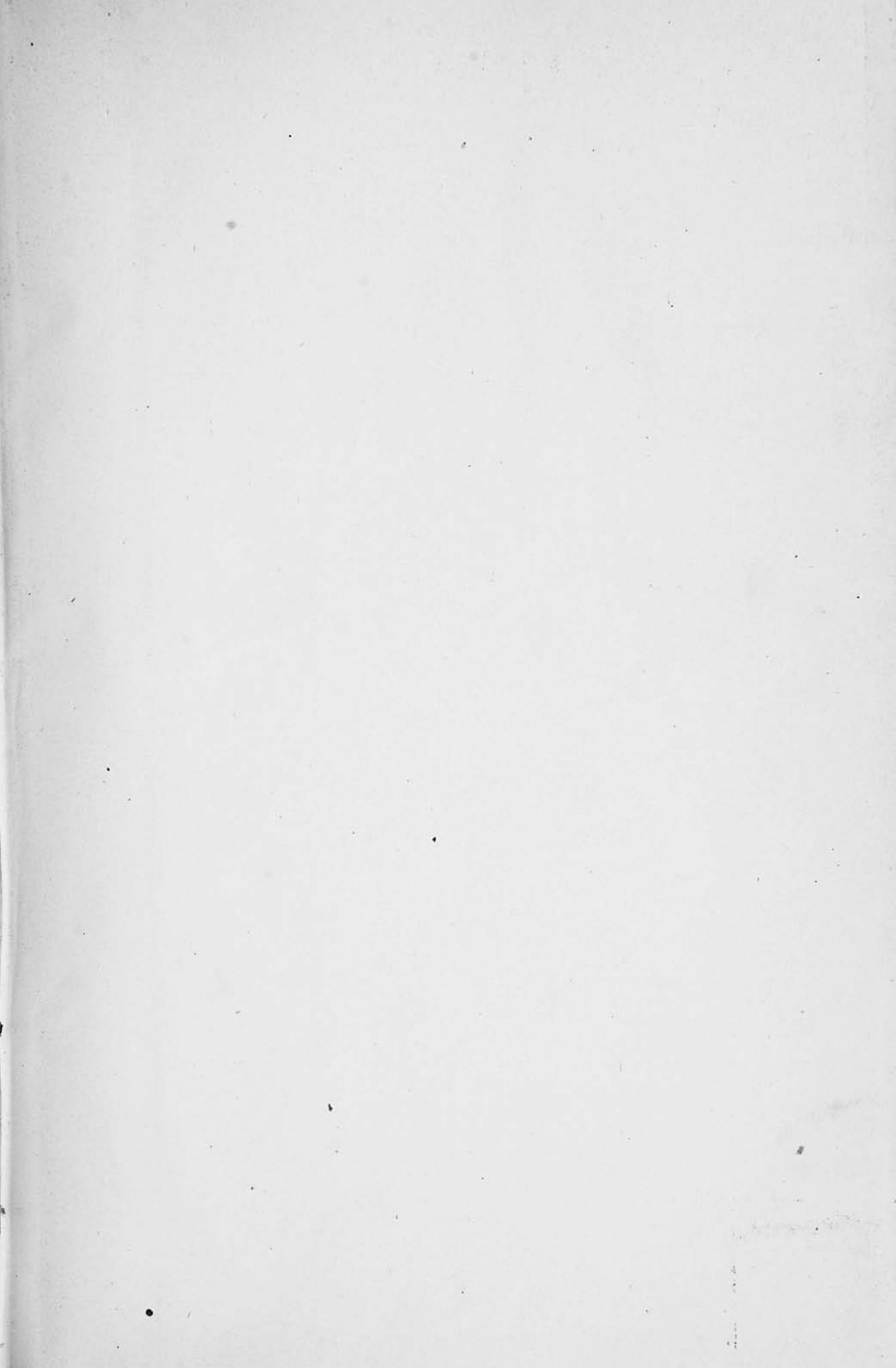
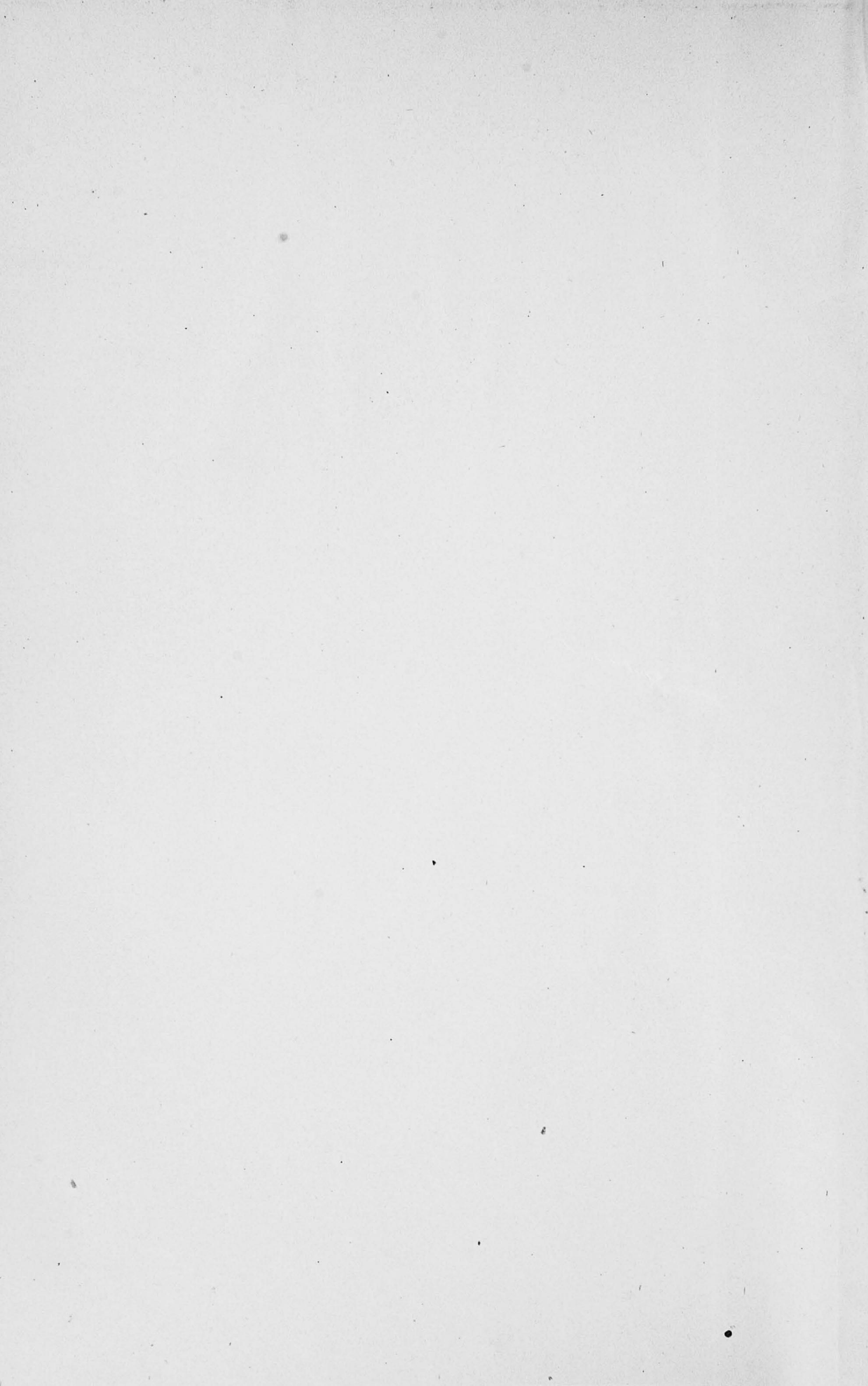


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THIRD ANNUAL REPORT

OF THE

BUREAU OF STATISTICS

OF

# Labor and Industries

OF

*NEW JERSEY,*

FOR THE YEAR ENDING OCTOBER 31ST,

**1880.**

974.901

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1880.



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STATE OF NEW JERSEY, OFFICE OF BUREAU OF  
STATISTICS OF LABOR AND INDUSTRIES, }  
TRENTON, October 31st, 1880. }

*To His Excellency, George B. McClellan, Governor ;*

SIR:—I have the honor to submit to the Senate and General Assembly, through you, the Third Annual Report of the Bureau of Statistics of Labor and Industries.

JAMES BISHOP,  
Chief.

## ERRATA.



- On page 104, second paragraph, eighth line, read gridiron instead of "guiding."
- On page 324, second paragraph, second line, read 320 instead of "94."
- On page 324, ninth paragraph, first line, read 10 instead of "0."

## INTRODUCTION.

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In laying out the work for this Third Annual Report such a variety of subjects presented themselves, coming within the scope of our duty, that it seemed difficult to decide which should take precedence. Recognizing the fact, however, that the leading idea in establishing the bureau was to encourage our present State industries, and also stimulate endeavor to establish new sources of wealth, whereby profitable employment might be furnished to a larger number of wage workers, we have tried to direct attention to subjects tending directly to that end.

The only blanks issued (with the exception of a few questions put in print and sent to the township clerks with the view of obtaining information as to the working of the roads of the State) were No. 2 for employers, and No. 3 for employees. That a greatly increased interest has been manifested in the work of the bureau is evident from the fact, that while the same number of blanks were issued, the number returned has increased nearly ninety per cent. over last year.

The elevation of the wage working class to a higher condition of education and self-help has become an absolute necessity for the preservation of our free institutions; for, as this class forms a large majority of the voters of our country, it must ever constitute that conservative element which, through an educated intelligence quite within their reach, should always be on the alert to check any revolutionary or communistic tendency which may manifest itself on the one hand, and on the other be able to exert such a wise influence upon legislation as will prevent all combinations for the purpose of monopolizing either the highways for transportation, or the products or manufactures of the country whereby it is made possible, by advancing prices, to increase the cost of commodities which enter into the daily consumption of the people. Uniformity in the cost of living is an essential element in the prosperity of the wage working

class, for it is not always the case that the advance in articles of consumption is met by a corresponding advance in wages.

The awakening of an increased interest upon the part of working men to our methods of government; and a more thorough understanding of the vast and important problems now being solved in our midst, can only be secured by inciting them to a more careful study of those questions in political economy which so directly interest them in their daily life. By an intelligent examination of these questions they will be aroused to a higher moral sentiment, which will lead them to demand that party morality shall be observed and the abuses of party restrained.\*

#### TECHNICAL EDUCATION.

A pressing necessity is felt for schools which will furnish those who desire to become mechanics or artizans with more thorough technical and artistic training. While many kinds of manufactures are being rapidly developed in our midst which require skilled workmen, the schools are not at hand wherein the necessary training can be acquired, and we are dependent upon other States and foreign countries for our supply. We are glad to learn, however, that the State Board of Education have had this subject under discussion, and there is every probability that some definite plan will be agreed upon, whereby, through the conjoined efforts of many of our leading manufacturers and the State Board of Education, such legislative aid will be secured as will cause the speedy establishment of schools for the proper training of those who wish to pursue mechanical or artistic work.

#### THE SILK INDUSTRY.

The rapid growth of silk manufacture in the United States, and the fact that it has become one of the most prominent industries in our own State, furnishes ample reasons why more energetic measures

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\* We are informed that "The Society for Political Education," of New York, have arranged for a special edition of the four following named books, under the title of *Library of Political Education; First Series*, and have fixed the retail price at \$3.00 for the set of four books, viz.: 1. Politics for Young Americans, by Chas. Nordhoff. 2. Introduction to Political Economy, by Prof. A. L. Perry. 3. History of American Politics, by Alex. Johnson. 4. Alphabet in Finance, by Graham McAdam. These books can be procured from the local bookseller in any town, or from Messrs. G. P. Putnam's Sons, 182 Fifth Avenue, New York.

should be adopted to promote silk culture, and establish it as one of our staple agricultural products.

The United States census for 1880 will show the aggregate production of silk goods to have been \$34,410,463, while in 1879 the total was \$29,983,630. The same census shows that of this product \$16,209,465 \* was manufactured in this State, or nearly one-half of all the goods manufactured in the country.

The increased amount of raw material required each year is shown in our table of imports, page 86, where it will be seen that 18,936 bales, of the value of \$9,921,032 were imported in 1879, while 20,899 bales, valued at \$11,478,763 were required in 1880.

In view of the largely increased demand for the raw material, and from the fact that so large an amount is consumed within our own State, (1,422,653 pounds, or 11,500 bales) silk culture should receive more encouragement at the hands of our legislators. The offer of even a moderate bounty for each pound of cocoons would greatly stimulate it as a family industry.

The culture of raw silk as an American industry is attracting attention all over the United States, and the ladies of the country are taking the subject vigorously in hand. An organization has been effected styled "The Women's Silk Association of America," with rooms at Permanent Exhibition Building and 1328 Chestnut street, Philadelphia, for the purpose of imparting information as to the best method of raising the cocoons, and also of reeling the silk. We quote from their circular as follows :

"The aim of this association is to create a market for the exchange of small quantities of silk, before it can pass to the manufacturers who purchase only in large quantities, and who feel thus far little interest in the work, so long as they can purchase abroad all the raw silk they require for manufacturing purposes."

Again :

"Reels will soon be put in operation, and we do most earnestly urge the agricultural people to enter perseveringly into this work, and help to retain within their own pockets, the millions of money which are now sent abroad for foreign silk."

Specimens of cocoons and reeled silk, the result of the work of this "Association," were presented before the State Board of Agri-

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\* According to our own table the amounts foot up only \$15,808,424, but it will be observed the returns made to us by *eight* manufacturers did not report the *value* of goods manufactured.

culture at its recent annual meeting, which demonstrated fully the practicability of the work it has undertaken.

That the climate and soil of South Jersey are well adapted to silk culture, has been practically demonstrated. A correspondent, from Egg Harbor City, writes :

"In May, 1880, I purchased two ounces of silk worm eggs for eight dollars, and used mulberry and osage orange leaves for feed. Now (October) I have *twenty* pounds of cocoons on hand, but as there is no way of disposing of them, I must discontinue for the present, although fully satisfied that success must crown every effort in this region."

A correspondent, from Vineland, writes :

"I have about two bushels of cocoons, and these I will keep, and as soon as I shall have made a reeling machine, I will try to reel the silk off myself. I believe silk culture is a profitable business, and I will raise silk worms again as soon as my circumstances will allow me."

#### PAYMENT OF WAGES.

This is a question of paramount importance to the wage-worker, and only the class directly interested can realize the inconvenience and loss which comes from deferred or irregular payment of wages. In purchasing supplies for the family a saving of from *five* to *ten* per cent. can be effected by having the money in hand each week or every two weeks, in order to be able to buy for cash. The habit of running in debt is a bad one, but if wages are paid only at the end of the month, very few working men are forehanded enough to avoid keeping an account with the tradesman, and before they are aware of it, the amount to their debit has exceeded the amount of their monthly wages; discouragement often ensues, which frequently leads to the formation of evil habits, and in the end, total ruin.

The truck system may be considered as nearly or quite abandoned in the State, as we have had no complaints of hardship resulting from enforced trade at stores owned by manufacturers; but it is a question to be considered most carefully by those who employ labor, whether the payment of wages weekly, or at least, every two weeks, cannot be universally adopted.

To show to how great an extent payment of wages weekly, or every two weeks, has already become the custom, we have compiled

the following table, made up from 955 returns made by employers of labor. This table exhibits the interesting fact that out of the 74,825 persons employed, more than 80 per cent. receive their wages weekly, or every two weeks. It will be observed that nearly all the industries requiring skill receive prompt payment of wages. Why cannot the practice be made universal?

VARIETY OF MANUFACTURE.	Number of Establishments paying their Employees weekly.		Number of Persons Employed.		Number of Establishments paying their Employees every two weeks.		Number of Persons Employed.		Number of Establishments paying their Employees monthly.		Number of Persons Employed.	
Steam Engines and other Machinery.....	48	4,777	21	3,074	.....	.....	.....	.....	.....	.....	.....	.....
Silk Manufactures.....	11	576	95	12,104	.....	.....	.....	.....	.....	.....	.....	.....
Textiles other than Silk.....	10	1,495	13	3,117	17	3,981	.....	.....	.....	.....	.....	.....
Hats.....	88	7,342	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iron, Steel and Hardware.....	56	2,462	4	1,460	1	370	.....	.....	.....	.....	.....	.....
Furnaces, Rolling Mills, Forges and Foundries.....	10	432	5	730	12	1,581	.....	.....	.....	.....	.....	.....
Iron and Zinc Ores Mined.....	.....	.....	4	150	58	3,909	.....	.....	.....	.....	.....	.....
Pottery.....	30	3,009	4	148	1	38	.....	.....	.....	.....	.....	.....
Bricks, Glass, Stone and Clay.....	16	417	4	145	33	2,093	.....	.....	.....	.....	.....	.....
Leather and Furs.....	24	1,523	1	30	.....	.....	.....	.....	.....	.....	.....	.....
Manufactures of Jewelry.....	45	1,173	8	606	.....	.....	.....	.....	.....	.....	.....	.....
Rubber and Celluloid.....	6	848	3	501	4	1,125	.....	.....	.....	.....	.....	.....
Paper and its Products.....	21	694	6	346	12	373	.....	.....	.....	.....	.....	.....
Clothing.....	31	2,730	1	250	.....	.....	.....	.....	.....	.....	.....	.....
Manufactures of Wood.....	27	873	4	879	1	63	.....	.....	.....	.....	.....	.....
Ales, Beer, &c.....	8	260	4	15	2	85	.....	.....	.....	.....	.....	.....
Trunks, Valises, &c.....	7	1,251	1	400	.....	.....	.....	.....	.....	.....	.....	.....
Harness, Saddlery, &c.....	37	1,242	2	243	.....	.....	.....	.....	.....	.....	.....	.....
Paints, Varnishes, Soap, &c.....	16	319	2	222	1	78	.....	.....	.....	.....	.....	.....
Sundry Industries.....	16	972	1	205	2	196	.....	.....	.....	.....	.....	.....
Buttons.....	13	809	3	31	.....	.....	.....	.....	.....	.....	.....	.....
Carriages.....	21	353	2	48	.....	.....	.....	.....	.....	.....	.....	.....
Bakers and Confectioners.....	18	190	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cigars and Tobacco.....	18	209	.....	.....	1	50	.....	.....	.....	.....	.....	.....
Manufactures of Brass, &c.....	13	237	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boots and Shoes.....	31	1,824	1	162	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	621	36,017	189	24,866	145	13,942	.....	.....	.....	.....	.....	.....

## LABOR LEGISLATION.

Since our last annual report, the following laws have been placed upon the statutes:

[CHAPTER 36, ACTS OF 1880.]

A SUPPLEMENT to an act entitled "An act for the better securing of wages to workmen and laborers in the State of New Jersey," approved March ninth, one thousand eight hundred and seventy-seven.

1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, That section one of an act entitled "An act for the better securing of wages to workmen and laborers in the State of New Jersey," approved March ninth, one thousand eight hundred and seventy-seven, which reads:

"1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, That it shall not be lawful for any person or corporation in this State to issue for payment of labor any order or other paper whatsoever, unless the same purport to be redeemable for its face value, in lawful money of the United States, by the person giving or issuing the same; *provided, however*, nothing in this act contained shall be held to prevent any employer from making any deduction for money due him from any laborer or employee," be and the same is hereby amended so that the same shall read and be:

1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, That it shall not be lawful for any person or corporation in this State to issue for payment of labor any order or other paper whatsoever, unless the same purport to be redeemable for its face value at sight in lawful money of the United States, by the person giving or issuing the same; *provided, however*, nothing in this act contained shall be held to prevent any employer from making any deduction for money due him from any laborer or employee; *and provided however*, nothing in this act contained shall prevent any private individual from giving any orders for goods and merchandise on any store in which such private individual has no interest, directly or indirectly, in the profits or business.

2. *And be it enacted*, That this act shall take effect immediately.

Approved February 23d, 1880.

[CHAPTER 138, ACTS OF 1880.]

AN ACT to provide for the arbitration of labor disputes.

WHEREAS, Disputes between workmen and their employers frequently result in protracted strikes, which cause great loss to both parties and to the community at large, and disturb the amicable relations which ought to exist between labor and capital; *and whereas*, it is desirable to provide some legal method for submitting such differences to arbitration, with a view to an honorable, satisfactory and speedy settlement; therefore,

1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, That if a majority of the employees in any manufacturing establishment, or in any particular department thereof, shall give notice to their employer or employers in writing, signed by themselves, that they are dissatisfied with the terms or conditions on which they are employed, or with the wages they are receiving, or with any proposed reduction of their wages or proposed alteration of the terms or conditions on which they are employed, and that they propose to submit the matters complained of to arbitration, and shall name an arbitrator to represent them; and if such employer or employers cannot adjust such differences, it shall be the duty of such employer or employers, if they choose to accept this method of compromise, to nominate and appoint in writing an arbitrator to represent him or them, and to give notice to said employees of such appointment.

2. *And be it enacted*, That the two arbitrators so as aforesaid appointed, shall forthwith meet and proceed to select a third arbitrator; and the said three arbitrators shall without unnecessary delay notify the employees and the employer or employers of the time and place, when and where they will meet to hear arguments on the matters in dispute, which meetings shall be held under such conditions, rules and regulations as the said arbitrators may mutually agree upon; the questions at issue shall be submitted to the arbitrators in writing, and their decision shall be confined to the questions so submitted; either of such arbitrators may administer an oath or affirmation to any person testifying before them, and any person so sworn who shall testify falsely, shall be deemed guilty of perjury; either of the parties to such arbitration may be represented before the arbitrators by counsel, if they so desire, and the arguments may be oral or in writing, as the parties themselves may respectively prefer.

3. *And be it enacted*, That the finding of the said arbitrators shall be reduced to writing, and a copy thereof served upon each of the parties to the dispute, or upon their respective representatives, and shall be deemed to be binding upon both parties submitting the matters in dispute to arbitration, and shall take effect from the date of the finding, unless some other time is fixed in the finding for the taking effect thereof.

4. *And be it enacted*, That the costs of arbitration shall be fixed and paid as the parties may previously or mutually agree, and if not so agreed upon, they shall be fixed and paid as the arbitrators themselves may decide.

5. *And be it enacted*, That this act shall take effect immediately.

Approved March 10, 1880.

[CHAPTER 198, ACTS OF 1880.]

AN ACT to secure to workmen the payment of wages in lawful money.

1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, That it shall not be lawful for any glass manufacturer, ironmaster, foundryman, collier, factoryman, employer, cranberry grower or his agent or company, their agents or clerks, to pay the wages of workmen or employees by them employed, in either store goods, merchandise, printed, written, verbal orders, or due bills of any kind.

2. *And be it enacted*, That any glass manufacturer, ironmaster, foundryman, collier, factoryman, employer, cranberry grower or his agent or company paying to the said workmen or employees, or authorizing their clerks or agents to pay the wages, or any part thereof, in either store goods, merchandise, printed, written, verbal orders, or due bills of any kind, except as aforesaid, shall forfeit the amount of said pay or any part of wages of said workman or employee given in store goods, merchandise, printed, written, verbal orders or due bills of any kind, and the same not to offset against the wages of said workman or employees, but he or they shall be entitled to recover the full amount of his or their wages, as though no such store goods, merchandise, printed, written, verbal orders or due bills had been given or paid; and no settlement made with such employer shall bar such action until after a lapse of one year from such settlement.

3. *And be it enacted*, That the provisions of this act shall extend to all seamstresses, females and minors, employed in factories or otherwise.

4. *And be it enacted*, That any glass manufacturer, ironmaster, foundryman, collier, factoryman, employer or company offending against the provisions of this act, the

same shall be a misdemeanor, and punishable by a fine of not less than ten dollars or more than one hundred for each and every offence, or imprisonment not to exceed the term of thirty days, at the discretion of the court; but nothing in this act shall apply to or affect any private individual giving orders as aforesaid on a store in the business or profits whereof he has no interest, directly or indirectly, or to the offset of any debt due from such workmen to any glass manufacturer, ironmaster, foundryman, collier, factoryman, employer or company where the said debt is voluntarily contracted by the employee, or to the payment of any debt due from such workman to any glass manufacturer, ironmaster, foundryman, collier, factoryman, employer or company.

5. *And be it enacted*, That this act shall take effect the fourth of July next, and all acts and parts of acts inconsistent with the provisions of this act be and the same are hereby repealed.

Approved March 12, 1880.

The publication of this report having been, from unavoidable causes, delayed, we are enabled to publish the following law, passed by the State Legislature now in session, having in view the encouragement of a new productive industry in the State :

AN ACT to encourage the manufacture of sugar in the State of New Jersey.

WHEREAS, The encouragement of new productive industries in the State of New Jersey is calculated to advance the vital interests of the State, and the cultivation of beets, sorghum, amber or other sugar cane to be a new source of industry, and would besides bring under cultivation large areas of land of the State now unproductive and be beneficial to the State at large ; therefore,

1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, With a view to stimulate the culture of beets, sorghum, amber or other sugar cane, and the manufacture thereof into sugar, that for every ton of two thousand pounds of beets, sorghum, amber or other sugar cane raised by any farmer in the State, and manufactured into sugar in the State, the sum of one dollar shall be paid as a bounty to the farmer, by the Treasurer of the State, upon the proper vouchers being presented as hereinafter specified.

2. *And be it enacted*, That the sum of one cent per pound upon all merchantable sugar made within the State, from beets, sorghum, amber or other sugar cane grown within the State, shall be paid by the Treasurer of the State to any person or persons who shall establish a plant or sugar manufactory within the State, and shall manufacture sugar from beets, sorghum, amber or other sugar cane raised in the State, upon the proper vouchers being presented as hereinafter specified.

3. *And be it enacted*, That the "Chief of Bureau of Labor and Industries" shall have the general supervision, control and decision of all questions which may arise pursuant to the provisions of this act, and shall approve and certify the vouchers presented to him, duly receipted by the growers and manufacturers, setting forth the quantities grown or manufactured by him or them, whose affidavit of the truthfulness shall be first affixed to the said vouchers, and be attested by the clerk of the county in which the products are grown or manufactured, which vouchers shall be subject to such

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further scrutiny as the chief of said bureau may find necessary, or as the legislature may hereafter order.

4. *And be it enacted*, That this act shall continue in full force and effect for the term of five years, and shall take effect immediately.

Approved February 16th, 1881.

I again acknowledge the valuable service of Mr. Samuel C. Brown, the efficient Secretary of the Bureau; and also the earnest work of Mr. John G. Drew and Mr. Charles H. Simmerman, in tabulating the statistics received through Blank No. 2 for Employers and Blank No. 3 for Employees.

In preparing the chapter on Irrigation liberal use was made of French and Spanish authorities, as well as the "Report of the Board of Commissioners on Irrigation of the San Joaquin, Talure and Sacramento Valleys, of the State of California, Washington, 1874." H. N. Greene, Esq., of Vineland, and Mr. Claud Monckton, C. E., London, England, also furnished valuable information.

The question of "Food" bears so directly upon the prosperity of the laborer, that, at our request, Ezra M. Hunt, M. D., Medical Superintendent of the State Bureau of Vital Statistics, and Secretary of the State Board of Health, kindly consented to contribute an article upon that important subject.



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PART I.

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COLLATED STATISTICS DERIVED FROM LABORERS.

*Based upon Blank No. 3 for Employees.*

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- CHAP. I.—SPECIAL AND MISCELLANEOUS OCCUPATIONS OF SKILLED AND UNSKILLED LABOR—NATIONALITY—TERMS OF APPRENTICESHIP—WAGES PAID WEEKLY OR MONTHLY—HOURS WORKED—LOST TIME—DAYS WORKED IN THE YEAR AND WAGES PER DAY—INDIVIDUAL AND FAMILY EARNINGS AND TOTAL INCOME.
- CHAP. II.—SHOWS THE NUMBER OF BLANKS RETURNED BY EACH TRADE OR OCCUPATION, WITH ANSWERS TO QUESTIONS AS TABULATED.
- CHAP. III.—AGGREGATES OF LOST TIME, EARNINGS, ETC., REPRESENTED IN TABLE No. 1, IN EACH TRADE OR OCCUPATION, AND GENERAL AVERAGE FROM THE TOTAL NUMBER OF REPORTS MADE.
- CHAP. IV.—COLLATED FROM TABLE No. 1, SHOWING AVERAGE OF HOURS WORKED—DAYS LOST—DAYS WORKED—WAGES EARNED—EARNINGS OF FAMILY—TOTAL INCOME.
- CHAP. V.—COLLATED FROM ANSWERS TO QUESTIONS 22 AND 23 IN BLANK No. 3, SHOWING THE NUMBER OF CHILDREN EMPLOYED IN FACTORIES—THEIR AGE—HOURS WORKED—NIGHT WORK.
- CHAP. VI.—CLASSIFIED OCCUPATIONS, WITH EARNINGS AND EXPENSES OF FAMILIES AND SINGLE MEN—TOTAL INCOME FOR THE YEAR AND EXCESS OF EARNINGS AND EXPENSES OF EACH.
- CHAP. VII.—NUMBER OF BLANKS RETURNED WITH ANSWERS TO QUESTIONS AS TABULATED IN TABLE No. 6, FROM EACH TRADE AND OCCUPATION.
- CHAP. VIII.—COMPILATION FROM TABLE No. 6, SHOWING THE AGGREGATE AMOUNT REPRESENTED IN SAID TABLE, IN EACH OCCUPATION.
- CHAP. IX.—COMPILATION FROM TABLE No. 6; SHOWING AVERAGES IN EACH OCCUPATION.
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[BLANK No. 3, FOR EMPLOYEES.]

STATE OF NEW JERSEY,  
BUREAU OF STATISTICS OF LABOR AND INDUSTRIES, }  
TRENTON, May 1st, 1880.

DEAR SIR:—The law in defining the duties of this Bureau enjoins upon it to “collect, assort, systematize and present in annual reports to the Legislature, on or before the last day of October in each year, statistical details relating to all departments of labor in the State, especially in its relation to the commercial, industrial, social, educational and sanitary condition of the laboring classes,” &c.

The purpose of the accompanying circular is to obtain directly from wage-workers, specific and truthful statements respecting their condition, in order that, if real causes of grievance be found to exist, the public may be thus placed in possession of reliable information to aid in future deliberations in respect to their removal.

This is obviously the true method if faithfully adhered to, and we earnestly appeal to you in behalf of prompt and full responses to our questions, which will be held sacredly within the control of this department.

JAMES BISHOP,  
Chief.

SAMUEL C. BROWN,  
Secretary.

1. Name?.....
2. Residence?.....
3. Occupation?.....
4. Nationality?.....
5. Are you married, or single?.....
6. Did you serve an apprenticeship to learn your trade, and if so, how long?.....
7. How many hours do you work per week?.....
8. How many on Saturdays?.....
9. Are your wages paid weekly or monthly?.....
10. What are your wages per day?.....
11. How many days have you lost during the year ending August 1st, 1880?.....
- a. From sickness?.....    b. Inability to obtain work?.....
12. Do you own the house and land you occupy?..... If yes, did you pay therefor from your wages?..... and how long were you in saving the purchase money?.....

13. What proportion of your income is derived from the earnings of your wife and children?.....
14. Do you occupy a hired house or apartments—if so, give number of rooms?..... and monthly rent?.....
15. Is the workshop in which you are employed as comfortable and healthy as practicable?.....
16. What provision exists for escape in case of fire in the factory where you work?.....
17. Have your expenses been more than your earnings in the year 1879?.....  
If yes, how much have you fallen behind?.....
18. How many weeks do your children attend school in a year?.....
19. What do you think would be the result of a general reduction of the hours of labor to eight per day?.....
20. It is often stated that you don't receive a just share of profit on your labor. What better system can be equitably adopted?.....
21. Your class have derived great benefit from co-operation in England and elsewhere. Why don't you try it?.....
22. How many boys.....girls.....between 10 and 15 years of age are employed in the establishment where you work?.....how many under 10 years?.....
23. How many hours per day.....per week.....are such children employed, and have they ever been employed in *night* work?.....
24. If possible, give actual (if not, give estimated,) expenses for year 1879, as follows: For rent.....fuel.....clothing.....groceries.....meat and vegetables.....sundries.....

