are in New Jersey 30 rectifiers, 7,553 retail and 64 wholesale liquor dealers, and 134 wholesale dealers in malt liquors.

The Chief of the Bureau of Statistics (Treasury Department), at Washington, Hon. W. F. Switzler, in his quarterly report, December 31st, 1886, has presented some very valuable information regarding the production and consumption of liquor. The following is his succiact exhibit of

[^85]PRODUCTION AND CONSUMPTION OF DISTILLED AND MALT LIQUORS AND WINES IN THIS AND OTHER COUNTRIES．
Amount of Production in the United Statrs of Fermented Liquors and Distilled Spirits，together with the Quantity of Distilled Spirits

| Year Ending JUNE 30TH， |  | －Production of distilled spirits，Exclusive of brandy distilled from fruit． |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { ㅁㅇㅇ } \\ & \text { 웅 } \\ & \text { 品 } \end{aligned}$ |  | $\begin{aligned} & \text { Oi } \\ & \frac{0}{0} \\ & 4 \end{aligned}$ | 品 | 충 |  |  |  | $\begin{aligned} & \text { ت⿹\zh26灬 } \\ & \text { से } \end{aligned}$ |  |  |  |
|  | ＊Rarrels． 2，006，625 | Tax gals． | Tax．gals． | Tax．gals． | Tax．gals． | Tx．gls． | Tax．gals． | Tax．gals． | Tax．gals． | Tax．gals． | Tax．gals． | Tax．gals． $+16,149,954$ | Tax gals． $\pm 16,149,954$ |
| 1864. | 3，141，381 |  |  |  |  |  |  |  |  |  |  | ＋85，295，393 | £ $\mathbf{\ddagger} \times 16,295.393$ |
| 1865 | $3,657,181$ |  |  |  |  |  |  |  |  | 78 | 37，196 | 16，973，974 | 16，936，778 |
| 1866 | 5，115，140 |  |  |  |  |  |  |  |  | 23，814，051 | 248，654 | 24，062，705 | 14，599，289 |
| 1867. | 6，207，402 |  |  |  |  |  |  |  |  | 32，299，629 | 440，607 | 32，740，236 | 14，148，132 |
| 1868. | 6，146，663 |  |  |  |  |  |  |  |  | 16，395，651 | 515,262 | 16，910，913 | 6，709，546 |
| 1869 | 6，342，055 |  |  | ．．．．．．．．．．．．． |  |  |  |  |  | 53，367，884 | 908，858 | 54，276，742 | 61，183，559 |
| 1870. | 6．574，617 |  |  |  |  |  |  |  |  | 71，337，099 | 1，223，830 | 72，560，929 | 77，266，368 |
| 1871. | 7，740，260 |  |  |  |  |  |  |  |  | 54，576，446 | 2，472，011 | 57，048，457 | 59，842，617 |
| 1872. 1873 | $8,659,427$ 9633,323 |  |  |  |  |  |  |  |  | 68，275，745 | $1,089,698$ <br> 2,965 <br> 187 | $69,365,443$ $71,202,554$ | $65,145,880$ $62,955,154$ |
| 1873 1874. | $9,633,323$ $9,600,897$ |  |  |  |  |  |  |  |  | $68,236,567$ $68,805,374$ | 2，965，987 | $71,202,554$ 69572,061 | $62,945,154$ $61.814,875$ |
| 1875. | 9，452，697 |  |  |  |  |  |  |  |  | 60，930，425 | 1，757，202 | 62，687，627 | 62，668，709 |
| 1876. | 9，902，352 |  |  |  |  |  | ．．．．．．．．．．．． |  |  | 57，959，647 | 672，221 | 58，631，808 | 57，340，472 |
| 1877. | 9，810，060 |  |  |  |  |  |  |  |  | 59，912，268 | 1，527，141 | 61，439，409 | 57，016．248 |
| 1878 | 10，241，471 | 6，405，520 | 2，834，119 | 10，277，725 | 1，603，376 | 364，963 | 19，412，985 | 11，108，023 | 4，096，342 | 56，103，053 | 1，239，403 | 57，342，456 | 49，600，838 |
| 1879 | 11，103，084 | 8，587，081 | 4，001，048 | 19，594，283 | 2，243，455 | 372，777 | 18，033，652 | 13，459，486 | 5，600，840 | 71，892，621 | 995，752 | 72，888，373 | 52，003，467 |
| 1880. | 13，347，111 | 15，414，148 | 6，341，991 | 21，631，009 | 2，439，301 | 391，668 | 15，210，389 | 20，657，975 | 8，265，789 | $90,355,270$ | 1，023，147 | 91，378，417 | 61，126，634 |
| 1881. | 14，311，028 | 33，632，615 | 9，931，609 | 22，988，960 | 2，118，506 | 549，596 | 14，363，581 | 23，556，608 | 10，586，666 | 117，728，150 | 1，799，861 | 119，528，011 | 67，426，000 |
| 188. | 16，952，085 | 29，575，667 | 9，224，777 | 15，201，671 | 1，704，084 | 569,134 | 10，962，379 | 27，871， 933 | 10，744，156 | 105，853，161 | 1，430，051 | 107，283，212 | 70，759，548 |
| $18+3$ | 17，757，892 | 8，662，245 | 4，784，654 | 10，718，706 | 1，801，960 | 545，768 | 8，701，951 | 28，295，253 | 10，502，771 | 74，013，308 | 1，281，202 | 75，294，510 | 75，508，785 |
| 1884 | 18，998，619 | 8，896，832 | 5，089，958 | 12，385，229 | 1，711，158 | 641，724 | 6，745，688 | 28，538，680 | 11，426，470 | 75，435，739 | 1，095，428 | 76，531，167 | 78，479，845 |
| 1885 | 19，185，9．93 $20,710,933$ | $12,277,750$ $19,318,819$ | $5,328,043$ $7.842,540$ | 13，436．9．6 | $2,081,165$ $1,799,952$ | 639,461 656,607 | $3,235,889$ $2,396,248$ | 27，104，382 | $10,811,757$ $10,543,756$ | $74,915,363$ $80,344,380$ | 1，489，711 | $76,405,074$ $81,849,260$ | $67,689,250$ $69,295,361$ |

＊Of not more than 31 gallons．†The returns of spirits distilled from apples，grapes and peaches were included in the account of spirits distilled from other materials until July 1st，1864．$\ddagger$ Including fruit brandy．No returns of the production of the different kinds of spirits other than fruit brandy were made prior to July 1st，1877．There are no official data of annual production of spirits prior to 1866，except quantities on which tax was paid．There are provisions for exportation of spirits without payment of tax in acts of July 1st，1862，and June 3cth， $\mathbf{3 8 6 4}$ ；also provisions for ahatement of tax on spirits lost by leakage in transportation，in acts of March 3d，1863，and June 30th，1864，but there are no data in office of the Commissioner of Internal Revenue by which the total quantity of spirits so exported and lost by leakage each year can be determined prior to fiscal year 1866－67．Hence the production above given for 1863,1864 and 1865，is the same as the tax－paid quantities for those years，and represents the true production less unknown quantities exported and lost by leakage．To get production for 1866，the quantity returned for tax that year（ $14,847,943$ gallons）is added to $9,214,762$ gallons stock on hand at close of same year（see fage ix．，Rep．Com．Int．Rev．，1867）making $24,062,705$ gallons as production of $1865-66$ ，though some of the quantity in warehouse at close of the year may have been，and doubtless was，produced in previous years，

*Product less exports. †Included with "All other."
Notes.-(1) The data as to product of domestic liquors and wines for 1840,1850 and 1860 , were derived from the Census. (2) The consumption of imported liquors and wines for 1840,1850 and 1860 , is represented by the net imports (3) The production of domestic wines, from 1870 to 1885 , has been estimated by the Department of Agriculture ; by Mr. Charles McK. Leoser, President of Wine and spirit Traders' Society, New York, and other well-informed persons, and the amount stated as consumed represents the production minus the exports. (4) The consumption of domestic spirituous and malt liquors, from 1870 to 1886 was obtained from the reports of the commissioner of the tha gallon. (6) The consumption of distilled spirits as a beverage is estimated to be about 90 per five so called quart bottles are reckoned as equi
cent of the product consumed for all purposes.

## Amounts of Internal and Customs Revenue Receipts of the United States from Malt Liquors, Distilled Spirits and Wines from 1866 to 1886, Inclusive.

| Year Ending June 30, | INTERNAL REVENUE. |  | CuStoms revenue.- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Malt liquors. |  |  |  |
| 1866... | \$33,268,172 | \$5,220,553 | \$194,233 | \$1,903,883 | \$3,644,399 | \$44,231,240 |
| 1867. | 33,542,952 | 6,057,501 | 205,202 | 3,542,582 | 3,421,295 | $46,769,532$ |
| 1868. | 18,655,631 | 5,955,869 | 235,930 | 3,317,671 | 2,981,703 | 31,146,804 |
| 1869. | 45,071,231 $55,606,094$ | $6,099,879$ $6,319,127$ | 276,083 315,915 | 3,653,141 | 3,524,005 | 58,624,339 |
| 1871. | 46,281,848 | 7,389,502 | 438,658 | 3,951,560 | 4,478,974 | 62,535,542 |
| 1872. | 49,475,516 | 8,258,498 | 584,469 | 4,373,410 | 4,265, 826 | 66,957,719 |
| 1873. | 52,099,372 | 9,324,938 | 662,952 | 4,250,524 | 4,280,014 | 70,617,800 |
| 1874. | 49,444,090 | 9,304,680 | 586,988 | 3,917,010 | 3,912,872 | 67,165,640 |
| 1875 | 52,081,991 | 9,144,004 | 577,499 | 3,391,406 | 3,393,263 | 68,588,163 |
| 1876. | 56,426,365 | 9,571,281 | 425,318 | 2,947,644 | 2,980,185 | 72,350,793 |
| 1877. | 57,469,430 | 9,480,789 | 317,769 | 2,761,999 | 2,752,961 | 72,782,948 |
| 1878 | 50,420,816 | 9,937, 052 | 240,292 | 2,459,490 | 2,466,526 | 65,524,176 |
| 1879. | 52,570,285 | 10,729,320 | 254,099 | 2,511,136 | 2,595,241 | 68,660,081 |
| 1880 | 61,185,509 | 12,829,803 | 283,296 | 2,788,531 | 3,089,445 | 80,176,584 |
| 1881. | 67,153,975 | 13,700,241 | 321,048 | 2,965,708 | 3,376,901 | 87,517,873 |
| 1882. | 69,873,408 | 16,153,920 | 417,202 | 3,161,522 | 3,604,929 | 93,210,981 |
| 1883. | 74,368,775 | 16,900,616 | 511,383 | 3,374,507 | 5,367,451 | 100,522,732 |
| 1884 | 76,905,385 | 18,084,954 | 533,241 | 3,141,391 | 2,589, 255 | 101,254,226 |
| 1885. | 67,511,209 | 18,230,782 | 546,999 | 2,943,772 | 3,665,792 | 92,898,554 |
| 1886............................. | 69,092,266 | 19,676,781 | 585,102 | 2,834,696 | 3,774,349 | 95,963,144 |

## Annual Consumption of Domestic and Foreign Distilled Spirits and the Average Consumption Per Capita of Population in the United Kingdom, during eagh Year, from 1871 to 1885, Inclusive.

[From the "Statistical Abstract for the United Kingdom," 1885.]

| Years. | distilled spirits consumed. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 品 | ज़゙̃ |  |
|  | Gallons. | Gallons. | Gallons. | Gallons. |
| 1871........................................................................... | $824,563,993$ $27,279,519$ | $\$ 10,728,545$ $8,081,303$ | $\$ 35$ $35,360,822$ | 1.11 |
| 1873.......................................................................... | 29,322,087 | 11,872,196 | 41,194,283 | 1.28 |
| 1874................................................. | 30,321,928 | 10,332,767 | 40,654,695 | 1.25 |
| 1875................................................ | $30,659,043$ $30,534,265$ | 17,956,833 | 43,615,876 | 1.33 |
| 1877....................................................................... | 30,361,163 | 10,492,759 | 40,853,922 | 1.22 |
| 1878............................................... | 29,884,951 | 9,316,526 | 39,201,477 | 1.15 |
| 18790.............................................. | - ${ }_{29}^{28,508,8580}$ | $10,459,768$ 6970,499 | - | 1.14 1.04 |
|  | 29,334,161 | 5,543,905 | 34,878,066 | 1.00 |
| 1882........................................................................ | 29,251,754 | 8,32,938 | 37,684,692 | 1.07 |
| 1883............................................... | - $29,421,5950$ | $7,217,068$ $9,155,981$ | $36,638,659$ $37,901,874$ | 1.03 <br> 1.05 |
| 1884.................................................................... | 27,348,805 | 9,282,951 | $36,631,756$ | 1.01 |

Annual Consumption of Wine and the Average Consumption Per Capita of Population in the Ünited Kingdom, During each Year, from 1881 to 1885, Inclusive.
[From the accounts relating to the trade and navigation of the United Kingdom.]

*The consumption is the net imports.

Annual Consumption of Domestic and Foreign Beer and the Average Consumption PerCapita of Population in the United Kingdom, During each Year, from 1881 to 1885, Inclusive.
[From the statistical abstract for the United Kingdom and the account relating to the trade and navigation of the United Kingdom.]

| Years. | BEER CONSUMED.* |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | - $\begin{gathered}\text { \#̈ } \\ \text { H. }\end{gathered}$ |  |
| 1881. | Gallons. <br> 1,184,362,048 | Gallons. 572,585 | Gallons. <br> 1,184,934,633 | Gallons. 33.90 |
| 1882. | 1,186,877,214 | 766,712 |  |  |
| 1883........................................... | 1,178,287,517 | 918,411 | 1,179,205,928 | 83.13 |
| 1884................................... ....... | 1,211,600,222 | 1,028,738 | 1,212,628,960 | 33.72 |
| 1885........................................... | 1,190,286,873 | -983,632 | 1,191,270,005 | 32.79 |

[^86]Statement showing the Population, Total Estimated Cost, and average Cost Per Capita of Population of Intoxicating Liquors Consumed in the United Kingdom for Various Years from 1820 to 1865 and for each Year from 1820 to 1882.
[Prepared by William Hoyle, Esq., London, England.]


Table showing the Estimated Cost of Intoxicating Liquors Consumed，the Number of Apprehensions for Drunkenness，and the Total Number of Convictions for Crime， with the Number of Lunatics，in the United Kingdom，for each Year from 1860 to 1882，Inclusive．
［Prepared by William Hoyle，Esq．，London，England．］

| Year． |  | UNITED KINGDOM． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ↔ ㄴㅜㅒ <br> 边合品 <br> 졍웅운 <br>  <br> 픙 뭉클 | 湈 |
| 1860. |  | \＄414，999，888 | 88，361 | 255，803 | 38，058 |
| 1861. | ．．．．．． | 413，370，763 | 83，196 | 263，510 | 39，647 |
| 1862. | ．．．．．．． | 432，473，994 | 94，908 | 272，969 | 41，129 |
| 1863. | ．．．．．．． | 448，147，152 | 94，745 | 283，641 | 43，118 |
| 1864. | ．．．．． | $504,753,438$ | 100，067 | 300，731 | 44，795 |
| 1865. | ．．．． | $517,988,123$ $554,418,241$ | 105,310 104,365 | 312,882 339,091 | 45,950 47,648 |
| 1867. |  | 535，910，207 | 100，357 | 335，359 | 49，086 |
| 1868. |  | 552，176，869 | 111，465 | 347，458 | 51，000 |
| 1869. |  | 549，357，787 | 122，310 | 372，707 | 53，177 |
| 1870. |  | 577，830，102 | 131，870 | 389，712 | 54，713 |
| 1871. | ．．．． | 611，168，659 | 142，343 | 407，859 | 56，755 |
| 1872. | ．．．． | 640，438，651 | 151，034 | 423，581 | 58，640 |
| 1877. | ．．．．．．． | 681，381，596 | 182，941 | 456，705 | 60，296 |
| 1875. |  | $687,845,695$ $695,309,310$ | 185,730 203 | 486，786 | 62，027 |
| 1876. |  | 716，780，746 | 205，567 | 526，915 | 64，916 |
| 1877. |  | 691，078，190 | 200，184 | 519，839 | 66，636 |
| 1878. |  | 691，962，282 | 194，549 | 538，232 | 68，538 |
| 1879．． |  | $623,612,119$ | 178，429 | 506，281 | 69，885 |
| 1880． |  | 595，072，092 | 172，859 | 517，373 | 71，191 |
| 1881. |  | 618，407，860 | 174，481 | 530，966 | 73，113 |
| 1882．． | ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 614，402，239 | 189，697 | 575，593 | ．．．．．．．．．．．． |

Annual Production，Importation，Exportation and Consumption of Distilled Spirits
in France，During each Year，from 1879 to 1885 ，Inclusive．
［From＂Annuaire de la Statistique de la France，＂and＂Journal de la Societe de Statistique de ＂Paris，＂1886．］

| Year． |  |  |  |  | CONSUMPTION． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | W |  |
|  | Gallons． | Gallons． | Gallons． | Gallons． | Gallons． |  |
| 1879．．．．．．．．．．．．．．．．．．．． | 39，305，300 | 5，287，230 | $44,592,530$ | 9，001，932 | 35，590，598 | $.94$ |
| 1880．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． | 41，767．073 | $6,938,768$ $6,491,053$ | $48,70,841$ $54,604,018$ | 7，972，914 | 40，732，927 | 1.08 |
| 1882．．．．．．．．．．．．．．．．．．．．．．．．．．． | 46，667，347 | 7，568，497 | 54，235，844 | 7，091，168 | 47，144，676 | 1.25 |
| 1883. | $53,123,160$ | 4，427，595 | 57，550，755 | 7，847，989 | 49，702，766 | 1.32 |
| 1884．．．．．．．．．．．．．．．．．．．．． | 51，102，735 | 5，077，215 | 56，179，950 | 7，775，104 | 48，404，816 | 1.28 |
| 1885．．．．．．．．．．．．．．．．．．．．． | 49，214，871 | 5，445，177 | 54，660，048 | 7，801，970 | 46，858，078 | 1.24 |

Note．－The liter has been computed at .26417 United States gallon．For want of later infor－ mation，the population of France in 1881 was made the basis for the consumption per capita in each of the above years．

## Annual Production, Importation, Exportation and Consumption of Wine in France, During each Year, from 1879 to 1885, Inclusive.

[From "Annuaire de la Statistique de la France," and "Journal de la Societe de Statistique de Paris," 1886.]

| Year. |  | Importation. |  |  | CONSUMPTION. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 1879. | Gallons. $700,658,302$ | Gallons. 77,616,078 | Gallons. $778,274,380$ | Gallons. $80,485,651$ | Gallons. 697,788,729 | $\begin{gathered} \text { Gallons. } \\ 18.52 \end{gathered}$ |
| 1880 | 895, 950,492 | 190,745,903 | 1,086,696,395 | 65,714,427 | 1,020,981,968 | 27.10 |
| 1881. | 1,019,106,810 | 207,076,444 | 1,226,183,254 | 67,949,702 | 1,158,233,552 | 30.75 |
| 1882. | 1,025,648,611 | 199,098,034 | 1,224,746,645 | 69,166,997 | 1,155,579,648 | 30.67 |
| 1883. | 1,219,540,964 | 237,245,608 | 1,456,786,572 | 67,130,141 | 1,389,656,431 | 36.88 |
| 1884..................... | 918,809,677 | 214,766,881 | 1,133,576,558 | 64,296,614 | 1,068,279,942 | 28.36 |
| 1885..................... | 753,835,512 | 216,186,293 | 970,021,961 | 68,757,533 | 901,264,428 | 28.92 |

Note.-The liter has been computed at .26417 United States gallon. For want of later information, the population of France in 1881 was made the basis of the consumption per capita for each of the above years.

Annual Production, Importation, Exportation and Consumption of Distilled Spirits in Germany, During each Year, from 1870 to 1881, Inclusive.
[From "Statistisches Jahrbuch fuer das Deutsche Reich," 1882.]

| Fiscal Year. |  |  |  |  | CONSUMPTION. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  | Proof Gallons. | Gallons. | Gallons. | Gallons. | Gallons. | Gallons. |
| 1870..................... | 45,939,163 | 766,093 | 46,705,256 | 16,220,038 | 30,485,218 | 1.00 |
| 1871. | 43,059,710 | 924,595 | 43,984,305 | 12,653.743 | 31,330,562 | 1.03 |
| 1872..................... | 45,463,657 | 818,927 | 46,282,584 | 7,079,756 | 39,202,828 | 1.27 |
| 1873..................... | 50, 165,883 | 951,012 | 51,116,895 | 13,868,925 | 37,247,970 | 1.16 |
| 1874..................... | 54,973,777 | 1,188,765 | 56,162,542 | 13,763,257 | 42,399,285 | 1.27 |
| 1875..................... | 57,351,307 | 1,320,850 | 58,672,157 | 10,566.800 | 48,105,357 | 1.43 |
| 1876. | 53,864, 263 | 1,347,267 | 55,211,530 | 10,434,715 | 44,776,815 | 1.32 |
| 1877-78. | 52,966,085 | 1,135,931 | 54,102,016 | 14,714,269 | 39,387,747 | 1.14 |
| 1878-79................ | 55,079,445 | 1,135,931 | 56,215,376 | 14,529,350 | 41,686,026 | 1.19 |
| 1879-80................ | 53,837,846 | 1,268,016 | 55,105,862 | 16,008,702 | 39,097,160 | 1.11 |
| 1880-81................. | 57,747,562 | 977,429 | 58,724,991 | 18,012,811 | 40,682,180 | 1.14 |
| Average for 11 years........... | 51,856,571 | 1,083,097 | 52,939,668 | 13,446,253 | 39,493,415 | 1.19 |

[^87]Annual Production，Importation，Exportation and Consumption of Beer in Germany， During each Year，from 1872 to 1885，Ínclusive．
［From＂Statistisches Jahrbuch fuer das Deutsche Reich，＂1886．］

| Fiscal Year． |  |  |  |  | CONSUMPTION． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | F |  |
|  | Gallons． | Gallons． | Gallons． | Gallons． | Gallons． | Gallons． |
| 1872．．．．．．．．．．．．．．．．．．．．． | $886,158,265$ $995,498,228$ | 1，400，101 | 887，558，366 | 7，819，432 | 879，738，934 |  |
| 1874．．．．．．．．．．．．．．．．．．．．．．．．．． | 1，027，304，296 | 2，614，283 | 1，029，919，579 | 8，506，274 | 1，021，413，305 | 24.46 |
| 1875 | 1，046，245，285 | 3，143，623 | 1，049，388，908 | 10，249，796 | 1，039，139，112 | 24.65 |
| 1876. | 1，043，682，836 | 3，487，044 | 1，047，169，880 | 15，136，941 | 1，032，032，939 | 24.22 |
| 1877－78． | 1，028，176，057 | 3，037，955 | 1，031，214，012 | 17，435，220 | 1，013，778，792 | 23.46 |
| 1878－79． | 1，025，270，187 | 2，720，951 | 1，027，991，138 | 17，857，892 | 1，010，133，246 | 23.11 |
| 1879－80． | 983，848，331 | 2，298，279 | 986，146，610 | 17，963，560 | 968，183，050 | 21.90 |
| 1880－81． | 1，018，956，524 | 2，483，198 | 1，021，439，722 | 22，586，535 | 998，853，187 | 22.35 |
| 1881－82．．．．．．．．．．．．．．．．． | 1，033，142，453 | 2，536，032 | 1，035，678，485 | 25，994，328 | 1，009，684，157 | 22.45 |
| 1882－83．．．．．．．．．．．． | 1，038，822，108 | 2，641，700 | 1，041，463，808 | 26，284，915 | 1，015，178，893 | 22.45 |
| 1883－84． | 1，079，742，041 | 2，853，036 | 1，082，595，077 | 28，530，360 | 1，054，064，717 | 23.19 |
| 1884－85． | 1，119，393，958 | 2，773，785 | 1，122，167，743 | 30，485，218 | 1，091，682，525 | 23.78 |
| Average for 13 years． $\qquad$ | 1，025，085，268 | 2，615，283 | 1，027，700，551 | 18，201，313 | 1，009，499，238 | 23.19 |

Note．－The liter has been computed at .26417 United States gallon．

Comparative Summary of the Consumption Per Capita of Population in the United
States，the United Kingdom，France and Germany，of Distilled Spiryts，Wines and Malt Liquors，During each year，from 1881 to 1885，Inclusive．
［From original official data．］

| Years． | DISTILLED SPIRITS． |  |  |  | WINES． |  |  |  | MALT LIQUORS． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 通 |  |  |  | 通 | 命 㞻 ن |  |  | ¢ 号 号 | 免 |
|  | Galls． | Galls． | Galls． | Galls． | Galls． | Galls． | Galls． | Galls． | Galls． | Galls． | Galls． | Galls． |
| 1881. | 1.39 | 1.00 | ． 94 | 1.32 | ． 48 | ． 43 | 18.52 | ＊ | 9.97 | 33.90 | \％ | 22.85 |
| 1882．．．．．．．．．．．．．．．．．．．．． | 1.45 | 1.07 | 1.08 | 1.14 | ． 48 | ． 41 | 27.10 | ＊ | 10.18 | 33.65 | ＊ | 22.45 |
| 1883．．．．．．．．．．．．．．．．．．．．． | 1.46 | 1.03 | 1.24 | 1.19 | ． 37 | ． 40 | 30.75 | ＊ | 10.62 | 33.13 | ＊ | 22.45 |
| 1884. | 1.24 | 1.05 | 1.25 | 1.11 | ． 38 | ． 39 | 30.67 | ＊ | 10.44 | 33.72 | ＊ | 23.19 |
| 1885. | 1.24 | 1.01 | 1.32 | 1.14 | ． 38 | ． 37 | 36.88 | ＊ | 11.18 | 32.79 | ＊ | 23.78 |

＊No data．
Note－The years referred to are，for France and Great Britain，calendar years；for the United States，the five years ending June 30th， 1886 ；for Germany，in the case of beer，the five years ending March 31st，1885，and in the case of spirits，the five years ending March 31st，1881， these being the latest years for which data were obtainable．

Mulhall，in his＂History of Prices，＂＊gives the following compara－ tive statistics of the per capita consumption of luxuries throughout the world．His calculations are somewhat lower than those in the preceding summary，but are based on data no later than 1883 ：

Consumption of Luxuries.

| * | ounces per inhabitant. |  |  | gallons per inhabitant. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ¢ | ¢ّ8080 | \% | $\begin{aligned} & \dot{\oplus} \\ & \text { © } \end{aligned}$ | \# | 営 |
| United Kingdom....................... | 72 | 15 | ${ }^{23}$ | 28.6 | 0.4 | 1.1 |
| France ................................................. | 1 |  |  |  |  | 1.9 |
| Russia................................................ | 7 | 3 | 26 | 0.8 | 0.4 | 2.2 |
| Austria................................... | 1 | 35 | 80 | 6.5 | 7.5 | 0.8 |
| Italy ........................................................ | 1 | 18 | 22 | 0.7 | 17.6 | 0.3 |
| Spain................................ | ${ }_{8}^{1}$ | ${ }_{175}^{4}$ | 32 84 | 0.1 | $\begin{array}{r}13.5 \\ 0.8 \\ \hline\end{array}$ | 0.2 |
| Denmark.................................... | 8 | 76 | 61 | ${ }_{12.6}$ | 0.3 | 4.3 |
| Sweden and Norway..................... | 21 | 88 115 | 29 59 | 5.4 7.2 | 0.2 0.6 | 4.2 1.5 |
| Average ............................. | 11 | 44 | 41 | 8.6 | 5.5 | 1.1 |

"The consumption of wine and beer," further observes this statistican,* " is"on a vast scale, together making $5,500,000,000$ gallons, or fifteen per inhabitant, the proportion being as three gallons of beer to two of wine. Excluding children, the consumption of wine and beer in Europe and the United States is equal to thirty-two gallons per (adult) inhabitant, male and female. The production of wine has risen only twelve per cent. since 1850 , having received such a check by the phylloxera that one and a half million acres of vines have been pulled up in France since 1876. The sum spent on beer, wine, spirits, cider, \&c., in Europe is ten per cent. more than on grain. In Great Britain it is almost double, although when all kinds of liquor are reduced to alcohol the ratio per inhabitant in this country (England) is by no means high. This is the more remarkable seeing that drunkenness is such a fearful curse in the United Kingdom."

In our report for 1882, Dr. Thomas Dunn English furnished some very interesting information on this subject, of the per capita consumption of liquors. He estimated the consumption of distilled liquor and fruit brandy in 1880 in the United States at 47,886,777 gallons, or 0.95 per capita, which was a considerable decrease from the quantity consumed in 1870, for which year the estimate was $59,225,885$ gallons, or 1.55 per capita. "In consumption of malt liquors, on the contrary, there was a remarkable increase. In 1870, with the imports added, there were brewed $204,892,851$ gallons, or 5.4 gallons per capita. In 1880 the amount was $414,771,690$ gallons,

[^88]or 8.26 gallons per capita. This shows in ten years a decrease in whisky-drinking of 40.64 per cent. per capita, and an increase of beer-drinking of 52.96 per cent. per capita."

The following table was compiled by A. E. J. Tooey, editor of the United States Brewers' Journal:

Annual Production, Tax Paid, Number of Breweries and Per Capita Consumption
of the World.

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Austro-Hungary | 10,988,040 | \$11,700,768 | 2,053 | 8.17 |
| Belgium. | 8,135,498 | 1,844,924 | 2,602 | 44.69 |
| Canada. | 415,832 | 6,200 | 124 | 2.25 |
| Denmark................................................... | 964,173 | none | 251 | 8.80 |
| France...... ............................................. | 6,812,098 | 4,604,600 | 2,800 | 5.87 |
| German Empire..................................................................................... | $35,526,606$ $38,851,725$ | $15,808,555$ $41,612,927$ | 28,212 13,799 | 23.84 33.41 |
| Italy............ | 109,220 | 158,338 | 129 | ${ }^{3.15}$ |
| Netherlands, | 1,048,015 | 500,250 | 500 | 7.13 |
| Norway. | 515,624 | 973,252 | 420 | 4.04 |
| Russia.. | 2,973,978 | 2,386,000 | 1,690 | 1.23 |
| Sweden.................................................... | 784,754 | .............. | 129 | 2.91 |
| Switzerland..... | r 905,485 |  | ${ }^{424}$ | 9.90 |
| All Other Countries.................................................... | $19,642,870$ $1,00,00$ | $18,230,782$ 500,000 | 2,071 500 | 11.34 |
|  | 128,673,918 | 898,326,596 | 55,704 | ........ |

Mr. Tooey also prepared, from official statistics, the following statement:*

[^89]

Net increase-1886 over 1885-1,159,845 barrels.

| Collection Districts. | Principal City or Cities in District. | Barrels. |
| :---: | :---: | :---: |
| 1st California | San Fran | ${ }^{441,626}$ |
| 1st Ilinois.............................................. | Baltimore and Washington, D. . C................................... | ${ }_{462,781}^{938,083}$ |
| 3 M Massachusetts | Boston. | 888,378 |
| 1st Michigan. | Detroit... | 327,740 |
| New Hampshire. | Portsmouth. | 332,960 |
| 5th New Jersey............................. | Newark and Jersey City. | 1,008,410 |
| 1 st New York. | Brooklyn........ | 1,398,537 |
| ${ }_{14 \text { 2d }}$ 2d and 3d New ${ }^{\text {a }}$ York....................... | New York (without Morrisania). | 3,493, 3186 |
| 15th | Troy.. | 622,793 |
| 28 th | Rochester and Buffalo. | 755,842 |
| 10th " ................ | Toledo. | 301,855 |
| 1st Pennsylvania.. | Philadelphia. | 1,458,243 |
| 1st Wisconsin......................... | Milwaukee ................................... | 1,132,097 |

The sales by cities cannot be correctly given unless their boundaries coincide with the boundaries of the collection district in which they are located.

# THE COST OF ALCOHOLIC BEVERAGES TO CONSUMERS IN THE UNITED STATES. 

In the report of the United States Bureau of Statistics, quoted above, Mr. F. N. Barrett, the able editor of the New York Grocer, presents a valuable contribution as to the cost of alcoholic beverages to consumers in this country. It is reproduced in full :

The annual consumption of domestic and imported distilled spirits, as reported by the United States Bureau of Statistics for the five years ending June 30th, 1886, was as follows:

Gallons.
1886
72,261,614
1885
70,600,092
1884
81,128,581
Total for three years.......................................................... 223,990,287
Average per year................................................ $74,663,429$
1883
78,452,687
1882 ........................................................................................ 73,556,976
Total five years................................................................ 375,999,950
Average per year.............................................................. 75,199,990
The annual average of the past three years represents the actual quantity of distilled spirits drunk better than the figures for any one year. Taking the above statement into consideration we adopt $75,000,000$ gallons as representing the quantity of distilled spirits (including alcohol) annually consumed in the United States. Of that amount a considerable portion is used in the arts and manufactures. Careful inquiry by government officials has, however, led them to the conclusion that 10 per cent. fully covers the quantity used in manufacturing and in other ways than as a beverage, and after careful inquiry I am of the opinion that this estimate is approximately correct.

We find, however, that after whisky has left the bonded warehouse in a pure state it is blended with pure neutral spirits, during which process a small quantity of water is added, the mixture being colored, usually by caramel or burnt sugar. Then again it is further reduced by the retailer. In the better class of bar-rooms whisky is drunk comparatively pure; in cheap saloons it is adulterated by water 10 to 15 per cent.; in country districts sometimes as high as 25 to 30 per cent. In view of this reduction by water, we assume that it cancels fully the quantity used in the arts and manufactures, and that the consumer pays for $75,000,000$. If so, at what cost? The bulk of the whisky consumed costs the drinker 5 cents per glass; some pay 10 cents, a comparative few, 15 cents. A liberal average would be $7 \frac{1}{2}$ cents. On the average the retail liquor dealer will get 60 drinks per gallon, or $\$ 4.50$. The average wholesale cost is $\$ 2.25$; the cost of high wines or spirits, $\$ 1.15$ to $\$ 1.25$.

Taking the above facts into consideration we then have consumed annually 75,000 ,000 gallons whiskies; 60 drinks per gallon, at $7 \frac{1}{2}$, or $\$ 4.50$ per gallon, making a total cost of $\$ 337,500,0$ C0.


#### Abstract

BEER. The annual consumption of beer for five years has been as follows:

Gallons.

1886 642,967,720 1885 596,131,866 1884 590,016,517 Total three jears............................................................ 1,829,116,103 Average yearly................................................ 609,705,367 1883 551,497,340 1882 526,379,980 | Total five years. | 2,906,993,423 |
| :---: | :---: |
| Average per annum | 581,398,685 |

Adopting the average annual consumption for three years as a basis, we have as representing the quantity drunk $609,705,367$ gallons, of which $2,100,370$ gallons were imported.

At what cost? The wholesale price per barrel is $\$ 8$ for 32 gallons, or 25 cents per gallon. In the "pool" district, embracing New York, Brooklyn, Westchester, Richmond and Hudson counties, $4,000,000$ barrels are consumed, netting the brewer $\$ 6.50$ per barrel, as a rebate of 25 per cent. is given from the regular price. Froth plays a large part in estimating the cost to the consumer. In densely populated districts the retailer of beer has hard work to get cost. "Working the growler" literally means that the poorer classes of consumers get beer at the wholesale price. Then there is a difference in glasses. The "schooner" means more beer for 5 cents than is obtained when a glass of beer is served. A large quantity is consumed at picnics, on excursions, at clubs, and on various festival occasions which costs the consumer the wholesale price. This will more than balance the extra cost of the imported article.

After a careful study of these points we feel convinced that 50 cents per gallon fully represents the cost to the consumer. On that basis we have as the expense to the nation, $609,705,367$ gallons of beer, at 50 cents, $\$ 304,852,683$.




Taking the declared value and duties paid into account, the large proportion of still wines imported and various other details into consideration, we find that the bulk of the imported wines sold does not average far from $\$ 1.50$ per gallon at wholesale.

Many well-informed dealers believe $\$ 3$ fully represents the cost at retail. Allowance must be made for adulteration and the quantity sold in bottles by the case as compared with that sold in bulk. We therefore fix upon $\$ 4$ per gadlon as fully covering the cost of imported wines to the consumer. We then have an average annual consumption of $4,100,664$ gallons, at $\$ 4$ per gallon, or $\$ 16,402,656$.

## DOMESTIO WINES.

Gallons.
1886 .......................................... . .................................................................. 17,366,393

1884
17,402,938
Total three years................................................................ 52,174,029
Average yearly.................................................... 17,391,343
1883 ....................................................................................... 17,406,028
1882
19,934,856
Total five years................................................................... 89,514,913
Average yearly.................................................................. 17,902,982
A liberal estimate of average cost to the consumer is $\$ 2$ per gallon, on which basis we have annually consumed $17,391,343$ gallons, at $\$ 2$ per gallon, $\$ 34,782,686$.

A large portion of the domestic product is sold at wholesale from 60 to 90 cents per gallon. Taking into account the case price for bottled domestic wine, we fix upon $\$ 2$ per gallon as the retail cost. Dealers challenge this as excessive. We allow it to stand, however, as also the price fixed for foreign wine, in order that the sum total shall represent the maximum cost of liquors at retail and an amount that will cover the increase by adulteration and liquor unaccounted for made in the home or on the farm.

## SUMMARY.

| Kinds of Liquors. |  | Estimated cost. |  |
| :---: | :---: | :---: | :---: |
|  |  |  | \% |
| Spirits. | 75,000,000 | \$4 50 | \$337,500,000 |
| Beer................................................................. | 609,705,367 | 50 | 304,852,683 |
| Imported wines.................................................... | 4,100,664 | 400 | 16,402,656 |
| Domestic wines...................................................... | 17,891,343 | 200 | 34,782,686 |
| Total annual cost to consumers of alcoholic beverages in the United States, for three years, ending June 30th, 1886. |  |  | \$693,538,025 |
| Add for illicit whisky and home-made wines......................................... | ................... | ........... | 6,461,975 |
|  |  |  | \$700,000,000 |

Are the above figures correct? The best proof will be to take the last yearly statement of the Bureau in detail.
Gallons.
Domestic spirits consumed ..... 70,851,355
Gallons.
Less alcohol used in arts. ..... 8,861,247
Less spirits used to adulterate imported brandy ..... 455,231
9,316,478
Used as a beverage ..... 61,534,877
Water added, estimated at 15 per cent ..... 9,298,515
Imported spirits (less brandy and alcohol) ..... 954,195
Total spirits consumed ..... 71,787,587
ESTIMATED COST.
Domestic distilled spirits, $71,787,587$ gallons, sixty drinks per gallon, at $7 \frac{1}{2}$ cents per drink, or $\$ 4.50$ per gallon $\$ 323,044,141$
Domestic beer, $640,746,288$ gallons, at 50 cents ..... 320,373,144
Imported beer, $2,221,432$ gallons, at $\$ 1$ ..... 2,221,432
Domestic wines, $17,366,393$ gallons, at $\$ 2$. ..... 34,732,786
Imported champagne, 547,678 gallons or $2,738,390$ quart bottles, at $\$ 2.50$. ..... 6,845,975
Imported still wines, $4,096,090$ gallons, at $\$ 4$ ..... 16,384,360
Imported vermuth, 57,059 gallons, at $\$ 6$ ..... 342,354
Imported brandy, 455,231 gallons; domestic spirits, used in adultera- tion, 455,231 gallons ; total, 910,462 gallons, at $\$ 8$ ..... 7,283,696
Total $\$ 711,227,888$
ESTIMATED NUMBER OF PERSONS CONSUMING SPIRITUOUS LIQUORS AND PER OAPITA CONSUMPTION AND COST.