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## COLLATED STATISTICS DERIVED FROM LABORERS.

*Based upon Blank No. 3 for Employees.*

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The following Tables are made up from answers by individual workmen to questions contained in Blank No. 3. While the number represents but a small portion of the aggregate of wage-workers in the State, as to any one of the occupations named, from the fact that they were collected from all parts of the State, we believe they represent a very fair average of the whole. In the computation of averages fractions have been discarded :

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TABLE No. 1.—BLANK No. 3.

Selected returns of special occupations, also of skilled and unskilled labor in miscellaneous occupations, giving Nationality; Term of Apprenticeship; whether Wages are Paid Weekly or Monthly; Hours Worked per Week, and on Saturday; Lost Days in Year, From Sickness, Inability to Obtain Work; Days Worked in the Year, and Wages per Day; Earnings of Self; Earnings of Family; Total Income—

## PAINTERS.

Office Number.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
						From Sickness.	Inability to obtain work.						
35	American.	2 y.....	mon..	60	10	52	78	130	178	\$1 75	\$311 50	.....	\$311 50
41	American.	3 y.....	wk ..	60	10	10	.....	10	298	2 00	596 00	.....	596 00
654	Canadian.	.....	wk ..	60	10	2	18	20	288	2 25	648 00	.....	648 00
657	American.	4 y.....	wk ..	60	10	45	55	100	208	1 75	364 00	.....	364 00
641	American.	3 y.....	wk ..	60	10	.....	.....	50	258	2 00	516 00	.....	516 00
653	American.	3 y.....	wk ..	60	10	.....	60	60	248	2 25	558 00	.....	558 00
505	American.	3 y.....	wk ..	.....	.....	.....	.....	70	.....	.....	.....	.....	.....
536	English....	4 y.....	mon..	60	10	.....	.....	15	293	1 75	512 75	\$312 00	824 75
869	American.	4 y.....	wk ..	60	10	5	60	65	243	1 75	425 25	141 41	566 66
282	American.	2 y.....	wk ..	60	10	7	73	80	228	1 12	255 36	63 84	319 20
283	American.	8 mos	wk ..	60	10	5	70	75	233	1 13	263 29	.....	263 29
374	German.....	5 y.....	irreg.	60	9	.....	.....	120	188	2 00	376 00	.....	376 00
288	American.	1½ y.....	wk ..	60	10	5	40	45	263	1 37	360 31	.....	360 31
286	American.	2 y.....	wk ..	60	10	26	60	80	228	1 00	228 00	76 00	304 00
284	American.	1 y.....	wk ..	60	10	35	90	125	173	1 25	216 25	72 08	288 33
211	American.	5 y.....	wk ..	60	10	5	20	25	283	1 75	495 25	.....	495 25
292	American.	1 y.....	wk ..	60	10	4	76	80	228	1 00	228 00	.....	228 00
210	American.	4 y.....	wk ..	60	10	.....	.....	.....	308	2 00	616 00	.....	616 00
339	American.	.....	wk ..	60	10	6	56	60	248	1 13	280 24	.....	280 24
340	American.	.....	wk ..	60	10	25	65	90	218	1 00	218 00	54 25	272 25
336	English.....	8 mos	wk ..	60	10	10	55	65	243	1 25	303 75	.....	303 75
337	American.	1 y.....	wk ..	60	10	10	50	60	248	1 37	339 76	.....	339 76
338	American.	6 mos	wk ..	60	10	3	72	75	233	1 38	321 54	82 28	403 82
335	German....	2 y.....	wk ..	60	10	.....	40	40	268	1 37	367 16	.....	367 16
334	American.	1 y.....	wk ..	60	10	5	55	60	248	1 12	277 76	.....	277 76
333	English....	1 y.....	wk ..	60	10	50	40	90	218	1 13	246 34	.....	246 34
331	American.	6 mos	wk ..	60	10	5	35	40	268	1 38	369 84	.....	369 84
332	American.	2 y.....	wk ..	60	10	.....	50	50	258	1 62	417 96	.....	417 96
14	German....	3 y.....	wk ..	60	10	.....	60	60	248	2 00	496 00	.....	496 00
16	American.	3 y.....	wk ..	60	10	.....	40	40	268	1 68	450 24	.....	450 24
214	American.	3 y.....	wk ..	60	10	.....	.....	.....	308	2 00	616 00	.....	616 00
212	American.	2 y.....	wk ..	60	10	10	20	30	278	1 75	486 50	.....	486 50
213	American.	.....	wk ..	60	10	.....	.....	.....	308	1 75	539 00	107 80	646 80
639	American.	2 y.....	wk ..	60	10	12	68	80	228	1 50	342 00	.....	342 00
612	American.	3 y.....	wk ..	60	10	10	60	70	238	1 75	416 50	.....	416 50
598	American.	2½ y.....	wk ..	60	10	15	40	60	248	1 50	372 00	.....	372 00
564	American.	2 y.....	wk ..	60	10	15	35	50	258	1 25	322 50	.....	322 50
566	American.	2 y.....	wk ..	60	10	10	30	40	268	1 50	402 00	80 40	482 40
497	American.	2 y.....	wk ..	60	10	15	65	80	228	1 50	342 00	.....	342 00
942	American.	1 y.....	wk ..	.....	.....	2	90	92	216	2 00	432 00	.....	432 00
457	Austrian...	4 y.....	wk ..	59	9	.....	.....	94	214	2 00	428 00	9 00	437 00
1010	American.	4 y.....	wk ..	60	10	.....	.....	.....	.....	2 00	.....	.....	.....
Total.....				2399	398	404	1726	2476	9904	\$65 05	\$15,757 05	\$999 06	\$16,756 11
Number reporting.....				40	40	28	32	38	40	40	40	10	40
Average.....				60	10	14	54	65	248	\$1 63	\$393 42	\$99 90	\$418 90

TABLE No. 1.—BLANK No. 3—Continued.

**JEWELERS.**

Office Number.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
						From Sickness.	Inability to obtain work.						
26	German	7 y	2 wks	59	9	.....	52	52	256	\$2 50	\$640 00	.....	\$640 00
28	German	5 y	2 wks	59	9	.....	.....	60	248	2 50	620 00	.....	620 00
24	German	4 y	2 wks	59	9	.....	24	24	284	2 50	710 00	.....	710 00
23	German	5 y	wk	59	9	.....	78	78	230	2 00	460 00	.....	460 00
95	German	5 y	wk	59	9	48	30	78	230	2 00	460 00	\$6 00	466 00
31	German	5 1/2 y	2 wks	59	9	.....	42	42	246	2 60	639 60	312 00	951 60
33	French	5 1/2 y	wk	59	9	.....	.....	18	290	4 00	1,160 00	.....	1,160 00
159	German	5 y	wk	59	9	.....	21	21	287	3 00	861 00	.....	861 00
411	German	4 y	wk	59	9	.....	18	18	290	2 00	580 00	208 00	788 00
423	German	5 y	2 wks	60	9	.....	.....	30	278	3 00	834 00	.....	834 00
414	German	5 y	2 wks	59	9	.....	78	78	230	2 00	460 00	.....	460 00
417	German	5 y	wk	59	9	.....	120	120	188	2 00	376 00	156 00	532 00
367	German	5 y	wk	59	9	.....	.....	20	288	2 00	576 00	.....	576 00
368	German	4 1/2 y	wk	59	9	.....	.....	30	278	2 75	764 50	.....	764 50
420	German	4 y	wk	59	9	2	.....	2	306	2 50	765 00	.....	765 00
366	American	4 y	wk	50	9	.....	25	30	278	1 35	375 30	.....	375 30
92	American	6 y	2 wks	59	9	.....	.....	.....	308	2 50	770 00	.....	770 00
424	American	6 1/2 y	wk	59	9	.....	.....	20	288	2 65	763 20	.....	763 20
425	Norwegi'n	7 y	wk	60	9	52	26	78	230	2 50	575 00	.....	575 00
153	German	5 y	2 wks	59	9	.....	52	52	256	2 00	512 00	416 00	928 00
152	Austrian	6 y	wk	59	9	.....	.....	.....	308	2 16	665 28	416 00	1,081 28
166	German	5 y	wk	59	9	.....	52	52	256	2 00	512 00	.....	512 00
977	German	5 y	2 wks	59	9	.....	4	46	262	2 50	655 00	.....	655 00
980	German	6 y	wk	59	9	52	52	256	2 17	555 52	250 00	.....	805 52
27	German	5 1/2 y	2 wks	59	9	.....	80	80	228	2 50	570 00	.....	570 00
454	German	4 y	2 wks	59	9	.....	24	24	284	3 00	852 00	.....	852 00
445	German	6 y	wk	59	9	.....	.....	.....	.....	2 25	.....	.....	.....
Total.....				1586	243	154	726	1105	6883	\$64 93	\$16,711 40	\$1764 00	\$18,475 40
Number reporting.....				27	27	4	16	24	26	27	26	7	26
Average.....				59	9	38	45	46	265	\$2 40	\$642 75	\$252 00	\$710 59

**MACHINISTS.**

635	American	4 y	2 wks	60	10	10	10	20	288	\$2 75	\$792 00	.....	\$792 00
636	American	3 y	2 wks	60	10	10	25	35	273	2 75	750 75	.....	750 75
612	American	4 y	wk	60	8 3/4	.....	.....	8	300	2 20	660 00	.....	660 00
613	American	4 y	wk	60	8 1/2	4	8	12	296	2 25	666 00	.....	666 00
611	American	4 y	wk	60	8 1/2	.....	30	32	276	2 30	654 80	.....	634 80
674	American	3 y	2 wks	60	10	.....	.....	18	290	.....	.....	.....	.....
651	English	3 y	2 wks	60	10	.....	60	60	248	2 25	558 00	.....	558 00
560	English	6 mos	mon	60	10	6	24	30	278	3 50	973 00	.....	973 00
208	American	6 y	wk	60	10	.....	39	30	278	2 00	556 09	\$111 20	667 20
32	American	4 y	wk	59	9	30	42	72	236	1 66	391 76	.....	391 76
103	American	4 y	wk	59	9	.....	.....	.....	308	2 35	723 80	.....	723 80
104	American	4 y	2 wks	60	9	.....	.....	.....	308	2 00	616 00	.....	616 00
7	American	4 y	wk	60	10	.....	.....	.....	308	3 50	1,078 00	.....	1,078 00
9	American	5 y	wk	60	10	.....	.....	.....	308	2 30	708 40	.....	708 40
15	Irish	4 y	wk	59	9 3/4	.....	.....	10	299	2 90	864 20	.....	864 20
1011	American	5 y	2 wks	60	10	.....	.....	.....	.....	1 00	.....	.....	.....
Total.....				957	152	60	229	327	4293	\$36 71	\$9,972 71	\$111 20	\$10,083 91
Number reporting.....				16	16	5	8	11	15	15	14	1	14
Average.....				60	10	12	29	29	286	\$2 45	\$712 34	\$111 20	\$720 28

TABLE No. 1.—BLANK No. 3—Continued.

## CABINET MAKERS.

Office Number.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
						From Sickness.	Inability to obtain work.						
402	German	3 y.	wk	59	9	6	8	14	294	\$2 25	\$661 50		\$661 50
387	German	2 y.	2 wks	59	9	35	25	60	248	1 50	372 00		372 00
421	French	4 y.	mon	60	10		42	42	246	1 85	455 10		455 10
403	German	3 y.	wk	59	9	8	16	24	284	1 80	511 20		511 20
1005	German	3 y.	wk	59	9	2	8	10	298	3 00	894 00		894 00
981	German	3 y.	wk	59	9	13	42	55	253	1 87	473 11		473 11
979	German	3 y.	wk	59	9		30	30	278	2 25	625 50		625 50
978	German	4 y.	wk	59	9				308	3 00	924 00		924 00
976	German	3 y.	wk	59	9	36	12	48	260	2 25	585 00		585 00
975	German	4 y.	wk	59	9				308	2 00	616 00	\$300 00	916 00
953	German	4 y.	2 wks	59	9	63	38	101	207	2 25	465 75		465 75
Total				650	100	163	221	384	2984	\$24 02	\$6,583 16	\$300 00	\$6,683 16
Number reporting				11	11	7	9	9	11	11	11	1	11
Average				59	9	23	25	43	271	\$2 17	\$590 29	\$300 00	\$625 74

## PRINTERS.

505	American	3 y.	wk	60	10	40	70	110	198	\$1 50	\$297 00		\$297 00
681	American	4 y.	wk	59	9		100	100	208	2 00	416 00		416 00
430	German	6 y.	wk	75		9		9	299	2 50	747 50		747 50
431	German	4 y.	wk	72					260	2 50	650 00		650 00
434	American	3 y.	wk	45						2 30	698 00		698 00
2	American	4½ y.	wk	70	10½				308	2 00	616 00		616 00
3	American	3 y.	wk	60	10			20	288	1 60	460 80		460 80
395	German	4 y.	wk	75					308	2 50	770 00		770 00
533	American	6 y.	wk	58	8		21	10	298				
324	American	3 y.	wk	55	8½	25	15	40	268	1 75	469 00	\$78 00	547 00
419	German	4 y.	wk	72					308	2 50	770 00		770 00
383	German	5 y.		59									
350	American	3 y.	wk	55	8	15	25	40	268	2 50	670 00		670 00
351	American	3 y.	wk	54	8	5	25	30	278	2 00	556 00		556 00
418	German		wk	60	20	14		14	294	2 00	588 00		588 00
394	Swiss	4 y.	wk	75					308	2 50	770 00		770 00
393	American	4 y.	wk	75		8			300	2 50	750 00		750 00
392	French	3½ y.	wk	75					308	3 00	924 00		924 00
328	American		wk	72	12	7	7	14	294	1 00	294 00		294 00
972	American	4 y.		75		6							
Total				1301	104	129	263	387	4793	\$36 65	\$10,446 30	\$78 00	\$10,524 30
Number reporting				20	10	9	7	9	17	17	17	1	17
Average				65	10	14	37	282	282	\$2 15	\$614 49	\$78 00	\$619 08

TABLE No. 1.—BLANK No. 3—Continued.

WEAVERS.

Office Number.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.	
						From Sickness.	Inability to obtain work.							
382	*Swiss.....	2 y.....	wk ...	60	7	.....	56	56	252	\$1 50	\$378 00	\$94 50	\$472 50	
416	*French.....	3 mos	wk ...	60	9	.....	45	45	263	1 50	394 50	.....	394 50	
436	*French.....	4 y.....	wk ...	60	9	.....	78	78	230	1 50	345 00	.....	345 00	
373	*German.....	3 y.....	Irreg	50	8	.....	50	50	258	1 25	322 50	.....	322 50	
380	*American.....	.....	wk ...	62	9½	12	48	60	248	1 50	372 00	.....	372 00	
379	*Swiss.....	2 y.....	2 wks	60	7	.....	30	30	278	2 00	556 00	.....	556 00	
378	*Austrian.....	2 y.....	.....	60	9	.....	6	24	30	278	1 33	376 00	75 20	451 20
377	*French.....	3 y.....	Irreg	60	10	30	30	60	248	1 10	272 80	136 40	409 20	
376	*Spanish.....	6 mos	Irreg	60	10	.....	50	50	258	1 25	322 50	.....	322 50	
381	*German.....	.....	wk ...	60	7	42	50	92	216	1 00	216 00	108 00	324 00	
518	†English.....	4 y.....	wk ...	60	10	.....	.....	78	230	2 00	460 00	.....	460 00	
429	*American.....	1 mo.	wk ...	60	10	.....	18	92	216	1 00	216 00	.....	216 00	
649	American.	.....	mon..	66	9	.....	18	290	1 25	362 50	.....	.....	362 50	
650	†English.....	.....	mon..	60	.....	.....	1	.....	307	2 50	767 50	277 20	1,044 70	
644	‡English.....	.....	2 wks	60	6	.....	50	.....	258	1 50	387 00	.....	387 00	
646	‡English.....	.....	mon..	70½	10½	.....	.....	.....	.....	.....	.....	.....	.....	
956	*German.....	4 wks	wk ...	62	8½	.....	5	30	278	1 00	278 00	.....	278 00	
968	**American.....	5 wks	wk ...	75	10	14	61	75	233	1 50	349 50	.....	349 50	
993	*Swiss.....	3 y.....	.....	60	9	.....	78	78	230	1 50	345 00	.....	345 00	
994	*German.....	2 mos	.....	.....	.....	.....	40	40	268	2 00	536 00	241 20	777 20	
999	*Swiss.....	1 y.....	.....	59	9	.....	78	78	230	1 40	322 00	.....	322 00	
1000	*Swiss.....	2 y.....	.....	59	9	.....	93	93	215	1 75	376 25	.....	376 25	
1007	††German.....	1 y.....	2 wks	60	.....	30	40	70	238	2 00	476 00	.....	476 00	
1008	††American.....	3 y.....	2 wks	60	7½	39	7	46	262	2 00	524 00	.....	524 00	
1020	††Swiss.....	2 y.....	2 wks	60½	8	.....	.....	.....	234	3 25	760 50	351 00	1,111 50	
1019	*German.....	.....	.....	64	.....	60	22	82	226	1 50	339 00	.....	339 00	
1018	*German.....	.....	.....	55	7	20	30	50	258	2 00	516 00	.....	516 00	
1017	††German.....	.....	.....	60	10	18	.....	90	218	.....	.....	.....	.....	
1016	*German.....	2½ y..	wk ...	55	.....	1	42	43	265	1 70	450 50	.....	450 50	
1015	German.....	3 y.....	2 wks	57	.....	.....	60	60	248	2 00	496 00	.....	496 00	
1021	*German.....	3 y.....	2 wks	60	8½	.....	18	50	258	1 25	322 50	.....	322 50	
1014	*German.....	3 y.....	2 wks	60	9	.....	34	34	274	1 62	443 88	.....	443 88	
1013	*German.....	.....	.....	59	9	.....	30	30	278	1 25	347 50	920 00	1,267 50	
Total.....	.....	.....	.....	1934	235½	341	1117	1738	8043	\$49 90	\$12,630 05	\$2203 50	\$14,832 67	
Number reporting.....	.....	.....	.....	32	27	14	26	30	32	31	31	8	31	
Average.....	.....	.....	.....	60	9	24	43	58	251	\$1 61	\$407 62	\$275 44	\$478 70	

\*Silk Weaver. †Carpet Weaver. ‡Woolen Spinner. §Worsted Weaver. ¶Power Loom Weaver.  
 \*\*Silk Operative. ††Ribbon Weaver. †††Silk Ribbon Weaver.

TABLE No. 1.—BLANK No. 3—Continued.

## MASONS.

Office Number.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.		Days lost in year.		Days lost in the year.		Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
				Week.	on Saturday.	From Sickness.	Inability to obtain work.	Days lost in the year.	Days worked in the year.				
603	Irish	2 y.	wk	60	10	.....	78	78	230	\$2 00	\$460 00	\$308 00	\$768 00
316	American.	1 y.	wk	60	10	10	20	30	278	1 50	417 00	.....	417 00
358	American.	1½ y.	wk	60	10	20	105	125	183	1 50	274 50	.....	274 50
355	American.	1½ y.	wk	60	10	12	68	80	228	2 00	456 00	.....	456 00
203	American.	2 y.	wk	60	10	12	68	80	228	1 50	342 00	.....	342 00
204	American.	1 y.	wk	60	10	10	120	139	178	1 25	222 00	.....	222 50
674	American.	2 y.	wk	60	10	10	50	60	248	1 50	372 00	.....	372 00
653	American.	4 y.	wk	60	10	.....	13	13	295	1 75	516 25	119 41	635 66
652	American.	3 y.	wk	60	10	.....	12	12	296	1 75	518 00	.....	518 00
616	American.	2 y.	wk	60	10	5	25	30	238	1 25	297 50	.....	297 50
637	Irish	3 y.	wk	60	10	.....	.....	144	164	2 00	328 00	.....	328 00
226	American.	5 y.	wk	54	9	.....	10	30	278	2 00	556 00	111 20	667 20
225	Irish	1 y.	wk	60	10	20	8	20	288	1 62	466 56	.....	466 56
308	American.	1 y.	wk	60	10	12	40	60	248	1 50	372 00	93 00	465 00
157	German	3 y.	wk	60	10	20	27	35	273	2 12	578 76	80 00	658 76
254	American.	3 y.	wk	55	8½	8	20	30	278	1 50	417 00	.....	417 00
525	American.	7 y.	wk	60	10	10	30	30	278	2 50	695 00	.....	695 00
Total	.....	.....	.....	1009	167½	149	694	987	4209	\$29 94	\$7,289 07	\$711 61	\$8,000 68
Number reporting	.....	.....	.....	17	17	12	16	17	17	17	17	5	17
Average	.....	.....	.....	59	10	12	43	58	248	\$1 72	\$428 77	\$142 32	\$470 63

## CIGAR MAKERS.

388	American.	3 y.	wk	60	10	.....	.....	30	278	\$1 00	\$278 00	.....	\$278 00
385	German	1 y.	wk	60	10	14	30	44	264	1 75	462 00	.....	462 00
386	German	4 y.	wk	60	10	.....	30	30	278	1 30	361 40	.....	361 40
390	German	1 y.	wk	60	10	.....	30	30	278	1 50	417 00	.....	417 00
389	American.	3 y.	wk	60	10	.....	30	30	278	1 40	389 20	.....	389 20
966	Swede	4 y.	wk	54	7	.....	18	18	290	2 50	725 00	.....	725 00
991	Belgian	5 y.	wk	54	.....	.....	15	15	293	1 50	439 50	.....	439 50
992	Swede	.....	wk	57	.....	.....	.....	.....	308	1 60	492 80	.....	492 80
997	Belgian	3 y.	wk	60	.....	20	40	60	248	1 50	372 00	\$248 00	620 00
450	American.	3 y.	wk	60	10	.....	.....	35	273	1 35	368 55	.....	368 55
449	German	3 y.	wk	60	10	.....	115	115	193	1 25	241 25	.....	241 25
448	American.	3 y.	wk	60	10	.....	60	60	248	1 25	310 00	.....	310 00
452	German	3 y.	wk	60	10	.....	47	47	261	1 25	326 25	.....	326 25
Total	.....	.....	.....	765	97	34	415	514	3490	\$19 15	\$5,182 95	\$248 00	\$5,430 95
Number reporting	.....	.....	.....	13	10	2	10	12	13	13	13	1	13
Average	.....	.....	.....	59	10	17	41	43	269	\$1 47	\$398 68	\$248 00	\$417 76

TABLE No. 1.—BLANK No. 3—Continued.

**WHEELWRIGHTS.**

Office Number.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
						From Sickness.	Inability to obtain work.						
221	American.	.....	wk ...	60	10	8	12	20	288	\$2 00	\$576 00	\$38 00	\$614 00
223	American.	2½ y.	wk ...	60	10	4	12	16	292	1 50	438 00	.....	438 00
474	American.	2 y.	wk ...	60	10	11	25	35	273	1 50	409 50	.....	409 50
570	American.	2 y.	wk ...	60	10	5	15	20	288	1 50	432 00	.....	432 00
565	American.	3 y.	wk ...	60	10	10	30	40	268	1 50	402 00	80 00	482 00
569	American.	3 y.	wk ...	60	10	15	35	50	258	1 50	387 00	77 00	464 00
89	American.	3 y.	wk ...	59	9	10	20	30	278	2 00	556 00	.....	556 00
197	American.	2 y.	wk ...	60	10	8	12	20	288	1 25	360 00	.....	360 00
298	American.	2 y.	wk ...	60	10	10	65	75	233	1 25	291 25	96 55	387 80
299	American.	1½ y.	wk ...	60	10	5	15	20	288	1 50	432 00	.....	432 00
657	American.	2 y.	wk ...	60	10	.....	.....	.....	308	1 00	308 00	.....	308 00
Total.....				659	109	86	241	326	3062	\$16 50	\$4,591 75	\$291 55	\$4,883 30
Number reporting.....				11	11	10	10	10	11	11	11	4	11
Average .....				60	10	9	24	32	278	\$1 50	\$417 43	\$72 89	\$443 94

**POTTERS.**

432	American.	.....	wk ...	60	10	.....	52	52	254	\$1 25	\$317 50	.....	\$317 50
483	English.....	4 y.	wk ...	60	8	.....	30	30	278	1 62	450 36	.....	450 36
481	Irish .....	5 y.	wk ...	58	8	11	.....	41	267	1 00	267 00	.....	267 00
475	Irish .....	7 y.	wk ...	60	8	10	30	40	268	1 50	402 00	.....	402 00
474	Irish .....	7 y.	wk ...	60	9	6	24	30	278	2 00	556 00	.....	556 00
18	English.....	3 y.	wk ...	65	10	14	6	20	288	2 00	576 00	.....	576 00
Total.....				363	53	41	142	213	1633	\$9 37	\$2,568 86	.....	\$2,568 86
Number reporting.....				6	6	4	5	6	6	6	6	.....	6
Average .....				60	9	10	28	35	272	\$1 56	\$428 14	.....	\$428 14

**TAILORS.**

463	American.	1 y.	wk ...	60	10	7	23	30	278	\$1 25	\$347 50	.....	\$347 50
165	German.....	3 y.	wk ...	59	9	.....	.....	10	298	1 60	476 80	.....	476 80
465	American.	1 y.	wk ...	60	10	5	30	35	273	1 25	341 25	.....	341 25
154	German.....	3 y.	wk ...	59	9	.....	.....	.....	308	1 75	539 00	.....	539 00
90	Swiss .....	3 y.	wk ...	60	10	12	12	24	284	1 50	426 00	\$142 00	568 00
375	German.....	3 y.	wk ...	72	12	60	70	130	178	2 50	435 00	145 00	580 00
384	German.....	5 y.	wk ...	100	.....	.....	.....	.....	.....	.....	.....	.....	.....
973	German.....	4 y.	wk ...	72	12	.....	120	120	188	1 50	282 00	.....	282 00
Total.....				542	72	84	255	349	1807	\$11 35	\$2,847 55	\$287 00	\$3,134 55
Number reporting.....				8	7	4	5	6	7	7	7	2	7
Average .....				68	10	21	51	58	258	\$1 62	\$406 79	\$143 50	\$447 79

TABLE No. 1.—BLANK No. 3—Continued.

## BLACKSMITHS.

Office Number.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
						From Sickness.	Inability to obtain work.						
640	American.	6 y.....	wk ...	60	10	100	100	200	108	\$2 00	\$216 00	.....	\$216 00
465	American.	3 y.....	wk ...	60	10	.....	50	50	258	1 50	387 00	.....	877 00
567	Irish.....	7 y.....	2 wks	60	10	7	.....	7	301	1 50	451 50	\$45 15	496 65
199	American.	1 y.....	wk ...	60	10	15	15	30	278	1 25	347 50	86 87	434 37
302	American.	2 y.....	wk ...	60	10	2	3	5	303	1 50	454 50	.....	454 50
301	American.	2 y.....	wk ...	60	10	10	15	25	283	1 25	353 75	.....	353 75
296	American.	1½ y.	wk ...	60	10	5	20	25	283	1 50	424 50	.....	424 50
304	American.	1 y.....	wk ...	60	10	10	80	90	218	1 25	272 50	90 83	363 33
303	American.	2 y.....	wk ...	70	12	5	15	20	288	75	216 00	.....	216 00
30	American.	.....	wk ...	50	7	6	.....	6	302	1 25	377 50	125 16	502 66
87	American.	4 y.....	wk ...	54	9	22	8	30	278	2 25	625 50	.....	625 50
82	American.	3½ y.	wk ...	58	8	7	21	28	280	2 00	560 00	93 00	653 00
84	American.	3 y.....	mon.	60	.....	.....	.....	.....	308	87	267 96	.....	267 96
63	American.	3 y.....	mon.	60	10	.....	20	20	288	1 00	288 00	.....	288 00
71	American.	5 y.....	wk ...	54	.....	30	10	40	268	1 65	442 20	.....	442 20
73	American.	4 y.....	mon.	60	10	8	29	35	273	1 00	273 00	.....	273 00
75	American.	3 y.....	mon.	60	10	.....	20	20	288	75	216 00	.....	216 00
219	American.	5 y.....	wk ...	60	10	.....	10	10	298	2 00	596 00	.....	596 00
220	American.	3½ y.	wk ...	60	10	.....	.....	.....	308	1 75	539 00	102 20	641 20
222	American.	4 y.....	wk ...	60	10	.....	.....	.....	308	2 00	616 00	.....	616 00
144	American.	4 y.....	mon.	60	10	6	19	25	283	1 75	495 25	15 00	510 25
145	American.	3½ y.	mon.	.....	.....	10	40	50	258	1 50	387 00	95 00	482 00
45	American.	3 y.....	mon.	60	10	.....	40	40	268	1 75	469 00	.....	469 00
57	Irish.....	3 y.....	wk ...	60	10	8	20	28	280	2 12	593 60	.....	593 60
507	American.	1 y.....	wk ...	60	10	4	6	10	298	1 25	372 50	94 00	466 50
633	American.	1½ y.	wk ...	60	10	.....	10	10	298	1 25	372 50	.....	372 50
Total .....				486	226	255	551	804	7204	\$38 64	\$10,614 26	\$747 21	\$11,361 47
Number reporting.....				25	23	17	21	23	26	26	26	9	26
Average .....				59	10	15	26	25	277	\$1 49	\$408 25	\$83 02	\$436 98

## GLASSBLOWERS.

618	German....	5 y.....	.....	48	8	63	100	163	145	\$3 00	\$435 00	\$50 00	\$485 00
609	American.	.....	wk ...	60	10	.....	.....	116	192	3 00	576 00	72 00	648 00
925	American.	3 y.....	ord'rs	48	8	10	30	40	268	2 50	670 00	.....	670 00
926	American.	3 y.....	ord'rs	49½	9½	.....	.....	52	256	2 25	576 00	.....	576 00
928	American.	4 y.....	ord'rs	48	8	.....	.....	60	248	2 50	620 00	128 00	748 00
917	American.	5 y.....	mon.	56	9	2	58	60	248	1 50	372 00	.....	372 00
933	American.	5 y.....	wk ...	54	9	.....	.....	60	248	4 00	992 00	.....	992 00
932	American.	4 y.....	2 wks	54	9	.....	.....	.....	.....	3 50	.....	.....	.....
931	American.	4 y.....	2 wks	54	9	.....	.....	33	275	3 50	962 50	.....	962 50
930	American.	5 y.....	2 wks	60	10	.....	30	30	278	3 50	973 00	.....	973 00
622	American.	.....	ye'rly	51	8½	.....	.....	14	284	.....	.....	.....	.....
1022	American.	5 y.....	wk ...	54	9	.....	72	72	236	.....	725 00	260 00	985 00
Total .....				636½	107	75	290	700	2678	\$29 25	\$6,901 50	\$510 00	\$7,411 50
Number reporting.....				12	12	3	5	11	11	10	10	4	10
Average .....				53	9	25	58	64	243	\$2 92	\$690 15	\$127 50	\$741 15

TABLE No. 1.—BLANK No. 3—Continued.

CARPENTERS.