What is the number of persons consuming annually $75,000,000$ gallons of spirits, $609,705,367$ gallons of beer, $21,492,007$ gallons of wine, and what is the per capita consumption and cost?

Taking the census of 1880 we find that out of a total population of $50,155,783$ there were $16,966,035$ under twelve years of age, representing 34 per cent. of the total population. Those between twelve and fifteen represent 6 per cent. of the total. Assuming that the same ratio now exists, we estimate as follows:
Total population in 1886 ..... 58,600,000
Less children under twelve ..... 19,924,000
Total over twelve. ..... 38,676,000
Less youths between twelve and fifteen, excluding 5 per cent. of the male youths as users of liquor ..... 3,428,100
$35,247,900$

In 1880 the female population represented 49.1 per cent. of the total. Upon that basis there were, in 1886, above the age of fifteen, 17,306,719 women. Those of foreign birth number $2,120,073$, of whom it is estimated that 90 per cent. consume liquor in one form or another. Of
the native women it is estimated that one in ten uses alcoholic beverages. This leaves the number of women to be deducted as non-consumers of spirits, wine or beer. 15,080,318

$$
20,167,582
$$

The male population over fifteen in 1886 (using the census figures of 1880 as a basis) numbered $17,941,181$, of whom $3,027,481$ were under twentyone years of age. Deduct as non-consumers one-half the number of males between fifteen and twenty-one, and one-fourth over twenty.... 5,242,165

$$
\text { Leaving a liquor-consuming population of.............................. } 14,925,417
$$

The drinking population therefore represents $25 \frac{1}{2}$ per cent. of the total population, and is centered in the cities which contain $22 \frac{1}{2}$ per cent. of the total population. On that basis, taking the estimates of Prof. E. B. Elliott, actuary of the Treasury Department, as to the total population, except for 1886, we have the following:

|  | Year. |  |  |
| :---: | :---: | :---: | :---: |
| 1882. |  | 52,799,000 | 13,463,745 |
| 1883. |  | 54,163,000 | 13,811,565 |
| 1884. |  | 55,554,000 | 14,166,270 |
| 1885. |  | $57,093,000$ | 14,558,715 |
| 1886. |  | 58,600,000 | 14,925,417 |

Taking the average annual consumption for five years at $75,199,900$ gallons of whisky, $581,398,685$ gallons of beer, $23,163,425$ gallons of wine, at a total cost of $\$ 700,000,0 c 0$, we have the following per capita consumption and cost for an average population of $14,185,142$ : 5.3 gallons of whisky, 40.9 gallons of beer, 1.6 gallons of wine, at a cost of $\$ 49.34$.

The following table exhibits the per capita consumption based on total population, drinking population, and yearly cost per capita to consumers, taking annual consumption as reported by the Bureau of Statistics :

Per Capita Consumption.

| Year. | SPIRITS. |  | BEER. |  | wine. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | Gallons. | Gallons. | Gallons. | Gallons. | Gallons. | Gallons. |  |
| 1882.................................................... | 1.3 1.4 | 5.4 5.7 | 9.8 10.2 | 39.1 39.9 | .48 .47 | 1.9 1.8 | $\$ 4765$ 4920 |
| 1884............................ | 1.4 | 5.7 | 10.6 | 41.6 | . 36 | 1.4 | 4925 |
| 1885........................... | 1.2 | 4.8 | 10.4 | 40.9 | . 38 | 1.5 | 4505 |
| 1886.......... ................ | 1.2 | 4.8 | 10.9 | 43.0 | . 37 | 1.4 | 4590 |
| Average................ | 1.3 | 5.3 | 10.4 | 40.9 | . 41 | 1.6 | \$4741 |

The above proves conclusively that the consumption of spirits decreases while that of beer increases, and that there is a reduced use of wine as a beverage. During this period the consumption of coffee has risen from 8.2 pounds per capita to 9.11 pounds. Do not these facts show that the milder stimulants are driving out their fiery competitor? And is it not due to the growing agitation of the temperance question?

In justice to the manufacturers, importers and wholesale dealers, we should say that the cost of the liquor to the retailer for which he receives $\$ 700,000,000$ does not exceed $\$ 300,000,000$, showing that the cost of the service in distributing liquor to consumers is $\$ 400,000,000$, affording a profit to the seller of $133 \frac{1}{3}$ per cent. It is claimed by experienced men in the liquor trade that the average cost of whisky per gallon does not exceed $\$ 2$. We are satisfied that $\$ 4.50$ per gallon as the cost to the consumer is a very full estimate. If it is figured at $\$ 4$ per gallon, imported wine at $\$ 3$, it reduces the total cost to $\$ 658,399,336$. We adhere, however, to $\$ 700,000,000$, because of the free use made of water as an adulterant by the retailer, and also, as elsewhere stated, in order to have that sum represent the maximum expenditure and fully cover all spirits and wines of unlawful or home manufacture as well as all imitation liquors.

The United States collected during two years ending June 30th, 1886, as internal revenue and customs taxes the sum of $\$ 188,861,698$, a yearly average of $\$ 94,430,849$. This shows that $\$ 258,715$ are contributed to the United States Treasury every day in the year by the alcoholic liquor interest. The total receipts from liquor paid 25 per cent. of the expenditures of the United States for the two fiscal years ending June 30th, 1886. Perhaps this explains the tremendous political power entrenched behind the liquor interest. And it also suggests the inquiry why total abstainers, prohibitionists and all interests arrayed against alcoholic liquors are willing that King Alcohol shall pay such a large portion of the expenses of government. We all share in the benefits of the contribution which the liquor interest makes to the general government in the form of taxes.

After the preceding analysis of the liquor traffic the question naturally arises, What relation does the expenditure of $\$ 700,000,000$ for alcoholic beverages bear to the nation's expenditure for the necessaries of life, or say food, clothing and shelter, waiving other expenditures equally as necessary in the struggle for maintenance, such as fuel, medicines and furniture?

This is too broad a question to be considered other than briefly in this statement. In Mr. Edward Atkinson's paper "What Makes the Rate of Wages?" he estimates the cost of food, drink, tobacco, fuel, light, clothing, carpets and other textiles at from $\$ 6,000,000,000$ to $\$ 6,500,000,000$, or $\$ 120$ to $\$ 130$ per year to each person, taking the number reported by the census of 1880 . That showing left $\$ 4,000,000,000$ to $\$ 4,500,000,000$ for all other expenses of living and for profits out of a total annual product of $\$ 10,000,000,000$ to $\$ 10,500,000,000$.

The total value of the products of all the industries mentioned in the census of 1880 is $\$ 9,817,900,652$. The annual report on commerce and navigation for 1884 , page 50 , reports the total value of the products of agriculture, manufacturers, mining, forestry and fisheries in the United States at $\$ 10,000,000,000$. The imports of merchandise nearly balance the exports. It costs not less than $\$ 15$ to distribute at retail $\$ 100$ worth of the necessaries of life, whieh would bring the $\$ 10,000,000,000$ of annual product to $\$ 11,500,000,000$, representing the total consuming power of $55,000,000$ persons. To this must be added the increase natural to a gain of $3,600,000$ in population.

The gross cost of maintaining prisoners in Kings county in 1886 was $\$ 128$; net, $\$ 93$ or $\$ 94$; of maintaining insane convicts in Auburn, N. Y., asylum, $\$ 172.18$ per capita; in the four prisons in New York, $\$ 104$ gross or $\$ 62$ for ordinary support. As a people we live better than the insane or criminals.

Last year 204 ministers in New Jersey received an average salary of $\$ 862$, including rent, $\$ 1,056$, showing that 243 persons in farming districts, small villages and cities averaged $\$ 194$ per annum for rent. If these families averaged five persons each, it represents a per capita cost for maintenance of $\$ 211$.

Taking these facts into account and the known extravagance and waste of the American people and the large proportion resident in cities, it is not underestimating to state that $\$ 150$ to $\$ 200$ represent the per capita cost of maintenance. If so, we have a grand total of $\$ 8,790,000,000$ to $\$ 11,720,000,000$ spent in living. Deducting $\$ 700,000,000$ as the customers' cost of liquor, we have the ratio of $\$ 1$ spent for liquor to $\$ 12.55$ to $\$ 16.74$ spent by the American people for other articles connected with the cost of support. Taking the outside estimate it balances the estimated annual product of the country at its cost to the consumer,

## BREWERIES.



## PART VIII.

## FIVE MANUFACTURING CENTRES.

THE GROWTH AND PRESENT CONDITION OF CAMDEN, JERSEY CITY, NEWARK, PATERSON AND TRENTON.

## PART VIII.

## FIVE MANUFACIURING CENTRES.

In Vol. XVIII., Tenth United States Census, issued in 1886, which is devoted to a report on the social statistics of cities, nine of our principal cities are included. As the information there recorded is very valuable, showing the development, socially and industrially, of our largest centres of population and manufacture, it is here, to a considerable extent, reproduced. The census report relates only to the condition of the cities in the census year, but the manufacturing statistics have been brought down to date, and are as accurate as the time and means at our disposal permitted. As the same agents who gathered the 1880 statistics were employed, the information obtained for 1886 and tabulated in our tables below are a fairly correct statement of the present condition of the five cities to which attention was given. The summary for 1880 and 1886 approximately indicates our industrial progress in six years.
The following is a comparative statement of the population and financial condition of Camden, Jersey City, Newark, Paterson and Trenton-cities which together include over one-third of our population and over one-half of our manufacturing industries. The figures for 1880 are the census returns; those for 1885 are taken from the Comptroller's report :

|  |  | VALUATION. |  | NET INDEBTEDNESS. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Camden............... $\left\{\begin{array}{l}1885 \\ 1880\end{array}\right.$ | 52,884 41,658 | $\$ 14,230,240$ $11,566,085$ | $\$ 26900$ 27800 | $\$ 1,256,365$ $1,164,900$ | $\$ 2186$ 2796 | $\$ 240$ 210 |
| Jersey City .......... $\left\{\begin{array}{l}1885 \\ 1880\end{array}\right.$ | 153,513 120,722 | $63,061,257$ $58,411,959$ | 411 484 00 | $16,570,411$ $15,386,435$ | 10794 12745 | 3 3 8 |
| Newark................ $\left\{\begin{array}{l}1885 \\ 1880\end{array}\right.$ | 152,988 136,508 | $\begin{aligned} & 89,476,380 \\ & 83,364,410 \end{aligned}$ | 58500 61100 | $8,685,027$ $9,070,032$ | 5677 6644 | 203 208 |
| Paterson................ $\left\{\begin{array}{l}1885 \\ 1880\end{array}\right.$ | $\begin{aligned} & 63,273 \\ & 51,031 \end{aligned}$ | $\begin{aligned} & 22,397,417 \\ & 19,898,485 \end{aligned}$ | 35500 390 3 | $1,322,079$ $1,359,500$ | $\begin{array}{ll} 2089 \\ 26 & 24 \end{array}$ | $\begin{aligned} & 250 \\ & 2540 \end{aligned}$ |
| $\underline{\text { Trenton................ }\left\{\begin{array}{l}1885 \\ 1880\end{array}\right.}$ | $\begin{aligned} & 34,386 \\ & 29,910 \\ & \hline \end{aligned}$ | $\begin{aligned} & 15,972,992 \\ & 15,670,017 \end{aligned}$ | $\begin{aligned} & 46400 \\ & 52400 \end{aligned}$ | $\begin{aligned} & 744,356 \\ & 664,501 \end{aligned}$ | $\begin{aligned} & 2164 \\ & 22 \quad 22 \\ & \hline \end{aligned}$ | 150 <br> 148 |

## CAMDEN.

In the year 1828 Camden was incorporated as a city, but was not set apart from the township of Newton, to which it had belonged, until three years later. The charter has been amended from time to time, as the progress of the city made changes necessary. In 1845 the Camden Water-Works Company was chartered to supply the city with water. The eompany was given the exclusive right for fifty years, and at the expiration of that time the city was to have the right of purchasing the works by paying an amount equal to the principal of the revenue of the company at the time of the purchase, at the legal rate of interest.

Without waiting, however, for the expiration of the fifty years, the city purchased the works in 1870 , paying for them $\$ 200,000$; since then over $\$ 300,000$ has been expended in enlarging and perfecting. the system.

A single reservoir, with a capacity of about 450,000 gallons, is in use, the water being raised to it by pumping. The pumping pressure is twenty-five pounds to the square inch, with a head of seventy feet. The daily consumption in July, 1880, was $2,350,871$ gallons, while the average amount pumped each day is stated at $2,081,300$ gallons.

The yearly cost of maintenance, aside from the cost of pumping, is $\$ 19,100$, and the yearly income from water-rates is $\$ 57,306$. No water-meters are in use. There are forty-three and one-eighth miles of pipes. The total collections of water-rates in 1880 amounted to $\$ 67,858$, but a part of this was collected from the delinquents of past years.

A fire department on the volunteer system had been maintained until 1869, but in that year the department was changed to the paid system. A board of health was organized in 1872.

The growth of the city since its incorporation was slow until during the past decade when it became very rapid. Between 1870 and 1880 the population more than doubled, increasing from 20,045 to 41,659 . This large increase took place during a time of great commercial depression. It was due probably to the overflow of population from Philadelphia, Camden being practically a suburb of the larger city.

The Amboy division of the Pennsylvania railroad connects Cam-
den with South Amboy and New York; the West Jersey railroad with Cape May ; the Camden and Atlantic railroad with Atlantic City; the West Jersey and Atlantic railroad with other cities of the State. All of these railroads make Camden one of their terminal points.

The country about Camden is devoted exclusively to agriculture, and large quantities of fruit and market produce are raised for the Philadelphia market. The city has a considerable local trade with all the agricultural district of West Jersey.

The city has about sixty miles of streets, of these about twenty miles are paved with cobble-stones, one-half mile with stone blocks, one-half mile with asphaltum blocks, one mile with broken stone, and about six miles with rubble pavement. The cost of each of these was as follows : cobble-stone, 65 cents per square yard ; stone blocks, $\$ 1.80$ per square yard; asphalt, $\$ 2$ per square yard; broken stone, $\$ 3$ per linear yard, and rubble, 71 cents per linear yard.

The sidewalks are of brick, stone, slate or artificial stone. The gutters are built of Connecticut granite and are ten inches in width. Trees are planted along the sides of the street, being placed between the walks and the curbing, about eighteen inches back from the curb. The construction and repair of the streets are done by contract. There are nine miles of horse railroads ; these run twenty-seven cars and eighty-four horses; they employ fifty-two men and carry passengers about the city at a uniform rate of five cents. The omnibus lines run nine vehicles and twenty-eight horses, and employ twelve men. The rate of fare is three cents.

The police force of Camden is appointed and governed by the mayor and the police committee of the city council. The chief executive officer is the chief of police, who receives a salary of $\$ 1,000$ per year, and has the general supervision and control of his department, subject to the mayor and police committee. The rest of the force is limited by law to 25 men . Each of these receives a yearly salary of $\$ 750$, and a further sum of $\$ 50$ to be applied to the purchase of a uniform, which is of blue cloth. The men are equipped with short, heavy clubs, twisters, whistles, etc., and are on duty from 7 р. м. until daylight, patrolling about 40 miles of streets. The number of arrests during the year 1880 was 1,127 , the principal cause being drunkenness. There were 3,960 station-house lodgers, as against 3,550 in 1879. No meals are furnished to these lodgers. The police
force is required to assist the fire department and the board of health. No special policemen are appointed. The total cost of the department during the year 1880 was $\$ 15,350$.

## JERSEY CITY.

By an act of January 28th, 1820, Jersey City was incorporated and extended over Paulus Hoeck. By this act the taxable inhabitants were authorized to elect annually five freeholders to conduct the affairs of the city, and to be known as the "Board of Selectmen of Jersey City." It still, however, remained a part of Bergen township until February 22d, 1838, when the corporate name was changed to the "Mayor and Common Council of Jersey City," and it became a separate municipality.

On March 8th, 1806, "the town or landing place of Jersey" was made a port of delivery within the district of Perth Amboy. Five years later the whole city was annexed to the district of New York, and Colonel Aaron Ogden was appointed as collector. In 1865 the assistant collector was empowered to enroll and license vessels for the coasting trade and fisheries.

In 1839 the boundaries of the city were extended westerly as far as Grove street. March 18th, 1851, the city received a new charter extending its limits over the township of Van Vorst, and dividing the city into four wards. In 1861 the Fifth and Sixth wards were added; in 1867 the Seventh, and in 1870 the Eighth wards were erected. On October 5th, 1869, Bergen and Hudson cities became, by a majority vote of their electors, according to an act approved for the purpose, annexed to Jersey City proper, each adding three wards. In 1871, the local government being re-organized, the wards were abolished and six aldermanic districts were erected in their stead, each district being entitled to two aldermen, and each returning one member to the State Assembly. In 1873 the township of Greenville was annexed and became a part of the Sixth aldermanic district, this being the last annexation made.

The entire area, including various tracts reclaimed from the Hudson river and New York bay, is now 11,000 acres, and 2,227 acres, of this is salt marsh.

The original area of the city when incorporated was between seventy
and eighty acres, including sixty-five acres of the upland of Paulus Hoeck, and the remainder of salt meadow.

The growth of Jersey City, in respect to population, manufactures and means of communication, has been equaled by few Western cities. In 1802 the entire population of Paulus Hoeck numbered thirteen, while the entire number within the present city limits did not exceed 1,500 . In 1840 , the date when the United States census gave the city a separate return, the population was only 3,072 ; but the increase since then has been rapid, the percentage by decades being 123,326 , 182 and 39.

The first post-office was established in 1831, and gas was first used for lighting the streets in 1852.

The first settlers were from Holland. The predominating nationality continued to be of Dutch extraction until about 1840, when, more especially in the lower regions of the city, population began to assume its present mixed complexion.

The causes for this change are the promimity to New York, rendering this city and vicinity desirable as a place of residence for business men, and the railroad and manufacturing companies that attract large numbers of laborers, both skilled and unskilled.

The city has a water front of two miles on the Hudson river, with a channel depth of fifty feet and a depth at pier-line of twenty-six feet, and on the New York bay a front of three miles, with a depth of water at high tide of six feet. On Newark bay the water front is; one mile, with a channel depth of thirteen feet and a depth at bulk-head-line of three feet, while on the Hackensack river the water front extends five miles, with a channel depth varying from twenty-five $t_{1}$, thirty feet, and a depth at bulkhead-line of from seven to sixteen feet, the current here running about six miles an hour. The Red Star line to Antwerp, Belgium, and the Monarch line to London have their piers on the eastern water front.

Seven ferries ply between the city and New York, and two ferries, in connection with railroads, run to Brooklyn. Jersey City is also a large shipping point for coal, for, in addition to the many railroads terminating here, the Morris canal connects the city with Easton, Pa., and the Lehigh valley.

The lands in and about the city are mainly used as market gardens, and supply a large proportion of the garden-truck used here and in New York city.

The highest-recorded summer temperature is $99^{\circ}$; highest summer temperature in average years, $94^{\circ}$; lowest-recorded winter temperature, $3^{\circ}$; lowest winter temperature in average years, $6^{\circ}$.

There are 200 miles of streets in the city, of which 43.3 miles are paved with Belgian blocks, cobble-stones, and, to some extent, crushed stone. Wood was used in some of the streets for a number of years, but of late it has not been put down, and its further use is not recommended. The cost of the Belgian-block pavement, as near as it may be estimated, was $\$ 1.75$ per square yard. There is no regular system of repairìng, all work under $\$ 500$ being given out to small parties, while jobs over that amount are given out to contractors. The streets are in some parts good, and, where paved with stone, some of them are very good.

There being a comparatively small number paved, they get the most attention, while the majority are unpaved and are not well taken care of, some of them being in bad condition. The sidewalks are laid with bluestone, and under the present regulations must be fifteen feet wide.

Nearly all the important streets have good sidewalks. On the unpaved streets the sidewalks are generally formed by a single width of bluestone, from three and a half to four feet wide.

Nearly all the gutters are constructed of two pieces of bluestone, the one forming the curb and the other the gutter. At present the board of public works considers it better to make the gutters of stone blocks. The city takes no action in tree-planting along the streets, and where any is done it is done by private abutters; some of the streets, however, are well shaded with trees that have been set out by private enterprise. For the construction and repair of streets the contract system is preferred by the city authorities, it being found much cheaper and a better class of work being obtained.

There are several lines of horse railroads in the city, with a total length of twenty-five miles, intersecting nearly all the principal streets. The rate of fare is five cents on all lines.

The works for the water-supply are owned by the city, and their total cost was $\$ 5,042,713.42$. The water is taken from the Passaic river at Belleville and pumped into a reservoir elevated 120 feet above the pumps. The distribution is from the reservoir, the available head being from thirty to ninety feet. The average amount of water pumped per diem is $1,994,228$ gallons. The average cost of raising $1,000,000$ gallons one foot high is 6.8 cents, or 4.23 cents
without the wages of fireman, etc. The yearly cost of maintenance, aside from the cost of pumping, is $\$ 139,574.15$, and the yearly income from water-rents, $\$ 465,279.04$. Water-meters are used to some extent, and it is believed here that they materially reduce the consumption of water; the authorities are inclined to think that the water-tax would be largely reduced if meters were more thoroughly introduced.

The police force of Jersey City is appointed and governed by the board of police commissioners, an independent body, composed of six members, who are elected by the people. The chief of police, salary $\$ 2,000$ per annum, is the executive officer and has direct control of the force, subject to the orders of the board. The remainder of the force, with the annual salaries in the respective grades, is as follows: one inspector, at $\$ 1,425$; four captains, at $\$ 1,390$ each; twenty sergeants and three detectives, at $\$ 920$ each; six roundsmen, at $\$ 825$ each, and one hundred and fifteen patrolmen and four doormen, at $\$ 800$ each. The uniform is of dark blue cloth with brass buttons, and helmet hat, and each man provides his own. The patrolmen are equipped with clubs and revolvers. The hours of duty are : day, 7 to 11 А. м., 11 А. м. to 5 Р. м., and 4 to 9 р. м. ; and night, from 9 P. M. to 5 A. . . All the streets of the city are patrolled by the force, the outside districts being covered by mounted officers.

During the year 1880 there were 6,285 arrests made, the principal causes being for intoxication and disorderly conduct; "three-fifths of all are caused directly or indirectly by the use of liquor."

The cases were disposed of by fine or imprisonment, some being discharged. During the year property to the value of $\$ 12,336.54$ was reported to the police as either lost or stolen, and of this $\$ 7,880.10$ was recovered and returned to the owners. The number of stationhouse lodgers during 18807, was 709 , as against 9,087 in 1879 . No meals are furnished to any of the lodgers, except worthy persons who are destitute, while " tramps and bums are arrested or driven out of the city."

The police force is required to co-operate and render all possible aid to all branches of the city government. Special policemen are appointed by the police board, upon application of corporations and individuals, as watchmen, but without pay from the city. They are subject to instructions from the office of the regular force, and if guilty of misconduct are removed. The yearly cost of the police force (1880) was $\$ 138,000$.

The manual force of the fire department of Jersey City consists of one chief engineer, three assistant engineers, one superintendent of telegraph, one superintendent of horses, and 253 men attached to the several companies, 93 being permanent and 160 on call. The working apparatus consists of eleven steam fire-engines, five hook-andladder trucks, and one tender, and the reserve apparatus of two steam fire-engines, one truck, one tender, two jumpers, one hand-engine, two coal wagons and one company supply-wagon, all of which are in good condition. There is in service 19,000 feet of hose, of which 15,000 feet is in good condition, 3,000 feet in fair condition and 1,000 feet worthless. There are fifty-one horses in the department. There are twenty houses under control of the department, all of which, except one, are owned by the city. The fire-alarm telegraph has over forty miles of wire, and sixty-three street signal-boxes are in use.

During the year 1878 there were 154 fires, the total loss being $\$ 220,135$, and the total insurance on same $\$ 325,835$, making a total insurance over loss of $\$ 105,700$. The total expenses of the department during the year were $\$ 117,227.36$.

## NEWARK.

Down to the revolution, Newark grew and prospered, and it was usually free from the troubles which agitated the other New Jersey colonies on account of disagreements with the proprietors. In 1681 Newark was reported as the most compact town in the province, with a population of 500 , having 10,000 acres of town lands and 40,000 acres of plantations. In 1713 Queen Anne granted a charter of incorporation. With the close of the revolutionary war, Newark entered on a new and more prosperous era. The means of communication with New York had been improved in 1765, and in 1795 bridges were built over the Passaic and Hackensack rivers.

In 1798 the township received a new charter and entered on the present century in prosperity and peace. In 1810 an early directory gave the population as 6,000 , while a census taken in 1806 showed 8,117 inhabitants, 844 houses, 207 machine shops, three lumber yards and four quarries in the town. In 1836 the town was incorporated as the "Mayor and Common Council of the City of Newark."

Newark engaged early in manufactures, the early settlers being mainly artisans, and with its close proximity to New York, combined
with excellent shipping facilities, soon drew to her mills and factories abundant capital and skilled workmen.

The comparative cheapness of rents and building sites, with low taxation, has always been another factor in Newark's growth, and many New York business men have made this city their home. It has had its periods of depression in common with other cities, and the years 1837 and 1857, with those subsequent to the war of the rebellion, brought reverses to Newark as well as to the country at large.

In 1836 a destructive fire occasioned the loss of property valued at $\$ 125,000$, but, with the exception of local fires at different times, there has been no other serious conflagration. The original population, from New England, with their descendants, long held sway, but with the increase of manufactures came immigrants from the old world, and these, principally Irish and German, with their descendants, now form a considerable portion of the population.

The Central Railroad of New Jersey, from Jersey City to Easton, Pa., to Philadelphia and to Long Branch ; the main line of the Pennsylvania railroad, to Philadelphia and the West ; the New York, Lake Erie and Western railroad to Buffalo, and the Delaware, Lackawanna and Western railroad to Oswego, New York, pass through Newark from their eastern termini in Jersey City, and afford easy and frequent communication with New York, over eighty passenger trains passing through Newark daily.

With the exception of a few vegetable gardens and flower gardens, the country immediately tributary to Newark is, like the city itself, largely engaged in manufactures, New York affording a ready market for all the products of the workshops: hats, shoes, leather, carriages, jewelry, celluloid, the manufacturing of which, with smelting works and fertilizing factories, being the principal industries.

The city lies on the west bank of the Passaic river, spread out on the eastern face of a range of hills and on a plain which stretches down to the marshy borders of the river and Newark bay. It has an area of eighteen square miles, six miles of which are salt meadows. These meadows extend to the southeast for some distance and are estimated to contain 15,000 acres. The eastern part of the city, covering about twelve square miles, including the meadows, has an average elevation of about thirty feet above high water, the soil being sandy, while the western part is formed by two parallel ridges, from 100 to 230 feet above high water and has a clay and gravel soil with.
underlying sandstone. The Passaic river, with the streams emptying into the same, receives the drainage from the city, partly through forty-eight miles of sewers; and as the site of the city is on the slope of Orange mountain, which extends down to tide-water, the natural drainage is good.

Highest-recorded summer temperature, $99 \frac{3}{4}^{\circ}$; highest summer temperature in average years, $96^{\circ}$. Lowest-recorded winter temperature, $123^{\circ}$; lowest winter temperature in average years, about $8^{\circ}$. The average mean temperature is $71.4^{\circ}$ in summer, and $30.6^{\circ}$ in winter. The influence of the adjacent marshes or salt meadows is said to produce malaria in the lower parts of the city, while the Orange range of hills, though healthy in themselves, exert no special influence on the climate.

The streets have a total length of 176.80 miles, paved as follows: cobble-stones, 28.76 miles; stone blocks, 4.89 miles; broken stone (Telford), 12.21 miles, and gravel and unpaved, 130.94 miles. The cost per square yard of each, as nearly as it may be estimated, was, for cobble-stones, 80 cents; stone blocks, trap-rock, $\$ 1.50$, and granite, $\$ 2.25$; and broken stone, $\$ 1$ to $\$ 1.75$, according to depth. During 1879 there was paid for repairing cobble and block pavement, $\$ 4,000$, and for broken stone, $\$ 7,500$.

The stone-block pavement needs less repair and is more easily cleaned than any of the others, and is preferred in point of quality and permanent economy. Sidewalks are one-fifth the width of the street, flagged with North River bluestone to a width not less than four feet. In the main thoroughfares the sidewalks are flagged for their entire width. Streets paved with cobble-stones or broken stone have gutter-stones fourteen inches wide, but streets laid with stone blocks have no gutter-stones. Gutters are usually eight inches below the top of the curb. All trees planted in the streets must be placed within two feet of the outer line of the sidewalks. The construction of new streets (grading, curbing, paving and flagging) is done by contract, while all repairs are done by day work, urless the work is of some magnitude, when it is also done by contract. Steam stonecrushers are used by the contractors, but the use of the steam roller for repairing the streets laid with broken stone has been abandoned.

There are 21.75 miles of horse railroads in the city, with eightyone cars. The rate of fare to any point inside the corporate limits is five cents. There are no omnibus lines.

The water-works are owned by the city, and their total cost has been $\$ 3,246,907.67$. The supply is taken from the Passaic river at Belleville, and pumped into a distributing reservoir 114 feet above tide, with a capacity of $22,000,000$ gallons, the available head being 165 feet. The average amount pumped per diem is $9,386,064$ gallons; the greatest amount pumped in any twenty-four hours being $10,475,667$, and the least, $8,491,797$ gallons. The average cost of raising $1,000,000$ gallons one foot high is 5.2 cents (for pumping alone). The yearly income from water-rates is $\$ 211,243.69$. Water-meters are used, and are found to effect a saving of water where set. There are 136 miles of distributing mains and about 11,000 water tanks.

The gas-works are owned by private corporations, but neither the average daily production nor the cost to consumers was furnished. The city paid $\$ 28.70$ per annum for each street lamp (burning 3,160 hours), 3,000 in number, and $\$ 2.25$ per 1,000 cubic feet for the gas used in the public buildings, the consumption for the latter purpose being $2,000,000$ feet annually.

The city owns and occupies for municipal purposes, wholly or in part, the city hall, the city market, fire department buildings, police stations, school-houses, etc., the aggregate value of which is $\$ 1,799,646$. The estimated value of the city hall, including the site, is $\$ 137,150$, and it is owned wholly by the city.

There are eleven parks and squares in the city, with an aggregate area of 17.46 acres. The largest one, Military common, area 6.45 acres, is situated on Broad street near the Morris canal; Washington park, area 3.40 acres, at the intersection of Broad and Washington streets; and Lincoln park, area 4.37 acres, situated at the junction of Clinton avenue and Broad street. The remaining eight, varying in size from 0.04 to 0.97 of an acre, are situated in various parts of the city. With the exception of Lincoln park, all the land covered by the parks was donated to the city. Lincoln park was opened by the municipal authorities in 1851 , at a cost of $\$ 30,000$. Owing to the fact that the improvements on these parks have been extended over many years, no accurate statement can be made of their actual cost,

- but it is thought that some $\$ 10,000$ have been expended for railings, etc. The street commissioners have charge of the parks, under the direction of the common council committee on public grounds.

There is one public market in the city, known as Central market, situated between Broad and Mulberry streets and Mechanic street and

Springfield avenue. The main building is 30 by 723 feet and contains sixty regular stalls, with an adjoining space, 140 by 140 feet, all roofed over, for the retail sale of vegetables; and on the south side, grounds 70 by 460 feet, with a building 26 by 460 feet, with fiftyone stalls. The total cost of all the buildings was $\$ 60,000$. Farmers' wagons stand on the east side of Broad street, near the market building, and through the summer season there is a daily average of 175 wagons here. The rate of rental of stalls of different classes per month is, for meat, $\$ 15$; butter, eggs and cheese, $\$ 12$; fish and, oysters, $\$ 10$; produce, fruit and poultry, $\$ 10.50$; and farmers' wagons, twenty cents per load. The total receipts from rents and fees for the market average about $\$ 27,500$ per annum. The market is open daily from sunrise to 1 P. m., and on Saturdays till 11:30 p. m. The gross amount of annual sales from the stalls within the market is estimated as follows : Meats, $\$ 670,800$; butter, eggs and cheese, $\$ 170,620$; fish and oysters, $\$ 165,840$; vegetables, poultry and fruits, $\$ 1,375,000$.

## PATERSON

The town of Paterson was first located on July 4th, 1792. Its progress was steady, manufactures gradually developed, and in 1831 the township of Paterson was incorporated. The town increased rapidly, and in 1851 it was incorporated as a city. The silk industry of Paterson has contributed much to its growth and importance, and the large water-power here afforded by the Passaic river has made the city essentially a manufacturing one. A reference to the table of manufactures will show the extent of the several industries.

Paterson has never suffered from any severe conflagrations. The periods of depression have been in 1812, again in the adoption of the sliding tariff, again in 1857, 1860, 1866-1867 and 1873-1878. The recovery after each one of these was rapid. The early settlers were operatives from the north of Ireland, Scotland and England, with the "Jersey Dutch" always as a leavening element; and though the many manufactories are continually attracting foreign operatives, the present population is largely native-born.

Paterson is touched by the following railroads: The New York, Lake Erie and Western railway, between New York and Buffalo; the Delaware, Lackawanna and Western railroad, between New York and Buffalo; the New York, Susquehanna and Western railroad,
between New York and Middletown. These roads give Paterson over forty trains each way daily to New York.

The local trade of the city is mainly from an agricultural population, with half a dozen villages within a radius of eight or ten miles. Little or no industry in the way of mannfacturing is carried on in any of them with the exception of Passaic, four miles to the south, which is looming up as a busy manufacturing village, though now termed a city:

The soil on which the city is built is sand and clay loam, with clay, slate and sandstone cropping out, overtopped with trap rock. The city is built upon a broad plain, whose western extremity rises to a height of nearly 400 feet. As viewed from the surrounding hills, it appears to be a natural basin, which is true of the business and older portions, but in the last fifteen years the elevated ground has been gradually built upon and is the part most affected for residences at present. The city is nearly surrounded by hills or elevated ground, and the natural drainage is good except in the old part immediately contiguous to the river. Comparatively few marshes or ponds now exist within the city limits, a number of them having been filled up. The country within a radius of five miles is open, and the soil is the same as that under the city, with excellent brick clay to the west.

No regular record of temperature has been kept, but the city surveyor reports that during the past two or three years a comparison has been made with the climate of New York and it is estimated that Paterson has an average temperature of from $2^{\circ}$ to $4^{\circ}$ lower than that city. The winds from the ocean modify the heat of summer and the cold of winter, while the mountains to the north and west break the force of the winds from those directions. Owing to the proximity of marshes, malarial fever prevails in some localities.

The total length of streets is 226 miles. Of this 2.76 miles are paved with cobble-stones, 7.24 miles with broken stone and 100 miles are of loam, the remainder not being opened. The cost per square yard was, for cobble-stones, 55 to 60 cents; broken stone, 75 cents to $\$ 1$, and for loam no estimate can be made, as the material is left on the streets when graded. The cobble-stone pavement is reputed to be the easiest to keep clean and the least costly to repair. The sidewalks are of blue-stone and brick. Some years ago most of the sidewalks were of brick, four feet wide, and these are now gradually being replaced with blue-stone from four to twelve feet
wide. The gutters are now being laid with blue-stone, fourteen inches wide, next the curb, and cobble-stones to the outer edge, two feet ten inches from the curb. The work of construction on the streets is done by contract. The repairs are done by the day. The annual cost for repairs is from $\$ 15,000$ to $\$ 20,000$. Contract work is preferred, and is reported to be from 10 to 30 per cent. cheaper than day work. A steam stone-crusher and steam roller are used with good effect. There are fifteen miles of horse railroads, with twenty-three cars and forty-five horses, and employing twenty-one men. During the year 314,826 passengers were carried, at rates of fare from five to six cents for adults and three cents for children. There are no omnibus lines in the city.

The water-works are owned by the Passaic Water Company, a private corporation, and cost $\$ 1,230,000$. Water is taken from the river at the edge of the falls, and pumped both by steam and water-power into three distributing reservoirs, with an aggregate capacity of 18,000,000 gallons. The average pressure in the mains is thirty pounds to the square inch. The average amount of water pumped per diem is $6,000,000$ gallons-the greatest being $9,000,000$ and the least 4,000,000 gallons. Water-meters are not used. There are thirty-five miles of distribution pipe in use and 500 fire hydrants. The city pays $\$ 37$ a year for each hydrant, which includes water for flushing sewers and gutters and sprinkling streets.

Gas is supplied by a private corporation, and the daily average production is 100,143 cubic feet. The charge per thousand feet to consumers is $\$ 2$. The city paid $\$ 35$ a year for each street lamp, 355 in number. These figures are for the Paterson Gas Light Company, but in January of the year 1880 the People's Gas Light Company was organized, and in that year its daily average production was 15,000 cubic feet and the charge $\$ 1.58$ to $\$ 2$ per thousand feet.

The city owns and occupies for municipal uses, wholly or in part, one city hall, one police station, one street department building, one almshouse, eleven fire department houses and ten school-houses. The total value of these, including the land, is $\$ 447,000$. The city hall and police station are on one lot and are rated together at $\$ 37,500$.

There are no public parks in the city. The Passaic falls and grounds are owned by a private corporation, the Passaic Water Company, and are rented to a hotel keeper, who maintains them and keeps
them open to the public. These grounds are in a great degree a substitute for a public park.

The police force of Paterson is appointed by the mayor, subject to the approval of the board of aldermen, and is governed by the committee on police, consisting of the mayor and five aldermen. The chief of police is the executive officer, has charge of the force and governs it in accordance with the rules and regulations ; his salary is $\$ 1,000$ per annum. The rest of the force in the several grades, and the salaries per annum of each, are as follows : one captain, at $\$ 950$; four'sergeants, at $\$ 900$ each, and thirty-eight patrolmen, at $\$ 800$ each. The uniform is of navy-blue cloth, coat, vest and trousers, with gilt buttons and hats. In summer a flannel suit is worn. The men furnish their own uniforms. Each man carries a locust baton twenty-two inches long. The men have eight hours' regular patrol duty at one time, and each beat covers from seven to twelve ordinary blocks. During the year 18802,675 arrests were made by the force, the principal causes being: disorderly, 569 ; drunk and disorderly, 495 ; drunk, 444 ; assault and battery, 374 , and the remainder for various offenses. The final disposition was: fined, 587 ; committed, 810 ; bailed, 477 ; discharged, 126 ; sentence suspended, 604 , and the rest in different ways. During the same time the total value of property lost or stolen and reported to the police was about $\$ 3,500$, and of this $\$ 2,146.42$ was recovered and returned to the owners. The total number of station-house lodgers was 3,248 , as against 3,296 in 1879 . The force is required to co-operate with the fire department by protecting property and preserving order at fires, and with the health department by serving notices. Special policemen are appointed by the mayor and aldermen, generally for private watchmen. They have no connection with the regular force, but are bound to act if called upon by the chief of police. The yearly cost of the police force in 1880 was $\$ 32$,757.46 .

## TRENTON.

The early history of the city, which until about thirty years ago contained only the territory north of Assanpink creek, was uneventful. The name Trenton was given about 1720 in honor of Colonel William Trent, speaker of the House of Assembly, and the Swedish naturalist, Peter Kalm, who visited Trenton in 1749, reports that it
was then a place of about 100 houses. Its growth in the century following Kalm's visit was steady but not rapid.