Office Number.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
						From Sickness.	Inability to obtain work.						
643	American.	4 y....	wk ...	60	10	.....	54	54	254	\$2 00	\$508 00	\$169 33	\$677 33
645	American.	4 y....	wk ...	60	10	.....	.....	.....	308	2 25	693 00	.....	693 00
666	American.	5 y....	wk ...	60	10	15	25	40	268	1 75	469 00	100 00	569 00
512	American.	3 y....	wk ...	60	10	26	26	52	256	2 00	512 00	.....	512 00
531	American.	3 y....	mon..	84	14	78	.....	78	230	1 30	299 00	.....	299 00
362	American.	1 y....	wk ...	60	10	10	90	100	208	1 25	260 00	.....	260 00
315	American.	8 mos	wk ...	60	10	20	30	50	258	1 50	387 00	.....	387 00
198	American.	1½ y.	wk ...	60	10	2	8	10	298	1 25	372 50	.....	372 50
422	American.	3½ y.	wk ...	60	10	52	104	156	152	1 50	228 00	.....	228 00
287	American.	1 y....	wk ...	60	10	40	80	120	188	1 00	188 00	47 00	235 00
371	German....	2 y....	wk ...	60	10	.....	.....	.....	308	3 00	924 00	.....	924 00
285	American.	10 mo	wk ...	60	10	.....	30	30	278	1 37	380 86	.....	380 86
290	American.	6 mos	wk ...	60	10	5	55	60	248	1 25	310 00	.....	310 00
289	American.	8 mos	wk ...	60	10	2	40	50	258	1 38	356 04	.....	356 04
401	German....	4 y....	wk ...	59	.....	38	12	50	258	1 80	464 40	.....	464 40
255	American.	3 y....	wk ...	60	10	15	20	35	273	2 00	546 00	.....	546 00
295	American.	2 y....	wk ...	60	10	5	45	50	258	1 50	387 00	.....	387 00
294	American.	.....	wk ...	60	10	3	57	60	248	1 25	310 00	75 00	385 00
293	American.	.....	wk ...	60	10	10	40	50	258	1 13	291 54	.....	291 54
343	American.	1 y....	wk ...	60	10	3	97	100	208	1 00	208 00	69 00	277 00
342	American.	1 y....	wk ...	60	10	10	65	75	233	1 25	291 25	.....	291 25
341	American.	1½ y.	wk ...	60	10	8	42	50	258	1 50	387 00	.....	387 00
291	American.	2 y....	wk ...	60	10	10	30	40	268	1 25	335 00	.....	335 00
297	American.	1 y....	wk ...	60	10	2	58	60	248	1 25	310 00	.....	310 00
330	American.	8 mos	wk ...	60	10	.....	40	40	268	1 25	335 00	.....	335 00
329	American.	2 y....	wk ...	60	10	2	48	50	258	1 50	387 00	.....	387 00
227	American.	3 y....	mon..	60	10	14	16	30	278	2 00	556 00	.....	556 00
149	American.	3 y....	wk ...	60	10	.....	.....	.....	308	1 50	462 00	.....	462 00
148	American.	4 y....	wk ...	54	9	4	18	22	286	1 75	500 50	125 12	625 62
146	American.	2½ y.	wk ...	60	10	7	13	20	288	1 75	504 00	84 00	588 00
113	Canadian.	2 y....	wk ...	60	10	13	27	40	268	1 00	268 00	.....	268 00
147	American.	.....	wk ...	60	10	.....	45	45	263	1 00	263 00	.....	263 00
99	American.	1 y....	2 wks	60	10	.....	30	30	278	2 00	556 00	.....	556 00
53	American.	3 y....	2 wks	60	10	.....	90	90	218	1 75	381 50	.....	381 50
52	American.	3 y....	wk ...	60	10	.....	90	90	218	2 00	436 00	.....	436 00
51	American.	3 y....	2 wks	60	10	90	.....	90	218	2 00	436 00	.....	436 00
49	American.	3 y....	2 wks	60	10	14	46	60	248	2 00	496 00	165 00	661 00
42	American.	5 y....	2 wks	60	10	15	45	60	248	2 00	496 00	165 00	661 00
21	American.	3 y....	wk ...	60	10	12	13	25	.....	1 62	459 87	50 00	509 87
20	American.	4 y....	wk ...	60	10	12	24	36	272	2 50	680 00	.....	680 00
5	American.	4 y....	wk ...	60	10	.....	.....	10	298	1 50	447 00	.....	447 00
1	American.	5 y....	wk ...	60	10	6	50	56	252	1 75	441 00	.....	441 00
56	American.	2 y....	wk ...	60	10	.....	60	60	248	1 75	434 00	.....	434 00
596	American.	2 y....	wk ...	60	10	25	50	75	233	1 50	349 50	116 50	466 00
587	American.	1 y....	wk ...	60	10	10	70	80	228	1 25	285 00	95 00	380 00
590	American.	1½ y.	wk ...	60	10	8	50	60	248	1 50	372 00	.....	372 00
562	American.	1 y....	wk ...	60	10	4	46	50	258	1 25	322 50	80 62	403 12
569	American.	.....	wk ...	60	10	10	25	35	273	1 25	341 25	.....	341 25
535	American.	1½ y.	wk ...	60	10	.....	20	20	288	1 50	432 00	108 00	540 00
539	American.	2 y....	wk ...	60	10	3	97	100	208	1 50	312 00	78 00	390 00
496	American.	1 y....	wk ...	60	10	10	10	20	288	1 50	432 00	.....	432 00
511	American.	2 y....	wk ...	60	10	8	22	30	278	1 50	417 00	.....	417 00
467	American.	2 y....	wk ...	60	10	5	25	30	278	1 25	347 50	.....	347 50
488	American.	1½ y.	wk ...	60	10	8	32	40	268	1 50	402 00	.....	402 00
489	American.	2 y....	wk ...	60	10	15	45	60	248	1 50	372 00	.....	372 00
492	American.	3 y....	wk ...	60	10	30	40	70	238	1 50	357 00	.....	357 00
493	American.	1 y....	wk ...	60	10	17	33	50	258	1 25	322 50	.....	322 50
613	American.	1 y....	wk ...	60	10	7	43	50	258	1 25	322 50	.....	322 50
594	American.	1½ y.	wk ...	60	10	4	56	60	248	1 25	312 00	78 00	390 00
605	American.	2 y....	wk ...	60	10	20	80	100	208	1 25	260 00	86 00	346 00
618	American.	1½ y.	wk ...	60	10	30	30	60	248	1 50	372 00	.....	372 00

TABLE No. 1.—BLANK No. 3—Continued

## CARPENTERS—Continued.

Office Number.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
						From Sickness.	Inability to obtain work.						
627	American.	2 y.....	wk ...	60	10	15	85	100	208	\$1 50	\$312 00	\$78 00	\$390 00
622	American.	1 y.....	wk ...	60	10	8	22	30	278	1 25	347 50	.....	347 50
621	American.	1½ y..	wk ...	60	10	3	42	45	263	1 25	328 75	82 00	410 75
620	American.	1 y.....	wk ...	60	10	5	20	25	283	1 25	353 75	88 00	441 75
636	American.	2½ y..	wk ...	60	10	15	30	45	263	1 50	394 50	.....	394 50
635	American.	2 y.....	wk ...	60	10	5	25	30	278	1 50	417 00	.....	417 00
638	American.	3 y.....	wk ...	60	10	30	50	80	228	1 75	399 00	.....	399 00
637	American.	2 y.....	wk ...	60	10	10	20	30	278	1 25	347 50	.....	347 50
656	American.	2 y.....	wk ...	60	10	.....	.....	30	278	1 50	417 00	.....	417 00
655	American.	1 y.....	wk ...	60	10	25	55	80	228	1 50	342 00	.....	342 00
665	American.	1½ y..	wk ...	60	10	20	60	80	228	1 50	342 00	.....	342 00
664	American.	1 y.....	wk ...	60	10	10	60	70	230	1 25	287 50	.....	287 50
680	American.	2 y.....	wk ...	60	10	.....	.....	30	278	1 50	417 00	.....	417 00
670	American.	3 y.....	wk ...	60	10	20	40	60	248	1 50	372 00	.....	372 00
916	American.	3 y.....	wk ...	60	10	25	45	70	238	1 50	357 00	.....	357 00
941	American.	3 y.....	wk ...	60	10	20	40	60	248	1 50	372 00	.....	372 00
996	American.	3 y.....	wk ...	60	10	30	.....	90	218	2 00	436 00	.....	436 00
Total.....				4697	773	998	2931	4169	19564	\$119 35	\$30,529 71	\$1939 57	\$32,469 28
Number reporting.....				78	77	63	69	75	77	78	78	20	78
Average .....				60	10	16	43	56	254	\$1 53	\$391 41	\$96 97	\$416 27

TABLE No. 1.—BLANK No. 3—Continued.

SHOEMAKERS.

Office Number.	Nationality.	Time of Apprenticeship.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
					From Sickness.	Inability to obtain work.						
619	American	3 y	60	10	10	90	100	208	\$1 00	\$208 00	\$104 00	\$312 00
620	American		60					308	2 00	616 00		616 00
621	American	3 y	60	10	20	130	150	158	2 50	395 00		395 00
624	American		60		5	73	78	230	1 50	345 00		345 00
653	Irish	5 y	87½				50	258	3 75	967 50		967 50
678	English	7 y	60	8		36	36	272	2 50	680 00		680 00
484	American		60	10	78		78	230	1 25	287 50		287 50
480	American	3 y						308	2 00	616 00		616 00
517	American		58	9			26	282	1 00	282 00		282 00
595	American		60				104	204	1 25	255 00		255 00
516	American		60	10			78	230	2 2	188 60		188 60
506	American		60	10			78	230	1 50	345 00		345 00
500	Irish	3 y	60	10				308	1 50	462 00		462 00
492	American		60	10			104	204	1 50	306 00		306 00
494	American	3 y	60	10				308	1 50	462 00		462 00
519	American		50	8		104	104	204	1 15	234 60		234 60
527	American		60	10		104	104	204	1 00	204 00		204 00
542	American	4 y	60	10		15	15	293	1 50	439 50		439 50
546	Irish	2 y					25	283	1 50	424 50		424 50
553	American	2 y	58	8		60	60	248	2 00	496 00		496 00
554	American	1 y	60	10			60	248	1 62	401 76		401 76
564	Irish	3 y	53	8			20	288	2 50	720 00		720 00
576	American	4 y	60	9								
584	American		60			90	90	218	1 50	327 00		327 00
597	American	3 y	60	10		85	85	223	1 35	301 05		301 05
600	American		59	8			90	218	1 00	218 00		218 00
194	American	1 y	84	14	3	12	15	293	1 25	366 25	122 08	488 33
353	American	3 y	60	10				308	1 50	462 00	92 40	554 40
274	American	3 y	55	8	25	15	40	268	1 60	428 80	71 46	500 26
352	German	4 y	60	10	5	20	25	283	1 12	316 96	79 24	396 20
410	German		59	9		78	78	230	1 50	345 00	104 00	449 00
172	American	1½ y	60	10	10	30	40	268	1 25	335 00	83 75	418 75
178	American	2 y	60	10		30	30	278	1 50	417 00		417 00
158	German	2½ y	59	9		52	52	256	1 75	448 00	26 00	474 00
85	American	5 y	60	10	6	12	18	290	2 50	725 00		725 00
91	German	3 y	59	9	4	26	30	278	1 40	389 20		389 20
94	German	3 y	59	9			28	280	1 50	420 00		420 00
155	German	3 y	59	9		52	52	256	1 50	384 00	159 00	543 00
151	German	3 y	59	9		52	52	256	1 50	384 00		384 00
123	American	3 y	60	10	7	43	50	258	1 50	387 00		387 00
124	American	3 y	60	10	12	48	60	248	1 50	372 00		372 00
121	American	3 y	60	10	17	23	40	268	1 50	402 00		402 00
36	Austrian	3 y	60	10	12		12	296	1 00	296 00		296 00
163	German	3 y	59	10		78	78	230	1 50	345 00		345 00
461	German	3 y	62	6		3	3	305	1 50	462 50	25 00	487 50
940	American		58	9	2	40	70	238	1 75	416 50		416 50
939	American		48			25	55				60 00	60 00
938	American		48	8				308	1 75	539 00	179 00	718 00
937	American	2 y	60	10				308	1 25	385 00		385 00
936	American	1 y	60	10	15	45	60	248	1 62	401 76		401 76
935	American		50	8		100	100	208	1 50	312 00		312 00
934	American	2½ y	58½	8		30	30	278	2 00	556 00		556 00
944	Scotch		48									
945	American	1 y	45	4								
950	American	3 y	50	8	10	40	50	258	1 50	387 00		387 00
969	German	4 y	72	12				308	2 50	770 00	52 00	822 00
970	American	7 y	72	12		20	20	288				
971	German	3 y	72	12		28	28	280	1 25	350 00		350 00
1023	American	4 y	46	6				308	1 75	539 00		539 00
Total			3387	467	241	1689	2651	14344	\$85 93	\$22,523 98	\$1157 93	\$23,681 91
Number reporting			57	50	17	34	47	55	54	54	13	54
Average			59	9	14	49	56	261	\$1 59	\$417 11	\$89 07	\$438 48

TABLE No. 1.—BLANK No. 3—Continued.

## FARM LABORERS.

Office Number.	Nationality.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
					From Sickness.	Inability to obtain work.						
531	American..	wk ...	60	10	.....	50	50	258	\$1 00	\$258 00	.....	\$258 00
530	American..	mon..	60	10	.....	50	50	258	1 00	258 00	.....	258 00
529	American..	wk ...	60	10	10	15	25	283	1 00	283 00	.....	283 00
528	American..	mon..	60	10	10	50	60	248	1 00	248 00	.....	248 00
527	American..	daily.	40	10	25	70	95	208	1 00	208 00	.....	208 00
526	American..	wk ...	60	10	.....	50	50	258	1 00	258 00	.....	258 00
525	American..	wk ...	60	10	10	40	50	258	1 00	258 00	.....	258 00
524	American..	mon..	40	10	10	35	45	263	1 00	263 00	.....	263 00
523	American..	wk ...	60	10	15	30	45	263	1 00	263 00	.....	263 00
522	American..	wk ...	60	10	10	15	25	283	1 00	283 00	.....	283 00
521	American..	mon..	60	10	.....	.....	30	278	1 10	305 80	.....	305 80
520	American..	wk ...	60	10	15	52	67	241	1 00	241 00	.....	241 00
519	American..	wk ...	60	10	8	62	70	238	1 00	238 00	.....	238 00
518	American..	wk ...	60	10	5	25	30	278	1 00	278 00	.....	278 00
117	American..	mon..	60	10	8	22	30	278	1 00	278 00	.....	278 00
546	American..	wk ...	60	10	30	30	60	248	1 00	248 00	.....	248 00
545	American..	wk ...	60	10	20	40	60	248	1 10	272 80	.....	272 80
544	American..	mon..	60	10	15	20	35	273	1 00	273 00	.....	273 00
543	American..	wk ...	60	10	5	15	20	288	1 00	288 00	.....	288 00
541	American..	mon..	60	10	10	23	40	268	1 00	268 00	.....	268 00
540	American..	wk ...	60	10	10	40	50	258	1 00	258 00	.....	258 00
538	American..	mon..	60	10	30	30	60	248	1 00	248 00	.....	248 00
537	American..	wk ...	60	10	.....	.....	.....	308	1 00	308 00	\$80 25	388 25
536	American..	wk ...	60	10	.....	50	50	258	1 00	258 00	64 50	322 50
533	American..	wk ...	66	11	10	50	60	248	1 25	310 00	.....	310 00
560	American..	mon..	60	10	3	7	10	298	1 00	298 00	.....	298 00
559	American..	wk ...	60	10	.....	50	50	258	1 25	322 50	64 60	387 10
558	American..	wk ...	60	10	15	30	45	263	1 00	263 00	.....	263 00
557	American..	wk ...	60	10	2	8	10	298	1 00	298 00	.....	298 00
556	American..	mon..	60	10	10	50	60	248	1 25	310 00	.....	310 00
555	American..	wk ...	60	10	10	60	70	238	1 00	238 00	.....	238 00
554	American..	mon..	60	10	30	5	35	273	1 00	273 00	.....	273 00
553	American..	wk ...	60	10	40	5	45	263	1 00	263 00	.....	263 00
552	American..	wk ...	60	10	.....	40	40	268	1 00	268 00	.....	268 00
550	American..	wk ...	60	10	5	20	25	283	1 00	283 00	.....	283 00
549	American..	mon..	60	10	5	45	50	258	1 00	258 00	.....	258 00
548	American..	wk ...	60	10	30	40	70	238	1 25	297 50	.....	297 50
547	American..	wk ...	60	10	30	60	90	218	1 25	272 50	.....	272 50
267	American..	wk ...	60	10	.....	.....	60	248	1 00	248 00	.....	248 00
561	American..	wk ...	60	10	3	17	20	288	1 00	288 00	.....	288 00
589	American..	wk ...	60	10	5	25	30	278	1 00	278 00	.....	278 00
585	American..	mon..	72	12	.....	.....	.....	308	1 00	308 00	.....	308 00
583	American..	mon..	72	12	8	32	40	268	1 00	268 00	.....	268 00
582	American..	mon..	60	10	40	20	60	248	1 25	310 00	.....	310 00
581	Irish .....	wk ...	60	10	12	58	70	238	1 25	297 50	.....	297 50
580	American..	wk ...	60	10	5	15	20	288	1 00	288 00	.....	288 00
578	American..	mon..	60	10	2	8	10	298	1 00	298 00	.....	298 00
577	American..	mon..	60	10	.....	.....	70	238	1 25	297 50	.....	297 50
576	American..	mon..	60	10	4	21	25	283	1 10	311 30	.....	311 30
575	American..	wk ...	60	10	10	60	70	238	1 00	238 00	.....	238 00
571	American..	mon..	60	10	10	25	35	273	1 25	341 25	.....	341 25
600	American..	wk ...	60	10	20	10	30	278	1 00	278 00	92 62	370 62
599	American..	wk ...	60	10	25	55	80	228	1 00	228 00	.....	228 00
597	American..	mon..	72	12	20	100	120	188	75	141 00	.....	141 00
611	American..	wk ...	60	10	2	28	30	278	1 00	278 00	.....	278 00
610	American..	wk ...	60	10	30	30	60	248	75	186 00	.....	186 00
607	American..	mon..	72	12	3	87	90	218	1 00	218 00	.....	218 00
604	American..	mon..	72	12	10	40	50	258	1 00	258 00	.....	258 00
602	American..	mon..	66	11	.....	20	20	288	75	216 00	.....	216 00
617	American..	mon..	60	10	.....	.....	.....	308	1 00	308 00	.....	308 00
615	American..	mon..	60	10	.....	30	30	278	1 00	278 00	.....	278 00

TABLE No. 1.—BLANK No. 3—Continued.

FARM LABORERS—Continued.

Office Number.	Nationality.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
					From Sickness.	Inability to obtain work.						
129	American..	mon..	60	10	.....	18	18	290	\$1 00	\$290 00	.....	\$290 00
130	American..	mon..	60	10	12	18	30	278	1 00	278 00	\$69 50	347 50
135	Colored....	wk ...	60	10	9	92	100	208	87	180 96	.....	180 96
137	Colored....	wk ...	60	10	5	45	50	258	1 00	258 00	.....	258 00
138	Colored....	mon..	60	10	.....	.....	.....	308	1 39	120 00	.....	120 00
140	American..	mon..	60	10	.....	5	5	303	1 00	303 00	.....	303 00
109	American..	mon..	60	10	9	5	15	293	1 00	293 00	.....	293 00
110	American..	mon..	60	10	10	.....	10	298	75	223 50	.....	223 50
114	American..	mon..	60	10	5	8	13	295	1 25	368 75	.....	368 75
233	American..	mon..	60	10	.....	25	25	283	1 25	353 75	.....	353 75
234	American..	wk ...	60	10	25	35	60	248	1 00	248 00	.....	248 00
235	American..	mon..	60	10	15	30	45	263	1 00	263 00	.....	263 00
236	American..	mon..	60	10	.....	.....	30	278	1 25	347 50	.....	347 50
237	American..	wk ...	60	10	10	30	45	263	1 25	328 75	.....	328 75
216	American..	mon..	72	12	.....	.....	.....	308	78	240 00	.....	240 00
217	American..	mon..	72	12	.....	.....	.....	308	58	180 00	.....	180 00
74	American..	wk ...	60	10	8	27	35	273	1 25	341 25	34 00	375 25
75	American..	mon..	60	10	.....	.....	20	288	50	144 00	.....	144 00
69	American..	mon..	60	10	6	.....	6	302	1 00	302 00	.....	302 00
68	American..	mon..	60	10	.....	.....	.....	308	1 00	308 00	.....	308 00
66	American..	2 wks	60	10	6	14	20	288	1 50	432 00	.....	432 00
65	American..	wk ...	60	10	.....	.....	.....	308	1 50	462 00	115 50	577 50
230	American..	mon..	60	10	30	30	60	248	1 25	310 00	77 50	387 50
231	American..	wk ...	60	10	.....	10	10	298	1 00	298 00	99 33	397 33
232	American..	mon..	60	10	20	20	40	268	1 25	335 00	83 75	418 75
22	American..	wk ...	60	10	10	30	40	268	1 25	335 00	23 50	358 50
306	American..	wk ...	72	11	20	40	60	248	1 25	310 00	.....	310 00
307	American..	wk ...	60	10	15	65	80	228	75	171 00	.....	171 00
187	American..	wk ...	60	10	.....	80	80	228	1 00	228 00	76 00	304 00
242	American..	wk ...	60	10	5	20	25	283	1 25	353 75	.....	353 75
241	American..	wk ...	60	10	3	9	12	296	1 00	296 00	.....	296 00
243	American..	mon..	60	10	.....	.....	60	248	1 00	248 00	.....	248 00
174	American..	wk ...	60	10	5	70	75	233	75	174 75	.....	174 75
176	American..	wk ...	60	10	20	60	80	228	1 00	228 00	.....	228 00
183	American..	mon..	60	10	15	45	60	248	1 00	248 00	.....	248 00
182	American..	wk ...	60	10	3	27	30	278	87	241 86	.....	241 86
207	American..	wk ...	60	10	.....	35	35	273	1 25	341 25	85 00	426 25
167	American..	wk ...	60	10	.....	100	100	208	1 00	208 00	.....	208 00
168	American..	wk ...	74	14	.....	60	60	248	1 00	248 00	.....	248 00
170	American..	mon..	60	10	.....	.....	.....	308	1 00	308 00	.....	308 00
173	American..	wk ...	60	10	8	42	50	258	1 00	258 00	.....	258 00
256	American..	wk ...	60	10	17	28	45	263	1 00	263 00	.....	263 00
257	American..	mon..	60	10	20	40	60	248	1 25	310 00	.....	310 00
258	American..	wk ...	60	10	10	25	35	273	1 00	273 00	.....	273 00
259	American..	mon..	60	10	12	38	50	258	1 25	322 50	64 50	387 00
260	American..	wk ...	60	10	15	30	45	263	1 50	394 50	98 62	493 12
261	American..	mon..	60	10	14	26	40	268	1 50	402 00	.....	402 00
262	English....	mon..	70	10	10	10	20	288	1 00	288 00	.....	288 00
263	American..	mon..	72	12	5	10	15	293	1 00	293 00	48 00	341 00
264	English....	mon..	70	10	15	.....	15	293	1 50	439 50	.....	439 50
265	American..	mon..	60	10	.....	40	40	268	1 50	402 00	100 25	502 25
205	Irish.....	wk ...	60	10	10	40	50	258	1 00	258 00	.....	258 00
253	American..	mon..	70	10	10	10	20	288	1 50	432 00	.....	432 00
252	American..	wk ...	60	10	10	25	35	273	1 25	341 25	.....	341 25
251	American..	mon..	60	10	10	30	40	268	1 25	335 00	.....	335 00
202	Irish.....	wk ...	60	10	15	45	60	248	1 25	310 00	77 50	387 50
201	Irish.....	wk ...	60	10	.....	50	50	258	1 00	258 00	.....	258 00
200	American..	wk ...	60	10	.....	40	40	268	1 25	335 00	.....	335 00
247	American..	wk ...	60	10	15	20	35	273	1 00	273 00	.....	273 00
248	American..	mon..	60	10	.....	.....	50	254	1 00	258 00	.....	258 00
249	American..	wk ...	60	10	10	20	30	278	1 00	278 00	.....	278 00

TABLE No. 1.—BLANK No. 3—Continued.

## FARM LABORERS—Continued.

Office Number.	Nationality.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
					From Sickness.	Inability to obtain work.						
312	American..	mon..	65	10	10	20	30	278	\$ 75	\$208 50	.....	\$208 50
614	American..	mon..	60	10	5	35	40	268	1 00	268 00	.....	268 00
626	American..	mon..	72	12	20	10	30	278	75	208 50	.....	208 50
625	American..	mon..	72	12	4	96	100	208	1 00	208 00	.....	208 00
619	American..	wk ...	60	10	10	30	40	268	75	201 00	.....	201 00
632	American..	mon..	60	10	.....	40	40	268	1 00	268 00	.....	268 00
631	American..	mon..	66	11	7	33	40	268	1 00	268 00	.....	268 00
629	American..	mon..	66	11	3	17	20	288	1 00	288 00	\$72 00	360 00
643	American..	mon..	60	10	.....	.....	25	283	1 00	283 00	.....	283 00
654	American..	mon..	60	10	30	15	45	263	1 00	263 00	.....	263 00
651	American..	mon..	60	10	30	20	50	258	1 25	322 50	64 50	387 00
650	American..	mon..	60	10	20	30	50	258	1 00	258 00	.....	258 00
648	American..	wk ...	66	11	5	30	35	273	1 00	273 00	.....	273 00
646	American..	wk ...	60	10	10	20	30	278	1 00	278 00	.....	278 00
645	American..	mon..	60	10	12	28	40	268	1 00	268 00	53 30	321 30
644	American..	mon..	60	10	15	35	50	258	1 00	258 00	64 50	322 50
658	American..	wk ...	60	10	25	55	80	228	1 25	285 00	95 00	380 00
666	American..	mon..	60	10	15	25	40	268	1 25	335 00	67 00	402 00
662	American..	mon..	60	10	10	20	30	278	87	241 86	.....	241 86
659	American..	mon..	60	10	15	45	60	248	1 00	248 00	.....	248 00
676	American..	mon..	60	10	40	10	50	258	1 00	258 00	.....	258 00
678	American..	wk ...	60	10	5	45	50	258	1 00	258 00	.....	258 00
679	American..	mon..	60	10	.....	.....	40	268	1 25	335 00	.....	335 00
675	American..	wk ...	60	10	5	35	40	268	1 00	268 00	.....	268 00
673	American..	wk ...	60	10	.....	30	30	278	1 25	347 50	.....	347 50
672	American..	mon..	60	10	5	45	50	258	1 00	258 00	.....	258 00
617	American..	mon..	90	15	.....	.....	30	278	55	152 90	50 96	203 86
111	Irish .....	mon..	60	10	.....	20	20	288	1 25	360 00	.....	360 00
108	Colored .....	mon..	60	10	.....	.....	.....	308	1 00	308 00	.....	308 00
476	French.....	wk ...	60	10	10	30	40	268	1 00	268 00	.....	268 00
477	American..	mon..	60	10	.....	.....	.....	308	1 00	308 00	77 00	385 00
478	American..	mon..	60	10	3	17	20	288	1 00	288 00	.....	288 00
479	American..	wk ...	60	10	5	45	50	258	1 00	258 00	.....	258 00
462	American..	mon..	60	10	5	30	35	273	1 00	273 00	.....	273 00
464	American..	mon..	60	10	6	34	40	268	1 00	268 00	.....	268 00
468	American..	mon..	60	10	15	50	65	243	1 00	243 00	.....	243 00
481	American..	mon..	60	10	8	52	60	248	1 00	248 00	.....	248 00
482	American..	mon..	60	10	15	45	60	248	1 00	248 00	.....	248 00
483	American..	wk ...	60	10	30	40	70	238	1 00	238 00	.....	238 00
484	American..	wk ...	60	10	5	10	15	293	1 00	293 00	.....	293 00
485	American..	mon..	60	10	.....	.....	.....	308	1 00	308 00	.....	308 00
486	American..	wk ...	60	10	15	65	80	228	1 00	228 00	.....	228 00
473	American..	mon..	60	10	5	55	60	248	1 00	248 00	49 00	297 00
471	American..	mon..	60	10	10	40	50	258	1 00	258 00	.....	258 00
515	American..	wk ...	60	10	12	18	30	278	1 00	278 00	.....	278 00
514	American..	mon..	60	10	3	17	20	288	1 00	288 00	.....	288 00
513	American..	mon..	60	10	4	64	70	238	1 00	238 00	.....	238 00
512	American..	wk ...	60	10	15	60	75	233	1 00	233 00	.....	233 00
510	American..	wk ...	60	10	3	7	10	298	1 00	298 00	74 25	372 25
508	American..	mon..	60	10	5	35	40	268	1 00	268 00	.....	268 00
503	American..	mon..	60	10	20	60	80	228	1 00	228 00	.....	228 00
502	American..	mon..	60	10	5	10	15	293	1 00	293 00	.....	293 00
501	American..	mon..	60	10	20	40	60	248	1 00	248 00	.....	248 00
498	American..	wk ...	60	10	.....	15	15	293	1 00	293 00	.....	293 00
494	American..	mon..	60	10	16	34	50	258	1 00	258 00	.....	258 00
118	Irish .....	wk ...	60	10	5	20	25	283	1 50	424 50	85 90	510 40
120	American..	mon..	60	10	9	15	24	284	1 00	284 00	.....	284 00
119	American..	mon..	60	10	9	16	25	283	90	254 70	.....	254 70
122	American..	mon..	60	10	5	11	16	292	1 25	365 00	91 00	456 00
126	Irish .....	mon..	60	10	5	.....	5	303	1 00	303 00	.....	303 00
127	American..	mon..	60	10	7	23	30	278	1 25	347 50	.....	347 50

TABLE No. 1.—BLANK No. 3—Continued.

FARM LABORERS—Continued.

Office Number.	Nationality.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
					From Sickness.	Inability to obtain work.						
150	American..	mon..	60	10	.....	.....	.....	308	\$1 00	\$308 00	.....	\$308 00
313	American..	mon..	62	10	50	20	70	238	75	178 50	.....	178 50
323	Colored .....	mon..	60	10	2	28	30	278	1 00	278 00	\$92 00	370 00
326	American..	wk ...	60	10	10	60	70	238	1 00	238 00	.....	238 00
364	American..	wk ...	60	10	.....	50	50	258	1 00	258 00	.....	258 00
Total.....			11481	1915	1752	5492	7683	50223	\$195 61	\$52,243 43	\$2291 33	\$54,534 76
Number reporting			188	188	141	161	175	188	188	188	30	188
Average .....			61	10	12	34	44	267	\$1 04	\$277 88	\$76 38	\$290 08

LABORERS ON RAILROAD, UNSKILLED.