With the close of the revolution the importance of Trenton increased, and in 1790 it was chosen the capital of New Jersey. Two years later it was made a city. Even with these added honors, the city did not make rapid progress for many years. In the year 1834 the completion of the Delaware and Raritan canal afforded excellent water communication with central New Jersey, New York city and Philadelphia, and the rapid spread of the railway system, between 1840 and 1850 , still further increased the facilities of the city as a manufacturing centre. To her manufactures Trenton owes her prosperity. Abundant water-power was obtained from the Assanpink creek and the falls of the Delaware, the water being led by artificial means to the places where it was needed. In 1850 the population was only 6,461 , but in the ten years immediately following, the city sprang suddenly into life. Manufactures became important ; the excellent water-power was utilized ; the pottery industry took form, shape and size ; the villages of Bloomsbury, Lamberton and Mill Hill and the borough of South Trenton were made part of Trenton, and in 1860 the population had increased to 17,228 .

The growth thus begun has been steady and rapid, until now Trenton counts its inhabitants at 29,910 , an increase of over 360 per"cent. in thirty years. The manufactures of the city are large, varied and important. There are, besides, large factories producing wire, saws, products of iron of all kinds, woolen, rubber and zinc goods, etc., while the city is also a large depot for the shipment of coal. With all these industries, a good location and an enterprising people, it is surely not extravagant to expect in the future a degree of prosperity fairly comparable with that of the past thirty years.

The New Jersey division of the Pennsylvania railroad crosses the Delaware at Trenton and connects the city with Philadelphia and New York. A branch road from the Amboy division of the same railroad connects Trenton with Bordentown, and a branch line enters the city from the Bound Brook route of the Philadelphia and Reading railroad, affording a second means of railroad communication with New York and Philadelphia.

The country immediately surrounding Trenton is chiefly agricultural in character, the productions varying with the soil, which to the north and east is a stiff, clayey loam, adapted for raising wheat, corn
and grass, while to the south it is light and sandy-in some places almost barren-but adapted for vegetable culture.

The highest-recorded temperature was $102 \frac{1}{2}^{\circ}$; the lowest-recorded winter temperature, $16^{\circ}$.

Of the streets of Trenton, 3,520 feet are paved with cobble-stones, 13,360 feet with stone blocks, about 3,000 feet with broken stone (Telford paving) and the rest is of gravel. The sidewalks are mostly of brick, but stone is used to a slight extent. The gutters are laid with stone. Trees are planted along some of the streets. There are two horse railroad lines in the city. These own about five miles of tracks and use about 15 cars. The rate of fare is five cents.

The water-works are owned by the city. Water is raised by pumping to a reservoir situated in the extreme northern part of the city, in Reservoir street, whence it is distributed throughout the city. Trenton has no public parks.

The following are the industrial statistics, in detail, for the year 1886. A comparative summary for 1880 and 1886 is also annexed:

## NEW ARK.

| Mechanical and Manufacturing Industries. |  |  |
| :---: | :---: | :---: |
| All industries...................................................................... | 1,581 | \$29,300,580 |
| Blacksmithing. $\qquad$ <br> Boot and shoe uppers. $\qquad$ | 50 6 | $\begin{array}{r}21,950 \\ 18,360 \\ \hline\end{array}$ |
| Boots and shoes, including custom work and repairing............ | 50 | 450,760 |
| Boxes, paper and fancy.................................................... | 11 | 97,736 137,700 |
| Brass castings.......................................................................................................... | 120 | 137,700 |
| Brooms and brushes................... | 9 | 29,375 |
| Buttons........................................................................... | 25 | 203,148 |
| Carpentery....................................................................... | 88 | 302,627 |
| Carpets, rag................................................................... | 8 | 123,475 |
| Carriage and wagon materials............................................. | - 28 | 123,475 |
| Carriages and wagons ........................................................................................ | 23 9 | 1,450,800 |
| Cement......................... | 4 | 215,300 |
| Clothing, men's.................................................................................................... | 54 | 524,481 |
| Clothing, women's................................................................. | 4 | 21,500 |
| Coffee and spices roasted and ground................................. | 3 | 52,500 |
| Coffins, burial cases and undertakers' goods........................... | 15 | 85,000 |
| Confectionery.................................................................. | 15 9 | 91,455 4,800 |
| Cooperage. <br> Corsets.. | 11 | 114,180 |
| Cortors........................................................................................................................ | 2 | 1,114,060 |
| Cutlery and edged tools...................................................... | 22 | 301,632 |
| Dentistry, mechanical...................................................... | 26 | 56,650 |
| Drugs and chemicals........................................................ | 18 | 1,598,005 |
| Engraving and die sinking............................................................................................. | 12 | 90,300 195,800 |
| Fancy articles... | 6 | 190,800 50,90 |
| Flouring and grist mill products........................................................................................ | 4 | 60,500 |
| Foundry and machine shop products................................. | 65 | 1,460,350 |
| Furniture., ..................................................................... | 19 | 153,450 23,200 |
| Furs, dressed.................................................................. |  |  |
| Glass, bent, stained, cut and ornamental.............................................................. Gold and silver reduced and refined....... | 8 | 46,200 60,000 |
| Gold and silver reduced and.................................................................................... | 28 | 292,350 |
| Hardware, saddlery ................................... .......................... | 40 | 862,730 |
| Hat and cap materials...................................................... | 5 | 19,500 |
| Hats and caps, not including wool hats.... .............................. | 51 | 793,430 10 |
| Ink............................................................................................................................. | $\stackrel{2}{3}$ | 10,700 630,000 |
| Irow and steel | 74 | 2,769,688 |
| Kindling wood......................................................................................................... | 13 | 11,450 |
| Lamps and reflectors.............................................................. | 3 | 42,500 |
| Lapidary work.................................................................. | 6 32 | 5,400 $1,863,183$ |
| Leather, curried.................................................................................................................. | 27 | 1,652,350 |
| Leather, tanned.......................................................... | 20 | 3,250,000 |
| Looking-glass and picture frames.................................................................................... | 10 | 19,283 |
| Lumber, planed................................................................ | 3 | 24,000 190,135 |
| Marble and stone work........................................................ | 14 8 | 190,135 |
| Masonry, brick and stone...................................................... | 8 | 2,550 |
| Mattresses and spring beds................................................. | 14 | 38,500 |
| Mineral and soda waters.................................................... | 14 | 6,125 |
| Models and patterns............ | 32 | 22,961 |
| Painting and paper hanging.. | 14 | 16,115 |
| Photography.......................................................................................... | 50 | 234,050 |
| Plumbing and gas fitting.......................................................................... | 30 | 300,600 |

## NEWARK.

| average number of hands employed. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 25,196 | 5,366 | 2,869 | \$15,170,650 | \$50,608,220 | 880,454,929 |
| 84 17 | ......... | 7 | 37,110 10,272 | 34,313 31,558 | 123,461 52,020 |
| 868 | 240 | 84 | 612,331 | 1,167,397 | 2,057,324 |
| 86 | 340 | 60 | 117,134 | 1,122,756 | -364,599 |
| 206 219 | 4 17 | 14 36 | -96,512 | 1,016,922 | - ${ }_{1,488,816}$ |
| 39 | 20 | 10 | 29,158 | 1, 40,817 | 1,89,192 |
| 391 1,457 | 208 | 162 38 | ${ }_{753,133}$ | 242,460 849703 | 650,182 |
| 1,457 | ................. | ............. | 753,133 $-1,772$ | 849,703 2,620 | $1,808,136$ 7,700 |
| 95 | ................. | .................. | 53,969 | 93,461 | 202,506 |
| ${ }_{632} 26$ | ${ }_{243}^{1}$ | ${ }_{130}^{9}$ | ${ }^{1499,796}$ | - $\begin{aligned} & 1953,772 \\ & 54346\end{aligned}$ | + 4 434,797 |
| 76 |  |  | 34,035 | ${ }_{7}^{54,650}$ | 1,140,700 |
| 518 10 | 615 | 35 | 501,745 | 1,293,641 | 2,326,627 |
| 10 20 | 23 | ........ | 10,325 11,853 | 34,800 51,817 | 59,300 |
| 30 | ................. | 5 | 29,880 | 35,000 | 93,500 |
| 134 21 | 16 | 7 | 65,390 | 386,300 | 547,414 |
| $\stackrel{21}{58}$ | ............. | ${ }^{6}$......... | 9,345 125,067 | 17,850 234,388 | 34,245 404,946 |
| ${ }_{4}^{250}$ | 694 | 120 | 340,955 | 345,462 | 1,198,397 |
| 476 10 | 3 3 | 85 | 267 \% 8,245 8,285 | 214,689 | , 603,575 |
| 438 | 25 | 28 | 212,526 | 23,117 805,331 | 106,132 |
| 82 | 9 | 16 | 52,226 | 18,698 | 1, 107,950 |
| 370 139 | 34 8 | $\begin{array}{r}178 \\ \hline 29\end{array}$ | 272,086 | 173,816 | 596,748 |
| 139 22 |  | 29 | 74,150 10,401 | 72,250 250,040 | $16 广, 145$ 289,629 |
| 1,395 128 |  | 66 | 750,564 | 956,310 | 2,152,894 |
| 128 | 3 9 | 15 5 | 69,520 12,825 | 93,770 42,315 | 2188,603 81,419 |
| 49 | .............. | 8 | 30,890 | 51,676 | - 90,570 |
| 20 279 | .............. | ${ }_{41}^{1}$ | 9,350 139,863 |  | 424,500 672,736 |
| 896 | 153 | 172 | 477, 470 | 376,343 80022 | 1,652,609 |
| 1,800 | \% 7 | ${ }_{114}^{1}$ | 24,300 | 15,300 | 57,530 |
| 1,800 10 | 627 1 | ${ }_{1} 14$ | $1,000,246$ 4,000 | 1,369,043 | $2,856,235$ 29,000 |
| 309 1,898 | .............. | 198 | 142,944 | 519,142 | 848,185 |
| 1,898 | 284 | 198 10 | 1,196,190 | 1,124,159 | 4,402,944 |
| ${ }_{25}^{29}$ | 1 | 20 | 19,550 | 11,860 | 48,600 |
| 1,207 | 25 | 77 | 802,023 | 8,200 7,419200 | 9,130,894 |
| 1,142 | 3 | 66 | 749,070 | 5,447,393 | 6,980,441 |
| 875 20 | ................. | 10 9 | - 608,000 | 3,625,500 | 5,450,000 |
| 60 | .................. | 16 | - $27,8,85$ | 57,330 | 52,415 104,785 |
| 226 58 | .................. | 38 11 | 186,226 32,351 | 114,145 61,950 | - 383,013 |
| 5 | 2 | 1 | 3,7074 | 10,590 | 17,300 |
| 54 10 | ............... | 12 | 24,935 5,076 | 59,367 2,361 | 102,491 |
| 97 24 | ........ | 13 | 55,412 | 72,572 | 172, 874 |
| 215 | ............ | 31 | -145,472 | -203, ${ }^{11,04}$ | 45,377 460,591 |
| 269 | 26 | 29 | 177,936 | 164,010 | 543,630 |

## NEWARK-Continued.



## JERSEY CITY.

| All industries.................................................................. | 744 | \$15,492,969 |
| :---: | :---: | :---: |
| Blacksmithing (see also wheelwrighting)............................ | 44 | 35,750 |
| Bread and other bakery products............. .......................... | 50 | 82,665 |
| Boots and shoes, including custom work............................. | 43 | 32,357 |
| Brass castings.................................................................. | 5 | 138,660 |
| Box manufactory and lumber yard..................................... | 1 | 225,000 |
| Carpentering.......................................... ....................... | 47 | 45,980 |
| Copper works................................................................ | 1 | 25,000 |
| Carriages and wagons (see also wheelwrighting).................., | 7 | 25, 200 |
| Clothing, men's.. ........................................................... | 27 | 64,900 |
| Confectionery.... | 9 | 26,950 |
| Cooperage......................................................................... | 12 | 2354,000 |
| Crucible works ...................................................................................................... | 6 | 784,00 29,200 |
| Dry docks......... | 13 | 100,000 |
| Dentistry, mechanical. | 6 | 12,700 |
| Drugs and chemicals.. | 9 | 130,000 |
| Foundry and machine shops......................... | 35 | 922,000 |
| Furniture (see also mattresses and spring beds)...................... | 5 | 4,820 |
| Iron and steel.................................................................. | 5 | 1,052,000 |
| Iron railing, wrought | 1 | 2,750 10,000 |
| Lead, white...... | 1 | 50,000 |
| Knitting works.. | 6 | 35,500 |
| Kindling wood ........................................................................................... | 5 | 445,620 |
| Liquors, malt......................................................................................... | 5 | 688 |
| Marble and stone work................................................................................ | 14 | 41,235. |
| Masonry, brick and stone.............................................................................. | 1 | $60,000^{\circ}$ |
| Machinery works............ | 1 | 75,000 |
| M attresses and spring beds (see also furniture)....................... | 7 | 31,500 |
| Oakum works. | 38 | 120,000 |
| Painting and paper hanging. | 38 | 50,440 |

## NEWARK-Continued.

| AVERAGE NUMBER OF HANDS EMPLOYED. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 687 290 1,009 66 | 74 31 $\cdots \cdots \cdots . . . . . .$. 584 | 32 20 $\cdots \cdots . . . . .$. 23 | $\begin{array}{r} \hline \$ 12,228 \\ 140,366 \\ 430,654 \\ 181,003 \end{array}$ | \$741,873 200,639 602,100 <br> 308,429 | $\begin{array}{r} \$ 1,318,844 \\ 406,341 \\ 1,062,150 \\ 558,586 \end{array}$ |
| 140 |  | 6 | 87,840 | 1,820,840 | 2,132,445 |
| 7 103 | .................... | 1 | 2,450 52,860 | 8,866 150,300 | 14,095 229,320 |
| + 42 | $3$ | 12 | 52, 20,748 | 17,040 | r 58,200 |
| 43 | 1 | 3 | 24,138 | 10,694 | 53,750 |
| 281 | 41 | 79 | 157,347 | 432,902 | 636,713 |
| 193 | 51 | - 37 | 123,181 | 364,839 | 615,409 |
| 1,216 | 99 | 183 | 604,254 | 1,689,337 | 2,616,011 |
| - 5 |  | 3 | 3,550 | 3,890 | 12,800 |
| 8 | $\dddot{1}$ | 3 | 3,950 | 4,790 | 12,680 |
| 45 <br> 85 <br> 8 | $26$ | 15 | 39,600 | 75,000 | 126,000 |
| 85 17 | *************** ************** | 3 1 | 57,488 12,800 | 573,107 15,990 | 872,051 |
| 52 | .................. | 8 | 31,791 | -32,454 | -86,949 |
| 27 |  | 7 | 16,090 | 30,716 | 52,800 |
| 2,648 | 399 | 323 | 1,462,500 | 12,014,423 | 14,905,914 |

JERSEY CITY.

| 10,781 | 3,210 | 1,093 | \$6,213,658 | \$55,919,573 | \$68,880,168 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 83 |  | 3 | 41,814 | 32,213 | 119,262 |
| 21 | 16 | 4 | 67,372 | 354,315 | 504,877 |
| 42 | 4 | 2 | 18,096 | 37,552 | 87,120 |
| 122 | ............... | 4 | 52,502 | 98,759 | 170,675 |
| 155 | ...... | 10 | 65,000 | 190,000 | 275,000 |
| 198 | 4 | 5 | 108,862 | 187,420 | - 363,573 |
| 36 |  |  | 17,892 | 30,700 | 62,910 |
| 45 |  | $2$ | 24,310 | 30,800 | 75,900 |
| 100 | $15$ | 6 | 56,875 | 197,368 | 313,400 |
| 15 | 8 | 20 | 12,751 | 45,474 | 77,700 |
| 572 |  | 22 | 207,491 | 755,092 | 1,261,058 |
| 171 | $178$ | 118 | 135,520 | 700,000 | 700,000 |
| 14 |  | 2 | 72,880 | 46,122 | - 135,990 |
| 100 | 30 |  | 155,000 | 120,000 | 220,000 |
| 10 | ............ | $4$ | 7,321 | 14,791 | 31,270 |
| 685 | 13 | 7 | 139,645 | 1,426,202 | 1,707,214 |
| 725 | 15 | 7 | 364,509 | 612,617 | 1,286,518 |
| 21 | ............... | ...... | 5,640 | 8,040 | 23,160 |
| 504 | ................ | 15 | 262,200 | 963,922 | 1,830,600 |
| 6 | ........... | 1 | 2,390 | 2,469 | 1,830,380 |
| 40 |  | 6 | 10,000 | 15,000 | 40,000 |
| 7 | $65$ | 8 | 15,000 | 65,000 | 100,000 |
| 35 | ................ | 4 | 14,050 | 23,250 | 55,620 |
| 126 | ............... | ............... | 56,768 | 294,844 | 520,108 |
| ${ }^{2}$ | ................. |  | ${ }^{270}$ | 1,810 | $5,250$ |
| 105 | $\qquad$ | $5$ | 43,867 | 55,200 | 138,230 |
| 30 | $10$ | $1$ | 30,000 |  | 250,000 |
| 50 | 7 |  | 30,000 | $60,000$ | 90,000 |
| 50 80 | 7 | $6$ | 16,100 | 58,096 | 94,000 |
| 80 175 | .. |  | 31,000 | 160,000 | 200,000 |
| 175 | ........... |  | 87,110 | 75,500 | 207,465 |

## JERSEY CITY-Continued.

Mechanical and Manufacturing Industries.
Photography

Plumbing and gas fitting
Printing and publishing
Paper mills.
$\qquad$
$\qquad$
Saddlery and harness
Sash, doors and blinds, wood turned and carved.
Ship building
Shirts
Slaughtering and meat packing, retail butchering.
$\qquad$
Spike works. $\qquad$
Sugar and molasses refineries. $\qquad$
Tin ware, copper ware and sheet-iron ware. $\qquad$ Tobacco, cigars and cigarettes. $\qquad$
Upholstery (see also furniture).
Wheelwrighting (see blacksmithing, carriages and wagons)....
Zinc works (new since 1880).