574	Irish .....	mon..	54	9	.....	12	12	296	\$ 90	\$266 40	.....	\$266 40
322	Irish .....	wk ...	60	10	4	6	10	298	1 10	327 80	.....	327 80
321	Irish .....	wk ...	60	10	2	10	12	298	1 10	327 80	\$81 95	409 75
195	American..	wk ...	84	14	8	32	40	260	1 50	390 00	.....	390 00
280	Irish .....	wk ...	60	10	1	4	5	303	1 10	333 30	.....	333 30
277	Irish .....	wk ...	60	10	.....	7	7	301	1 10	331 10	.....	331 10
275	American..	wk ...	60	10	5	95	100	208	1 10	228 80	.....	228 80
273	Irish .....	wk ...	60	10	1	.....	15	293	1 10	322 30	.....	322 30
281	Irish .....	wk ...	60	10	3	.....	20	288	1 10	316 80	.....	316 80
175	American..	wk ...	60	10	7	32	40	268	1 10	294 80	73 50	368 30
97	American..	mon..	60	10	6	9	15	293	1 10	322 30	32 50	354 80
98	American..	wk ...	60	10	10	25	35	273	1 50	409 50	68 25	477 75
88	American..	mon..	60	10	9	13	25	283	1 10	311 30	.....	311 30
78	Irish .....	mon..	60	10	8	21	29	279	1 10	306 90	51 15	358 05
79	American..	mon..	60	10	.....	25	25	283	1 10	311 30	.....	311 30
64	American..	mon..	60	10	.....	12	12	296	1 10	325 60	81 40	407 00
67	American..	mon..	60	10	.....	8	8	300	1 10	330 00	.....	330 00
141	American..	mon..	60	10	5	20	25	283	1 10	311 30	.....	311 30
136	Colored .....	wk ...	60	10	5	5	10	298	1 10	327 80	.....	327 80
133	Colored .....	wk ...	60	10	10	5	15	293	1 10	322 30	.....	322 30
115	American..	mon..	60	10	.....	.....	.....	308	1 00	208 00	61 00	369 00
58	American..	wk ...	60	10	.....	.....	7	301	1 37	412 37	82 49	494 86
59	American..	mon..	60	10	.....	.....	10	298	1 10	327 80	.....	327 80
60	American..	mon..	60	10	5	11	16	292	1 10	321 20	32 00	353 20
61	American..	mon..	60	11	.....	.....	8	300	1 10	330 00	.....	330 00
642	American..	wk ...	60	10	3	37	40	268	1 10	294 80	.....	294 80
623	American..	wk ...	60	10	5	55	60	248	1 10	272 80	.....	272 80
624	American..	wk ...	60	10	.....	.....	.....	308	1 10	338 80	.....	338 80
606	American..	wk ...	60	10	2	38	40	268	1 10	294 80	.....	294 80
609	American..	wk ...	60	10	.....	.....	.....	308	1 10	338 80	.....	338 80
584	American..	wk ...	60	10	5	25	30	278	1 10	305 80	.....	305 80
586	American..	wk ...	60	10	10	40	50	258	1 10	283 80	.....	283 80
509	Irish .....	wk ...	60	10	12	8	20	268	1 10	294 80	.....	294 80
485	American..	mon..	72	12	.....	.....	.....	308	1 60	492 80	.....	492 80
Total.....			2070	346	126	555	741	9705	\$38 67	\$11,013 97	\$564 24	\$11,578 21
Number reporting			34	34	22	25	30	34	34	34	9	34
Average.....			61	10	6	22	25	285	\$1 14	\$323 94	\$62 69	\$340 51

TABLE No. 1.—BLANK No. 3—Continued.

## OCCUPATIONS REQUIRING EXPERIENCE.

Office Number.	Occupation.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
							From Sickness.	Inability to obtain work.						
510	Rubber Bootmaker	Am	.....	mon..	45	7	.....	.....	48	260	\$1 50	\$390 00	.....	\$390 00
631	Rubber Bootmaker	Am	.....	mon..	54	9	.....	.....	270	38	1 44	54 72	221 76	276 48
572	Rubber Bootmaker	Ger	.....	mon..	72	11	.....	.....	156	152	1 44	218 88	.....	218 88
101	Mix Colors.....	Am	.....	mon..	60	10	20	.....	20	288	1 25	360 00	.....	360 00
467	Helper in Foundry	Am	.....	2 wks	60	10	8	.....	8	300	1 60	480 00	.....	480 00
47	Foreman.....	Am	.....	wk ..	60	10	.....	.....	7	301	2 50	751 50	.....	751 50
573	Screw Lathe Hand	Am	.....	wk ..	59	9	4	5	11	295	1 40	415 80	.....	415 80
906	Glass Packer.....	Am	.....	wk ..	48	8	.....	.....	308	1 00	308 00	.....	308 00	
921	Glass Spearer.....	Am	.....	mon..	72	12	.....	40	40	268	1 16	310 88	.....	310 88
915	Hollow'are Packer	Am	.....	wk ..	60	10	.....	.....	308	1 15	354 20	.....	354 20	
952	Hollow'are Packer	Ger	3 y..	.....	53	.....	.....	.....	308	2 60	800 80	.....	800 80	
974	Paper Operator.....	Ger	.....	wk ..	72	12	20	28	48	260	1 50	390 00	.....	390 00
Total.....					715	108	52	73	608	3086	\$18 54	\$4834 78	221 76	\$5056 54
Number reporting.....					12	11	4	3	9	12	12	12	1	12
Average.....					59	10	13	24	67	257	\$1 54	\$402 89	221 76	\$421 38

TABLE No. 1.—BLANK No. 3—Continued.

CLERKS AND AGENTS.

Office Number.	Occupation.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Earnings of Self.	Earnings of Family.	Total Income.
							From Sickness.	Inability to obtain work.						
13	Book-k'r....	Am....	3 y.	wk...	70	13	.....	.....	14	294	\$1 33	\$391 02	.....	\$391 02
8	Clerk .....	Am....	.....	wk...	72	12	.....	.....	.....	308	2 00	616 00	.....	616 00
102	Clerk .....	Am....	.....	wk...	60	.....	.....	.....	.....	308	2 00	616 00	.....	616 00
4	Book-k'r....	Am....	.....	wk...	58	8	.....	.....	.....	308	4 00	1,232 00	.....	1,232 00
107	Editor.....	Ger....	.....	wk...	50	8	.....	.....	.....	308	2 87	884 00	180 00	1,064 00
160	Carrier.....	Ger....	.....	.....	56	.....	.....	.....	.....	308	1 50	462 00	260 00	722 00
396	Carrier.....	Ger....	.....	wk...	56	8½	15	21	36	272	1 33	360 76	.....	360 76
649	Tel. Oper....	Am....	4 m.	wk...	72	12	.....	4	40	268	1 25	335 00	.....	335 00
551	Tel. Oper....	Am....	6 m.	wk...	60	10	.....	.....	.....	308	1 50	462 00	.....	462 00
671	R. R. Agent	Am....	.....	wk...	60	10	.....	5	.....	303	1 25	378 75	.....	378 75
475	Bartender...	Am....	.....	mon.	80	15	.....	.....	.....	308	1 25	385 00	.....	385 00
614	Janitor.....	Am....	.....	mon.	50	2	.....	60	60	248	77	190 96	.....	190 96
616	Teacher.....	Am....	.....	wk...	59	9	.....	.....	.....	308	2 17	668 36	.....	668 36
668	Agent.....	Am....	.....	mon.	.....	.....	.....	.....	.....	308	1 50	462 00	.....	462 00
228	Book-k'r....	Am....	.....	wk...	42	7	.....	42	42	266	1 25	332 50	.....	332 50
370	Clerk .....	Am....	.....	wk...	78	15	.....	.....	.....	308	1 50	462 00	.....	462 00
357	Bartender...	Am....	.....	wk...	92	17	.....	75	75	233	1 50	349 50	.....	349 50
270	Tel. Oper....	Am....	.....	wk...	78	13	30	60	90	218	1 50	327 00	.....	327 00
369	Clerk .....	Am....	.....	wk...	59	9	.....	.....	.....	308	60	184 80	.....	184 80
269	Tel. Oper....	Am....	6 m.	.....	84	14	.....	.....	.....	308	1 50	462 00	.....	462 00
943	Tel. Agent...	Am....	.....	wk...	87	15	.....	.....	.....	308	1 15	354 20	.....	354 20
957	Clerk .....	Ger....	3 y.	wk...	62	.....	.....	.....	.....	308	2 00	616 00	.....	616 00
964	Clerk .....	Am....	.....	wk...	60	.....	.....	.....	.....	308	1 00	308 00	.....	308 00
965	Clerk .....	Ger....	.....	mon.	104	19	.....	.....	.....	308	50	154 00	.....	154 00
967	Teacher.....	Am....	.....	.....	.....	.....	.....	.....	.....	.....	.....	551 00	.....	551 00
998	Agent.....	Ger....	.....	.....	.....	.....	.....	.....	.....	308	1 00	308 00	.....	308 00
1001	Electrician	Irish..	.....	wk...	56	8½	14	.....	14	294	2 00	588 88	.....	588 00
446	Book-k'r....	Am....	.....	wk...	60	10	3	.....	3	305	2 66	811 30	.....	811 30
Total.....					1655	233	67	262	379	7937	\$42 28	\$13,252 15	\$440 00	\$13,692 15
Number reporting.....					25	21	5	6	10	27	27	28	2	28
Average.....					66	11	13	44	38	294	\$1 56	\$473 22	\$220 00	\$489 00

TABLE No. 1.—BLANK No. 3—Continued.

## SKILLED WORKMEN—MISCELLANEOUS TRADES.

Office Number.	Occupation.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Total Income.
							From Sickness.	Inability to obtain work.				
412	Bracelet maker.....	Ger.....	5 y....	2 wks	59	9	.....	52	52	256	\$2 50	\$640 00
409	Polishing.....	Ger.....	5 y....	wk....	59	9	12	24	36	272	2 00	544 00
407	Bag maker.....	Ger.....	.....	2 wks	59	9	.....	52	52	256	1 50	384 00
406	Bag maker.....	Ger.....	3 y....	2 wks	59	9	.....	52	52	256	1 75	448 00
405	Trunk maker.....	Ger.....	5 y....	2 wks	59	9	.....	78	78	230	1 50	345 00
404	Bag maker.....	Ger.....	5 y....	2 wks	59	9	.....	78	78	230	1 75	402 50
229	Moulder.....	Amer...	1 y....	wk....	60	10	.....	.....	.....	308	1 50	*528 00
206	Harness maker.....	Amer...	1½ y.	wk....	60	10	.....	.....	.....	308	1 50	462 00
574	Butcher.....	Amer...	.....	wk....	60	10	.....	50	50	258	1 25	322 50
563	Sash and Blind maker.	Amer...	1 y....	wk....	60	10	.....	20	20	288	1 50	432 00
487	Baker.....	Ger.....	2 y....	mon..	80	12	10	80	90	218	1 50	327 00
370	Stone cutter.....	French	4 y....	2 wks	48	8	.....	.....	.....	.....	3 50	.....
610	Pattern maker.....	Amer...	5 y....	wk....	60	8	16	.....	.....	292	2 00	584 00
623	Sawyer.....	Amer...	2 y....	mon..	59	9	.....	60	60	248	1 25	310 00
349	Worker in Sash Fact'ry.	Amer...	3 y....	wk....	54	9	.....	12	12	296	1 50	444 00
626	Loom Fixer.....	English	30 y..	mon..	67	8	5	30	35	273	1 70	464 10
633	Pump maker.....	Amer...	3 y....	.....	48	.....	.....	.....	.....	.....	.....	.....
634	Druggist Graduate.....	Amer...	.....	2 wks	.....	.....	3	47	50	258	1 50	387 00
648	Awning maker.....	Amer...	3 y....	.....	50	7	3	.....	.....	305	2 00	610 00
639	Boiler maker.....	Amer...	3 y....	wk....	65	10	.....	.....	.....	308	2 25	693 00
652	Watch Spring maker..	Amer...	6 y....	wk....	60	10	.....	.....	.....	.....	.....	.....
650	Tinsmith.....	Amer...	3 y....	wk....	60	10	.....	154	154	1 50	†431 00	
663	Box maker.....	Amer...	3 y....	wk....	56	.....	.....	60	60	.....	.....	.....
669	Ivory Turner and Carv.	Amer...	4 y....	wk....	60	9	.....	26	282	1 50	423 00	
668	Iron Moulder.....	Amer...	5 y....	wk....	60	10	10	10	298	2 25	670 50	
667	Bookbinder.....	Amer...	.....	.....	59	9	.....	.....	.....	.....	.....	.....
671	Brush maker.....	English	7 y....	wk....	68	.....	.....	.....	200	.....	.....	.....
672	Straw Hat Presser.....	English	1 y....	wk....	59	9	.....	70	238	1 70	404 60	
675	Carriage Upholsterer..	Amer...	5 y....	wk....	60	8	.....	.....	.....	.....	1 50	.....
682	Boiler maker.....	Ger.....	5 y....	wk....	60	10	.....	.....	.....	308	2 00	616 00
162	Chain maker.....	Ger.....	5 y....	2 wks	59	9	.....	104	204	.....	.....	.....
164	Wax Thr'd Mach'e Op'r	Amer...	3½ y.	wk....	59	9	.....	.....	308	1 66	511 28	
165	Satchel maker.....	Ger.....	.....	wk....	59	9	.....	.....	.....	.....	.....	.....
54	Carriage maker.....	Amer...	3 y....	wk....	60	10	.....	7	7	301	1 75	526 75
44	Carriage maker.....	Amer...	3 y....	wk....	60	10	.....	4	5	303	1 65	499 95
161	Carriage maker.....	Ger.....	5 y....	wk....	59	9	.....	.....	308	2 00	616 00	
39	Tinsmith.....	Amer...	5 y....	mon..	54	9	.....	48	48	260	1 50	390 00
427	Lapper.....	English	.....	wk....	59	9	.....	30	.....	278	2 00	556 00
426	Hat Finisher.....	Amer...	4 y....	wk....	60	10	.....	.....	308	3 00	924 00	
435	Bag maker.....	Ger.....	4 y....	2 wks	59	9	.....	.....	8	300	2 00	600 00
433	Chain maker.....	Amer...	.....	wk....	59	9	.....	36	36	242	1 50	363 00
93	Well Digger.....	Irish...	.....	wk....	60	10	10	10	20	288	2 00	†691 20
80	Miller.....	Amer...	3 y....	mon..	60	10	.....	10	10	298	87	259 26
93	Harness maker.....	Ger.....	5 y....	2 wks	59	9	.....	.....	308	85	417 80	
86	Moulder.....	Amer...	5 y....	wk....	60	10	15	15	30	278	2 50	695 00
196	Railroad Engineer.....	English	2 y....	wk....	84	14	.....	.....	308	2 50	770 00	
630	Railroad Engineer.....	Amer...	3 y....	wk....	78	13	11	.....	11	297	2 00	594 00
907	Bricklayer.....	English	7 y....	wk....	60	10	.....	.....	5	303	2 50	757 50
912	Wind'w Glass Gatherer	.....	.....	mon..	54	9	.....	72	72	236	1 73	408 28
408	Foreman.....	Amer...	3 y....	wk....	90	.....	.....	.....	.....	308	3 33	1025 64
398	Nickel Plater.....	Amer...	6 mos	2 wks	59	9	14	11	25	283	1 50	424 50
918	Window Glass Cutter...	Amer...	5 y....	.....	.....	.....	.....	.....	.....	.....	.....	.....
919	Carriage Wood Worker	Amer...	5 y....	wk....	60	10	.....	.....	.....	308	1 50	462 00
1006	Cloth Hat & Cap maker	Ger.....	3 y....	wk....	.....	.....	.....	60	60	.....	2 00	557 00
1009	Steam Fitting.....	Amer...	3 y....	.....	60	9	14	.....	90	218	1 16	252 88
995	Electro-Plater.....	Ger.....	5 y....	2 wks	60	9	.....	.....	60	248	2 60	644 80
1003	Engineer.....	Ger.....	4 y....	mon..	.....	.....	21	.....	21	287	2 66	763 42
1004	Wall Bleacher.....	Aust...	.....	wk....	60	10	.....	52	52	256	2 00	512 00
955	Gilder.....	Ger.....	3 y....	wk....	60	10	.....	.....	.....	154	2 00	308 00

Earnings of Family:—\* \$66.00; † \$200.00; ‡ \$115.20; § \$156.00.

TABLE No. 1.—BLANK No. 3—Continued.

SKILLED WORKMEN—MISCEL. TRADES—Continued.

Office Number.	Occupation.	Nationality.	Time of Apprentic. ship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Total Income.
							From Sickness.	Inability to obtain work.				
990	Chain maker.....	Ger.....	5 y....	2 wks	59	9	18	78	96	212	\$1 83	*\$855 96
951	Bench maker.....	Amer.....	4 y....	.....	48	8	.....	90	90	218	2 00	436 00
954	Tool maker.....	Ger.....	4 y....	wk....	59	9	.....	.....	18	290	2 00	580 00
459	Butcher.....	Amer.....	3 mos	mon..	66	11	.....	.....	.....	308	1 00	308 00
447	Florist.....	Ger.....	5 mos	mon..	90	15	.....	6	6	302	87½	264 25
460	Piano maker.....	Ger.....	3 mos	.....	.....	.....	.....	25	25	283	2 50	707 50
453	Wagon maker.....	Swiss...	3 mos	wk....	60	10	10	40	50	258	1 50	387 00
455	.....	Ger.....	.....	wk....	60	10	.....	.....	.....	308	2 50	770 00
456	Grinder and Polisher...	Ger.....	4 mos	wk....	59	9	25	50	75	238	2 00	466 00
458	Traveling-bag maker...	Amer.....	3 mos	wk....	59	9	.....	.....	.....	308	2 00	616 00
442	Silk Hatter.....	Italian.	6 mos	wk....	54	8	.....	95	95	213	4 00	852 00
441	Hatter.....	French.	4 y....	wk....	.....	.....	.....	.....	.....	.....	.....	.....
443	Mattress maker.....	Ger.....	.....	wk....	59	9	.....	.....	10	298	2 00	596 00
444	Bag maker.....	Amer.....	.....	wk....	60	10	.....	.....	.....	308	1 75	539 00
25	Harness maker.....	Ger.....	5 y....	2 wks	59	9	.....	.....	.....	308	1 00	†360 00
17	Sewing Machine maker	Amer.....	.....	wk....	60	10	.....	.....	1	307	1 50	460 50
12	Sash and Blind maker.	Amer.....	3 y....	wk....	60	10	.....	50	60	248	2 50	620 00
11	Turner.....	Amer.....	2 y....	wk....	60	10	.....	25	25	283	2 00	566 00
10	Tinner.....	Amer.....	5 y....	wk....	60	10	.....	.....	.....	308	2 50	770 00
6	Sewing Machine maker	Amer.....	.....	2 wks	60	9	.....	6	6	302	1 70	513 40
96	Cooper.....	Amer.....	3 y....	wk....	60	10	.....	60	60	248	2 00	496 00
29	Plumber.....	Amer.....	4 y....	mon..	67	.....	2	.....	3	305	3 11	948 55
106	Tinsmith.....	Amer.....	3 y....	wk....	50	9	.....	90	90	218	1 80	392 40
171	Harness maker.....	Amer.....	1 y....	wk....	60	10	50	60	110	198	1 25	†330 00
209	Moulder.....	Amer.....	2 y....	wk....	60	10	15	.....	15	293	1 50	439 50
346	Brush manufacturer....	Amer.....	2 y....	wk....	55	8	10	15	25	283	1 25	353 75
177	Tinker.....	Amer.....	1 y....	wk....	.....	.....	2	25	25	283	87	246 21
189	Butcher.....	Amer.....	.....	wk....	60	10	5	15	20	288	1 25	360 00
190	Butcher.....	Amer.....	.....	wk....	60	10	10	130	140	168	1 00	168 00
310	Tinsmith.....	Amer.....	.....	wk....	.....	.....	5	15	20	288	1 25	360 00
34	Ivory Turner.....	Amer.....	18 mo	wk....	59	9	.....	65	65	243	2 00	486 00
400	Wood Carver.....	French	3½ y.	wk....	.....	.....	10	1	11	297	3 00	891 00
399	Bookbinder.....	Ger.....	3 y....	wk....	59	9	.....	.....	.....	308	2 25	693 00
460	Rubber Cutter.....	Amer.....	.....	mon..	48	8	.....	.....	78	230	1 00	230 00
469	Moulder.....	English	3½ y.	2 wks	.....	.....	.....	18	18	290	3 15	913 50
477	Iron Moulder.....	Amer.....	.....	wk....	60	10	.....	.....	.....	308	1 50	462 00
473	Puddler.....	Amer.....	.....	mon..	58	8	6	12	18	290	3 40	986 00
469	Catcher in Rolling Mill	Irish....	4 y....	.....	55	5	.....	12	12	296	1 50	444 00
468	Puddler.....	Amer.....	4 y....	wk....	55	5	.....	14	14	294	2 50	735 00
489	Moulder.....	Irish....	3 y....	2 wks	60	10	12	18	30	278	3 25	903 50
554	Carriage Trimmer.....	Amer.....	4 y....	wk....	60	10	3	.....	20	288	2 00	774 66
537	Metal Spinner.....	Amer.....	3 y....	wk....	60	.....	.....	.....	85	223	1 12	249 76
529	Box maker.....	Amer.....	.....	mon..	60	10	.....	60	60	248	1 50	372 00
495	Harness maker.....	Irish....	5 y....	.....	70	.....	.....	20	20	288	1 50	432 00
563	Carriage Trimmer.....	Amer.....	2 y....	wk....	60	10	.....	90	90	218	1 75	381 50
578	Butcher.....	Ger.....	3 y....	wk....	75	13	60	90	150	158	1 17	184 86
582	Butter Presser.....	Amer.....	.....	2 wks	55	.....	8	.....	90	218	2 50	545 00
585	Butcher.....	Ger.....	4 y....	wk....	72	12	.....	.....	.....	308	1 75	539 00
587	Tinsmith.....	Irish....	3 y....	wk....	59	9	.....	38	38	270	1 50	405 00
590	Iron Worker.....	Amer.....	.....	2 wks	55	5	.....	15	15	293	2 00	‡745 00
596	Bricklayer.....	Amer.....	4 y....	wk....	58	8	.....	.....	.....	308	2 00	616 00
599	Butcher.....	Irish....	.....	.....	60	10	.....	.....	.....	.....	1 00	.....
604	Rubber Cutter.....	Amer.....	.....	mon..	72	12	.....	64	64	244	1 75	**569 33
608	Wool Carder.....	Amer.....	2 y....	mon..	60	10	.....	.....	.....	308	1 50	462 00
354	Butcher.....	Amer.....	.....	wk....	60	10	2	28	30	278	1 50	417 00
271	Butcher.....	Amer.....	.....	wk....	72	12	10	60	70	238	75	178 50
372	Piano maker.....	Ger.....	6 y....	2 wks	60	8	.....	.....	.....	308	4 00	1,232 00
348	Brush maker.....	Amer.....	.....	wk....	48	8	8	32	40	268	1 00	268 00
347	Brush maker.....	Amer.....	3 y....	wk....	54	8	.....	.....	.....	308	1 25	385 00

Earnings of Family:—\* \$468.00; † \$52.00; ‡ \$82.00; || \$198.66; ‡ \$159.00; \*\* \$142.33.

TABLE No. 1.—BLANK No. 3—Continued.

## SKILLED WORKMEN—MISCEL. TRADES—Continued.

Office Number.	Occupation.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Total Income.
							From Sickness.	Inability to obtain work.				
391	Shade and Sign Painter	Ger .....	3 y....	wk ...	60	9	.....	6	6	302	\$1 84	*\$562 68
440	Trunk maker.....	Amer ...	3 y....	2 wks	59	9	50	.....	50	258	1 63	420 54
439	Upholsterer.....	Ger .....	4 y....	wk ...	59	9	5	.....	6	297	2 00	594 00
438	Upholsterer.....	Ger .....	3 y....	wk ...	59	9	1	.....	10	18	1 65	478 00
437	Tool maker.....	Ger .....	3 y....	wk ...	59	9	120	14	134	174	75	†330 50
413	Bar maker.....	Ger .....	5 y....	2 wks	59	9	.....	52	52	256	1 50	†387 50
415	Tinsmith.....	Ger .....	3 y....	wk ...	59	9	52	.....	52	256	2 00	512 00
541	Ship Carpenter.....	Amer....	4 y....	wk ...	60	10	.....	40	40	268	1 75	469 00
507	Ship Carpenter.....	Irish....	4 y....	mon..	60	10	.....	52	52	256	2 40	614 40
1012	Moulder.....	Amer ...	5 y....	wk ...	60	10	.....	.....	.....	.....	1 60	.....
318	Boatman.....	Amer .....	.....	.....	84	12	.....	20	20	288	2 00	576 00
669	Boatman.....	Amer ...	.....	wk ...	60	10	.....	10	10	298	1 00	298 00
81	Boatman.....	Amer ...	.....	mon..	84	12	15	.....	15	293	75	219 75
500	Boatman.....	Amer ...	.....	wk ...	72	12	20	20	50	258	1 50	387 00
491	Boatman.....	Amer ...	.....	wk ...	72	12	5	25	30	278	1 25	347 50
469	Boatman.....	Amer ...	.....	wk ...	72	12	10	60	70	238	1 25	297 50
Total .....					7564	1108	783	2837	4342	33013	\$227 55½	\$62159 46
Number reporting.....					124	116	43	72	94	122	125	121
Average .....					61	10	18	39	46	271	\$1 82	\$513 71

Earnings of Family :—\*\$7.00; †\$200.00; ‡\$3.00.

TABLE No. 1.—BLANK No. 3—Continued.

DAY LABORERS.

Office Number.	Occupation.	Nationality.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Total Income.
						From Sickness.	Inability to obtain work.				
504	Work in Hotel.....	Amer ...	mon..	84	12				308	\$1 00	\$308 00
667	Jack of all Trades.....	Amer ...	wk ...	60	10	3	7	10	298	1 00	298 00
661	Anything.....	Amer ...	wk ...	60	10			50	258	1 00	258 00
647	Anything.....	Amer ...	wk ...	60	10	3	7	10	298	1 00	298 00
640	Anything.....	Amer ...	wk ...	60	10	10	60	70	238	1 00	* 317 00
641	Anything.....	Amer ...	wk ...	60	10	2	28	30	278	1 00	278 00
634	Anything.....	Amer ...	wk ...	60	10	8	42	50	258	1 75	193 50
628	Anything.....	Amer ...	wk ...	60	10	15	75	90	218	1 25	272 50
608	Jack of all Trades.....	Amer ...	wk ...	60	10	5	55	60	248	1 00	† 310 00
608	Anything.....	Amer ...	wk ...	60	10		6	6	302	75	226 50
592	Anything.....	Amer ...	wk ...	60	10		50	50	258	1 25	322 50
593	Drive Wagon.....	Amer ...	wk ...	60	10				308	1 00	308 00
601	Anything.....	Amer ...	wk ...	60	10	15	25	40	268	1 25	335 00
572	Jack of all Trades.....	Amer ...	wk ...	60	10			60	248	1 12	277 76
573	Laborer.....	Amer ...	wk ...	60	10	5	72	77	231	1 00	231 00
579	Laborer.....	Amer ...	wk ...	60	10	40	50	90	218	1 25	† 340 62
588	Anything.....	Amer ...	wk ...	60	10	10	70	80	228	1 00	228 00
591	Jack of all Trades.....	Amer ...	wk ...	60	10		80	80	228	1 00	228 00
534	Anything.....	Amer ...	wk ...	60	10		30	30	278	1 25	347 50
495	Jack of all Trades.....	Amer ...	wk ...	60	10	15	15	30	278	90	250 20
499	Drive Truck Wagon.....	Amer ...	wk ...	60	10	10	40	50	258	1 25	322 50
506	Anything.....	Amer ...	wk ...	60	10	2	38	40	268	1 00	335 00
516	Wood Chopper.....	Amer ...	wk ...	60	10	10	80	90	218	1 25	272 50
472	Anything.....	Amer ...	wk ...	60	10	10	60	70	238	1 00	‡ 317 33
486	Drayman.....	Amer ...	mon..	72	12	3	12	15	293	1 00	293 00
470	Drive Wagon.....	Amer ...	mon..	72	12			8	300	1 00	300 00
469	Drive Truck Wagon.....	Amer ...	mon..	72	12	10	50	60	248	1 00	** 289 33
480	Anything.....	Amer ...	wk ...	60	10	15	55	70	238	1 00	238 00
427	Laborer.....	Ger ...	2 wks	60	9	10	20	30	278	1 35	†† 563 15
628	Laborer.....	Amer ...	2 wks	60	10				308	1 35	†† 623 50
632	Laborer.....	Amer ...	mon..	65	10		30	30	278	1 28	355 84
642	Laborer.....	Irish ...	wk ...	60	11				308	1 75	539 00
656	Laborer.....	Amer ...	mon..	60	10				308	1 20	369 60
659	Laborer.....	Irish ...	wk ...	72	12				308	1 25	385 00
665	Laborer.....	Irish ...	mon..	72	12				308	1 36	418 88
463	Laborer.....	Irish ...	wk ...	58	8	6	34	40	268	1 25	335 00
487	Laborer.....	Irish ...	wk ...	60	10	26	78	104	204	1 50	666 00
486	Laborer.....	Amer ...	wk ...	60	10			30	278	1 25	347 50
479	Laborer.....	Irish ...	wk ...	60	10			78	230	1 25	287 50
476	Laborer.....	Amer ...	mon..	60	10			60	248	1 25	310 00
472	Laborer.....	Amer ...	wk ...	60	10				308	1 25	385 00
470	Laborer.....	Amer ...	wk ...	60	10				308	1 50	462 00
466	Laborer.....	Amer ...	wk ...	60	10		78	78	230	1 25	287 50
514	Laborer.....	Amer ...	mon..	60	10		52	52	256	1 00	256 00
513	Laborer.....	Irish ...	wk ...	60	10		52	78	230	1 20	276 00
511	Laborer.....	Amer ...	wk ...	60	10	12	18	30	278	1 00	278 00
509	Laborer.....	Irish ...	mon..	66	11			52	256	1 75	448 00
508	Laborer.....	Irish ...	mon..	60	10			78	230	1 50	‡‡ 517 50
507	Laborer.....	Irish ...	S wk.	66	10			52	256	1 25	320 00
503	Laborer.....	Amer ...	mon..	60	10			156	152	1 50	228 00
501	Laborer.....	Amer ...	mon..	60	10			52	256	1 00	256 00
502	Laborer.....	Amer ...	mon..	60	10			26	282	1 00	282 00
428	Laborer in Pottery.....	Irish ...	wk ...	60	10	30		30	278	1 50	*** 513 00
491	Laborer.....	Irish ...	wk ...	60	10				308	1 50	462 00
496	Laborer.....	Amer ...	wk ...	60	10				308	1 00	308 00
497	Laborer.....	Amer ...	mon..	60	10			52	256	1 00	256 00
498	Laborer.....	Amer ...	wk ...	60	10			52	256	1 25	320 00
521	Laborer.....	Amer ...	mon..	60	10		208	208	100	1 50	150 00
522	Laborer.....	Amer ...	wk ...	60	10			52	256	1 50	384 00
523	Laborer.....	Irish ...	mon..	60	10		60	60	248	1 25	310 00
524	Laborer.....	Scotch ..	mon..	60	10			66	242	1 00	242 00

Earnings of Family:—\* \$79; † \$62; ‡ \$68.12; || \$67; ‡‡ \$79.33; \*\* \$41.33; †† \$187.85; ††† \$207.70; ||| \$360; ‡‡‡ \$172.50; \*\*\* \$96.

TABLE No. 1.—BLANK No. 3—Continued.