Wood turned and carved 73

## PATERSON.

| All industries... | 403 | \$15,707,250 |
| :---: | :---: | :---: |
| Belting and hose, leather.................................................. | 2 | 25,000 |
| Blacksmithing ......................................................... ..... | 22 | 17,200 |
| Boots and shoes............................................................. | 15 | 9,800 |
| Brass castings. | 5 | 175,000 |
| Bread and other bakery products. | 36 | 85,500 |
| Card cutting and designing........... | 4 | 4,800 |
| Carpentery.. | 27 | 120,000 |
| Carriages and wagons.................. .................................... | 9 | 225,000 |
| Cotton goods.. | 3 | 625,000 |
| Dentistry, mechanical...................................................... | 5 | 4,500 |
| Dyeing and finishing textiles.. | 10 | $\begin{array}{r}420,000 \\ \hline\end{array}$ |
| Foundry and machine shop pros | 28 | 1,838,600 |
| Liquors, malt................................................................. | 6 | 720,000 |
| Looking-glass and picture frames. | 8 | 3,300 50,500 |
| Marble and stone work | 8 | 50,500 799 |
| Mixed textiles.. | ${ }^{6}$ | 799,500 11,500 |
| Painting and paper hanging................................................ | 16 8 | 11,500 |
| Photography ................................................................................................................ | 128888 | 26,500 30 |
| Plumbing and gas fitting...................................................................................................... | 12 8 | 39,000 |
| Printing and publishin | 8 | 20,000 |
| Silk and silk goods..... | 80 | 8,019,500 |
| Tin ware, copper ware and sheet-iron ware.. ....................... | 15 | 58,500 |
| Tobacco, cigars and cigarettes........................................... | 16 | 20,500 |
|  | 5 | 8,500 |
| Wood turned and carved........................................................................................................... | + ${ }^{5}$ | 2,250,750 |
| All other industries........................................................... | 40 | 2,250,750 |

JERSEY CITY-Continued.

| AVERAGE NUMBER OF HANDS EMPLOYED. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Children and youths. |  |  |  |
| 42 | 13 | 13 | \$26,790 | \$32,390 | \$95,160 |
| 77 |  | 14 | 40,761 | 99,103 | 180,425 |
| 97 |  | 12 | 52,921 | 35,608 | 125,228 |
| 35 |  |  | 28,000 | 82,000 | 115,000 |
| 40 | 2 | 6 | 18,000 | 15,000 | 40,000 |
| 6 40 | ............ | .... | 2,620 | 6,940 | 16,760 |
| 40 450 | .................... | .............. | 18,780 | $\begin{array}{r}65,635 \\ \hline 272142\end{array}$ | 111,915 |
| 6 | ${ }^{40}$. | ......... | 296,972 | 2721,142 33,00 | 677,101 47,782 |
| 465 | .......... | 15 | 334,180 | 19,145,157 | 20,406,961 |
| 150 680 | ............... | $\cdots{ }^{-\ldots . . . . . . . . . . ~}$ | 65,000 | 275,000 | 2. 79.7. |
| 87 |  | 6 | 473,316 41,701 | $20,759,961$ 69,850 | 22,799,614 |
| 140 | .......... | .... | 68,007 | 100,144 | 224,713 |
| 13 | ............... | 4 | 6,546 | 14,346 | 28,850 |
| 50 156 | .............. | 4 1 | 25,060 | 24,562 | 75,120 |
| 156 37 | …......... | 1 | 104,210 15,950 | 220,735 30,470 | 325,946 57,000 |
| 3,885 | 2,787 | 751 | 2,436,164 | 7,974,954 | 12,551,117 |

PATERSON.

| 12,763 | 6,581 | 4,789 | \$8,496,298 | \$18,322,639 | \$33,501,329 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | .............. | .............. | 8,000 | 47,000 | 79,000 |
| 39 |  | . | 18,500 | 17,400 | 55,500 |
| 41 | 2 | 1 | 12,800 | 15,300 | 240,000 |
| 300 | ............... |  | 137,000 | 17,500 | 225,000 |
| 48 | ................ |  | 17,600 | 88,500 | 161,000 |
| 27 | $\qquad$ | $4$ | 9,550 | 4,690 | 18,350 |
| 287 | 2 | 1 | 137,500 | 370,000 | 585,800 |
| 200 | .1...... | 230... | 105,000 | 58,000 | 250,000 |
| 356 | 378 | 230 | 312,000 | 465,000 | 1,206,000 |
| 5 |  | ................ | 3,500 | 3,000 | 11,600 |
| 865 | $13$ | $41$ | 370,700 | 482,000 | 954,500 |
| 2,856 | 94 | 137 | 1,160,800 | 1,864.774 | 8,332,979 |
| 130 | ............... | - | 77,900 | 510,000 | 900,000 |
| 8 | ................ | ................ | 2,000 | 11,000 | 15,500 |
| 40 | ................ | $\qquad$ | 17,800 | 17,600 | 80,600 |
| 402 | 431 | . 211 | 313,050 | 631,600 | 1,164,000 |
| 50 | ................. | $2$ | 27,500 | 32,400 | 1,72,900 |
| 15 | $\ddot{8}$ | $7$ | 12,500 | 11,450 | 47,500 |
| 58 |  |  | 34,000 | 60,000 | 125,000 |
| 75 | $45$ | $18$ | 45,000 | 40,000 | 130,000 |
| 30 85 |  |  | 18,000 | 40,000 | 77,000 |
| 4,859 | 3,983 | 3,864 | 4,315,700 | 10,800,000 | 19,116,250 |
| $110$ | ................ |  | 45,000 | 73,200 | 150,750 |
| $45$ | ................ | $4$ | 17,000 | 36,000 | 74,500 |
| 10 79 | ............. | .......... | $\begin{array}{r}4,000 \\ \hline 29\end{array}$ | 4,900 | 10,500 |
| 79 1815 |  | 10 259 | 29,898 | 23,150 | $62,850$ |
| 1,815 | - 1,625 | 259 | 1,244,000 | 2,598,175 | 4,354,250 |

## TRENTON.

| Mechanical and Manufacturing Industries. |  | W \# \% |
| :---: | :---: | :---: |
| All industries. | 492 | \$8,592,100 |
|  |  | 11,400 |
|  | 22 47 | 5,350 114,50 |
| Boxes, wooden packing. | 5 | 3,000 |
| Bread and other bakery products...................................... | 33 | 121,000 |
|  | ${ }_{4}^{5}$ | 175,000 |
| Carpentery..... | 25 | 83,200 |
| Carpet, rag................................................................ | 5 | 1,500 58,300 |
| Carriages and wagons................................................................................. | 18 | 90,000 |
| Coffins, burial cases and undertaking goods.............................. | 3 | 8,500 |
| Confectionery.......................................................... | 9 3 | 12,000 5 5 |
|  | ${ }_{3}^{3}$ | 5,200 12,500 |
| Dyeing and cleaning................................................................. | 3 | 2,100 |
| Flouring and grist mills............................................... | ${ }_{8}^{5}$ | 68,000 78 |
| Furniture....... | 11 | 42,000 |
| Iron and steel........................................................... | 3 | ,300,000 |
| Iron forgings....... | 3 | 11,400 |
| Lumber, planed................................................................................... | 5 | 42,000 |
| Marble and stone work................................................. | 11 | 70,000 |
| Masonry, brick and stone,..................................................................... | 32 | 13,500 |
| Photography............................................................................. | 7 | 7,000 |
| Plumbing and gas fitting | 9 | 15,000 |
| Printing and publishing............................................... | 8 |  |
| Roofing and roofing materials. | ${ }_{6}^{6}$ | ${ }_{12}{ }^{4,2000}$ |
| Saddlery and harness........... | ${ }_{3}^{6}$ | 275,000 |
| Stone and earthenware.. | 32 | 2,200,000 |
| Tin ware, copper ware and sheet-iron ware......................... | 10 | 15,000 |
| Tobacco, cigars and cigarettes...................................... | ${ }_{4}^{24}$ | 14,000 |
| Upholstery | 14 | 5,000 |
| Woolen goods.......................... | 4 | 800,000 |
| All other industries ....... ................................... ............ | 74 | 1,600,000 |

## CAMDEN.

| All industries................................................................ | 716 | \$6,977;664 |
| :---: | :---: | :---: |
| Blacksmithing and wheelwrighting................................. | 37 30 | ${ }_{75,000}$ |
| Butchering................................................ | 94 | 177,148 |
| Bread and other bakery products.............................. | 49 | 109,700 14000 |
| Bottlers. | ${ }^{7}$ |  |
| Carpentery............................................................ | 8 | 218,500 |
| Carriages and wagons | 19 | 119,000 |
| Coffees and spices ground and roasted.................................... | 2 | 50,000 |
| Coffins and burial cases. | 17 34 | 112,000 |
| Contractors and builders | 13 | 11,675 |
| Confectionery.... | 6 | 3,600 |

## TRENTON.



CAMDEN.

| $\begin{array}{r} 7,288 \\ 68 \end{array}$ | 1,021 | 437 | $\$ 3,745,098$ 34,000 | $\$ 6,479,307$ 33,500 | $\$ 14,945,355$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 97 |  |  | 52,440 | 68,300 | r 149,500 |
| 312 | 32 | 6 | 116,200 | 262,700 | 668,358 |
| 133 | 27 | 5 | 65,720 | 241,740 | 406,604 |
| 23 | .............. | 4 | 11,500 | 22,000 | 49,000 |
| 82 | .............. | ... | 36,900 | 67,530 | 116,500 |
| 178 |  | ... | 92,378 | 160,200 | 426,000 |
| 87 | 112 13 | ............... | 50,800 | 71,600 | 156,000 |
| 71 43 | $13$ | ... | 28,470 22,400 | 63,400 | 180,000 |
| 43 340 | ............... | $\cdots$ | 22,400 265,250 | 38,300 | 103,000 |
| 340 38 | ............. | 11 | 265,250 | 218,700 | 498,000 |
| $\stackrel{38}{27}$ |  |  | 27,000 8,500 | 79,000 4,350 | 187,630 |

## CAMDEN-Continued.

| Mechanical and Manufacturing Industries. |  | 馬 |
| :---: | :---: | :---: |
| Carpet, rag | 11 | \$8,000 |
| Dentistry ............................................................................................... | 10 3 | 6,000 800000 |
| Drugs and chemicals....................................................................... | 3 | $\begin{array}{r}\text { - } \\ \text { - } \\ \hline 1,500,0000 \\ \hline\end{array}$ |
| Furniture................................................................................ | 6 | 1,42.000 |
| Fruits and vegetables, canned and preserved....................... | ${ }_{3}^{2}$ | 100,000 130,000 |
| Glass..................................................................... | ${ }_{3}^{3}$ | 130,000 13,500 |
| Pipes, gas and water, iron rails, fire escapes............................... | 3. | 123,000 |
| Jewelry (including repairing)............................................. | 15 | 11,000 |
| Lumber, sawed............................... ........................... | ${ }_{3}^{3}$ | 165,000 1,500 |
| Locksmithing................................................................................... | 11 | 16,500 |
| Marble and stone works. | 9 | 18,000 |
| Masonry, brick and stone | ${ }_{3}{ }^{\text {9- }}$ | 37,700 16000 |
| Painting, house, sign and ship................................................................... | 24 | 30,768 |
| Paper hanging. | 18 | 9,000 |
| Patent medicine.......................................................... | 10 | 10,000 |
| Photography............................................................... | 4 | 37,000 |
| Plasterers........................................................................................... | 12 | 3,000 |
| Plumbers and gas fitters............................................... | 18 | 31,000 128,900 |
| Printing and publishing, book and job............................... | 12 | 122,000 |
| Roofers, ${ }_{\text {Roofers }}$ gravel and slate........................................................................................ | - 7 | 2,900 |
| Saddlery and harness................................................................................. | 11 | 28,500 |
| Sash, doors and blinds................................................... | 7 | ${ }_{725,000}$ |
| Ship building............... | 13 | 484,500 |
| Soap ............................. | 5 | 72,300 |
| Stair building.. | ${ }_{21}^{4}$ | 136,311 |
| Stoves, heaters, tin and sheet-iron............................................. | 24 | 44.680 |
| Upholstery............................................................................. | 11 | 2,700 |
| Woolen goods......... | ${ }_{2}$ | 34,000 |
| Worsted mills...i. .......................................................... | 3 | 48,700 |
| Woolen and coton yarns.............................................................................. | 46 | 563,750 |

## SUMMARY, 1880 AND 1886.

| Newar | 1880 | 1,319 | $\begin{array}{r} \$ 25,679,885 \\ 29,300,580 \end{array}$ |
| :---: | :---: | :---: | :---: |
| " | 1886 1880 | 1,581 | - $11,899,915$ |
| Jersey Cit | . 1886 | 744 | 15,492,969 |
| Paterson | . 1880 | 346 403 | 12,412,942 |
|  | .. 1880 | 404 | 6,966,830 |
| Trenton | .. 1886 | 492 | 8,592,100 |
| Camden | 1880 1886 | 321 716 | 5,032835 $6,977,664$ |

CAMDEN-Continued.

| AYERAGE NUMBER OF HANDS EMPLOYED. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Children and youths. |  |  |  |
| 25 | ...... | ......... | \$6,450 | \$3,460 | \$26,000 |
| $\begin{array}{r} 34 \\ 330 \\ \hline \end{array}$ | .............. | .............. | 20,400 101,000 | 6,700 15,000 | 56,000 751,613 |
| r 1,600 | 60 | 14 | 104,000 | 15,000 585,000 | 751,613 $1,158,000$ |
| 1,62 | 4. |  | 15,138 | 42,550 | 1,87,600 |
| 64 | 113 | 27 | 39,354 | 47,300 | 128,000 |
| 132 | 6 | 36 | 32,917 | 37,079 | 116,500 |
| 10 | 6 | .............. | 7,300 | 9,720 | 19,700 |
| 113 | ............... | .............. | 57,760 | 63,500 | 125,150 |
| 42 | $\qquad$ | .............. | 27,884 | 42,520 324699 | 96.000 |
| 99 11 | ................ $\qquad$ | $\qquad$ | 36,993 4,620 | 324,699 3,716 | 417,000 12,700 |
| 11 220 |  <br> -******* |  | 4,620 97,960 | 3,716 95,850 | 12,700 244,750 |
| 43 | .............. | ............... | 97,960 18,600 | 13,720 | 243,544 |
| 127 |  |  | 111,080 | 98,060 | 234,850 |
| 130 | .............. | 30 | 71.627 | 603,200 | 741,040 |
| 63 | . |  | 28,918 | 33,728 | 113,936 |
| 73 | ........... | 4 | 43,800 | 31,700 | 94,928 |
| 32 | 47 4 | 9 | 23,400 | 7,570 | 127,000 |
| 4 | $\begin{gathered} 4 \\ \ldots \ldots \ldots . . . . . . . . . . ~ \end{gathered}$ | $\ldots .$ | 2,700 21,430 | 1,300 64,290 | 6,800 113,000 |
| 48 | . | ... | 5,760 | 1,920 | 16,000 |
| 60 |  | .............. | 29,220 | 27,117 | 124,858 |
| 89 |  | 13 | 33,590 | 31,600 | 100,333 |
| 43 |  | 5 | 21,560 | 17,400 | 62,720 |
| 51 | .............. | ......... | 25,640 | 63,200 | 106,500 |
| 54 | .... | 2 | 28,783 | 83,760 | 149,180 |
| 215 |  | 30 | 141,113 | 180,181 | 384,450 |
| 57 558 | ............. |  | $\begin{array}{r}29,640 \\ 374 \\ \hline\end{array}$ | 143,000 | 211,665 |
| 558 83 | $4$ | ............... | 374,760 24,300 | 531,184 | $1,013,576$ $1,021,000$ |
| 16 |  | ........ | 9,600 | 11,400 | 1,025,600 |
| 91 |  | ............... | 72,400 | 143,300 | 247,470 |
| 105 | $7$ | 10 | 42,814 | 49,750 | 139,680 |
| 33 | 36 | 1 | 30,150 | 64,608 | 137,560 |
| 166 | 37 | 13 | 86,088 | 227,486 | 530,000 |
| 90 | 35 | 55 | 22,200 | 70,417 | 117,250 |
| 158 746 | 351 116 | 95 64 | 151,251 307,400 | 285,602 $1,012,500$ | 701,700 $2,081,910$ |

SUMMARY, 1880 AND 1886.

| 22,151 | 5,246 | 2,649 | \$13,171,339 | \$44,604,335 | \$69,252,705 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 25,196 | 5,366 | 2,869 | 15,170,650 | 50,608,220 | 80,4i4,929 |
| 7,962 | 2,426 | 750 | 4,622,655 | 49,738,985 | 60,473,905 |
| 10,781 | 3,210 | 1,093 | 6,213,658 | 55,919,573 | 68,880,168 |
| 10,270 | 6,576 | 2,953 | 6,992.487 | 14,623,833 | 26,503,350 |
| 12,763 | 6,581 | - 4,789 | 8,496,298 | 18,322,639 | 33,501,329 |
| 6,691 | 1,084 | 1,127 | 3,150,119 | 7,421,399 | 12,712,762 |
| 8,130 | 1,383 | 926 | 3,815,350 | 8,990,470 | 15,115,980 |
| 3,293 | 826 | 251 | 1,626,306 | 4,348,710 | 7,644,705 |
| 7,288 | 1,021 | 437 | 3,745,098 | 6,479,307 | 14,945,355 |

## PART IX.

## LABOR LEGISLATION.

LAWS RELATING TO THE EMPLOYMENT OF LABOR AND AFFECTING THE INTERESTS OF WAGE-EARNERS IN THIS STATE.

## PART IX.

## LABOR LEGISLATION.

## LAWS RELATING TO THE EMPLOYMENT OF LABOR AND AFFECTING THE INTERESTS OF WAGE-EARNERS IN THIS STATE.*

An act to amend an act entitled "An act to authorize cities to establish and maintain free public libraries and readingrooms," approved March fourteenth, one thousand eight hundred and seventy-nine.

1. Be it enacted by the Senate and General Assembly of the State of New Jersey, That section one of the act entitled "An aet to authorize cities to establish and maintain free public libraries and reading-rooms," approved March fourteenth, one thousand eight hundred and seventy nine, be and the same is hereby amended so as to read as follows:
[1. That the common council of each incorporated city of this state shall have power to establish and maintain a public library and reading-room for the use and benefit of the inhabitants of such cities, and for such purposes may levy a tax of not more than one-fifth of one mill on the dollar annually on all the taxable property in the city, such tax to be levied and collected in like manner with other general taxes of said city, and to be known as the "library fund;" and whenever, in any such city, a public library and reading-room shall have been established, under and pursuant to the provisions of this act, and shall have existed for three years or more, and the title to property of the value of at least thirty thousand dollars shall have become vested in the board of directors of such library and reading room, the board of directors of such library and reading-room shall, on or before April of each year, determine the amount, not exceeding one-half of one mill on the dollar on all the taxable property in the city, which will be required in such year for the maintenance of such library and reading-room, and, by its president, certify such amount to the common council of such city, and such common council shall thereupon order and cause to be assessed and raised by tax in such year for such purpose the amount so certified, such tax to be levied and collected in like manner with other general taxes of said city, and to be known as the "library fund."]
2. That section nine of the act hereby amended be and the same hereby is amended so as to read as follows:
[9. That any person desiring to make donations of money, personal property or real estate for the benefit of such library, or for the establishment or maintenance of an art

[^90]gallery and museum in connection therewith, may do so, and is empowered to vest the title to the money, personal property or real estate donated in the board of directors created under this act for the time being, to be held and controlled by such board, and its successors, when accepted, according to the terms of the deed, gift, devise or bequest of such property ; and any building or real estate so donated may be accepted by such board upon and subject to a trust that the same, or such part thereof as the donor or donors shall designate and appoint for such purposes, shall be set apart and appropriated and forever maintained as and for an art gallery and museum for the encouragement of art and scientific study among the inhabitants of the city where located, subject to such reasonable rules and regulations concerning admission to and the use of the same, not inconsistent with the terms of the deed, gift, devise or bequest of such property, as such board or its successors shall from time to time establish; and any money or personal property so donated may be accepted by such board upon and subject to a trust that the same shall be applied to or towards the maintenance or enlargement of any such art gallery or museum; and all moneys received for admission to or the use of such art gallery and museum shall be applied to the maintenance or enlargement of such art gallery and museum, or to the general purposes of such library and reading-room, as the board of directors shall from time to time determine; and as to all property so donated the said board shall be held and considered to be special trustees.]

Approved March 6th, 1886. P. L., Chapt. 50.

An act to amend an act entitled " $A$ further supplement to the act entitled 'An act for the relief of creditors against absconding and absent debtors,' " approved April sixteenth, one thousand eight hundred and forty-six, which further supplement was approved April flfth, one thousand eight hundred and seventysix.

1. That the first section of the act of which this is amendatory be and the same hereby is amended so as to read as follows:
[1. That the wages, salaries, or other compensation for labor, work or services done or rendered within this state, or elsewhere, due to a non-resident employe, shall not be liable to attachment at the suit of a non-resident creditor, or his or her assigns.]

Approved February 26th, 1886. P. L., Chapt. 37.

## An act to authorize cities of this state to compel owners of tene-ment-houses to construct flre-escapes thereon.

1. Be it enacted by the Senate and General Assembly of the State of New Jersey, That it shall and may be lawful for any city of this state, by general ordinance of the common council, board of aldermen, or other governing body, to provide for the construction of fire-escapes on all houses in said city which, in their judgment, shall require the same, and to provide rules and regulations for the construction and regulation of said fire-escapes, and to provide penalties to be imposed on any owner who may refuse or neglect to comply with the provisions of said ordinance, which penal-
ties may be recovered before any police justice or recorder of cities in which, said offices exist, or before any justice of the peace in any other city.
2. That all acts and parts of acts and charter provisions inconsistent herewith be and they are repealed.

Approved March 1st, 1886. P. L., Chapt. 41.

A further supplement to an act entitled "An act to limit the age and employment hours of children, minors and women, and to appoint an inspector for the enforcement of the same," approved March fifth, one thousand eight hundred and eightythree.