## DAY LABORERS—Continued.

Office Number.	Occupation.	Nationality.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Total Income.
						From Sickness.	Inability to obtain work.				
536	Laborer	Amer	mon	60	10				308	\$1 00	\$308 00
598	Laborer	Amer	wk	60	10	14	46	60	248	1 00	248 00
530	Laborer	Amer	mon	60	10		60	60	248	1 00	248 00
532	Factory Employee	Amer	mon	60	10		40	40	268	1 50	402 00
534	Factory Employee	Irish	wk	59	9				308	1 25	385 00
535	Laborer	Irish	wk	60	10			60	248	1 25	*466 00
538	Laborer	Irish	mon	84	14						
539	Laborer	Irish	mon	60	10				308	1 10	338 80
540	Work in Factory	Amer	wk	60	10					1 25	
62	Work by Day	Amer	wk	60	10		75	75	233	1 50	349 50
55	Work by Day	Amer	wk	48	8	35	67	102	206	1 50	†412 00
50	Laborer	Amer	wk	60	10			102	206	1 50	309 00
48	Jobbing	Amer	wk	60	10	6	34	40	268	1 25	335 00
46	Anything	Amer	wk	60	10	6	84	90	218	1 50	327 00
43	Job Work	Amer	wk	60	10		30	30	278	1 50	†500 00
38	Laborer	Irish	wk	60	10		104	104	204	1 50	306 00
116	Laborer	Col'd	wk	60	10	10	40	50	258	1 00	‡344 00
117	Laborer	Col'd	wk	60	10	10	115	125	183	1 00	‡263 00
125	Laborer	Amer	wk	60	10	7	11	18	290	1 00	290 00
128	Laborer	Irish	wk	60	10	13	27	40	268	1 00	268 00
131	Laborer	Amer	wk	60	10	11	19	30	278	1 25	347 50
132	Laborer	Col'd	wk	60	10	3	72	75	233	1 00	233 00
134	Laborer	Col'd	wk	60	10	90	10	100	208	1 00	**277 33
139	Laborer	Amer	wk	60	10	5	30	35	273	1 50	†460 68
112	Laborer	Irish	wk	60	10	35	25	60	248	1 25	310 00
142	Laborer	Amer	wk	60	10		90	90	218	1 50	327 00
143	Jack of all Trades	Amer	wk	60	10	5	40	45	263	1 50	†333 75
218	Coal Yard	Irish	mon	66	11				308	1 50	462 00
215	Laborer	Amer	mon	72	12				308	1 25	385 00
19	Anything	Amer	wk	48	8			100	208	1 00	208 00
100	Laborer	Amer	wk	60	10			102	206	1 50	309 00
305	Jack of all Trades	Amer	wk	60	10	10	30	40	268	1 00	‡315 00
309	Any Work	Amer	wk	60	10	15	45	60	248	1 00	248 00
180	Any Work	Amer	wk	60	10	15	85	100	208	1 00	208 00
181	Jack of all Trades	Amer	wk	60	10	10	17	80	228	1 00	228 00
188	Hack Driver	Amer	wk	74	14	5		5	303	1 00	303 00
186	Baker Wagon	Amer	wk	60	10				308	1 25	385 00
185	Driver	Amer	wk	60	10	10	30	40	268	1 25	335 00
184	Driver	Amer	wk	60	10			30	278	1 25	347 50
179	Jack of all Trades	Amer	wk	60	10	30	80	110	198	1 00	‡247 50
300	Jack of all Trades	Amer	wk	60	10	8	82	90	218	75	163 50
169	Driver	Amer	wk	60	10	12	28	40	268	1 00	268 00
105	Manufacturer	Russ'n	wk	60	10	60	40	100	208	1 00	208 00
345	Grocery Clerk	Amer	mon	90	16	8		8	300	75	225 00
344	Anything	Amer	wk	60	10	8	22	30	278	1 25	347 50
266	Jack of all Trades	Amer	wk	60	10	5	85	90	218	1 00	218 00
267	Jack of all Trades	Amer	wk	60	10	8	92	100	208	1 00	208 00
268	Jack of all Trades	Amer	wk	60	10	5	75	80	228	1 00	228 00
272	Jack of all Trades	Amer	wk	60	10	15	60	75	233	75	174 75
319	Jack of all Trades	Amer	wk	60	10	5	85	90	218	1 00	218 00
311	Jack of all Trades	Amer	wk	60	10	15	60	75	233	1 00	***291 25
317	Anything	Amer	wk	60	10	10	60	70	238	1 00	238 00
356	Jack of all Trades	Amer	wk	60	10	3	37	40	268	1 00	268 00
276	Anything	Irish	wk	60	10	10	80	90	218	1 00	218 00
279	Anything	Irish	wk	60	10	20	105	125	183	1 00	183 00
193	Anything	Amer	wk	60	10	7	83	90	218	1 00	218 00
320	Anything	Amer	wk	60	10	10	90	100	208	1 00	208 00
325	Anything	Amer	wk	60	10	15	110	125	183	75	137 25
326	Jack of all Trades	Amer	wk	60	10	20	60	80	228	1 00	228 00
532	Hostler	Amer	wk	72	12	14	106	120	188	1 50	††352 50
542	Waiter	Amer	mon	84	12	10	30	40	268	1 00	268 00

Earnings of Family:—\* \$156.00; † \$103.00; ‡ \$83.00; § \$86.00; ¶ \$80.00; \*\* \$69.33; †† \$51.18; ††† \$39.25; †††† \$47.00; ††††† \$49.50; \*\*\* \$58.25; †††††† 70.50.

TABLE No. 1.—BLANK No. 3—Continued.

DAY LABORERS—Continued.

Office Number.	Occupation.	Nationality.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Total Income.
						From Sickness.	Inability to obtain work.				
629	Bleachery Operator.....	Amer ...	mon..	68	9	.....	.....	70	238	\$1 38	\$328 44
630	Teamster.....	Amer ...	mon..	63	10 $\frac{1}{2}$	.....	14	21	267	1 40	* 673 80
631	Glass House.....	.....	2 wks	60	10	5	38	43	265	1 40	† 635 00
663	Waiter.....	Amer ...	mon..	72	12	10	10	20	288	1 00	288 00
660	Waiter.....	Amer ...	mon..	84	12	.....	10	10	298	1 00	298 00
677	Driver.....	Amer ...	wk ...	72	12	5	55	60	248	1 25	310 00
499	Colors.....	Irish ...	wk ...	60	10	.....	.....	.....	308	1 25	385 00
239	Porter.....	Amer ...	mon..	85	13	8	22	30	278	1 25	347 50
327	Hostler.....	Amer ...	wk ...	60	10	3	47	50	248	75	186 00
625	Shoe Factory.....	Amer ...	mon..	59 $\frac{1}{2}$	9 $\frac{1}{2}$	.....	30	30	278	1 50	417 00
459	Rubber Shop.....	Amer ...	wk ...	65	8 $\frac{1}{2}$	2	.....	30	278	1 50	417 00
428	Stripper.....	Amer ...	wk ...	60	10	10	21	31	277	67	185 59
76	Coachman.....	Dane ...	mon..	78	11	.....	.....	.....	308	1 38	425 04
520	Pedler.....	Dane ...	.....	80	7	.....	.....	.....	308	.....	.....
548	Factory Employee.....	Dane ...	wk ...	59 $\frac{1}{2}$	.....	.....	.....	60	248	1 25	310 00
568	Coal Docks.....	Irish ...	wk ...	60	10	.....	.....	.....	308	1 44	443 52
191	Grocery Business.....	Amer ...	wk ...	92	16	6	.....	6	302	1 25	377 50
397	Porter.....	Ger ...	mon..	59	9	21	5	26	282	1 16	† 436 12
361	Lumber and Coal Yard.....	Amer ...	wk ...	60	10	.....	.....	.....	308	1 25	385 00
250	Porter.....	Amer ...	mon..	85	13	.....	.....	50	258	1 00	258 00
245	Waiter.....	Amer ...	mon..	78	12	10	50	60	248	1 00	248 00
238	Waiter.....	Amer ...	mon..	77	11	8	17	25	283	1 00	353 75
244	Waiter.....	Amer ...	mon..	70	10	15	35	50	258	1 00	258 00
240	Waiter.....	Amer ...	mon..	70	10	15	25	40	268	1 00	‡ 321 60
586	Factory Employee.....	Amer ...	wk ...	59 $\frac{1}{2}$	9 $\frac{1}{2}$	.....	.....	9	299	1 00	299 00
607	Factory Employee.....	Irish ...	wk ...	59 $\frac{1}{2}$	9 $\frac{1}{2}$	.....	.....	.....	308	1 00	308 00
246	Porter.....	Amer ...	mon..	85	13	25	55	80	228	1 25	285 00
192	Porter in Store.....	Amer ...	wk ...	92	16	.....	.....	.....	308	1 25	385 00
314	Anything.....	Amer ...	wk ...	60	10	20	60	80	228	75	171 00
359	Jack of all Trades.....	Amer ...	wk ...	60	10	18	52	70	238	1 00	238 00
360	Jack of all Trades.....	Amer ...	wk ...	60	10	3	87	90	218	1 00	218 00
365	Jack of all Trades.....	Amer ...	wk ...	60	10	9	.....	90	218	1 00	218 00
605	Factory Employee.....	Amer ...	wk ...	59 $\frac{1}{2}$	9 $\frac{1}{2}$	.....	.....	.....	308	1 00	308 00
602	Factory Employee.....	Irish ...	wk ...	60	10	.....	.....	.....	308	82	252 56
594	Day Laborer.....	English	wk ...	54	9	.....	30	35	273	90	245 70
593	Laborer.....	Irish ...	wk ...	60	10	.....	90	90	218	1 00	**698 00
592	Laborer.....	Amer ...	wk ...	60	8	.....	.....	110	198	1 25	247 50
588	Factory Employee.....	Amer ...	wk ...	59 $\frac{1}{2}$	9 $\frac{1}{2}$	6	5	15	293	1 50	439 50
583	Factory Hand.....	Amer ...	2 wks	60	10	.....	30	30	278	1 50	417 00
580	Laborer.....	Irish ...	mon..	60	8	.....	.....	.....	308	1 20	369 60
577	Laborer.....	Amer ...	mon..	60	10	.....	.....	.....	308	1 20	369 60
561	Laborer, Shoe Factory.....	.....	wk ...	60	10	.....	52	52	256	1 50	384 00
575	Factory Hand.....	Irish ...	wk ...	59 $\frac{1}{2}$	9 $\frac{1}{2}$	.....	36	36	272	1 12	304 64
557	Laborer.....	Dutch...	mon..	65	10	.....	100	100	208	1 90	††691 60
551	Laborer.....	Irish ...	2 wks	60	10	.....	30	30	278	1 25	347 50
547	Laborer.....	Irish ...	wk ...	70	13	.....	.....	12	296	90	265 40
545	Laborer.....	Irish ...	wk ...	60	10	.....	.....	.....	308	1 25	††462 00
326	Laborer.....	Amer ...	wk ...	60	10	20	60	80	228	1 00	228 00
914	Team Driver.....	.....	mon..	60	10	.....	.....	15	293	1 11	325 23
908	Laborer.....	Amer ...	wk ...	60	10	.....	.....	.....	308	1 00	308 00
910	Laborer.....	Amer ...	wk ...	60	10	.....	.....	130	178	1 00	178 00
911	Team Driver.....	.....	wk ...	60	10	.....	.....	.....	308	1 10	338 80
913	Team Driver.....	.....	wk ...	60	10	.....	.....	.....	308	1 10	338 80
924	Laborer.....	Amer ...	mon..	60	10	2	28	30	278	1 50	417 00
958	Laborer on Dock.....	Dane ...	.....	.....	.....	.....	.....	.....	154	1 25	221 00
963	Laborer on Dock.....	Amer ...	.....	60	.....	.....	.....	.....	308	1 50	462 00
Total .....				11056	1797	1110	5427	8514	45510	\$204 54	\$56,505 31
Number reporting.....				177	176	88	107	142	176	176	175
Average .....				62	10	13	51	60	259	\$1 15	\$322 89

Earnings of Family:—\* \$300.00; † \$264.00; †† \$109.00; || \$70.75; ‡ \$53.60; \*\* \$480.00; ††† \$296.40; †††† \$77.00.

TABLE No. 1.—BLANK No. 3—Continued.

## TRANSPORTATION HANDS ON RAILROAD.

Office Number.	Occupation.	Nationality.	Time of Apprenticeship.	Are wages paid weekly or monthly.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in the year.	Days worked in the year.	Wages per day.	Total Income.
							From Sickness.	Inability to obtain work.				
40	Flagman	Amer	mon..	mon..	107	.....	.....	.....	.....	308	\$1 40	\$432 00
490	Brakeman	Amer	mon..	mon..	.....	.....	.....	.....	.....	308	1 60	492 80
568	Flagman	Amer	mon..	mon..	70	10	.....	.....	60	248	2 00	496 00
595	Brakeman	Amer	mon..	mon..	65	.....	.....	.....	.....	308	1 47	452 76
591	Flagman	Amer	mon..	mon..	85	.....	.....	.....	.....	308	2 00	616 00
589	Brakeman	Amer	mon..	mon..	64	8	.....	.....	90	218	1 70	370 60
579	Brakeman	Amer	mon..	mon..	64	.....	.....	.....	.....	308	1 70	523 60
581	Brakeman	Irish	mon..	mon..	72	12	.....	.....	.....	308	1 90	585 20
570	Flagman	Irish	mon..	mon..	72	12	20	.....	20	288	1 90	547 20
556	Brakeman	Irish	mon..	mon..	72	12	10	.....	30	278	1 90	528 20
565	Brakeman	Irish	mon..	mon..	72	12	.....	.....	.....	308	.....	585 20
562	Conductor	Amer	mon..	mon..	72	12	40	.....	40	268	2 75	737 00
559	Brakeman	Irish	mon..	mon..	72	12	.....	.....	.....	308	1 90	*615 20
558	Brakeman	Irish	mon..	mon..	72	12	.....	.....	.....	308	1 90	585 20
556	Brakeman	Irish	mon..	mon..	72	12	20	.....	20	288	1 90	547 20
550	Flagman	Amer	mon..	mon..	84	12	.....	.....	.....	308	2 00	†976 00
552	Brakeman	Amer	mon..	mon..	72	12	.....	.....	.....	308	1 90	585 20
549	Yardmaster	Amer	mon..	mon..	72	12	.....	.....	.....	308	3 75	1,155 00
478	Car Inspector	Amer	mon..	mon..	72	12	60	.....	.....	248	1 60	396 80
482	Brakeman	Amer	mon..	mon..	55	.....	.....	60	60	248	1 65	409 20
464	Brakeman	Irish	mon..	mon..	60	10	.....	.....	6	302	1 90	573 80
477	Foreman	Amer	mon..	mon..	60	10	7	20	27	281	2 00	562 00
664	Car Driller	Amer	mon..	mon..	84	12	.....	.....	.....	308	1 55	477 40
661	Car Inspector	Amer	mon..	mon..	104	.....	.....	.....	.....	308	1 80	554 40
829	.....	Amer	mon..	mon..	72	12	15	75	90	218	1 75	381 50
1002	Car Inspector	Irish	mon..	mon..	60	10	1	6	7	301	1 60	†649 60
Total	.....	.....	.....	.....	1826	206	173	161	450	7498	\$46 12	\$14,835 06
Number reporting	.....	.....	.....	.....	25	19	8	4	11	26	25	26
Average	.....	.....	.....	.....	73	10	21	40	41	288	\$1 84	\$570 58

## MISCELLANEOUS OCCUPATIONS.

595	Gardener	English	wk....	wk....	60	10	5	85	90	218	\$1 50	\$327 00
224	Gardener	Irish	mon..	mon..	60	10	.....	13	13	295	1 25	368 75
83	Farmer	Amer	wk....	wk....	60	10	5	25	30	278	1 50	417 00
615	Farmer	Amer	mon..	mon..	72	11	.....	100	100	208	1 50	‡520 00
471	Farmer	Irish	mon..	mon..	60	10	.....	.....	.....	308	1 50	‡982 00
555	Sailor	Irish	7 y... mon..	mon..	72	12	.....	90	90	218	2 00	**644 00
278	Teamster	Irish	wk....	wk....	60	10	3	97	100	208	1 00	††259 75
909	Farmer	Amer	.....	.....	.....	.....	30	17	20	288	1 50	432 00
922	Farmer	Amer	.....	.....	60	10	.....	150	158	1 50	237 00	
923	Farmer	Amer	.....	.....	60	10	.....	100	.....	.....	.....	.....
927	Longshoreman	English	wk....	wk....	30	.....	.....	.....	.....	308	1 00	308 00
920	Farmer	Amer	.....	.....	.....	.....	150	50	200	108	.....	.....
959	Longshoreman	Ger	wk....	wk....	.....	.....	.....	154	154	2 50	385 00	
960	Longshoreman	.....	3 y... wk....	wk....	53	8	14	39	53	255	2 75	701 25
961	Longshoreman	.....	3 y... wk....	wk....	59	9	.....	24	284	2 00	††672 00	
962	Longshoreman	Amer	wk....	wk....	60	.....	10	140	150	150	.....	.....
451	Hostler	.....	wk....	wk....	94	13	9	.....	9	299	1 25	373 75
Total	.....	.....	.....	.....	860	123	226	656	1283	3737	\$22 75	\$6627 50
Number reporting	.....	.....	.....	.....	14	12	8	10	15	16	14	14
Average	.....	.....	.....	.....	61	10	28	66	86	234	\$1 62	\$473 40

Earnings of Family:—\* \$30.00; † \$360.00; ‡ \$168.00; § \$208.00; ¶ \$520.00; \*\* \$208.00; †† \$51.75; ††† \$104.00

TABLE No. 2.

Collated from Table No. 1, Blank No. 3, showing the number of Blanks returned by each Trade or Occupation, with answers to questions as tabulated.

OCCUPATIONS.	Number of Blanks returned, with hours worked per week.	Number of Blanks returned, with hours worked on Saturday.	Number of Blanks returned, with days lost in year.		Number of Blanks returned, with Total No. of days lost in year.	Number of Blanks returned, with Total No. of days worked in year.	Number of Blanks returned, with Wages Earned per day.	Number of Blanks returned, with Earnings of Self in year.	Number of Blanks returned, with Earnings of Family in year.	Number of Blanks returned, with Total Income for year.
			From Sickness.	Inability to obtain work.						
Painters.....	40	40	28	32	38	40	40	40	10	40
Jewelers.....	27	27	4	16	24	26	27	26	7	26
Machinists.....	16	16	5	8	11	15	15	14	1	14
Cabinet Makers.....	11	11	7	9	9	11	11	11	1	11
Printers.....	20	10	9	7	9	17	17	17	1	17
Weavers.....	32	27	14	26	30	32	31	31	8	31
Glassblowers.....	12	12	3	5	11	11	10	10	4	10
Masons.....	17	17	12	16	17	17	17	17	5	17
Cigar Makers.....	13	10	2	10	12	13	13	13	1	13
Wheelwrights.....	11	11	10	10	10	11	11	11	4	11
Potters.....	6	6	4	5	6	6	6	6	.....	6
Tailors.....	8	7	4	5	6	7	7	7	2	7
Clerks and Agents.....	25	21	5	6	10	27	27	28	2	28
Blacksmiths.....	25	23	17	21	23	26	26	26	9	26
Carpenters.....	78	77	63	69	75	77	78	78	20	78
Shoemakers.....	57	50	17	34	47	55	54	54	13	54
Skilled Workmen, Miscellaneous Trades..	124	116	43	72	94	122	125	121	13	121
Occupations Requiring Experience.....	12	11	4	3	9	12	12	12	1	12
Farm Laborers.....	188	188	141	161	175	188	188	188	30	188
Laborers on Railroads, Unskilled.....	34	34	22	25	30	34	34	34	9	34
Day Laborers.....	177	176	88	107	142	176	176	175	31	175
Transportation Hands on Railroads.....	25	19	8	4	11	26	25	26	3	26
Miscellaneous Occupations.....	14	12	8	10	15	16	14	14	5	14
	972	821	528	661	814	965	964	959	180	959

TABLE No. 3.

The following Table is compiled from Table No. 1, Blank No. 3, showing the aggregate amounts represented in said Table, in each Trade or Occupation named, together with the general average under each heading, from the total number of reports made.

OCCUPATIONS.	Hours worked per week.	Hours worked on Saturday.	Days lost in year.		Days lost in year.	Days worked in year.	Wages Earned per day.	Earnings of Self in year.	Earnings of Family.	Total Income of year.
			From Sickness.	Inability to obtain work.						
Machinists .....	957	152	60	229	327	4293	\$3,671 00	\$9,972 71	\$111 20	\$10,083 91
Cabinet Makers...	650	100	163	221	384	2984	2,402 00	6,583 16	300 00	6,883 16
Glassblowers.....	636	107	75	290	700	2678	2,925 00	6,901 50	510 00	7,411 50
Masons .....	1009	167	149	694	987	4209	2,924 00	7,289 07	711 61	8,000 68
Cigar Makers.....	765	97	34	415	514	3490	1,915 00	5,182 95	248 00	5,430 95
Laborers on R. R., Unskilled. }	2070	346	126	555	741	9705	3,867 00	11,013 97	564 24	11,578 21
Blacksmiths.....	1486	226	255	551	804	7204	3,864 00	10,614 26	747 21	11,361 47
Printers .....	1301	104	129	263	387	4793	3,665 00	10,446 30	78 00	10,524 30
Wheelwrights....	659	109	86	241	326	3062	1,650 00	4,591 75	291 55	4,883 30
Potters .....	363	53	41	142	213	1633	937 00	2,568 86	.....	2,568 86
Tailors .....	542	72	84	255	349	1807	1,135 00	2,847 55	287 00	3,134 55
Jewelers .....	1586	243	154	726	1105	6883	6,493 00	16,711 40	1,764 00	18,475 40
Carpenters.....	4697	773	998	2931	4169	19564	11,935 00	30,529 71	1,939 57	32,469 28
Weavers .....	1934	235	341	1117	1738	8043	4,990 00	12,630 05	2,203 50	14,833 55
Painters .....	2399	398	404	1726	2476	9904	6,505 00	15,757 05	999 06	16,756 11
Skilled Work- men, Miscel. } Trades .....	7564	1108	783	2837	4342	33013	22,755 00	60,309 77	1,849 69	62,159 46
Trans. Hands on Railroad... }	1826	206	173	161	450	7498	4,612 00	14,277 06	588 00	14,835 06
Day Laborers.....	11056	1797	1110	5427	8514	45510	20,454 00	52,540 72	3,964 59	56,505 31
Farm Laborers....	11481	1915	1752	5492	7683	50223	19,561 00	52,243 43	2,291 33	54,534 76
Shoemakers.....	3337	467	241	1689	2651	14344	8,593 00	22,523 98	1,157 93	23,681 91
Occupat'ns Re- quiring Exp. }	715	108	52	73	608	3086	1,854 00	4,834 78	221 76	5,056 54
Miscel. Occu- pations .....	860	123	226	656	1283	3737	2,275 00	5,535 75	1,091 75	6,627 50
Clerks & Agents..	1655	233	67	262	379	7937	4,228 00	13,252 15	440 00	13,692 15
Totals.....	59598	9139	7503	26953	41140	255600	\$143,210 00	\$379,157 93	\$22,359 99	\$401,487 92
Av. from total No. reports made...	61	10	15	41	51	265	\$1 48	\$393 32	\$124 22	\$418 65

TABLE No. 4.

Collated from Table No. 1, showing the Average of Hours Worked, Days Lost, Days Worked, Wages Earned, Earnings of Family, and Average Total Income for the Year in each Trade or Occupation.

OCCUPATIONS.	Average hours worked per week.		Average days lost in year.		Average number of days lost in year.	Average number of days worked in the year.	Average amount earned per day.	Average amount of Earnings of Self in year.	Average amount of Earnings of Family in year.	Average Total Income of year.
	Average hours worked on Saturday.	From Sickness.	From inability to obtain work.							
Painters.....	60	10	14	54	65	248	\$1 63	\$393 42	\$99 90	\$418 90
Jewellers.....	59	9	38	45	46	265	2 40	642 75	252 00	710 59
Machinists.....	60	10	12	29	29	286	2 45	712 34	111 20	724 28
Cabinet Makers.....	59	9	23	25	45	271	2 17	590 29	300 00	625 74
Printers.....	65	10	14	37	43	282	2 15	614 49	78 00	619 08
Weavers.....	60	9	24	43	58	251	1 61	407 62	275 44	478 70
Glassblowers.....	53	9	25	58	64	243	2 92	690 15	127 50	741 15
Masons.....	59	10	12	43	58	248	1 72	428 77	142 32	470 63
Cigar Makers.....	59	10	17	41	43	269	1 47	398 68	248 00	417 76
Wheelwrights.....	60	10	9	24	32	278	1 50	417 43	72 89	443 94
Potters.....	60	9	10	28	35	272	1 56	428 14	.....	428 14
Tailors.....	68	10	21	51	58	258	1 62	406 79	143 50	447 79
Clerks and Agents.....	66	11	13	44	38	294	1 56	473 22	220 00	489 00
Blacksmiths.....	59	10	15	26	35	277	1 49	408 25	83 02	436 98
Carpenters.....	60	10	16	43	56	254	1 53	391 41	96 97	416 27
Shoe Makers.....	59	9	14	49	56	261	1 59	417 11	89 07	438 48
Skilled workmen, miscellaneous trades.....	61	10	18	39	46	271	1 82	498 43	142 28	513 71
Occupation requiring experience.....	59	10	13	24	67	257	1 54	402 89	221 76	421 38
Farm laborers.....	61	10	12	34	44	267	1 04	277 88	406 38	290 08
Laborers on R. R., unskilled.....	61	10	6	22	25	285	1 14	323 94	62 69	340 51
Day laborers.....	62	10	13	51	60	259	1 15	300 23	127 89	322 89
Trans. Hands on R. R.....	73	10	21	40	41	288	1 84	549 11	196 00	570 58
Miscellaneous Occupations.....	61	10	28	68	86	234	1 62	395 41	218 35	473 40
Totals.....	1404	225	388	918	1130	6118	\$39 52	\$10,568 75	\$3,715 16	\$11,239 98
Averages.....	61	10	17	40	49	266	1 72	459 88	161 52	488 51

It would appear from Table No. 4, that the wage-worker is obliged to labor, on an average, sixty-one hours per week, but this is not true as an average for all departments of labor; for while the transportation hands on railroads, owing to the peculiar character of their business, are obliged to work seventy-three hours per week, cabinet makers, masons, cigar makers, blacksmiths, jewelers—occupations requiring experience—and shoemakers only work, on an average, fifty-nine hours, and glass blowers only work fifty-three hours, tailors who work sixty-eight hours, clerks and agents sixty-six hours, and printers, who work sixty-five hours, also tend to swell the

average of hours worked per week. After deducting the four employments where the average is exceptionally high, it will be seen that, in the nineteen remaining occupations, sixty hours per week is the average time worked.

It is gratifying to observe that there has been a steady demand for labor throughout the year, a marked diminution from last year being apparent in the number of days lost on account of inability to obtain work.

In our last report eighty-seven days was the average time lost during the year from this cause, while the table herewith presented shows only forty days on the average. A greatly improved condition in the demand for labor.

The average days lost from sickness, as shown by our tabulation of last year, was nineteen. The present year the average is found to be seventeen, showing that in constant occupation, by which the mind is relieved in a great degree from harrassing cares and anxieties, is to be found a panacea for the healthful condition of the body; better than the prescription of the physician.

Not only has there been more constant employment this year than last, but wages have been advanced in a number of occupations, the average for men being \$1.78 this year as compared with \$1.45 per day last year.

*Nine hundred and fifty-nine* wage-workers reported as their total earnings for the year \$401,487.92, being an average for each of \$429.08.

*One hundred and six* returns were made by persons employed in the following occupations, viz.: Machinists, cabinet makers, printers, jewelers, clerks or agents, and glass blowers. These employments afforded the highest daily wages, the average being \$2.49 per day. The total amount earned by these one hundred and six persons was \$63,867.22, an average of \$602.52 each, and the earnings reported as made by the families of sixteen of this number amounted to \$3,203.20, an average of \$200.20 each, making the total annual income, including the earnings of the family, as \$802.72.

*Three hundred and ninety-eight* returns were made by those who were employed as farm laborers, day laborers, and laborers on railroads, *unskilled*. These employments afforded the lowest daily wages, the average being \$1.10 per day. These three hundred and ninety-eight persons reported their gross earnings for the year to

have been \$115,798.12, or an average of \$290.95 each; and *seventy* of the number reported the earnings of their families to have been \$6,820.16, an average of \$97.43, showing the total income of these seventy families to have been \$388.38 each.

The daily average wages of those employed in the remaining occupations represented in Table No. 4 was \$1.62 per day; and *four hundred and fifty-nine* reports were made, showing their gross earnings to have been \$199,492.59, an average of \$434.62 each; while *ninety-four* of the number reported \$12,336.63 to have been earned by their families, an average of \$131.24 each, making the total income of these ninety-four persons to have been \$565.86 each.

TABLE No. 5.

Collated from answers to questions No. 22 and 23 in Blank No. 3, showing the Number of Children employed in Factories, together with their Age, Number of Hours Worked, and Night Work.

Office Number.	Children Employed.				Hours Worked per Day.	Hours Worked per Week.	Are the Children Employed at Night-Work?
	Boys.	Girls.	Between 10 and 15 Years of Age.	Under 10 Years of Age.			
1009	50	10	.....	.....	10	59	Work night-work 3 months in year.
1006	.....	10	.....	.....	10	59	Often.
918	1	.....	.....	.....	8	48	
398	4	.....	.....	.....	10	59	
912	56	.....	.....	20	8	48	Yes.
907	.....	.....	56	20	8	48	Yes.
426	1	.....	.....	.....	10	60	
427	2	1	.....	.....	10	59	Yes.
164	4	1	.....	.....	10	59	
162	12	3	.....	.....	10	59	
668	3	.....	.....	.....	10	60	
634	.....	.....	250	.....	10	60	
349	3	.....	3	.....	8	54	
370	3	4	.....	.....	10	60	
404	18	14	.....	.....	10	59	
405	20	15	.....	.....	10	59	
406	18	14	.....	.....	10	59	
407	15	20	.....	.....	10	59	
409	2	.....	.....	.....	10	59	
412	12	6	.....	.....	10	59	
413	25	15	.....	.....	10	59	
347	1	.....	.....	.....	8½	54	
347	2	.....	2	.....	8	48	
608	3	2	.....	.....	10	60	Yes.
604	.....	.....	7	.....	10	60	
537	46	34	.....	.....	10	60	Boys 14 years of age work from 6 A. M. until 9:30 P. M.
504	2	1	.....	.....	10	60	
399	8	2	.....	.....	10	59	
34	3	.....	.....	.....	10	59	
346	1	.....	.....	.....	8½	54	
209	1	.....	.....	.....	10	60	
17	100	.....	.....	.....	10	60	Occasionally.
974	3	.....	.....	.....	12	72	Sometimes until 9 o'clock.
915	.....	.....	56	20	8	48	Yes.
921	10	.....	.....	.....	8	44	
906	56	.....	.....	20	8	48	Yes.
573	50	.....	.....	.....	11	65	Yes.
228	1	.....	1	15	10	60	
396	25	.....	.....	.....	10	59	
107	1	.....	.....	.....	10	59	
253	2	2	.....	.....	10	60	
264	2	2	4	.....	10	60	
262	2	2	4	.....	10	60	
214	2	.....	.....	.....	10	60	
148	2	.....	.....	.....	8	48	
934	10	.....	.....	4	10	58	Occasionally until 8 o'clock, without extra pay.
151	16	7	.....	.....	10	59	
155	4	.....	.....	.....	10	59	
353	1	.....	.....	.....	10	60	
600	20	35	.....	4	10	59	
597	15	12	27	.....	10	60	
662	10	7	.....	.....	10	59	

TABLE No. 5—Continued.

Office Number.	Children Employed.				Hours Worked per Day.	Hours Worked per Week.	Are the Children Employed at Night-Work?
	Boys.	Girls.	Between 10 and 15 Years of Age.	Under 10 Years of Age.			
621	4	2			10	60	
619				3	5	25	
564	4	6			10	59	
18	6	5			10	59	
474	20	8		4	10	58	Yes.
475	15	5		5	10	58	Yes.
561	5	11			10	59	
588	2	2		4	10	59	
602	25	3		7	10	60	} For 3 months in year, until 9:30 P. M., when there is rush of work.
605	40				10	59½	
607	95			45	10	59½	Yes.
586	200			25	10	59½	They have had to work 12 hours in busy seasons.
397	25	50			10	59½	Yes.
520	1	2		3	10	59	
459	10	5			12	60	Sometimes all night.
625	2			1	10	59½	
631	2				10	58	Part of Time.
630			250		10	60	
488	20	11			10	58	Sometimes.
463	8	4	12		9	54	
628	7	4			10	59	
627	275				9	53	Very seldom.
1022	75			15	9	54	
622	48		48		8½	51	
980	15			20	10	60	
933	8				9	54	They work 3 times a week after night.
928	25				8	48	
926			60		8½	49½	
445	5				10	59	Yes.
464	50	60			10	59	
27	8	10			10	59	
977	22	2			10	59	
152		1			10	59	Sometimes.
425	10			2	10	60	
424	5	1			10	59	Yes.
92	12	7			10	59	Yes.
366	4	1			10	59	Yes.
368	5	1			10	59	Yes.
367	5	1			10	59	
417	30	15			10	59	Yes.
159		1			10	59	From 6 to 9 o'clock P. M., 3 months before Christmas.
24	50	25			10	59	
222	2			2	10	60	
220	2			2	10	60	
219	2			2	10	60	
640	3	1			10	59	
393	1				10	60	
418	1				10	60	
351	1				9	59	Yes.
350	1				9½	55	Yes.
324	1				9½	55	
3	3				10	60	Occasionally.
444	40	15			10	60	Yes.
443	1	1			8	48	
456	20	15		6	10	59	
995	160	20			11	60	About 3 months, or during busy season.
481	12	2		6	10	58	

TABLE No. 5—Continued.

Office Number.	Children Employed.				Hours Worked per Day.	Hours Worked per Week.	Are the Children Employed at Night-Work?
	Boys.	Girls.	Between 10 and 15 Years of Age.	Under 10 Years of Age.			
483	30	15	.....	.....	10	58	Yes.
156	.....	4	.....	.....	10	59	
154	.....	2	.....	.....	10	59	
1015	3	1	.....	.....	10	59	
1016	3	1	.....	.....	10	58	
1019	6	2	.....	.....	11	64	
1008	11	39	.....	16	10	60	
1007	.....	.....	15	2	10	60	They have to work over-time occasionally.
1000	15	40	.....	.....	11	64	
994	101	.....	.....	.....	10	60	
999	15	50	.....	.....	11	66	
993	1	2	.....	.....	10	59	
968	100	100	.....	50	11	66	
956	12	15	.....	.....	11	62	
644	4	.....	.....	4	10	59	
650	2	1	.....	.....	11	66	
649	.....	.....	25	.....	11	66	
429	40	60	.....	20	10	60	
518	1	3	.....	4	10	59	
381	5	4	.....	.....	10	60	
376	8	7	.....	.....	10	60	
379	3	25	.....	5	10	60	
380	20	42	.....	.....	11	62	Yes.
373	150	50	200	.....	10	60	Sometimes.
436	.....	.....	140	55	10	60	Occasionally.
416	.....	.....	150	65	10	60	Occasionally.
382	5	4	.....	.....	10	60	
221	2	.....	.....	.....	10	60	
	2578	983	1310	476	1345	7974	

It will be seen by the above table that reports were received from 137 establishments where children are employed showing the average number of hours worked per day to have been nine hours and three-quarters, while the average number of hours per week was a little over fifty-eight hours.

This table discloses the fact that 476 children under ten years of age are employed in the factories in direct violation of law, as will be seen by reference to "*An act to limit the hours of labor, and to prevent the employment of children in factories under ten years of age,*" approved March 18th, 1851, which, with the several supplements passed subsequently, may be found in our first annual report.

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Language cannot be found strong enough with which to condemn this inhuman practice, and it is to be hoped that our most influential mill owners will join heartily with those workingmen who are striving to suppress this great wrong, and aid them in securing such legislation as will banish from every factory in our State these little ones who are being ruined both soul and body by working at such an immature age, and subjected to temptation before either mind or body are strong enough for resistance.

TABLE No. 6.—BLANK No. 3.

Returns from Classified Occupations giving Earnings and Expenses of Families and Single men. Total Income for the year and Excess of Earnings and Expenses of each.

## MACHINISTS.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
635	Married	.....	\$84 00	\$24 00	\$160 00	.....	.....	\$500 00	\$768 00	\$791 50	\$23 50	.....
636	Married	.....	120 00	24 00	150 00	\$421 00	\$100 00	50 00	865 00	689 00	.....	\$176 00
613	Married	.....	78 00	20 00	50 00	.....	.....	.....	.....	.....	.....	.....
611	Married	.....	96 00	34 35	30 00	.....	154 92	65 00	380 27	634 80	254 53	.....
560	Married	.....	120 00	.....	.....	.....	.....	.....	.....	.....	.....	.....
208	Married	.....	120 00	40 00	65 00	120 00	130 00	120 00	595 00	677 20	82 20	.....
7	Married	.....	120 00	25 00	100 00	260 00	100 00	50 00	655 00	1078 00	423 00	.....
9	Married	.....	60 00	30 00	100 00	200 00	150 00	25 00	565 00	718 40	153 40	.....
15	Married	.....	96 00	45 00	50 00	302 00	112 00	150 00	755 00	864 20	109 20	.....
Total	.....	.....	\$894 00	\$242 35	\$705 00	\$1303 00	\$746 92	\$960 00	\$4583 27	\$5453 10	\$1045 83	\$176 00
No. reporting	.....	.....	9	8	8	5	6	7	7	7	6	1
Average	.....	.....	\$99 33	\$30 29	\$88 12	\$260 60	\$124 48	\$137 11	\$654 75	\$779 01	\$174 30	\$176 00

## CABINET MAKERS.

402	Married	.....	\$96 00	\$50 00	\$110 00	\$140 00	\$180 00	\$100 00	\$676 00	\$661 75	.....	\$14 25	
387	Single	\$260	.....	.....	80 00	.....	.....	32 00	372 00	372 00	.....	.....	
421	Married	.....	120 00	20 00	60 00	100 00	100 00	50 00	450 00	555 10	\$105 10	.....	
403	Married	.....	84 00	40 00	100 00	110 00	120 00	50 00	504 00	511 20	7 20	.....	
1005	Married	.....	22 00	25 00	100 00	275 00	150 00	75 00	647 00	894 00	247 00	.....	
981	Single	260	.....	12 00	175 00	.....	.....	60 00	507 00	473 00	.....	34 00	
979	Married	.....	72 00	40 00	100 00	250 00	150 00	50 00	662 00	625 50	.....	36 50	
978	Married	.....	132 00	20 00	100 00	.....	.....	.....	.....	.....	.....	.....	
976	Married	.....	96 00	25 00	100 00	150 00	150 00	100 00	621 00	650 00	29 00	.....	
Total	.....	.....	\$520	\$622 00	\$232 00	\$925 00	\$1025 00	\$850 00	\$517 00	\$4439 00	\$4742 55	\$388 30	\$84 75
No. reporting	.....	.....	7	8	9	6	6	8	8	8	4	3	
Average	.....	.....	\$260	\$88 85	\$29 00	\$102 78	\$170 83	\$141 66	\$64 62	\$554 87	\$592 82	\$97 07	\$28 25

TABLE No. 6.—BLANK No. 3—Continued.

GLASSBLOWERS.

Office Number.	Married or Single.	Expenses of Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
618	Mar ...		\$72 00					\$413 00	\$485 00	\$485 00		
609	Mar ...		72 00	\$20 00				480 00	572 00	648 00	\$76 00	
926	Mar ...		84 00					500 00	584 00	576 00		\$ 8 00
928	Mar ...		84 00	50 00				614 00	748 00	748 00		
917	Mar ...		69 00	25 00	\$25 00	\$150 00	\$50 00	50 00	369 00	372 00	3 00	
933	Mar ...		78 00					600 00	678 00	992 00	314 00	
932	Mar ...		100 00									
931	Mar ...							600 00	600 00	962 00	362 00	
930	Mar ...		78 00					600 00	678 00	973 00	295 00	
622	Mar ...		77 00	100 00	75 00	200 00	100 00	25 00	577 00			
1022	Mar ...		168 00	32 00	100 00	300 00	200 00	185 00	985 00			
Total .....			\$882 00	\$227 00	\$200 00	\$650 00	\$350 00	4067 00	\$6276 00	\$7318 00	1050 00	\$ 8 00
Number reporting ..			10	5	3	3	3	10	10	10	5	1
Average.....			\$88 20	\$45 40	\$66 67	\$216 67	\$116 67	\$406 70	\$627 60	\$731 80	\$210 00	\$ 8 00

MASONS.

603	Mar ...		\$132 00										
316	Mar ...		72 00	\$30 00	\$70 00	\$110 00	\$160 00	\$50 00	\$492 00	\$417 00		\$75 00	
358	Sin ...	\$200 00			35 00	60 00	100 00	140 00	50 00	285 00	274 50	10 50	
355	Mar ...		72 00	30 00	60 00	100 00	140 00	60 00	462 00	456 00		6 00	
203	Mar ...			30 00	55 00	100 00	125 00	25 00	335 00	342 00	\$7 00		
204	Sin ...	100 00			40 00			50 00	190 00	222 50	32 50		
674	Mar ...			20 00	70 00	120 00	170 00	90 00	470 00	372 00		98 00	
653	Mar ...		160 00	40 00	80 00	120 00	130 00	40 00	570 00	636 66	66 66		
652	Sin ...	216 00			40 00			85 00	341 00	524 00	183 00		
616	Sin ...	210 00			40 00			50 00	300 00	297 00		2 50	
37	Mar ...		72 00	18 00	50 00	130 00	130 00		400 00	328 00		72 00	
226	Mar ...		120 00	45 00	70 00	140 00	115 00	65 00	555 00	667 20	112 20		
225	Mar ...			50 00	60 00	125 00	140 00	110 00	485 00	459 20		25 80	
308	Mar ...			31 00	70 00	125 00	175 00	75 00	476 00	465 20		10 80	
157	Mar ...		54 00	27 00	80 00	208 00	156 00	35 00	560 00	658 76	98 76		
254	Mar ...		108 00	25 00	50 00	110 00	100 00	50 00	443 00	417 00		26 00	
525	Mar ...												
Total . ....			\$726 00	\$790 00	\$346 00	\$870 00	\$1388 00	\$1541 00	\$835 00	\$6364 00	\$6537 52	\$500 12	\$326 60
Number reporting ..			4	8	11	15	11	11	14	15	15	1	9
Average ...			\$181 50	\$98 75	\$31 45	\$58 00	\$126 17	\$140 09	\$59 64	\$424 27	\$435 83	\$83 35	\$36 29

TABLE No. 6.—BLANK No. 3—Continued.

## CIGAR MAKERS.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the Year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
388	Sin..	\$260 00			\$50 00			\$50 00	\$360 00	\$278 00	\$82 00	
385	Mar.		\$84 00	\$32 00	200 00	\$200 00	\$72 00	100 00	688 00	462 00	226 00	
386	Mar.	250 00	60 00		50 00			250 00	610 00	361 40	248 60	
390	Mar.		72 00	40 00	100 00	200 00	80 00		492 00	417 00	75 00	
389	Sin..	260 00		50 00					310 00	389 20	\$79 20	
966	Mar.		84 00	20 00	30 00	150 00	100 00	25 00	409 00	580 00	171 00	
991												
992	Mar.		72 00	16 00	75 00							
997	Mar.		120 00	40 00	50 00	100 00	150 00	200 00	660 00	620 00	40 00	
450	Sin..				60 00							
448	Sin..				50 00							
Total..		\$770 00	\$492 00	\$198 00	\$665 00	\$650 00	\$402 00	\$625 00	\$3529 00	\$3107 60	\$250 20	671 60
No. rep.		3	6	6	9	4	4	5	7	7	2	6
Ave.....		\$256 67	\$82 00	\$33 00	\$73 89	\$162 50	\$100 50	\$125 00	\$504 14	\$443 94	\$125 10	111 93

## LABORERS ON RAILROADS, UNSKILLED.

574	Mar			\$15 00								
322	Mar.		\$48 00	15 00	\$45 00	\$75 00	\$75 00	\$30 00	\$288 00	\$327 80	\$39 80	
321	Mar.		60 00	25 00	50 00	70 00	60 00	40 00	305 00	409 70	104 70	
195	Sin..	\$250 00			60 00			80 00	390 00	402 00	12 00	
280	Mar.			25 00	65 00	80 00	85 00	45 00	300 00	333 30	33 30	
277	Sin..	125 00			60 00			125 00	310 00	331 10	21 10	
275	Sin..		18 00	10 00	45 00	40 00	50 00	15 00	178 00	228 80	50 80	
273	Sin..	156 00			70 00			50 00	276 00	322 30	46 30	
281	Mar.		48 00	20 00	50 00	90 00	100 00	20 00	328 00	316 80	\$11 20	
175	Mar.		60 00	30 00	50 00	90 00	110 00	35 00	375 00	369 30	5 70	
97	Mar.		30 00	20 00	50 00	100 00	125 00	10 00	335 00	351 80	19 80	
98	Mar.			30 00	70 00	100 00	150 00	50 00	400 00	477 75	77 75	
88	Mar.	200 00		10 00	40 00			50 00	300 00	311 30	11 30	
78	Mar.		72 00	15 00	60 00	70 00	100 00	10 00	327 00	358 05	31 05	
79	Sin..		12 00	8 00	60 00	220 00		10 00	310 00	311 50	1 30	
64	Mar.		24 00	15 00	50 00	100 00	110 00	25 00	324 00	407 00	83 00	
67	Mar.		36 00	15 00	40 00	90 00	120 00	10 00	311 00	330 00	19 00	
141	Mar.				38 00	204 00		10 00	252 00	311 30	59 30	
136	Mar.		48 00	27 00	50 00	150 00	50 00	24 00	349 00	327 80	21 20	
133	Mar.			10 00	30 00	60 00	35 00	50 00	185 00	322 30	137 30	
115	Mar.			20 00	80 00	100 00	100 00	10 00	310 00	369 00	59 00	
58	Mar.			25 00	75 00	110 00	150 00	60 00	420 00	494 86	74 86	
59	Mar.		60 00	20 00	40 00	90 00	110 00	20 00	340 00	311 30	28 70	
60	Mar.		24 00	15 00	50 00	100 00	140 00		329 00	353 20	24 20	
61	Sin..	200 00		18 00	12 00	50 00		25 00	305 00	330 00	25 00	
642	Sin..	150 00			50 00			50 00	250 00	294 80	44 80	
623	Sin..	175 00			45 00			55 00	275 00	272 80	2 20	
624	Mar.		48 00	20 00	50 00	80 00	110 00	30 00	338 00	338 80	80	
606	Sin..	200 00			50 00			50 00	300 00	294 80	5 20	
609	Mar.		60 00	20 00	50 00	70 00	95 00	35 00	330 00	338 00	8 00	
584	Mar.		36 00	25 00	50 00	80 00	100 00	40 00	331 00	305 80	25 20	
586	Sin..	175 00			40 00			45 00	260 00	283 50	23 50	
509	Sin..	200 00			60 00			60 00	320 00	294 00	26 00	
Total..		\$1831 00	\$702 00	\$447 00	\$1673 00	\$2169 00	\$1975 00	\$1169 00	\$9951 00	\$10883 56	1007 96	125 40
No. rep.		10	17	24	32	22	20	31	32	32	24	8
Ave.....		\$183 10	\$41 30	\$18 62	\$52 28	\$98 59	\$98 75	\$37 71	\$310 97	\$540 11	\$42 00	\$45 68

TABLE No. 6.—BLANK No. 3—Continued.

**BLACKSMITHS.**

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
640	Mar		\$144 00	\$50 00	\$50 00	\$75 00	\$100 00	\$200 00	\$619 00	\$216 00		\$403 00
465	Mar											100 00
567	Mar		84 00	48 00	20 00	100 00	170 00	10 00	432 00	496 65	64 65	
302	Mar		36 00	25 00	70 00	120 00	150 00	60 00	461 00	454 50		65 00
301	Mar		36 00	25 00	50 00	90 00	120 00	30 00	351 00	353 75	2 75	
296	Mar		108 00	25 00	70 00	90 00	120 00	25 00	438 00	424 50		13 50
304	Mar		72 00	30 00	50 00	80 00	90 00	10 00	332 00	363 33	31 33	
303	Sin	\$125 00	12 00		50 00			50 00	237 00	215 00		22 00
30	Mar			18 00	40 00	60 00	20 00	20 00	158 00	500 66	342 66	
87	Mar		85 00	30 00	75 00	90 00	150 00	90 00	520 00	625 50	105 50	
82	Mar		75 00	25 00	50 00	100 00	75 00	25 00	350 00	653 00	303 00	
84	Mar		24 00	10 00	40 00	100 00	100 00	5 00	279 00	267 96		11 04
63	Sin	200 00	18 00	10 00	50 00			10 00	288 00	288 00		
71	Mar	250 00	24 00	20 00	40 00			60 00	394 00	442 20	48 20	
73	Sin	200 00	12 00	8 00	50 00			10 00	280 00	273 00		7 00
75	Mar	1150 00	6 00	6 00	50 00			15 00	227 00	216 00		11 00
219	Sin	264 00			50 00			65 00	379 00	596 00	217 00	
220	Mar			32 00	80 00	115 00	95 00	118 00	440 00	641 00	201 00	
222	Mar		110 00	30 00	65 00	115 00	100 00	120 00	540 00	616 00	76 00	
144	Mar		72 00	25 00	75 00	125 00	175 00	10 00	482 00	510 25	28 25	
145	Mar		72 00	35 00	40 00	125 00	90 00	60 00	422 00	482 00	60 00	
45	Sin	300 00	12 00	18 00	60 00			50 00	440 00	469 00	29 00	
57	Sin	250 00	12 00	20 00	50 00			120 00	452 00	593 60	141 60	
507	Mar		60 00	20 00	70 00	100 00	150 00	60 00	460 00	466 50	6 50	
633	Mar		60 00	20 00	50 00	100 00	110 00	35 00	375 00	372 50		2 50
Total		\$1739 00	\$1134 00	\$530 00	1295 00	1585 00	1815 00	1258 00	9356 00	\$10536 90	\$1657 44	\$576 54
Number reporting		8	21	22	24	16	16	24	24	24	15	9
Average		\$217 37	\$54 00	\$24 09	\$53 96	\$99 06	\$113 44	\$52 42	\$389 83	\$439 04	\$110 49	\$64 06

**PRINTERS.**

505	Sin	\$200 00			\$60 00			\$45 00	\$305 00	\$297 00		\$8 00
681	Mar		\$132 00	\$30 00	100 00		\$150 00	250 00	962 00	416 00		546 00
4-0	Mar		96 00									
431	Sin	156 00	60 00		45 00			208 00	469 00	690 00	\$221 00	
434	Mar							50 00	350 00	698 00	348 00	
2	Mar		72 00	25 00	75 00	60 00	70 00	20 00	322 00	616 00	294 00	
3	Mar		108 00	25 00	100 00	220 00	100 00		553 00	460 00		93 00
395	Mar		120 00	50 00	75 00	100 00	150 00	100 00	595 00	770 00	175 00	
533	Mar		50 00	20 00								
324	Mar		120 00	30 00	60 00	135 00	115 00	120 00	580 00	547 00		33 00
419	Sin	442 00	48 00		50 00				540 00	770 00	230 00	
383	Sin		120 00		50 00							
350	Mar		120 00	40 00	75 00	185 00	150 00	90 00	660 00	670 00	10 00	
351	Sin			30 00	50 00	180 00	140 00	150 00	550 00	556 00	6 00	
418	Mar		72 00	50 00	50 00	260 00	180 00	100 00	712 00	588 00		124 00
394	Mar		120 00	50 00	75 00	125 00	75 00	125 00	570 00	770 00	200 00	
393	Mar		72 00	50 00	50 00	250 00	75 00	150 00	647 00	750 00	103 00	
392	Sin		60 00		150 00			275 00	485 00	924 00	439 00	
328	Sin				45 00			250 00	295 00	294 00		1 00
Total		\$798 00	\$1370 00	\$400 00	1110 00	1515 00	1205 00	1933 00	8595 00	\$9816 00	\$2026 00	\$805 00
Number reporting		3	15	11	16	11	10	14	16	16	10	6
Average		\$266 00	\$91 33	\$36 36	\$69 37	\$137 73	\$120 50	\$138 07	\$537 19	\$613 50	\$202 60	\$134 17

TABLE No. 6.—BLANK No. 3—Continued.

## WHEELWRIGHTS.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the Year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
221	Married		\$144 00	\$33 00	\$83 00	\$160 00	\$140 00	\$75 00	\$635 00	\$614 00		\$21 00
222	Single	\$216 00			50 00			70 00	336 00	438 00	\$102 00	
274	Married			25 00	75 00	100 00	150 00	65 00	415 00	409 50		5 50
570	Married		48 00	20 00	65 00	100 00	150 00	50 00	433 00	432 00		1 00
565	Married			25 00	70 00	100 00	125 00	70 00	390 00	482 00	92 00	
569	Married			24 00	75 00	100 00	125 00	40 00	364 00	464 00	100 00	
89	Single	300 00	24 00		60 00			20 00	404 00	556 00	152 00	
197	Single	300 00			40 00			60 00	400 00	360 00		40 00
238	Married		72 00	25 00	60 00	100 00	120 00	20 00	397 00	386 20		10 80
299	Married		120 00	25 00	50 00	90 00	120 00	30 00	435 00	432 00		3 00
657	Single	200 00			50 00			60 00	310 00	308 00		2 00
Total		\$1016 00	\$408 00	\$177 00	\$678 00	\$750 00	\$930 00	\$560 00	\$4519 00	\$4881 70	\$446 00	\$83 30
No. rep.		4	5	7	11	7	7	11	11	11	4	7
Average		\$254 00	\$81 60	\$25 28	\$61 64	\$107 14	\$132 86	\$50 91	\$410 82	\$443 79	\$111 50	\$11 90

## POTTERS.

432	Single							\$200 00				
480	Single				\$40 00							
481	Married	\$96 00	\$30 00									
475	Married	84 00	78 00	36 00								
474	Married	102 00	30 00	50 00								
18	Married	72 00	25 00	30 00								
Total		\$354 00	\$163 00	\$156 00				\$200 00				
No. rep.		4	4	4				1				
Average		\$88 50	\$40 75	\$39 00				\$200 00				

TABLE No. 6.—BLANK No. 3—Continued.

**TAILORS.**

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
463	Mar		\$36 00	\$20 00	\$50 00	\$80 00	\$120 00	\$40 00	\$346 00	\$347 50	\$1 50	
165	Mar		72 00	30 00	40 00	150 00	100 00	50 00	442 00	477 80	35 80	
465	Mar		24 00	15 00	60 00	75 00	115 00	50 00	339 00	341 25	2 25	
154	Sin	\$208 00	48 00		35 00				291 00	539 00	248 00	
90	Mar			20 00	30 00	100 00	250 00	50 00	450 00	568 00	118 00	
375	Mar		75 00	40 00	175 00	175 00	100 00	50 00	615 00	580 00		\$35 00
384	Mar			35 00	100 00	300 00	200 00	150 00	835 00	835 00		
973	Mar		96 00	1 00	30 00	50 00	67 00	10 00	254 00	288 00	34 00	
Total		\$208 00	\$351 00	\$161 00	\$520 00	\$980 00	\$952 00	\$400 00	\$3572 00	\$3976 55	\$439 55	\$35 00
Number reporting.		1	6	7	8	7	7	7	8	8	6	1
Average		\$208 00	\$58 50	\$23 00	\$65 00	\$140 00	\$136 00	\$57 14	\$446 50	\$497 07	\$73 26	\$35 00

**JEWELERS.**

26	Sin	\$234 00	\$42 00	\$10 00	\$60 00			\$200 00	\$546 00	\$640 00	\$94 00	
28	Mar		132 00		80 00	\$200 00	\$150 00	150 00	712 00	621 00		\$91 00
24	Mar		84 00	25 00	100 00	200 00	150 00	150 00	709 00	710 00	1 00	
23	Mar		60 00	35 00	30 00	150 00	100 00	75 00	450 00	460 00	10 00	
95	Mar		84 00	45 00	40 00	151 00	150 00	50 00	519 00	466 00		53 00
31	Mar		84 00		60 00	100 00	200 00	200 00	644 00	951 60	307 60	
33	Mar		240 00	50 00	150 00	150 00	315 00	271 00	1176 00	1160 00		16 00
159	Mar		120 00					364 00	484 00	861 00	377 00	
411	Mar		96 00	30 00	100 00	150 00	100 00	250 00	726 00	788 00	62 00	
423	Mar		96 00	35 00	150 00	160 00	156 00	250 00	847 00	834 00		13 00
414	Mar		72 00	30 00	35 00	125 00	100 00	100 00	462 00	460 00		2 00
417	Mar		72 00		100 00	200 00	200 00	75 00	647 00	532 00		115 00
367	Mar		65 00	20 00	25 00	100 00	100 00	150 00	460 00	576 00	116 00	
368	Mar		144 00	30 00	45 00	150 00	150 00	125 00	644 00	764 50	120 50	
420	Mar		72 00	40 00	100 00							
366	Mar		150 00	35 00	70 00	150 00	100 00	50 00	555 00	375 30		179 70
92	Mar		96 00	25 00	65 00	150 00	150 00	50 00	536 00	770 00	234 00	
425	Sin	520 00							520 00	575 00	55 00	
153	Mar		96 00	40 00	50 00	200 00	200 00	100 00	686 00	928 00	242 00	
152	Mar				175 00	200 00	150 00	50 00	575 00	1081 28	506 28	
166	Mar		84 00	40 00	30 00	150 00	125 00		429 00	512 00	83 00	
977	Mar		70 00	55 00	100 00	300 00	100 00	50 00	675 00	655 00		20 00
980	Mar		84 00	25 00	60 00	125 00	125 00	75 00	494 00	805 52	311 52	
27	Sin	234 00	84 00	15 00	50 00			200 00	583 00	570 00		13 00
454	Mar		84 00									
445	Mar		48 00									
Total		\$988 00	\$2259 00	\$585 00	1675 00	3110 00	2821 00	2985 00	14079 00	16096 20	\$2519 90	\$502 70
Number reporting.		3	24	18	22	19	19	21	23	23	14	9
Average		\$329 33	\$94 12	\$32 50	\$76 14	\$163 68	\$148 47	\$142 14	\$612 13	\$699 84	\$180 00	\$55 85

TABLE No. 6.—BLANK No. 3—Continued.

## CARPENTERS.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the Year.	Excess.	
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.
643	Mar.		\$120 00	\$25 00	\$50 00	\$100 00	\$200 00	\$100 00	\$895 00	\$677 33	\$217 67
666	Mar.		96 00	20 00	25 00	175 00	250 00	30 00	596 00	569 00	27 00
512	Mar.		42 00								
531	Mar.		78 00	35 00	12 00	360 00		50 00	535 00	299 00	236 00
362	Sin.	\$175 00			40 00			40 00	255 00	260 00	\$5 00
315	Mar.		72 00	30 00	60 00	100 00	160 00	50 00	472 00	387 00	85 00
198	Mar.		48 00	25 00	50 00	85 00	125 00	40 00	373 00	372 00	1 00
422	Mar.		80 00	20 00	55 00	100 00	80 00	40 00	375 00	218 00	157 00
287	Mar.		30 00	20 00	40 00	60 00	70 00	20 00	240 00	235 00	5 00
371	Mar.		102 00	30 00	200 00	150 00	150 00	268 00	900 00	924 00	24 00
285	Sin.		24 00	25 00	50 00	100 00	150 00	25 00	374 00	370 86	3 14
290	Mar.			30 00	60 00	100 00	120 00	30 00	340 00	311 00	30 00
289	Sin.		24 00	25 00	60 00	80 00	120 00	20 00	329 00	353 46	24 46
401	Mar.		98 00	40 00	60 00	110 00	130 00	60 00	498 00	462 40	35 60
255	Mar.		114 00	30 00	60 00	150 00	135 00	65 00	554 00	546 00	8 00
295	Mar.	250 00	12 00	15 00	50 00			50 00	377 00	387 00	10 00
294	Mar.			30 00	50 00	90 00	130 00	30 00	330 00	385 00	55 00
293	Sin.	200 00	12 00	10 00	50 00			30 00	302 00	288 95	13 05
343	Mar.		30 00	25 00	50 00	70 00	80 00	20 00	275 00	277 00	2 00
342	Mar.			25 00	50 00	80 00	120 00	25 00	300 00	291 25	8 75
341	Mar.		72 00	30 00	60 00	90 00	110 00	30 00	392 00	387 00	5 00
291	Mar.		48 00	25 00	50 00	100 00	110 00	15 00	348 00	335 00	13 00
297	Mar.			30 00	50 00	80 00	120 00	30 00	310 00	310 00	
330	Sin.	225 00	12 00	10 00	50 00			45 00	342 00	335 00	7 00
329	Mar.			40 00	50 00	100 00	150 00	50 00	390 00	387 00	3 00
227	Sin.	252 00			50 00			110 00	412 00	556 00	144 00
149	Sin.	240 00			32 00			40 00	312 00	462 00	150 00
148	Mar.		96 00	40 00	65 00	95 00	120 00	70 00	486 00	625 62	139 62
146	Mar.		35 00	34 00	58 00	130 00	140 00	70 00	467 00	588 00	121 00
113	Mar.		30 00	20 00	50 00	70 00	90 00	10 00	270 00	268 00	2 00
147	Sin.	168 00			40 00			10 00	218 00	263 00	45 00
99	Mar.			20 00	40 00	100 00	160 00	100 00	420 00	556 00	136 00
53	Sin.		6 00	20 00	50 00	50 00	50 00	150 00	326 00	381 50	55 50
52	Sin.	200 00	24 00	15 00	60 00			100 00	399 00	436 00	37 00
51	Mar.			25 00	50 00	100 00	125 00	100 00	400 00	436 00	36 00
49	Mar.		108 00	30 00	60 00	100 00	150 00	20 00	468 00	661 00	193 00
42	Mar.			25 00	60 00	125 00	125 00	100 00	435 00	661 00	226 00
21	Mar.		90 00	25 00	75 00	208 00	75 00	45 00	518 00	500 87	17 13
5	Mar.		108 00	30 00	50 00	205 00	75 00	10 00	478 00	447 00	31 00
1	Mar.			80 00	50 00	200 00	100 00	15 00	445 00	440 00	5 00
56	Sin.	220 00	12 00	10 00	60 00			90 00	392 00	434 00	42 00
596	Mar.		60 00	20 00	60 00	100 00	160 00	60 00	460 00	466 00	6 00
587	Mar.			20 00	65 00	100 00	150 00	60 00	395 00	380 00	15 00
590	Sin.	225 00			50 00			100 00	375 00	372 00	3 00
562	Mar.			25 00	60 00	100 00	150 00	75 00	410 00	403 00	7 00
568	Sin.	200 00			50 00			50 00	300 00	341 25	41 25
535	Mar.			30 00	80 00	130 00	160 00	110 00	510 00	440 00	70 00
496	Mar.			30 00	75 00	100 00	150 00	85 00	440 00	432 00	8 00
511	Mar.		60 00	25 00	50 00	70 00	80 00	35 00	320 00	417 00	97 00
467	Mar.		48 00	20 00	50 00	80 00	110 00	40 00	348 00	347 50	50
488	Mar.		36 00	25 00	50 00	100 00	150 00	35 00	396 00	402 00	6 00
489	Mar.			20 00	55 00	100 00	150 00	50 00	375 00	372 00	3 00
492	Mar.			20 00	60 00	100 00	130 00	50 00	360 00	357 00	3 00
493	Mar.		48 00	20 00	40 00	75 00	90 00	35 00	308 00	322 00	14 00
613	Sin.	200 00			45 00			80 00	325 00	222 00	103 00
594	Mar.			20 00	60 00	100 00	160 00	50 00	390 00	390 00	
605	Mar.			20 00	60 00	100 00	130 00	50 00	360 00	346 00	14 00
618	Mar.		36 00	25 00	60 00	100 00	150 00	50 00	421 00	372 00	49 00

TABLE No. 6.—BLANK No. 3—Continued.