1. That the inspector appointed under the act, and the supplement thereto, to which this is a further supplement, and his successors, shall have authority to appoint, with the approval of the governor and comptroller, three suitable persons, who shall be residents and citizens of this state, as deputy inspectors, who, when appointed, shall hold office for a term of one year, at a salary of one thousand dollars per year, to be paid monthly, and shall have like power as the inspector under the act to which this is a further supplement, but shall be governed by and be subject to the control and direction of said inspector.
2. That the inspector of factories and workshops, and his deputies, shall be furnished with certificates of authority by the secretary of state, and that they shall produce the same if so requested by any occupier of a factory, mine, workshop or establishment.
3. That it will be illegal for any one to personate an inspector of factories or forge his certificate of authority.
4. That it will be illegal for any one to delay the factory inspectors in the exercise of their duties, or to conceal or attempt to conceal any child or children from examination by the inspectors.
5. That every manufacturer, merchant or other person who shall be guilty of any violation of the provisions of this act, shall be liable to a penalty of fifty dollars for each offense, to be recovered in an action of debt in the manner provided in section four of the act to which this is a supplement.
6. That all acts and parts of acts inconsistent with this act be and the same are hereby repealed.

Approved March 22d, 1886. P. L., Chapt. 83.

A supplement to an act entitled "An"act to incorporate benevolent and charitable associations" (Revision), approved April ninth, one thousand eight hundred and seventy-flive.

1. That any trades assembly, labor union or other society of workmen associated together for lawful mutaal aid and protection, may become incorporated under the act to which this is a supplement, in the same manner and with the same powers as are in said bill set forth and provided.

Approved April 15th, 1886. P. L., Chapt. 177.

## An act concerning cities.

1. That in any city of this state in which there is land owned by such city and not required for the purpose for which it was purchased, the board of aldermen or common council or other governing body of any such city is hereby authorized by an affirmative vote of four fifths of all the members of such board, council or other governing body, with the concurrence of the board having charge of the finances of such city and the approval of the mayor of such city, to assume control of such land, and to prepare and allow the same to be used by the public as a park or place of recreation.
2. That the board of aldermen, common council or other governing body of any such city may expend for the purpose of improving such land, and rendering the same suitable for the purposes of a park or place of recreation, such sum of money, not exceeding the sum of ten thousand dollars, as shall be appropriated for such purpose, and may expend for the purpose of maintaining and improving such park such sum of money, not exceeding one thousand dollars each year, as shall be appropriated therefor.
3. That the board of aldermen, common council or other governing body of any such city shall have power to adopt such rules and regulations, and appoint one or more keepers for the care and safety of such park, as may be deemed necessary for the purpose ; provided, that an appropriation shall be made for the purpose.

Passed June 1st, 1886. P. L., Chapt. 267.

An act to provide for the amicable adjustment of grievances and disputes that may arise between employers and employes.

1. That whenever any grievance or dispute of any nature shall arise between any employer, joint stock association, company or corporation engaged in manufacturing and his, their or its employes, it shall be lawful by the mutual consent of the parties to submit the same in writing to a board of arbitrators for hearing and settlement, which board shall be composed of five persons; a majority of said employes, at a meeting duly held for that purpose, shall have the power to designate two persons to act as arbitrators in their behalf, the employer, firm, joint stock association, company or corporation as aforesaid, shall have the power to designate two arbitrators and the said four arbitrators shall designate a fifth person as arbitrator, who shall be the chairman of the board.
2. That each arbitrator shall, before he proceeds to the business of the arbitration, take and subscribe an oath or affirmation faithfully and impartially to hear and examine the grievance in dispute or question, and to discharge his duties as such arbitrator according to the best of his skill and understanding, which oath or affirmation shall be taken and sabscribed before any officer authorized to administer the same.
3. That when the said board is ready for the transaction of business, it shall select one of its number to act as secretary, whose duty it shall be, when ordered by the board, to give at least two days' notice in writing to the parties to the dispute of the time and place of hearing the same, which notice may be served personally on the parties or by affixing the same to the principal outer door or gate of the establishment of said employer, firm, joint stock association, company or corporation, or
where from any reason service as aforesaid cannot be had, then the same may be served as said board shall direct.
4. That it shall be lawful for any justice of the peace, or the"clerk of any court of record within the county wherein such board of arbitrators may be, to issue subponas for the production of books and papers and for the attendance of witnesses before said board, and if any such witness, when so subpornaed, shall not appear in accordance with the command of such writ, or if appearing, shall refuse to be sworn or affirmed and give evidence, he or she, as the case may be, shall be liable to the same fines and penalties as he or she would be by law for such defaalt or refusal if committed in any court of record in this state.
5. That the said witnesses shall be examined on oath or affirmation, which oath or affirmation the chairman of said board is hereby empowered to administer; a majority of said board may provide for the examination and investigation of books, documents and accounts pertaining to the matters in dispute and belonging to either party ; provided, that the board may unanimously direct that instead of producing books, papers and accounts before the board, an accountant agreed upon by the entire board may be appointed to examine such books, papers and accounts, and such accountant shall be sworn well and truly to examine such books, documents and accounts as may be presented to him, and to report the result of such examination in writing; before such examination the information desired and required by the board shall be plainly stated in writing and presented to said accountant, which statement shall be signed by the board; attorneys-at-law, or other agents of either party to the dispute, shall not be permitted to appear or take part in any of the proceedings of the board, but the same shall be as far as possible voluntary.
6. That said board may make and enforce rules for the government of itself and the transaction of basiness before it, and fix its sessions and adjournments, and shall hear and examine such witnesses as may be brought before the board, and such other proof as may be given relative to the matter in dispute.
7. That after the matter in dispute has been fully heard, the said board, or a majority thereof, shall, within five days, render a decision thereon, which decision shall be reduced to writing, signed by the arbitrators agreeing thereto, and shall set forth such details as will clearly show the points considered by said board and the nature of the decision; said decision shall be a final settlement of the matters referred to said arbitrators, and shall be binding and conclusive between the parties; it shall be executed in three parts, one copy of which shall be given to each of the parties to the dispute, and the remaining copy shall be filed in the office of the clerk of the county, there to remain of record.
8. That when the said board shall have reached a decision and filed their report, as set forth in section seven of this act, its power shall cease, unless there may be in existence at the time other similar grievances or disputes between the same classes of persons mentioned in section one, and in such case such persons may submit their differences to the said board, which shall have power to act and arbitrate and decide upon the same as fully as if said board was originally created for the settlement of such other difference or differences.
9. That the members of said board shall not receive any compensation for their services, but the expenses of said board may be met and paid by voluntary subscriptions, which the board is hereby authorized to receive for the purpose.
10. That all acts and parts of acts inconsistent with this act be and the same are hereby repealed.

Approved April 23d, 1886. P. L., Chapt. 211.

A further supplement to an act entitled "An act to limit the age and employment hours of children, minors and women, and to appoint an inspector for the enforcement of the same," approved March ffth, one thousand eight hundred and eightythree.

1. That section six of the act to which this is a further supplement be amended so as to read as follows :
[6. That all necessary expenses incurred by the inspector of factories and workshops and his deputies, in the discharge of their duty, shall be paid from the funds of the state, upon presentation of proper vouchers of the same by the chief inspector; provided, that not more than two thousand dollars shall be expended in any one year.]
2. That this act shall take effect immediately.

Approved April 8th, 1887. P. L., Chapt. 3.

A further supplement to an act entitled "An act to encourage the establishment of mutual loan, homestead and building associations" (Revision), approved April ninth, one thousand eight hundred and seventy-flive.

1. That any association which now is or hereafter may become incorporated under the provisions of the act to which this is a further supplement, may issue shares of stock in different series to mature and terminate in such manner as may be designated in and by the constitution or by-laws of such association or any amendment lawfully made thereto.
2. That all shares of stock heretofore issued in different series by any such association according to the provisions of its constitation or by-laws, shall be as valid and effectual to all intents and purposes as if this act had been in force prior to the issuing of such shares.
3. That whenever the constitution or by-laws of any such association make no provision for the manner in which the same may be amended, such association may amend its constitution or by-laws at any regular meeting of the association by a vote of two-thirds of its members present at such meeting; provided, that the proposed amendment shall have been submitted in writing and entered upon the minutes of said association at least four weeks before a vote shall be taken thereon.
4. That all acts and parts of acts inconsistent with any of the provisions of this act be and the same are hereby repealed.
5. That this act shall be deemed a public act and shall take effect immediately.

Approved March 29th, 1887. P. L., Chapt. 46.

An act to regulate the hours of labor of employes of surface and elevated railroad companies.

1. That twelve hours' labor, to be performed within twelve consecutive hours, with reasonable time for meals, not less than half an hour for each, shall constitute a day's
labor in the operation of all cable, traction and horse car street surface railroads, and of all cable, traction and steam elevated railroads, owned or operated by corporations incorporated under the laws of this state, for the employes of such corporations in operating such railroads.
2. That it shall be a misdemeanor for any officer or agent of any such corporation to exact from any of such employes more than twelve hours' labor within the twentyfour hours of the natural day, and within twelve consecutive hours therein, as in the first section provided; provided, however, that in case of accident or unexpected contingency demanding more than the usual service by such corporation to the public, or from such employes to the corporation, extra labor may be permitted and exacted for extra compensation.
3. That it is the true intent and purpose of this act to limit the usual hours of labor of the employes of railroad corporations as aforesaid to twelve hours' actual work a day, to be performed within a period of twelve consecutive hours as aforesaid, whether such employes be employed by the trip or trips, the job, the hour, the day, the week, the month, or in any other manner.
4. That all acts and parts of acts inconsistent herewith be and the same are hereby repealed, and this act shall take effect on the fifteenth day of May next after its passage.

Approved April 8th, 1887. P. L., Chapt. 112.

A supplement to an act entitled "An act establishing legal holidays and regulating the maturity of commercial paper with respect thereto," approved June flrst, one thousand eight hundred and eighty-six.

Whereas, It is fitting that one day in the year be specially dedicated to the wageworkers of the state, which they may regard as peculiarly their own, and as set apart for the observance of labor festivals and such other reunions as to them may seem proper ; therefore,

1. Be it enacted by the Senate and General Assembly of the State of New Jersey, That the first section of the act to which this is a supplement be amended so as to read as follows:
[1. That the first day of January, the twenty-second day of February, thirtieth day of May, fourth day of July, first Monday in September (to be known as labor day), thanksgiving day, twenty-fifth day of December, and any day upon which a general election shall be held for members of assembly in each year, and also any day set apart by proclamation of the governor of this state or by the president of the United States, for the purpose of public observance, shall be a legal holiday, and no court shall be held upon said days except in the cases where said court would now sit upon a Sunday, and no person shall be compelled to labor upon any of said days by any person or corporation ]
2. That this act shall take effect immediately.

Approved April 8, 1887. P. L., Chapt. 114.

An act to amend an act entitled "An act to authorize the establishment of free public libraries in the cities of this state," passed April flrst, one thousand eight hundred and eightyfour.

1. That section two of the act to which this is an amendment be amended to read as follows:
[2. That vacancies happening in the office of trustee of any public library established under the aforesaid act, from any cause except expiration of the term of office, shall be filled in the manner provided in said act for the original appointment of trustees, but for the unexpired term only.]
2. That the provisions of this act shall remain inoperative in any city in this state until assented to by a majority of the legal votere thereof voting on this act at an election at which the question of its adoption shall be submitted to vote by direction of the legislative body of such city, either at the time fixed by law for the election of municipal officers or at a special election to be held for that purpose, of the time and place of holding which election the city clerk of said city shall cause public notice to be given by advertisements signed by himself and set up in at least five public places in said city for at least ten days previous to the day of such election and published for the same period in two newspapers of such city; the ballots used at such election shall be printed or written, or partly printed or written, and the same may be printed or written on the general ballots used at such election, on which may be either the words "for the adoption for this city of the provisions of an act entitled 'An act to authorize the establishment of free public libraries in the cities of this state,'" or, "against the adoption for this city of the provisions of an act entitled 'An act to authorize the establishment of free public libraries in the cities of this state;'" the election officers of said city shall return to the canvassing board of the same a true and correct statement in writing under their hands of the result of said election, the same to be entered at large upon the minutes of said body.
3. That this act shall take effect immediately.

Approved April 8, 1887. P. L., Chapt. 115.

## An act for the promotion of industrial education.

1. That whenever in any school district in this state there shall have been raised by special school tax or by subscription, or both, a sum of money not less than one thousand dollars for the establishment in such district of a school or schools for industrial education, or for the purpose of adding industrial education to the course of study now pursued in the school or schools of such district, there shall be appropriated by the state, out of the income of the school fund, an amount equal to that appropriated by the district as aforesaid ; and when such school or schools shall have been established in any district, or said industrial education has been introduced into the course of stady in the school or schools of any district, there shall be appropriated by the state for the maintenance and support thereof a sum of money equal to that appropriated each year by the district for such purpose ; provided, that the moneys appropriated by the state as aforesaid to any school district shall not exceed in any one year the sum of five thousand dollars.
2. That the trustees of any district in this state receiving an appropriation under the provisions of this act shall annually, on or before the first day of September, make a special report to the superintendent of public instruction of the progress of industrial education in such district and such other information in connection therewith as he may require.
3. That this act shall take effect immediately.

Approved April 28, 1887. P. L., Chapt. 173.


#### Abstract

A further supplement to an act entitled "An act for the government and regulation of the state prison," approved April twenty-first, one thousand eight hundred and seventy-six.


1. That it shall be the duty of every contractor carrying on in the state prison any manufacturing business in which the labor or skill of the prisoners is employed, whether under contract or otherwise, and of the manager or superintendent in charge for such contractor, to cause all goods, wares and merchandise made, in whole or in part, within said prison, and which are intended for sale, to be stamped in a legible and conspicuous manner with the words "manufactured in the New Jersey state prison;" provided, that whenever from the nature of any of the articles made or manufactured in the said prison it shall be impracticable to stamp each article, or if any articles shall be manufactured which are usually put up in packages, it shall be sufficient for the purposes of this act to put a stamp, label or tag upon such package, showing where such articles were made; provided, that said tag, stamp or label shall be put on said package in a good, lasting and permanent manner; and it shall be the duty of the principal keeper, supervisor and board of inspectors to insist in every contract for convict labor hereafter made on behalf of the state such terms, covenants and promises as will bind the contractor to comply with the requirements of this act; any contractor, manager or superintendent who shall wilfully violate the provisions of this act shall be guilty of a misdemeanor.
2. That all acts or parts of acts inconsistent with the provisions of this act be and the same are hereby repealed, and that this act shall take effect immediately, but the provisions of this act shall not apply to articles manufactured under any contract now in existence.

Approved April 30th, 1887. P. L., Chapt. 176.

A supplement to an act entitled "A general act relating to factories and workshops, and the employment, safety, health and work hours of operatives," approved April seventh, one thousand eight hundred and eighty-five.

1. Be it enacted by the Senate and General Assembly of the State of New Jersey, That every person shall within one month after he begins to occupy a factory or workshop, notify one of the factory inspectors of such occupancy.
2. That section two of the act to which this is a supplement be amended to read as follows:
[2. That all accidents in workshops, factories or mines, which prevent the injured
person or persons from returning to work within two weeks, or which result in death, shall, within twenty-four hours after the expiration of such two weeks, or after the death, as the case may be, be reported by the person in charge of such workshop, factory or mine, to one of the factory inspectors and to the city or district physician, where there is such an officer, which notice may be given by mail.]
3. That section six of the act to which this is a supplement be amended to read as follows:
[6. That no minor or woman shall clean any part of the mill gearing or machinery in any factory or workshop while the same is in motion, or work between the fixed or traversing parts of any machine while it is in motion by the action of steam, water or other mechanical power.]
4. That all factories, manufacturing establishments or workshops of two or more stories in height, in which thirty or more persons are employed above the first floor thereof, shall be provided with one or (if the proper officials deem necessary) more outside iron fire-escapes, not less than six feet in length and three feet in width, properly and safely constructed, guarded by iron railings not less than three feet in height, and taking in at least two windows at each story, and connected with the interior by easily accessible and unobstructed openings; and the said fire-escapes shall connect by iron stairs not less than twenty-four inches wide, the steps to be not less than six inches tread, placed at not more than an angle of forty-five degrees slant, and protected by a well-secured hand rail on both sides, with a twelve-inch wide drop ladder from the lower platform, reaching to the ground.
5. That for every twenty persons employed on every floor above the second floor of every factory and workshop there shall be one rope or portable fire-escape, and that. each story shall be amply supplied with means for extinguishing fire.
6. That all the main doors, both inside and outside, in factories, shall open outwardly, when the inspectors of factories, in writing, so direct, and that no outside or inside door of any building wherein operatives are employed, shall be so locked, bolted or otherwise fastened during the hours of labor, as to prevent egress.
7. That no minor below the age of sixteen shall be employed at any work dangerous to health, without a certificate of fitness from a reputable physician.
8. That factories and workshops in which women and children are employed and where dusty work is carried on, shall be lime-washed or painted at least once in every twelve months.
9. That an abstract of the factory and workshop laws, to be prepared and furnished by the chief factory inspector, shall be affixed in a conspicuous place at the entrance of every factory and workshop.
10. That if the inspector of factories find that the heating, lighting, ventilation or sanitary arrangement of any shop or factory is such as to be injurious to the health of persons employed therein, or that the means of egress, in case of fire or other disaster, is not sufficient, or that the belting, shafting, gearing, elevators, drums and machinery in shops and factories are located so as to be dangerous to employes and not sufficiently guarded, or that the vats, pans or structures filled with molten metal or hot liquid are not surrounded with proper safeguards for preventing accident or injury to those employed at or near them, he shall notify the proprietor of such factory or workshop to make the alterations or additions necessary within thirty days; and if such alterations or additions are not made within thirty days from thedate of such notice or within such time as said alterations can be made with proper
diligence upon the part of said proprietors, said proprietors or agents shall be deemed guilty of violating the provisions of this act; it shall then be the duty of the inspectors to examine the matter in dispute, and, if adverse to the appellant, he shall carry out the alterations or additions directed by said inspectors within thirty days, as aforesaid, and under the like penalty.
11. That section fifteen of the act to which this is a supplement be amended to read as follows:
[15. That any person or corporation, being the owner, lessee or occupant of any manufacturing establishment, factory, mine, workshop or store, or owning or controlling the use of any building or room, shall, for the violation of any provision of this act, or of the act to which this is a supplement, be liable to a penalty of fifty dollars for each offense, to be recovered in an action of debt in any district court in any city, or before any justice of the peace having due jurisdiction, and that any employe who shall be guilty of any violation of the provisions of this act shall be liable in a like action to a penalty of not more than fifty dollars, as the court shall fix; that such action shall be prosecuted in the name of the inspector of factories; the trial shall proceed as other actions upon contract, and the first process shall be a summons, returnable in not less than five days or more than ten days after issue, and it shall not be necessary to indorse the same as in qui tam actions; the finding of the court shall be that the defendant has or has not, as the case may be, incurred the penalty claimed in the demand of the plaintiff, and judgment shall be given accordingly ; in case an execution shall issue and be returned unsatisfied, the court, on application, after notice to the defendant, may award an execution to take the body of the defendant; and in case such a defendant is committed under such an execution, he shall not be discharged under the insolvent laws of the state, but shall only be discharged by the court making the order for the body execution, or one of the justices of the supreme court, when such court or justice shall be satisfied that further confinement will not accomplish the payment of the judgment and costs.]
12. That all acts or parts of acts inconsistent with the provisions of this act be and are hereby repealed.
Approved May 6th, 1887. P. L., Chapt. 177.
$\mathrm{NOV}_{5}$ 53

[^0]:    *If unable to state by the week, give for a day or month ; but mention which.

[^1]:    *" Werth des Lebens."

[^2]:    * The following quantities consumed per adult were also calculated from the returns, which, however, in this respect were far less complete than the data which constitute the basis of the table given above :

[^3]:    * See especially "Distribution of Products."
    $\dagger$ See "The Food Question in America and Europe," Century Magazine, December, 1886.

[^4]:    *Atkinson.