CARPENTERS—Continued.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the Year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
627	Mar.			\$20 00	\$55 00	\$80 00	\$110 00	\$40 00	\$305 00	\$390 00	\$85 00	
622	Mar.		\$60 00	20 00	60 00	80 00	100 00	30 00	350 00	347 50		\$2 50
621	Mar.		48 00	20 00	60 00	100 00	140 00	40 00	408 00	410 75	2 75	
620	Mar.		48 00	25 00	60 00	100 00	150 00	40 00	423 00	441 75	18 75	
636	Mar.			25 00	75 00	110 00	150 00	45 00	405 00	394 50		10 50
635	Mar.			20 00	60 00	110 00	160 00	70 00	420 00	417 00		3 00
638	Mar.		60 00	20 00	50 00	100 00	130 00		360 00	399 00	39 00	
637	Mar.			20 00	50 00	100 00	140 00	40 00	350 00	347 00		3 00
656	Mar.			20 00	60 00	110 00	160 00	70 00	420 00	417 00		3 00
655	Sin..	\$220 00			50 00			65 00	335 00	342 00	7 00	
665	Sin..	225 00			50 00			65 00	340 00	342 00	2 00	
664	Sin..	175 00			50 00			75 00	300 00	287 50		12 50
680	Mar.			20 00	70 00	100 00	150 00	80 00	420 00	417 00		3 00
670	Sin..	200 00			60 00			65 00	325 00	372 00	47 00	
916	Mar.		72 00									
941	Mar.		48 00									
996	Mar.		96 00	25 00	100 00	120 00	120 00	79 00	540 00	436 00		104 00
Total..		\$3375 00	\$2343 00	\$1524 00	\$4062 00	\$6429 00	7150 00	4022 00	28742 00	29225 99	1811 33	1327 34
No. rep.		16	41	61	72	56	55	71	72	72	30	40
Ave.....		\$210 94	\$57 15	\$24 98	\$56 42	\$114 80	\$130 00	\$56 65	\$399 19	\$405 91	\$60 38	\$33 18

TABLE No. 6.—BLANK No. 3—Continued.

## WEAVERS.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
382	Mar		\$108 00	\$25 00	\$110 00	\$156 00	\$150 00	\$75 00	\$624 00	\$472 50	\$151 50	
416	Mar		120 00	12 00	15 00	140 00	175 00	10 00	472 00	394 50	77 50	
436	Mar	\$260 00			40 00				300 00	345 00	\$45 00	
373	Mar			20 00	50 00	150 00	150 00	5 00	375 00	322 50	52 50	
380	Mar		72 00	35 00	100 00	125 00	125 00	12 00	469 00	372 00	97 00	
379	Mar		84 00	26 00	104 00	200 00	156 00	84 00	654 00	556 00	98 00	
378	Mar		60 00	32 00	100 00	164 00	150 00	50 00	556 00	451 20	104 80	
377	Mar		72 00	20 00	50 00	125 00	130 00	25 00	422 00	409 20	12 80	
376	Mar		96 00	30 00	50 00	125 00	50 00	85 00	436 00	322 50	113 50	
381	Mar		90 00	30 00	95 00	110 00	130 00	154 00	609 00	324 00	285 00	
518			5 00									
429	Sin				60 00			40 00				
649	Mar		120 00	30 00	100 00	125 00	150 00	20 00	545 00	362 50	182 50	
650	Mar		108 00									
644	Mar		108 00	25 00								
956	Sin				30 00			45 00				
968	Mar		72 00	20 00	65 00			13 00	170 00	120 00	50 00	
993	Sin	208 00	48 00		50 00			25 00	331 00	345 00	14 00	
994	Mar		108 00	20 00	70 00	200 00	80 00	60 00	538 00	777 20	239 20	
999	Sin	208 00	52 00		30 00			10 00	300 00	320 00	20 00	
1000	Sin	208 00	52 00		50 00			20 00	330 00	376 00	46 00	
1007	Mar		90 00	25 00	60 00	286 00		90 00	551 00	476 00	75 00	
1008	Sin				99 00							
1020	Mar		84 00									
1019	Sin				50 00							
1018	Sin		100 00		50 00	50 00	50 00	25 00	275 00	516 00	241 00	
1017	Mar		108 00									
1016	Sin	156 00	52 00		32 00				240 00	450 00	210 00	
1015	Sin		36 00									
1013	Mar		192 00									
Total.....		\$1040 00	\$2037 00	\$350 00	1460 00	1956 00	1496 00	\$848 00	\$8197 00	\$7712 10	\$815 20	\$1300 10
Number reporting.		5	24	13	23	13	12	19	19	19	7	14
Average ..		\$208 00	\$84 87	\$26 92	\$63 48	\$150 46	\$124 67	\$44 63	\$431 42	\$405 90	\$116 46	\$92 86

TABLE No. 6.—BLANK No. 3—Continued.

PAINTERS.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
35 Mar.	.....	\$36 00	\$20 00	\$50 00	\$75 00	\$60 00	\$35 00	\$276 00	\$311 50	\$35 50	.....	
41 Mar.	.....	96 00	25 00	60 00	120 00	160 00	30 00	491 00	596 00	105 00	.....	
654 Sin.	.....	144 00	20 00	40 00	.....	.....	150 00	354 00	603 00	249 00	.....	
641 Mar.	.....	144 00	.....	30 00	250 00	30 00	40 00	494 00	516 00	22 00	.....	
653 Mar.	.....	120 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	
569 Mar.	.....	84 00	17 00	50 00	225 00	75 00	25 00	476 00	566 00	90 00	.....	
282 Mar.	.....	40 00	20 00	40 00	90 00	140 00	50 00	380 00	318 20	.....	\$61 80	
283 Mar.	.....	48 00	25 00	50 00	80 00	100 00	25 00	328 00	260 93	.....	67 07	
874 Mar.	.....	.....	15 00	100 00	100 00	150 00	115 00	480 00	376 00	.....	104 00	
288 Mar.	\$250 00	15 00	10 00	50 00	.....	.....	75 00	400 00	359 00	.....	41 00	
286 Mar.	.....	60 00	20 00	50 00	70 00	90 00	10 00	300 00	304 00	4 00	.....	
284 Mar.	.....	.....	25 00	50 00	100 00	140 00	20 00	335 00	288 00	.....	47 00	
211 Mar.	.....	90 00	35 00	45 00	120 00	125 00	70 00	485 00	495 00	10 00	.....	
292 Sin.	125 00	24 00	15 00	40 00	.....	.....	25 00	229 00	228 00	.....	1 00	
210 Mar.	.....	144 00	40 00	75 00	125 00	160 00	80 00	624 00	616 00	.....	8 00	
339 Sin.	175 00	12 00	10 00	55 00	.....	.....	25 00	277 00	277 76	76	.....	
340 Mar.	.....	24 00	15 00	40 00	60 00	80 00	25 00	244 00	272 25	28 25	.....	
336 Mar.	.....	36 00	20 00	50 00	80 00	100 00	25 00	311 00	303 75	.....	7 25	
337 Mar.	.....	48 00	25 00	60 00	80 00	100 00	20 00	333 00	339 76	6 76	.....	
338 Mar.	.....	.....	25 00	60 00	80 00	120 00	40 00	325 00	411 39	86 39	.....	
335 Mar.	.....	.....	20 00	50 00	100 00	150 00	45 00	365 00	367 16	2 16	.....	
334 Mar.	.....	48 00	20 00	40 00	70 00	90 00	30 00	298 00	277 76	.....	20 24	
333 Mar.	.....	24 00	15 00	60 00	70 00	80 00	20 00	269 00	244 16	.....	24 84	
331 Mar.	.....	48 00	25 00	60 00	90 00	100 00	25 00	348 00	367 16	19 16	.....	
332 Mar.	.....	.....	30 00	70 00	120 00	180 00	100 00	500 00	451 50	.....	48 50	
14 Mar.	.....	180 00	30 00	70 00	200 00	162 00	50 00	697 00	596 00	.....	101 00	
16 Sin.	260 00	.....	.....	.....	.....	.....	100 00	360 00	448 00	88 00	.....	
214 Mar.	.....	90 00	40 00	75 00	140 00	110 00	60 00	515 00	616 00	101 00	.....	
212 Mar.	.....	108 00	40 00	80 00	160 00	140 00	45 00	573 00	486 00	.....	87 00	
213	.....	120 00	30 00	50 00	110 00	100 00	30 00	440 00	646 00	206 00	.....	
639 Sin.	200 00	.....	.....	40 00	.....	.....	100 00	340 00	342 00	2 00	.....	
612 Mar.	.....	60 00	20 00	60 00	100 00	135 00	45 00	420 00	416 50	.....	3 50	
588 Mar.	.....	.....	20 00	60 00	100 00	150 00	40 00	370 00	372 00	2 00	.....	
564 Sin.	150 00	12 00	10 00	40 00	.....	.....	100 00	312 00	322 00	10 00	.....	
566 Mar.	.....	.....	25 00	70 00	100 00	125 00	60 00	380 00	482 00	102 00	.....	
497 Sin.	225 00	.....	8 00	50 00	.....	.....	70 00	353 00	342 00	.....	11 00	
942 Mar.	.....	60 00	30 00	50 00	260 00	.....	.....	400 00	432 00	32 00	.....	
1010 Mar.	.....	168 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Total.....		\$1385 00	\$2083 00	\$745 00	\$1925 00	3275 00	3152 00	1805 00	14082 00	14650 78	1201 98	\$633 20
No. rep...		7	28	33	35	28	27	35	36	36	21	15
Ave.....		\$197 86	\$74 39	\$22 57	\$55 00	\$116 96	\$116 74	\$51 57	\$391 17	\$406 96	\$57 24	\$42 21

TABLE No. 6.—BLANK No. 3—Continued.

SKILLED WORKMEN—MISCELLANEOUS TRADES.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
412	Mar		\$96 00	\$20 00	\$35 00	\$200 00	\$150 00		\$501 00	\$640 00	\$139 00	
409	Mar		100 00	30 00	40 00	275 00	150 00	6 00	601 00	544 00		\$57 00
407	Sin	\$234 00			30 00				264 00	384 00	120 00	
406	Mar		72 00	20 00	30 00	100 00	150 00	76 00	448 00	448 00		
405	Sin	260 00										
404	Sin	260 00										
229	Mar		96 00	35 00	75 00	140 00	150 00	40 00	536 00	528 00		8 00
206	Mar		72 00	30 00	65 00	90 00	130 00	30 00	417 00	462 00	45 00	
574	Mar		48 00	20 00	60 00	75 00	100 00	30 00	333 00	322 50		10 50
563	Mar		60 00	20 00	55 00	70 00	95 00	35 00	335 00	432 00	97 00	
487	Sin	200 00			65 00			80 00	345 00	327 00		18 00
370	Mar		96 00	25 00	150 00							
610	Mar		96 00	25 00	12 00	250 00	40 00	59 00	482 00	584 00	102 00	
623	Mar				28 00							
349	Sin	260 00			40 00			60 00	360 00	444 00	84 00	
626	Mar			25 00								
633	Mar		128 00	35 00								
634	Mar		84 00	36 00								
648	Mar		120 00	36 00	75 00		312 00	20 00	563 00	610 00	47 00	
652	Mar		144 00									
660	Mar		108 00									
663	Mar		120 00	10 00		260 00						
669	Mar		96 00									
668	Mar											
672	Mar		120 00	12 00	40 00	200 00	30 00	30 00	482 00	404 60		27 40
162	Mar		72 00	35 00	30 00	150 00	150 00	100 00	537 00			26 72
164	Sin	260 00			80 00				340 00	510 28	170 28	
154	Mar			30 00	70 00	125 00	175 00	50 00	450 00	526 75	76 75	
44	Sin	250 00	12 00	10 00	60 00			100 00	432 00	508 20	76 20	
161	Mar		96 00	40 00	40 00	150 00	150 00	50 00	526 00	616 00	90 00	
39	Mar		108 00	15 00	75 00	85 00	50 00	63 00	396 00	390 00		6 00
427	Mar		96 00									
426	Mar		150 00	50 00	200 00	400 00			800 00	924 00	124 00	
435	Mar		84 00	8 00	30 00	60 00	160 00		342 00	600 00	258 00	
433	Sin	234 00		30 00	70 00	130 00	180 00	60 00	704 00	691 20		12 80
80	Sin	175 00			50 00			10 00	235 00	260 00	25 00	
93	Mar		84 00	35 00	20 00	100 00	100 00	50 00	389 00	417 80	28 80	
86	Sin	300 00	18 00	15 00	60 00			120 00	513 00	685 00	172 00	
196	Mar		84 00	40 00	75 00	150 00	200 00	75 00	624 00	770 00	146 00	
630	Mar			30 00	100 00	90 00	110 00	70 00	400 00	594 00	194 00	
907	Mar							480 00	480 00	767 50	287 50	
408	Mar		96 00	35 00	100 00	150 00	200 00	300 00	881 00	1025 64	144 64	
398	Sin	312 00			25 00			20 00	357 00	424 50	67 50	
918	Mar		54 00	24 00	20 00	60 00	40 00	500 00	698 00	673 00		25 00
1006	Mar		84 00	20 00	150 00	250 00	100 00	20 00	624 00	557 00		67 00
995	Mar		72 00	30 00	75 00	130 00	130 00	173 00	610 00	644 80	34 80	
990	Mar		84 00	30 00	80 00	225 00	225 00	214 00	858 00	858 00		
951	Sin	240 00			50 00			45 00	335 00	436 00	101 00	
460			108 00									
455	Mar			20 00								
456	Mar		78 00									
442	Mar	260 00		20 00								
443	Mar											
25	Mar		60 00		50 00	100 00	150 00	100 00	460 00	360 00		100 00
17	Mar				50 00			10 00				
12	Sin	225 00	24 00	15 00	60 00			100 00	424 00	620 00	196 00	
11	Mar		72 00	20 00	70 00	110 00	160 00	60 00	492 00	586 00	94 00	
10	Mar				100 00			25 00				
6	Mar		84 00	25 00	75 00	130 00	50 00	32 00	396 00	513 40	117 40	

TABLE No. 6.—BLANK No. 3—Continued.

SKILLED WORKMEN—MISCEL. TRADES—Continued.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
96 Mar.....		\$100 00	\$25 00	\$50 00	\$175 00	\$100 00	\$15 00	\$465 00	\$496 00	\$31 00		
29 Mar.....			30 00	100 00	250 00	150 00	175 00	705 00	950 00	245 00		
106 Mar.....		144 00	20 00	40 00								
171 Mar.....		48 00	20 00	25 00	40 00	50 00	75 00	258 00	330 00	72 00		
209 Mar.....		120 00	40 00	60 00	150 00	100 00	10 00	480 00	439 50		\$40 50	
346 Sin.....	\$260 00			35 00			85 00	380 00	381 25	1 25		
177 Sin.....	150 00			35 00			50 00	235 00	246 31	11 31		
189 Mar.....		60 00	30 00	40 00	100 00	110 00	40 00	380 00	360 00		20 00	
190 Sin.....	125 00			35 00			40 00	200 00	168 00		32 00	
311 Mar.....		48 00	30 00	70 00	100 00	150 00	80 00	478 00	360 00		118 00	
34 Sin.....	300 00			150 00			100 00	550 00	486 00		64 00	
400 Mar.....			20 00	50 00	300 00	146 00	200 00	716 00	891 00	175 00		
399 Mar.....		84 00	35 00	150 00	200 00	200 00		669 00	698 00	24 00		
477 Sin.....	200 00			60 00				260 00	462 00	202 00		
469 Mar.....		96 00	18 00	120 00	216 00			450 00	444 00		6 00	
468 Sin.....	450 00			75 00				525 00	735 00	210 00		
489 Mar.....		108 00	20 00	70 00	350 00	150 00	15 00	713 00	903 50	190 50		
654 Mar.....		120 00		100 00	200 00	60 00	25 00	505 00	794 66	289 66		
587 Mar.....		78 00	25 00	46 00	260 00	41 00	32 00	482 00	249 76		232 24	
529 Mar.....		96 00	20 00	40 00	250 00	100 00		506 00	372 00		134 60	
563 Mar.....		132 00										
578 Mar.....		72 00	27 00	170 00	186 00	104 80		559 80	184 80		375 00	
585.....							350 00	350 00	539 00	189 00		
587 Mar.....		96 00					387 00	483 00	408 00		75 00	
596 Mar.....		120 00	20 00	30 00	150 00	120 00	50 00	490 00	616 00	126 00		
354 Mar.....		60 00	30 00	60 00	90 00	150 00	40 00	430 00	417 00		13 00	
271 Sin.....	125 00			30 00			25 00	180 00	178 50		1 50	
372 Mar.....		425 00	60 00	250 00	200 00	225 00	40 00	1290 00	1232 00	32 00		
348 Sin.....	216 00			45 00			40 00	301 00	268 00		33 00	
347 Sin.....	240 00			40 00			60 00	340 00	385 00	45 00		
391 Mar.....		60 00	50 00	50 00	100 00	100 00	200 00	560 00	562 68	2 68		
440 Sin.....	260 00			30 00				290 00	420 54	130 54		
439 Mar.....		90 00	25 00	75 00	260 00	125 00	30 00	605 00	594 00		11 00	
438 Sin.....	182 00			75 00			200 00	509 00	478 50		30 50	
437 Mar.....		72 00	36 00	30 00	100 00	100 00	50 00	388 00	330 50		57 50	
413 Mar.....		72 00	20 00	50 00	150 00	125 00		417 00	387 00		30 00	
415 Mar.....		96 00	30 00	50 00	125 00	150 00	80 00	531 00	512 00		19 00	
318 Mar.....			40 00	70 00	150 00	225 00	90 00	575 00	576 00	1 00		
669 Sin.....	160 00			60 00			80 00	300 00	298 00		2 00	
81 Sin.....	100 00			50 00			10 00	160 00	219 00	59 00		
500 Mar.....		36 00	25 00	60 00	90 00	100 00	40 00	351 00	387 00	36 00		
491 Mar.....		48 00	20 00	50 00	80 00	110 00	40 00	348 00	347 50		50	
469 Sin.....	200 00			60 00			50 00	310 00	297 50		12 50	
Total.....		\$6438 00	\$5809 00	1712 00	5351 00	8527 00	6628 80	6097 00	37554 80	40999 95	5110 81	1665 66
No. rep.....		28	64	62	82	53	51	69	86	80	46	32
Average ...		\$229 93	\$90 77	\$27 61	\$65 25	\$160 89	\$133 90	\$88 36	\$469 43	\$512 50	\$111 10	\$52 05

TABLE No. 6.—BLANK No. 3—Continued.

## OCCUPATIONS REQUIRING EXPERIENCE.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the Year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
595 Mar.			\$48 00	\$20 00	\$50 00	\$80 00	\$90 00	\$40 00	\$328 00	\$327 00		\$1 00
224 Sin.		\$240 00			35 00			75 00	350 00	368 75	\$18 75	
631 Mar.												
572 Mar.			96 00									
83 Mar.				30 00	75 00	110 00	160 00	90 00	465 00	417 00		48 00
615 Mar.					15 00	50 00	50 00	100 00	215 00	520 00	305 00	
647 Mar.			168 00									
13 Sin.		208 00			50 00			20 00	278 00	391 00	113 00	
8 Sin.			180 00	30 00	100 00	175 00	140 00		625 00	616 00		9 00
101 Mar.			48 00	20 00	25 00	125 00	25 00	25 00	268 00	365 00	97 00	
4 Mar.			120 00	25 00	125 00	160 00	100 00	25 00	555 00	1232 00	677 00	
107 Mar.			164 00	38 00	160 00		624 00	202 00	1188 00	1064 00		124 00
160 Mar.			84 00	40 00	40 00	125 00	150 00	100 00	539 00	722 00	183 00	
396 Sin.		197 60			15 00				212 60	361 76	149 16	
471												
467 Mar.				16 00	40 00	275 00	100 00	75 00	506 00	480 00		26 00
555 Mar.			60 00									
649 Sin.		200 00			60 00			80 00	340 00	335 00		5 00
551 Sin.		200 00			50 00			65 00	315 00	462 00	147 00	
671 Mar.				25 00	75 00	100 00	50 00	30 00	280 00	454 25	174 25	
475 Sin.		220 00			70 00			45 00	335 00	462 00	127 00	
616 Mar.			120 00									
668 Mar.			60 00	30 00	60 00	100 00	150 00	65 00	465 00	462 00		3 00
47 Mar.				30 00	100 00	150 00	170 00	100 00	550 00	752 50	202 50	
228 Sin.		240 00			55 00			20 00	315 00	332 50	17 50	
573 Mar.			84 00	37 50	55 00	118 00	77 00	117 00	488 50	415 80		72 70
278 Mar.				10 00	55 00	60 00	75 00	50 00	250 00	259 75	9 75	
357 Sin.		225 00			60 00			75 00	360 00	349 50		10 50
270 Sin.		225 00			50 00			50 00	325 00	327 00	2 00	
369 Sin.					36 00			10 00				
269 Sin.			72 00	30 00	65 00	100 00	150 00	50 00	467 00	462 00		5 00
943 Mar.				35 00	50 00		150 00	25 00	260 00	354 20	94 20	
922 Mar.								500 00	500 00	308 00		192 00
927 Mar.												
921 Mar.												
920 Mar.			96 00									
915 Mar.				20 00								
959 Sin.		260 00			30 00				290 00	385 00	95 00	
960 Mar.			54 00	75 00	140 00	240 00	250 00		759 00	703 75		55 25
961 Mar.			84 00	45 00	170 00	320 00	300 00		919 00	682 00		237 00
962		260 00			25 00							
964 Sin.		260 00										
965 Sin.					50 00			25 00				
967 Mar.				18 00	107 50	195 00	125 00	104 59	550 00	551 00	1 00	
974 Mar.			60 00	25 00	20 00	100 00	30 00	40 00	275 00	390 00	115 00	
998 Mar.				50 00	150 00	260 00			460 00	308 00		152 00
Total.....		\$2735 60	\$1598 00	\$649 50	\$2263 50	\$2843 00	\$2966 00	\$2203 50	14033 10	15620 76	2528 11	940 45
No. rep.		12	17	21	34	19	20	28	32	32	18	14
Ave.....		\$227 97	\$94 00	\$30 93	\$66 57	\$149 63	\$148 30	\$78 70	\$438 53	\$488 15	\$140 45	\$67 18

TABLE No. 6.—BLANK No. 3—Continued.

DAY LABORERS.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
504	Mar.			\$20 00	\$60 00	\$80 00	\$110 00	\$40 00	\$310 00	\$308 00		\$2 00
667	Mar.		\$36 00	15 00	50 00	75 00	85 00	40 00	301 00	298 00		3 00
661	Sin.	\$175 00			40 00			40 00	255 00	258 00	\$3 00	
647	Mar.		36 00	15 00	40 00	75 00	100 00	35 00	301 00	298 00		3 00
640	Mar.			20 00	60 00	100 00	110 00	50 00	340 00	317 00		23 00
641	Mar.			20 00	60 00	75 00	90 00	35 00	280 00	278 00		2 00
634	Sin.	125 00			35 00			30 00	190 00	193 00	3 00	
628	Sin.	150 00			40 00			70 00	260 00	272 50	12 50	
603	Mar.		36 00	15 00	50 00	75 00	85 00	40 00	301 00	310 00	9 00	
608	Sin.	150 00			30 00			50 00	230 00	226 00		4 00
592	Mar.		48 00	20 00	50 00	75 00	95 00	35 00	323 00	322 50		50
593	Sin.	200 00			40 00			65 00	305 00	308 00	3 00	
601	Mar.		48 00	20 00	50 00	80 00	120 00	30 00	348 00	335 00		13 00
572	Sin.	175 00			50 00			50 00	275 00	277 76	2 76	
573	Sin.	170 00			25 00			40 00	235 00	231 00		4 00
579	Mar.		48 00	20 00	50 00	80 00	110 00	40 00	348 00	340 60		7 40
588	Sin.	150 00			50 00			35 00	235 00	228 00		7 00
591	Sin.	150 00			30 00			50 00	230 00	228 00		2 00
534	Mar.			20 00	50 00	100 00	140 00	40 00	350 00	347 50		2 50
495	Sin.				35 00	80 00	100 00	35 00	250 00	250 20	20	
499	Mar.			20 00	50 00	80 00	100 00	40 00	290 00	322 50	32 50	
506	Mar.		36 00	20 00	45 00	80 00	120 00	35 00	336 00	335 00		1 00
516	Mar.			20 00	40 00	60 00	70 00	30 00	220 00	272 00	52 00	
472	Mar.		24 00	15 00	60 00	100 00	120 00	30 00	349 00	317 33		31 67
486	Mar.		24 00	15 00	45 00	75 00	90 00	35 00	284 00	293 00	9 00	
470	Mar.		36 00	15 00	40 00	90 00	100 00	30 00	311 00	300 00		11 00
469	Mar.		24 00	15 00	50 00	75 00	100 00	35 00	299 00	289 33		9 67
480	Sin.	165 00			40 00			35 00	240 00	238 00		2 00
427	Mar.		114 00			720 00			834 00	563 55		270 45
628	Mar.					600 00			600 00	623 70	23 70	
632	Mar.		72 00	30 00	30 00	100 00	30 00	50 00	312 00	355 04	43 04	
656	Mar.		96 00									
659	Mar.		120 00									
615	Mar.											
463	Sin.	208 00						70 00	278 00	335 00	57 00	
487	Mar.		168 00	20 00	80 00	210 00	85 00		563 00	666 00	103 00	
486	Mar.		48 00									
470	Mar.		108 00	25 00	100 00	500 00			733 00	466 00		267 00
466	Mar.		96 00	11 00	40 00	175 00	25 00		347 00	287 50		59 50
511												
509												
508												
428	Mar.			25 00	125 00	290 00			440 00	513 00	73 00	
491	Mar.											
498	Mar.		48 00									
523	Mar.		60 00									
524	Mar.		60 00									
580	Mar.		60 00		40 00				100 00	248 00	148 00	
532	Mar.		96 00	15 00	50 00	150 00	60 00	25 00	396 00	402 00	6 00	
534			72 00									
535	Mar.		84 00									
539			72 00									
62	Mar.		18 00	15 00	50 00	100 00	150 00	5 00	338 00	349 00	11 00	
55	Mar.			18 00	40 00	90 00	140 00	10 00	298 00	412 00	114 00	
50	Mar.			20 00	60 00	100 00	120 00	5 00	305 00	309 00	4 00	
48	Sin.	249 00	12 00	10 00	40 00			25 00	336 00	335 00		1 00
46	Mar.		36 00	10 00	40 00	90 00	125 00	10 00	311 00	326 00	15 00	
43	Mar.		36 00	20 00	40 00	100 00	150 00	25 00	371 00	500 00	129 00	
38	Mar.		48 00	20 00	40 00	100 00	100 00		308 00	306 00		2 00

TABLE No. 6.—BLANK No. 3—Continued.

DAY LABORERS—Continued.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the Year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
116	Mar.			\$10 00	\$30 00	\$50 00	\$40 00	\$30 00	\$160 00	\$344 00	\$184 00	
117	Mar.			10 00	30 00	65 00	35 00	20 00	160 00	263 00	103 00	
125	Sin.	\$185 00	\$12 00		60 00			75 00	332 00	290 00		\$42 00
128	Mar.		30 00	20 00	50 00	70 00	80 00	10 00	260 00	268 00	8 00	
131	Mar.		24 00	20 00	75 00	80 00	120 00	20 00	339 00	347 50	8 50	
132	Mar.		24 00	8 00	30 00	80 00	40 00	35 00	217 00	233 00	16 00	
134	Mar.			15 00	40 00	50 00	30 00	60 00	195 00	277 33	82 33	
139	Mar.		45 00	32 00	45 00	100 00	160 00	40 00	422 00	460 68	38 68	
112	Mar.			20 00	60 00	80 00	130 00	20 00	310 00	372 00	62 00	
142	Sin.	240 00			25 00			18 00	283 00	327 00	44 00	
143	Mar.			30 00	40 00	100 00	145 00	25 00	340 00	433 25	93 25	
218	Sin.	216 00			40 00			70 00	326 00	462 00	136 00	
215	Sin.	192 00			45 00			90 00	327 00	385 00	58 00	
19	Sin.	100 00	12 00	8 00	30 00			50 00	200 00	208 00	8 00	
100	Sin.	200 00		10 00	50 00			40 00	300 00	309 00	9 00	
305	Mar.			35 00	50 00	90 00	130 00	30 00	335 00	315 00		20 00
309	Mar.		30 00	20 00	40 00	70 00	60 00	30 00	250 00	248 00		2 00
180	Sin.	125 00			30 00			25 00	180 00	208 00	28 00	
181	Mar.		36 00	15 00	40 00	60 00	90 00	30 00	271 00	228 00		43 00
188	Sin.	200 00			55 00			50 00	305 00	303 00		2 00
186	Mar.		72 00	30 00	60 00	100 00	150 00	70 00	482 00	385 00		97 00
185	Mar.		48 00	25 00	40 00	80 00	15 00	25 00	233 00	335 00	102 00	
184	Mar.		48 00	30 00	50 00	75 00	115 00	30 00	348 00	347 00		1 00
179	Mar.		36 00	15 00	40 00	60 00	80 00	20 00	251 00	247 50		3 50
300	Sin.	100 00	12 00		30 00			30 00	172 00	163 50		8 50
169	Sin.	175 00			50 00			45 00	270 00	268 00		2 00
105	Mar.		90 00	20 00	50 00	40 00	20 00	10 00	230 00	208 00		22 00
345	Mar.	160 00			35 00			40 00	235 00	215 00		20 00
344	Mar.			30 00	70 00	90 00	130 00	30 00	350 00	347 00		3 00
266	Sin.	140 00			40 00			40 00	220 00	218 00		2 00
267	Sin.	150 00			30 00			30 00	210 00	208 00		2 00
268	Sin.	150 00			30 00			50 00	230 00	228 00		2 00
272	Mar.		36 00	15 00	35 00	60 00	40 00	15 00	201 00	174 75		26 25
319	Mar.		24 00	15 00	50 00	50 00	60 00	20 00	219 00	218 00		1 00
311	Mar.		36 00	15 00	35 00	60 00	75 00	25 00	246 00	291 25	45 25	
317	Mar.	150 00			40 00			50 00	240 00	238 00		2 00
356	Mar.		36 00	15 00	50 00	70 00	80 00	70 00	321 00	268 00		53 00
276	Mar.			12 00	45 00	60 00	50 00	25 00	192 00	218 00	26 00	
279	Mar.			10 00	40 00	50 00	65 00	30 00	195 00	183 00		12 00
193	Mar.	125 00			40 00			35 00	200 00	218 00	18 00	
320	Sin.	150 00			30 00			20 00	200 00	208 00	8 00	
325	Sin.	140 00			25 00			25 00	190 00	137 25		
326	Mar.		24 00	15 00	40 00	60 00	70 00	20 00	229 00	228 00		1 00
532	Mar.		60 00	20 00	50 00	80 00	110 00	30 00	350 00	352 50	2 50	
542	Sin.	175 00			50 00			40 00	265 00	268 00	3 00	
629	Mar.			30 00	200 00	140 00	22 00	50 00	442 00	328 44		113 56
630	Mar.		72 00	25 00	200 00	100 00	150 00	50 00	597 00	673 00	76 00	
631	Mar.		75 00	30 00	125 00	20 00	75 00		325 00	635 00	310 00	
663	Sin.				50 00			40 00				
660	Mar.			20 00	60 00	80 00	10 00	40 00	210 00	298 00	88 00	
677	Mar.		48 00	20 00	50 00	75 00	85 00	30 00	308 00	310 00	2 00	
239	Mar.			25 00	45 00	100 00	100 00	35 00	305 00	347 50	42 50	
329	Sin.	160 00			30 00			50 00	240 00	186 00		54 00
428	Sin.				45 00							
76	Sin.	200 00		12 00	50 00			90 00	352 00	425 04	73 04	
568	Mar.		84 00									
191	Mar.		60 00	30 00	40 00	100 00	120 00	30 00	380 00	377 50		2 50
397	Mar.		120 00	20 00	60 00	120 00	150 00	50 00	520 00	436 00		84 00
361	Mar.		72 00	30 00	50 00	80 00	100 00	35 00	367 00	385 00	18 00	

TABLE No. 6.—BLANK No. 3—Continued.