[^5]:    *Pages 467-494.
    $\dagger$ Many valuable budgets, both domestic and foreign, are given in the first annual report of the U. S. Commissioner of Labor, 1886.
    $\ddagger$ See page 241, Century Magazine, December, 1886.
    \& Labor Bureau Report, 1886.
    Three boarding-houses for mill operatives and two families, whose heads were a glass. blower and machinist.

[^6]:    * Potatoes, beets, turnips, tomatoes (bushel), 60 lbs ; beans and peas (bushel), 60 lbs ; beans and peas (quart). 1 lb .14 ozs . ; apples (barrel), 150 lbs . ; onions (bushel), 52 lbs . ; molasses (gallon), 11 lbs. ; syrup (gallon), 12 lbs. ; milk (quart), 2 lbs ; eggs (dozen), 1 lb .6 ozs.

[^7]:    * Per contract.
    $\dagger$ These do not materially differ from the prices current in the New Jersey cities.

[^8]:    * Only work five days per week.

[^9]:    * One hundred and twenty-seven of these hands were on a strike 103 working days.

[^10]:    ₹ Made at trade ; extra income outside. \|Including society dues, life insurance, etc.

[^11]:    ZOnly worked thirty weeks at shearing. $\quad$ Includes society dues, life insurance, etc.

[^12]:    *Female.

[^13]:    $\|$ Includingoovertime. TExtra earnings.

[^14]:    $\ddagger$ Deficiency made up from former savings.

[^15]:    * Very irregular work. $\dagger$ Partly outside income.

[^16]:    * Also a servant for three months.

[^17]:    * Own house. † Board. $\ddagger$ Including boarders.

[^18]:    *Own house. $\dagger$ Board.

[^19]:    house. \& Board. \|Board free.

[^20]:    * Raise them myself.

[^21]:    * Per bundle. †Kindling. $\ddagger$ Cord. ZOne-quarter cord. \|Basket. 【One-quarter ton.

[^22]:    *Basket. †Lima beans.

[^23]:    *The glass factories are not in operation during the months of July and August, but this time is included in the number of days lost time reported. The shearers, packers, batch makers and others frequently find outside jobs at the same establishment during the time the factories are not in operation, and thereby earn more than the annual wages given.

[^24]:    Class No. 1 received the same wages as in No. 1. All the rest of the blowers worked for apprentices' pay. No Union men were employed. The quantity produced was much less than in other establishments, as the amount of wages made indicates.

[^25]:    ＊This factory was also operated on the co－operative plan，the same as No．16，but not so profitably ；the workmen，however，made full wages and secured more time than the average， being about forty－two weeks during the year．†This establishment was in operation forty weeks during the year．

[^26]:    ＊Eight establishments．

[^27]:    *Two lost twenty-four days each; one six days, the rest worked full time. $\dagger$ Full time. $\ddagger$ Per week. $\quad$ \&This increase in the latter part of year, and is to be added to the prices quoted for weaving.

[^28]:    * Per week.

[^29]:    ＊There was a strike at this establishment，which lasted from the 7 th of October，1885，until January 18th，1886，causing one hundred and three days lost time，and only thirty－seven weeks in full operation．The wages given are the rates earned since the advance took place．

[^30]:    ＊Per week．

[^31]:    ＊Some help not directly employed in producing goods，such as errand boys，scrub women， drivers，\＆c．$\dagger$ Lowest，\＄11；highest，\＄15． est，\＄30．

[^32]:    *Lowest, \$12 ; highest, \$18. †Lowest, \$9; highest, \$15. $\ddagger$ Lowest, \$11; highest, \$15

[^33]:    ＊Lowest，$\$ 11$ ；highest，$\$ 15$ ．†Lowest，$\$ 12$ ；highest，$\$ 18$. \＆Lowest，$\$ 5$ ；highest，$\$ 8$ ．No change in three years． ＊＊Lowest，$\$ 9$ ；highest，＇$\$ 15$ ．HLowest，$\$ 15$ ：highest，$\$ 25$ ．
    $\ddagger$ Lowest，\＄14；highest，$\$ 25$. ₹ Lowest，$\$ 12$ ；highest，$\$ 14$ ．

[^34]:    * Women's, misses' and childreñ's shoes.

[^35]:    * Women's, misses' and children's shoes.

[^36]:    ＊Women，misses＇and children＇s shoes．

[^37]:    ＊Machine work．†Women＇s，misses＇and infants＇shoes．Machine work．

[^38]:    ＊Women＇s，misses＇and infants＇shoes．Machine work．

[^39]:    * The department was not in full operation more than seven months, with the balance of time irregular; but few of the hands were employed one-half time. †The average price in sixteen establishments is given here. $\ddagger$ Overtime.

[^40]:    * Overtime. $\quad \dagger$ This statement was prepared by the Secretary of the Finishers' Association of Orange.

[^41]:    "A shorter day's work is not only a necessity, but it is also the worker's right. Increased production entitles him to this as well as

[^42]:    "In busy seasons we work fifteen hours daily. This should be stopped before we talk of an eight-hour day."-Bleacher.

[^43]:    ' Fall and winter opening. On Wednesday we will open to our customers and friends our dry goods department. We have just made heavy purchases of fall and winter goods in great variety, with a view to pleasing our friends. No trouble to show our goods, and we are sure we can offer you bargains. We will give a present to every person making a purchase in our dry goods room.

    - Look at the following prices in our grocery and meat departments :
    ' Granulated sugar, 6c. ; standard A, 6c.; B, $5 \frac{1}{2} \mathrm{c}$. ; headlight oil, per gal., 12c.; flour, per qr., 60, 70 and 80 c .; mackerel, per lb., 6.8 and 12 c . ; pork, salt, per lb., 9 c . ; pork steak, 2 lbs . for 2 J . ; apple butter, per 1 lb. . 7 c. ; sirloin steak, per lb., 14 c. ; round steak, 2 lbs . for 25 c . ; rik roast, 2 lbs . for 25 c .; chuck, 6 to 10 c . per lb.; roast pork, 9 c .' "-Glass Blower.

[^44]:    "Dissatisfaction with our many hours of work and overtime, as well as with the low wages received, was the cause of a general strike among the Hudson county silk workers on May 1st, lasting one month. The employers conceded a rise of from ten to twenty per cent. in wages, and a reduction to fifty-five hours of work weekly." Silk Weaver.

[^45]:    "Any differences which recently existed between employers and employes in Paterson have been adjusted, generally satisfactorily. In one case an iron founder locked out his men and shut down, because they asked for better wages."-Broad Silk Weiver.

[^46]:    "In Passaic there was a strike in the shawl mill, resulting in success for the men. The print-works strike was very disastrous. It originated through some man's spoiling a few pieces of goods, for which he was discharged. Many of the men quit work with him and were blacklisted."-Laborer.
    "There have been a number of strikes at different places in Paterson, all for increase in wages or enforcement of.schedules."-Laborer.

[^47]:    "' Whereas, The rapid increase in the number of journeymen in the trade has become so great under the apprentice system (which allows two for each furnace) as to create a large surplus of workmen; and whereas, this system has engendered a tendency to create and foster scab houses, which are a standing menace to the stability and permanent security of our trade; and whereas, we believe that the continuance of this system will ultimately result in the complete destruction of the trade, if not abated; therefore,
    "'Resolved, That manufacturers shall not be permitted to take any apprentices for or during the blast of 1886 and 1887, and their compliance with this law shall be rigidly enforced.'

[^48]:    *Furnished by a member of the Trades Assembly.

[^49]:    "Resolved, That no member of the Hat Makers' Association be allowed to go to work in any shop of any of the manufacturers who have favored this lock-out, until such time as the association of makers receives a written statement that the said mannfacturers have withdrawn from the lock-out; be it further
    "Resolved. By the Hat Makers' Association of the District of Newark, that we will not reconsider the resolation declaring that ten cents be the lowest price for the sizing of a hat of any kind."

[^50]:    "Resolved, That the secretary of this association be instructed that the factories will be open for work to-morrow (Wednesday, May 19th.) morning, and that the committee of eight be instructed to arrange a meeting with the like committee of the Makers' Association.
    " Robert CLaRK, Jr.,
    "Secretary Association of Fur Hat Manufacturers.
    "Newark, May 19th, 1886."

[^51]:    "Propositions submitted by the Conference Committee of the Hat Makers' Association to the Manufacturers' Association Conference Committee :

[^52]:    "Resolved, That in order to bring about the universal use of the union label and to make impossible its forgery by unscrupulous parties, this Board requests that each local district take immediate steps to make fair the foul shops in its jurisdiction, and if any district refuses to take such action, that then the Board of Directors shall have power to make such shops fair."

[^53]:    "Resolved, That the Deliberative Committee is hereby empowered to admit to membership in this union all persons at present employed on the Newark Daily Advertiser, or in the job department thereof, on the payment of a fine, which shall not be less than $\$ 5$ nor more than $\$ 100$; provided, that the seven men who deserted the union on the day of the strike pay the maximum amount, $\$ 100$; and provided further, that persons there employed who have never belonged to this or any union be admitted by paying the usual initiation fee."

[^54]:    "Boycott Committee,
    " Essex County Trades Assembly.

[^55]:    "Resolved, That the resolution passed at the last meeting, in reference to sub-bosses and in raising prices now paid two cents per hide, be reconsidered.
    "Resolved, That we will not pay any more per hide than we have been paying, and that we will not abolish the sub-boss system, and that we will sustain each other in running our factories as heretofore."

[^56]:    *"Nearly a third of a century has elapsed since a general modification in the hours of labor, notwithstanding that a vast multiplication of improved labor-saving machinery has resulted in enlarged production, increasing the difficulties of finding a market for our products, of keeping our factories in operation and of giving constant employment to the ever-increasing number dependent upon their daily toil for means of subsistence. These considerations, the advocates of the eight-hour system argue, not only warrant but require its introduction even more urgently than the change effected by the reduction of the work day from 'sun to sun' to ten hours. We therefore earnestly request the following information:
    "Are there any industries in which an eight-hour rule would be impracticable? If se, in which and why?
    "What was the earliest method (giving also the date) of production in your own trade or industry, so far as you personally have knowledge?
    "Taking this as a starting point, give the date of each improvement, when it was introduced and the increased production resulting therefrom, especially the average increase per individual workman ; the number of hours of daily work during these periods, and also the number of hands employed-to show whether there has been an increase or decrease."

[^57]:    * United States Census, 1880.

[^58]:    *"Questions of the Day," page 89.

[^59]:    *Page 141, reforring to railway construction.

[^60]:    *"Employers have constantly predicted that ruin would come on the great industries of the country if workmen were better paid and better treated. They resisted and have resisted up to the present day, every demand which workmen have made for the right of association, for the limitation of children's and women's labor, for the shortening of hours, for the abolition of truck, for the protection of their workmen's lives and limbs from preventable accidents, and are now appealing to the doctrine of liberty of contract, after having for centuries denied the liberty. The Factory Acts were believed to be the death-blow to English manufactures, and they have made labor more efficient, more intelligent, more decent and more continuous without trenching on profits."-Therold Rogers, in Work and Wages.

[^61]:    *"The new machinery benefits society at large, it is, therefore, intolerable that the workman, who is not responsible for the modifications introduced into industry, should be made their victim. Since he is deprived of his livelihood in the interests of the public good, he hasa right, should he need it 10 an indemnity, and the machinery, which has increased production, affords the means of pay ing it."-De Lavelaye Elements of Political Economy, p. 96. Also John Stuart Mill to same effect. helatter celebrated economist considered it doubtful if hitherto all the machinea that have been invented have decreased the sum of human labor by a single hour.

[^62]:    "In my trade little improvement in the way of machinery has been made. Composition is now very much the same as it was two hundred years ago, and the only calling that I know of where the eighthour rule could not be applied is farming."-Printer.

[^63]:    * Paper by Professor Alexander Johnson, LL.D., of Princeton College, before the Nationaz Convention of Chiefs of the United States Bureaus of Labor Statistics, Trenton, June 3d, 1886.

[^64]:    *There are two kinds of associations, "terminating" and "permanent." A terminating association is one where all the stock is issued as of one date. Say an association is limited by law to have 2,500 shares. Now, if all these shares are not sold, or, in other words, subscribed for and taken by members at the first meeting, the shares that are afterwards sold to new members are required to be made equal in value with those already issued, by back payments to the amount of the ascertained value of the stock at the time the new members subscribed for it. Suppose an association has been running one year, it would require a payment of one year's back dues, together with the amount earned that year, and supposing the gain to have been 60 cents, this would make $\$ 12.60$ for the first year, dues and profits. If the society had run two years it would require $\$ 24.40$ for the amount earned, making a total of $\$ 26.40$ to be paid at the end of the second year. This process continues from year to year, and of course it becomes more costly'and difticult for a new member to enter as the years move on. There being but one issue of stock, of course all the shares are of equal value at all times during the life of the association, and when the ultimate value is reached, by reason of all the dues paid in and profits combined aggregating $\$ 200$ per share, the society terminates. When this point is reached the non-borrowers are paid in full and the borrowers have their mortgages satisfied.

    A permanent association is formed on the same principle as one that issues only one series of shares, the difference being only in the issue of shares at different periods during the continuance of the society. Each series dates back only to the period at which it was issued; so that while all the shares of a terminating society are at all times equal to each other, the share of each particular series only are equal under the permanent plan. Each issue runs its course (as to value) independently, without interfering with others issued before or after it. Under this plan the members agree to wind up the series when their value is shown to be $\$ 200$, leaving other series, or members, in the association, who, by reason of a later entrance, have not reached the point of departure. These also, in turn, retire when their capital reaches the fixed value, leaving still others to follow in time. This constitutes the permanent feature of the plan.-
    Building News.

[^65]:    * Prof. R. T. Ely, Ph.D., of Johns Hopkins University, is Secretary.
    $\dagger$ Mr. Brown kindly furnished the following information about the associations in Pennsylvania and elsewhere:

    I have collected several hundred reports of our Pennsylvania building associations, of which it is estimated there are at least 1,500 in the State, a great number of new ones having been organized during the past few years. One hundred and twenty of the Philadelphia companies took in last year $\$ 3,980,372.55$, and the other items were shown on their reports as follows: Capi-

[^66]:    tal and assets, $\$ 874,939,917$ : expenses, $\$ 10,186.91$; shares, $151,6791 / 2$. The averages per society are: cash receipts, $\$ 33,169.77$; assets, $\$ 72.911 .15$; expenses, $\$ 378.20$, and shares, 1,264 . The foregoing multiplied by 1,500 gives: receipts, $\$ 19,754,655$; assets, $\$ 109,366,725$; expenses, $\$ 567,300$, and shares, $7,584,000$. This is only an estimate, but is believed to be nearly correct, as the assets have been largely augmented during the past thirty-six months. It is fair to suppose that about one-half of the $\$ 49,754,655$ taken in on account of dues, etc.. per year, is now being paid out each year on account of matured shares and withdrawals. (The shares in hundreds of these societies are now maturing yearly.) The small expense of management is chargeable just as much to the receipts and out-go as it is to the capital remaining at the end of the year. That is, the assets carried over are $\$ 109,366,725$, and the receipts, say $\$ 50,000,000$. The expense not only is for taking care of the assets, but for transacting a large cash business. Of course, the assets cannot increase according to the receipts, as these societies are paying out a large portion of their income to matured stock. In the early life of a society the assets are augmented yearly about to the extent of the income, but the particular associations which are maturing shares cannot do much better than hold their own in the matter of assets.

    There are fully 400 active societies in the city of Philadelphia, of which 100 are distinctively German, many of the latter being run on the single series plan. The profit allowed to withdrawing shares is 4 to 6 per cent. per annum, and matured shares earn from 6 to 9 per cent. The present gain on all the money invested is about at the rate of 7 per cent. per annum. The membership is about 300,000 .

    St. Paul, Minnesota, has 40 of these societies, and the dues paid in amount to nearly $\$ 1,000,000$ per year. It is estimated that one-half of this is used for the erection of new buildings. The average cost of a dwelling-house is $\$ 1,000$. giving that city 500 new houses for wage-workers every year. The members are of the opinion that the amount deposited by them is a clear saving, for they managed not to save before these societies were organized.
    M. K. McGrath, Secretary of State, Missouri, reports that there are 113 of these societies in that State, of which 39 are in St. Louis. New societies are being formed nearly every day.

    The City of Rochester, New York, has 56 active associations, with weekly deposits of about $\$ 25,000$.

[^67]:    * According to 1885 report. $\dagger$ No report sent for 1886 ; figures of 1884 . $\ddagger$ Nearly all.

[^68]:    ZIncluding notes. \|Railroad bonds, etc. TIncluding loans on stock. **Including uns divided balance.

[^69]:    * These are not ordinary building and loan associations; the associations own tracts of land, which are divided into lots sold to members. See above.
    $\dagger$ This is not a regular building and loan association, but a joint stock company.

[^70]:    $\ddagger$ Partly stock of association. z No data furnished by which this could be calculated. Dues paid ; no other data have been furnished. In 1884 the assets were reported to be $\$ 4,433$.
    No data given. §No data given. ** Including loans on shares, bonds, etc. \#February, $18>7$.

[^71]:    *Including loans on shares, bonds, etc. †Salaries and other expenses. $\ddagger$ Share, $\$ 500$ $z$ The 1886 report, received too late for tabulation, gives the net assets at $\$ 17,585$.

[^72]:    * One hundred and seventy-five males and fifty females. †One hundred and sixty-six males and ninety females. $\ddagger$ Two other associations in New Brunswick besides those given here-Union and Empire. Both are in process of settling up. \&We expect to close in April, 1887 , or in eleven years. PNo report received; 1884, data given. The information given is for 1884.

[^73]:    *This is a homestead association, which sells land to its members. †No report for 1886 was returned; the figures given are those for 1884.

[^74]:    * Matured December, 1885. $\dagger$ Less shares matured during year.

[^75]:    * Maturing value of shares, $\$ 100$; dues, 50 cents per month.

[^76]:    *Maturing value of shares, $\$ 100$; dues, 50 cents per month.

[^77]:    *A new series is started every month ; those given are the latest and earliest. †Forty-five series running; only part given here.

[^78]:    *General Master Workman Powderly's address, 1885.

[^79]:    * Vol. 5 of the publications of the American Economic Association, Baltimore, Md. Price; seventy-five cents.
    $\dagger$ Co-operative creameries do a business probably of $\$ 1,000,000$, and at least $\$ 3,250,000$ are now invested in co-operative banks (building and loan associations).

[^80]:    * Dyers are often required to divide one pound of silk into ten or twelve different colors, and to receive orders to dye one-half an ounce of silk is a common occurrence.

[^81]:    * Males under twenty years of age and females under eighteen years are here included. In former years males above eighteen were classed as men, and females of sixteen or more were classed as women.
    +Including 575,000 pounds of silk thrown, but not woven in this State.

[^82]:    " IMPORTS OF RAW SILK.
    " table of percentages in fiscal years.

[^83]:    "In other branches of the general trade improvement is to be noted. The few manufacturers engaged in producing velvets and plushes have made more goods than in 1885, and found for them a ready sale. The manufacture of silk knit fabrics has also increased, while in laces a satisfactory trade has been done."

[^84]:    *The imports of raw and waste silk, \&c., for the past fiscal year are given as follows: Raw silk, 4,717,672 pounds; pierced cocoons, 571,369 pounds.

[^85]:    *504 head of cattle were fed at this distillery, and their average increase in weight was 200 pounds, or a total of 100,800 pounds.

[^86]:    *The British beer barrel has been computed at 36 gallons and the ale gallon at 1.22 United. States gallons.

[^87]:    Note.-The liter has been computed at .26417 United States gallon.

[^88]:    * Page 94.

[^89]:    *Mr. Thoman, manager of the literary bureau of the United States Brewers' Association, says: "The capital at present invested in the breweries of the United States may be roughly estimated at $\$ 2,120,000,000$, and the capital invested in malt-houses at $\$ 21,000,000$."

[^90]:    *A compilation of the labor legislation of previous years was given in the Eighth Annual Report.