DAY LABORERS—Continued.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
250	Sin..	\$180 00			\$40 00			\$35 00	\$255 00	\$258 00	\$3 00	
245	Sin..	150 00			50 00			50 00	250 00	248 00		\$2 00
238	Mar.			\$20 00	40 00	\$100 00	\$150 00	50 00	360 00	537 50	177 50	
244	Sin..	175 00			40 00			35 00	250 00	258 00	8 00	
240	Mar.		\$24 00	15 00	50 00	90 00	140 00	50 00	369 00	321 60		47 40
246	Sin..				35 00	100 00	110 00	35 00	280 00	285 00	5 00	
192	Mar.			35 00	100 00	125 00	150 00	75 00	485 00	385 00		100 00
314	Mar.		36 00	15 00	30 00	50 00	60 00	20 00	211 00	171 00		40 00
359	Mar.		36 00	15 00	30 00	60 00	80 00	20 00	241 00	238 00		3 00
360	Sin..	150 00			40 00			35 00	225 00	218 00		7 00
365	Sin..	150 00			35 00			35 00	220 00	218 00		2 00
594	Mar.											
593	Mar.		120 00	20 00	30 00	170 00	122 00	30 00	492 00	698 00	206 00	
592	Sin..	192 00			10 00				202 00	247 00	45 00	
588	Mar.		65 00	13 00	50 00	170 00	100 00	60 00	458 00	417 00		41 00
583	Mar.											
580	Sin..	160 00			30 00				190 00	369 75	179 75	
577	Sin..	160 00			30 00				190 00	369 75	179 75	
557	Mar.		84 00									
551	Mar.		96 00	11 00	50 00	150 00		50 00	357 00	347 50		9 50
545	Mar.		72 00	15 00	75 00			30 00	192 00	462 00	270 00	
326	Mar.		24 00	15 00	40 00	60 00	70 00	20 00	229 00	208 00		21 00
914	Mar.			28 00	23 00	166 00	48 00	16 00	281 00	325 23	44 23	
910	Mar.			28 00								
913	.....			30 00								
924	.....			96 00								
958	Sin..	260 00		30 00								
963	Sin..	260 00			40 00							
Total.		\$7337 00	\$3743 00	\$1692 00	\$5833 00	\$8666 00	6792 00	4084 00	36440 00	38429 33	3664 98	1675 65
No. rep.		43	68	83	121	78	73	110	121	121	61	60
Ave.....		\$170 63	\$55 04	\$20 39	\$48 20	\$111 10	\$93 04	\$37 13	\$301 16	\$317 60	\$60 08	\$27 93

TABLE No. 6.—BLANK No. 3—Continued.

## FARM LABORERS.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the Year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
531	Mar.			\$20 00	\$50 00	\$80 00	\$90 00	\$10 00	\$250 00	\$258 00	\$8 00	
530	Mar.			30 00	60 00	70 00	90 00	10 00	260 00	258 00		\$2 00
529	Mar.		\$40 00	20 00	80 00	38 00	90 00	10 00	278 00	283 00	5 00	
528	Sin.	\$150 00			50 00			50 00	250 00	248 00		2 00
527	Sin.	170 00			30 00	38 00		10 00	210 00	208 00		2 00
526	Sin.	180 00			45 00	38 00		35 00	260 00	258 00		2 00
525	Sin.			20 00	40 00	50 00	70 00	35 00	205 00	258 00	53 00	
524	Mar.		72 00	20 00	55 00	50 00	60 00	5 00	262 00	263 00	1 00	
523	Mar.			30 00	65 00	73 00	90 00	10 00	268 00	263 00		5 00
522	Mar.		60 00	20 00	40 00	70 00	80 00	20 00	290 00	283 00		7 00
521	Mar.		24 00	15 00	40 00	90 00	100 00	30 00	299 00	305 80	6 80	
520	Sin.	170 00			70 00			30 00	270 00	241 00		29 00
519	Mar.		38 00	20 00	50 00	70 00	70 00	45 00	293 00	238 00		55 00
518	Mar.		60 00	20 00	50 00	70 00	85 00	5 00	290 00	278 00		12 00
517	Mar.			20 00	60 00	80 00	90 00	30 00	280 00	278 00		2 00
546	Sin.	175 00			40 00			35 00	250 00	248 00		2 00
545	Sin.	170 00			40 00	80 00		40 00	250 00	272 00	22 00	
544	Mar.		24 00	15 00	50 00	75 00	80 00	30 00	274 00	273 00		1 00
543	Mar.		36 00	15 00	40 00	75 00	90 00	35 00	291 00	288 00		3 00
541	Sin.	170 00			70 00			30 00	270 00	268 00		2 00
540	Sin.	130 00			60 00	75 00		70 00	260 00	258 00		2 00
538	Sin.				35 00	80 00	100 00	35 00	250 00	248 00		2 00
537	Mar.		36 00	15 00	50 00	90 00	100 00	30 00	321 00	388 25	67 25	
536	Mar.			25 00	60 00	90 00	110 00	40 00	325 00	322 50		2 50
533	Mar.		36 00	15 00	45 00	80 00	100 00	35 00	309 00	310 00	1 00	
560	Mar.			30 00	70 00	80 00	100 00	20 00	300 00	298 00		2 00
559	Mar.		24 00	25 00	70 00	70 00	100 00	25 00	314 00	387 10	73 10	
558	Sin.	202 00	12 00		40 00			10 00	264 00	263 00		1 00
557	Mar.			20 00	60 00	80 00	100 00	40 00	300 00	298 00		2 00
556	Sin.	200 00	15 00		50 00			45 00	310 00	310 00		
555	Sin.	150 00			40 00	80 00		50 00	240 00	238 00		2 00
554	Sin.	175 00	12 00		40 00	80 00		20 00	247 00	273 00	26 00	
553	Sin.	175 00	12 00		40 00	80 00		15 00	242 00	263 00	21 00	
552	Sin.	190 00			40 00	80 00		40 00	270 00	268 00		2 00
550	Sin.				40 00	80 00	120 00	45 00	295 00	283 00		12 00
549	Sin.	190 00			35 00			35 00	260 00	258 00		2 00
548	Mar.			20 00	50 00	90 00	100 00	40 00	300 00	297 50		2 50
547	Sin.	200 00			35 00			40 00	275 00	272 50		2 50
567	Sin.	275 00			40 00	90 00		35 00	350 00	248 00		102 00
561	Mar.		46 00	30 00	50 00	80 00	100 00	101 00	417 00	288 00		129 00
589	Mar.			15 00	50 00	80 00	100 00	35 00	286 00	278 00		2 00
585	Mar.		48 00	20 00	40 00	70 00	95 00	35 00	308 00	308 00		
583	Sin.	190 00			40 00			40 00	270 00	268 00		2 00
582	Sin.	200 00	15 00		50 00			25 00	290 00	310 00	20 00	
581	Mar.			25 00	50 00	75 00	100 00	50 00	300 00	297 50		2 50
580	Sin.	150 00			40 00			50 00	240 00	288 00	48 00	
578	Mar.			15 00	45 00	80 00	130 00	40 00	310 00	298 00		12 00
577	Sin.	200 00			40 00			60 00	300 00	297 50		2 50
576	Mar.			20 00	60 00	90 00	135 00	35 00	340 00	311 30		28 70
575	Sin.	150 00			40 00			50 00	240 00	238 00		2 00
571	Mar.			20 00	50 00	75 00	100 00	75 00	320 00	341 25	21 25	
600	Mar.		48 00	20 00	50 00	80 00	90 00	35 00	323 00	370 62	47 62	
599	Mar.		24 00	15 00	40 00	70 00	90 00	40 00	299 00	228 00		71 00
597	Sin.	100 00			25 00			20 00	145 00	131 00		14 00
611	Mar.			20 00	50 00	80 00	100 00	40 00	290 00	278 00		12 00
610	Sin.	130 00			45 00			50 00	225 00	186 00		39 00
607	Sin.	150 00			40 00			30 00	220 00	218 00		2 00
604	Sin.	175 00			40 00			40 00	255 00	258 00	3 00	
602	Sin.	150 00			40 00			30 00	220 00	216 00		4 00

TABLE No. 6.—BLANK No. 3—Continued.

FARM LABORERS—Continued.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
617	Mar.		\$24 00	\$15 00	\$50 00	\$75 00	\$100 00	\$45 00	\$314 00	\$308 00		\$6 00
615	Sin.	\$190 00			40 00			50 00	280 00	278 00		2 00
129	Sin.	175 00	12 00		55 00			40 00	282 00	290 00	\$8 00	
130	Mar.		24 00	20 00	50 00	80 00	90 00	10 00	274 00	347 50	73 50	
135	Sin.				50 00			40 00				
137	Sin.				50 00			50 00				
138	Sin.				35 00			25 00				
140	Sin.	240 00			35 00			25 00	300 00	303 00	3 00	
109	Sin.	175 00	12 00		60 00			40 00	287 00	293 00	6 00	
110	Sin.	140 00	12 00		40 00			15 00	207 00	222 00	15 00	
114	Sin.	200 00	12 00		50 00			75 00	337 00	368 75	31 75	
233	Mar.			20 00	40 00	110 00	150 00	40 00	360 00	353 75		6 25
234	Sin.			20 00	40 00	75 00	90 00	25 00	250 00	248 00		2 00
235	Sin.			20 00	30 00	90 00	100 00	30 00	270 00	263 00		7 00
236	Mar.		24 00	15 00	50 00	90 00	110 00	60 00	349 00	347 50		1 50
237	Mar.			20 00	40 00	100 00	140 00	35 00	335 00	328 75		6 25
216	Mar.			20 00	70 00	140 00	100 00	20 00	350 00	240 00		110 00
217	Sin.	120 00			30 00			15 00	165 00	180 00	15 00	
74	Mar.			25 00	50 00	100 00	160 00	10 00	345 00	375 25	30 25	
76	Sin.		18 00	4 00	35 00	70 00		10 00	137 00	144 00	7 00	
69	Sin.	150 00			25 00			10 00				
68	Sin.		12 00	6 00	40 00	200 00		60 00	318 00	308 00		10 00
66	Mar.			20 00	60 00	100 00	140 00	5 00	325 00	442 00	117 00	
65	Mar.			30 00	30 00	50 00	150 00	5 00	265 00	577 50	312 50	
230	Mar.			20 00	50 00	100 00	150 00	60 00	380 00	387 50	7 50	
231	Mar.		30 00	20 00	50 00	150 00	150 00	50 00	450 00	397 33		52 67
232	Mar.		30 00	20 00	50 00	100 00	150 00	75 00	425 00	418 75		6 25
22	Mar.		36 00	15 00	50 00	100 00	150 00	90 00	447 00	358 50		82 50
306	Mar.			25 00	50 00	80 00	120 00	35 00	310 00	310 00		
307	Sin.	125 00			30 00			25 00	180 00	171 00		9 00
187	Mar.			35 00	50 00	80 00	120 00	25 00	300 00	304 00	4 00	
242	Mar.			20 00	50 00	90 00	130 00	70 00	360 00	353 75		6 25
241	Mar.			20 00	40 00	80 00	110 00	35 00	285 00	296 00	11 00	
243	Sin.	175 00			40 00			30 00	245 00	248 00	3 00	
174	Sin.	150 00			40 00			50 00	240 00	171 00		69 00
176	Mar.			25 00	35 00	60 00	75 00	35 00	230 00	228 00		2 00
183	Sin.	150 00			50 00			50 00	250 00	248 00		2 00
182	Sin.	175 00			30 00			50 00	255 00	241 86		13 14
207	Mar.			25 00	70 00	75 00	100 00	20 00	290 00	426 25	136 25	
167	Sin.	150 00			30 00			30 00	210 00	208 00		2 00
168	Sin.	175 00			40 00			35 00	250 00	248 00		2 00
170	Mar.		60 00	30 00	40 00	60 00	80 00	35 00	305 00	308 00	3 00	
173	Sin.	175 00			4 00			40 00	219 00	258 00	39 00	
256	Sin.	150 00	12 00		40 00			40 00	242 00	263 00	21 00	
257	Sin.	150 00	15 00		50 00			10 00	225 00	310 00	85 00	
258	Sin.	150 00	12 00		40 00			50 00	252 00	273 00	21 00	
259	Mar.			20 00	65 00	75 00		75 00	235 00	387 00	152 00	
260	Mar.			25 00	60 00	100 00	125 00	40 00	350 00	493 12	143 12	
261	Mar.		24 00	15 00	60 00	90 00	125 00	60 00	374 00	402 00	28 00	
262	Sin.	182 00			40 00			60 00	282 00	288 00	6 00	
263	Mar.		84 00		50 00	90 00	50 00	20 00	294 00	345 00	51 00	
264	Mar.		96 00	25 00	60 00	100 00	75 00	75 00	431 00	439 00	8 00	
265	Mar.			25 00	70 00	100 00	125 00	50 00	370 00	502 75	132 75	
205	Sin.	175 00			40 00			40 00	255 00	258 00	3 00	
253	Mar.		108 00	20 00	40 00	100 00	75 00	75 00	418 00	432 00	14 00	
252	Mar.		36 00	15 00	40 00	80 00	120 00	60 00	351 00	341 25		9 75
251	Mar.			20 00	40 00	100 00	125 00	50 00	335 00	335 00		
202	Mar.			15 00	45 00	80 00	125 00	45 00	310 00	387 50	77 50	
201	Sin.	175 00			40 00			40 00	245 00	258 00	13 00	

TABLE No. 6.—BLANK No. 3—Continued.

## FARM LABORERS—Continued.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the Year	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
200	Mar.											
247	Sin.	\$200 00			\$50 00	\$80 00	\$110 00	\$30 00	\$338 00	\$335 00		\$3 00
248	Sin.	175 00			40 00			40 00	280 00	273 00		7 00
249	Sin.	190 00			40 00			45 00	260 00	258 00		2 00
312	Sin.	150 00			40 00			40 00	270 00	278 00	\$8 00	
614	Sin.	180 00			30 00			35 00	215 00	208 00		7 00
626	Sin.	140 00			40 00			50 00	270 00	268 00		2 00
625	Sin.	140 00			40 00			30 00	210 00	215 00	5 00	
619	Sin.	140 00			40 00			30 00	210 00	208 00		2 00
632	Sin.	115 00			40 00			33 00	215 00	201 00		14 00
631	Sin.	190 00			40 00			55 00	210 00	268 00	58 00	
629	Mar.		48 00	20 00	50 00			30 00	270 00	268 00		2 00
643	Sin.	180 00			70 00	90 00	100 00	32 00	360 00	360 00		
654	Sin.	175 00			40 00			70 00	290 00	283 00		7 00
651	Mar.			20 00	40 00			25 00	252 00	263 00	11 00	
650	Sin.	175 00	12 00		60 00	60 00	75 00	75 00	290 00	386 00	96 00	
648	Mar.		48 00	25 00	40 00			25 00	252 00	258 00	6 00	
646	Sin.	200 00			70 00	50 00	70 00	15 00	278 00	273 00		5 00
645	Mar.			20 00	35 00			45 00	280 00	278 00		2 00
644	Mar.			20 00	60 00	75 00	100 00	10 00	265 00	328 30	63 30	
658	Mar.			25 00	50 00	60 00	75 00	35 00	240 00	322 50	82 50	
666	Mar.			20 00	40 00	90 00	100 00	49 00	304 00	380 00	76 00	
662	Sin.	180 00			50 00	75 00	100 00	50 00	295 00	402 00	107 00	
659	Sin.	160 00			35 00			45 00	260 00	241 76		18 24
667	Sin.	175 00	12 00		35 00			50 00	245 00	248 00	3 00	
678	Mar.				40 00			30 00	252 00	258 00	6 00	
679	Mar.			20 00	40 00			60 00	250 00	258 00	8 00	
675	Sin.	150 00			60 00	90 00	110 00	50 00	330 00	335 00	5 00	
673	Mar.		36 00	20 00	50 00			45 00	270 00	268 00		2 00
672	Sin.	175 00			65 00	80 00	120 00	40 00	371 00	347 50		23 50
617	Mar.				45 00			40 00	260 00	258 00		2 00
111	Sin.	175 00	12 00		25 00	100 00	25 00	10 00	160 00	203 80	43 80	
108	Sin.	240 00			50 00			30 00	332 00	360 00	28 00	
476	Sin.	185 00		20 00	55 00			70 00	210 00	308 00	98 00	
477	Mar.			20 00	35 00	80 00	100 00	35 00	250 00	268 00	18 00	
478	Sin.	190 00			70 00	100 00	150 00	70 00	410 00	385 00		25 00
479	Sin.	175 00			50 00			50 00	290 00	288 00		2 00
462	Mar.			25 00	50 00			35 00	260 00	258 00		2 00
464	Sin.	150 00			75 00	75 00	90 00	10 00	275 00	273 00		2 00
468	Sin.	160 00			50 00			40 00	270 00	268 00		2 00
481	Sin.	175 00			45 00			40 00	245 00	243 00		2 00
482	Sin.	175 00			40 00			45 00	260 00	248 00		12 00
483	Sin.	160 00			40 00			35 00	250 00	248 00		2 00
484	Sin.	190 00			40 00			40 00	240 00	238 00		2 00
485	Mar.		96 00	15 00	45 00			60 00	295 00	293 00		2 00
486	Sin.	160 00			50 00	75 00	100 00	45 00	381 00	308 00		73 00
473	Mar.		36 00	15 00	30 00			40 00	230 00	228 00		2 00
471	Sin.				50 00	75 00	100 00	35 00	311 00	297 00		14 00
515	Sin.	140 00			40 00	80 00	100 00	40 00	260 00	258 00		2 00
514	Mar.				70 00			40 00	280 00	278 00		2 00
513	Sin.	170 00			290 00			290 00	290 00	288 00		2 00
512	Mar.			20 00	40 00			30 00	240 00	238 00		2 00
510	Mar.		36 00	20 00	50 00	70 00	80 00	10 00	230 00	233 00	3 00	
508	Sin.	280 00			65 00	100 00	140 00	40 00	401 00	372 00		29 00
503	Sin.	165 00			40 00			5 00	370 00	268 00		102 00
502	Mar.			15 00	30 00			35 00	230 00	228 00		2 00
501	Sin.	150 00			50 00	80 00	110 00	40 00	295 00	293 00		2 00
498	Mar.		48 00	20 00	40 00			60 00	250 00	248 00		2 00
494	Sin.	175 00			40 00	60 00	70 00	30 00	268 00	293 00	25 00	
					40 00			40 00	255 00	258 00	3 00	

TABLE No. 6.—BLANK No. 3—Continued.

FARM LABORERS—Continued.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the Year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
118	Mar.			\$40 00	\$125 00	\$100 00	\$150 00	\$60 00	\$475 00	\$510 40	\$35 40	
120	Sin..	\$200 00	\$12 00		55 00			30 00	297 00	284 00		\$13 00
119	Sin..	156 00			60 00			50 00	266 00	254 70		11 80
122	Mar.		24 00		70 00	250 00		25 00	369 00	456 00	87 00	
126	Sin..	225 00	12 00		50 00			15 00	297 00	303 00	6 00	
127	Sin..	250 00	12 00		50 00			35 00	347 00	347 50	50	
150	Sin..	200 00	12 00		60 00			25 00	297 00	308 00	11 00	
313	Sin..	125 00			30 00			25 00	180 00	178 00		2 00
323	Mar.			15 00	70 00	100 00	150 00	45 00	380 00	370 00		10 00
326	Mar.				30 00	80 00	110 00	20 00	240 00	238 00		2 00
364	Mar.			20 00	40 00	80 00	100 00	20 00	260 00	258 00		2 00
Total.		15955 00	\$1891 00	\$1730 00	\$8794 00	\$7986 00	9092 00	7382 00	52206 00	53682 84	2895 64	1418 80
No. rep.		92	58	85	187	93	88	188	184	184	74	105
Ave.....		\$173 42	\$32 62	\$20 35	\$47 03	\$85 87	\$103 32	\$39 27	\$283 73	\$291 75	\$39 13	\$15 31

TABLE No. 6.—BLANK No. 3—Continued.

## SHOEMAKERS.

Office Number.	Married or Single.	Expenses for Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
619	Mar.		\$84 00	\$15 00	\$15 00	\$250 00	\$50 00	\$10 00	\$414 00	\$312 00		\$102 00
600	Mar.		84 00	30 00	50 00	275 00	incl'd.	50 00	484 00	616 00	\$132 00	
621	Sin.	\$175 00			50 00			25 00	250 00	395 00	145 00	
624	Mar.		84 00									
480	Mar.		144 00	20 00		360 00	50 00		574 00	616 00	42 00	
564	Mar.		108 00		100 00	150 00	100 00	150 00	608 00	720 00	112 00	
597	Mar.		96 00	35 00	80 00	190 00	75 00	40 00	516 00	301 05		214 95
600	Sin.				40 00							
194	Mar.		72 00	40 00	90 00	100 00	150 00	50 00	532 00	488 33		43 67
350	Mar.		96 00	32 00	60 00	90 00	105 00	60 00	443 00	554 40	111 40	
274	Mar.		84 00	25 00	45 00	110 00	100 00	60 00	424 00	500 26	76 26	
352	Mar.		60 00	30 00	35 00				416 20	396 20		20 00
410	Mar.		63 00	25 00	70 00	150 00	75 00	126 00	509 00	449 00		60 00
172	Mar.			25 00	50 00	100 00	140 00	35 00	350 00	418 00	68 00	
178	Mar.			30 00	30 00	100 00	150 00	80 00	390 00	417 00	27 00	
158	Mar.		72 00	30 00	60 00	125 00	125 00	100 00	512 00	474 00		38 00
85	Mar.	300 00	36 00	12 00	65 00			40 00	453 00	725 00	272 00	
91	.....		66 00	10 00	57 00	121 00	82 00	80 00	416 00	389 00		27 00
94	Mar.		70 00		80 00	150 00	150 00	10 00	460 00	420 00		40 00
155	Mar.		60 00	30 00	40 00	150 00	200 00	75 00	555 00	543 00		12 00
151	Mar.		60 00	30 00	40 00	125 00	100 00	50 00	405 00	384 00		21 00
123	Mar.		30 00	20 00	60 00	90 00	140 00	20 00	360 00	387 00	27 00	
124	Mar.		12 00	15 00	50 00	100 00	150 00	15 00	342 00	372 00	30 00	
121	Mar.		30 00	30 00	50 00	100 00	150 00	25 00	375 00	402 00	27 00	
36	Mar.		16 00	12 00	60 00	85 00	75 00	18 00	442 00	296 00		146 00
163	Sin.	260 00			30 00				290 00	345 00	55 00	
461	Mar.		84 00	45 00	40 00	250 00	350 00		769 00	482 25		286 75
940	Mar.	235 00			50 00			50 00	335 00	416 50	81 50	
939	Mar.		66 00	26 00	75 00	260 00		25 00	452 00	302 00		150 00
938	.....		60 00	33 00	75 00		312 00	15 00	495 00	718 00	223 00	
937	Mar.			25 00	50 00	75 00	50 00	50 00	250 00	385 00	135 00	
936	Mar.			25 00	50 00	100 00	115 00	25 00	315 00	391 76	76 76	
935	Sin.	208 00			50 00			50 00	293 00	262 00		31 00
934	Mar.		84 00	20 00	100 00	80 00	150 00	150 00	584 00	556 00		28 00
944	Mar.			26 00								
945	Mar.		72 00	20 00	30 00	120 00	30 00	20 00	292 00	292 00		
950	Mar.			25 00	50 00		120 00	20 00				
969	Mar.		180 00	33 00	100 00	250 00	312 00	37 50	812 50	822 00	9 50	
920	Mar.		72 00	18 00	30 00	250 00	50 00	50 00	470 00	470 00		
971	Mar.		84 00	25 00	30 00							
Total..		\$1178 00	\$2129 00	\$817 00	\$2037 00	\$4306 00	3656 00	1611 50	15587 70	16017 75	1650 42	1220 37
No. rep.		5		32	37	28	28	32	35	35	18	15
Ave.....		\$236 00		\$25 53	\$55 05	\$153 79	\$130 57	\$50 36	\$445 36	\$457 65	\$91 69	\$81 36

TABLE No. 6.—BLANK No. 3—Continued.

TRANSPORTATION HANDS ON RAILROAD.

Office Number.	Married or Single.	Expenses of Year.							Total Income for the year.	Excess.		
		Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
40	Mar.....		\$78 00	\$20 00	\$125 00	\$100 00	\$75 00	\$34 00	\$432 00	\$432 00		
490	Mar.....		96 00	22 00	100 00	225 00		50 00	493 00	492 80		\$ 20
568	Mar.....		120 00	25 00	60 00	175 00	130 00	40 00	550 00	496 00		54 00
595	Sin.....		60 00									
591	Mar.....											
589	Mar.....		120 00	18 00	40 00	156 00	116 00	50 00	500 00	360 00		140 00
579	Sin.....	\$240 00			50 00				290 00	523 60	\$233 60	
581	Mar.....		96 00	16 00	45 00	170 00	130 00	50 00	507 00	605 20	98 20	
570	Sin.....	275 00			63 00			23 00	361 00	547 20	186 20	
556	Sin.....	260 00			35 00			15 00	310 00	537 20	227 20	
565	Mar.....		72 00	30 00	60 00	140 00	145 00	35 00	482 00	605 20	123 20	
562	Sin.....	300 00			50 00			50 00	400 00	737 00	337 00	
559	Mar.....		20 00	30 00	60 00	200 00	150 00	30 00	490 00	630 20	140 20	
558	Sin.....	260 00			40 00			15 00	315 00	605 20	290 20	
556	Sin.....	300 00			75 00			10 00	385 00	547 20	162 20	
550	Mar.....		32 00	35 00	67 00	165 00	150 00	100 00	549 00	976 00	427 00	
552	Sin.....	275 00			80 00			40 00	395 00	605 20	210 20	
549	Mar.....		96 00	50 00	150 00	260 00	100 00	60 00	716 00	1155 00	439 00	
482	Mar.....		96 00	20 00	40 00	150 00	140 00		446 00	409 20	36 80	
464	Mar.....		96 00	27 00	60 00	380 00	160 00	10 00	733 00	573 80	159 20	
77	Sin.....	275 00	24 00	13 00	60 00			75 00	449 00	562 00	113 00	
664	Mar.....		120 00					357 45	477 45	477 45		
661	Mar.....		186 00									
929	Mar.....		84 00									
1002	.....		72 00	25 00	100 00	300 00	80 00	60 00	637 00	649 60	12 60	
Total . . .		2185 00	1468 00	\$333 00	1360 00	\$2421 00	\$1376 00	1104 45	9917 45	12527 05	2999 80	\$390 20
Number reporting ..		8	17	13	20	12	11	19	21	21	14	5
Average ...		\$273 13	\$86 35	\$25 61	\$68 00	\$201 75	\$125 09	\$58 13	\$472 26	\$596 53	\$214 27	\$78 04

TABLE No. 7.

Collated from Table No. 6, Blank No. 3, giving number of Blanks returned from each Trade or Occupation, with answers to questions, from which said Table was compiled.

OCCUPATIONS.	Expenses for Year.							Total Income for the Year.	Excess.		
	Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
Machinists.....	.....	9	8	8	5	6	7	7	7	6	1
Cabinet Makers.....	2	7	8	9	6	6	8	8	8	4	3
Glassblowers.....	.....	10	5	3	3	3	10	10	10	5	1
Masons.....	4	8	11	15	11	11	14	15	15	6	9
Cigar Makers.....	3	6	6	9	4	4	5	7	7	2	6
Laborers on Railroads, Unskilled.....	10	17	24	32	22	20	31	32	32	24	8
Blacksmiths.....	8	21	22	24	16	16	24	24	24	15	9
Printers.....	3	15	11	16	11	10	14	16	16	10	6
Wheelwrights.....	4	5	7	11	7	7	11	11	11	4	7
Potters.....	.....	4	4	4	.....	.....	1	.....	.....	.....	.....
Tailors.....	1	6	7	8	7	7	7	8	8	6	1
Jewelers.....	3	24	18	22	19	19	21	23	23	14	9
Carpenters.....	16	41	61	72	56	55	71	72	72	30	40
Weavers.....	5	24	13	23	13	12	19	19	19	7	14
Painters.....	7	28	33	35	28	27	35	36	36	21	15
Skilled Workmen, Miscellaneous Trades.....	28	64	62	82	53	51	69	80	80	46	32
Transportation Hands on Railroads.....	8	17	13	20	12	11	19	21	21	14	5
Occupations Requiring Experience.....	12	17	21	34	19	20	28	32	32	18	14
Day Laborers.....	43	68	83	121	78	73	110	121	121	61	60
Farm Laborers.....	92	58	85	187	93	88	188	184	184	74	105
Shoemakers.....	5	29	32	37	28	28	32	35	35	18	15
	254	478	534	772	491	474	724	761	761	385	360

TABLE No. 8.

The following Table is compiled from Table No. 6, Blank No. 3, showing the aggregate amount represented in said Table in each Trade or Occupation, together with the Total Excess of Earnings or Expenses:

OCCUPATIONS.	Expenses for Year.							Total Income for the year.	Total Excess of.		
	Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.		Total.	Earnings over Expenses.	Expenses over Earnings.
Machinists.....		\$894 00	\$242 35	\$705 00	\$1303 00	\$746 92	\$960 00	\$4583 27	\$5453 10	\$869 83	
Cabinet Makers.....	\$520 00	622 00	232 00	925 00	1025 00	850 00	517 00	4439 00	4742 55	303 55	
Glassblowers.....		882 00	227 00	200 00	650 00	350 00	4067 00	6276 00	7318 00	1042 00	
Masons.....	726 00	790 00	346 00	870 00	1388 00	1541 00	835 00	6364 00	6537 52	173 52	
Cigar Makers.....	770 00	492 00	198 00	665 00	650 00	402 00	625 00	3529 00	3107 60		\$421 40
Laborers on Railroad, Unskilled.....	1831 00	702 00	447 00	1673 00	2169 00	1975 00	1169 00	9951 00	10883 56	932 56	
Blacksmiths.....	1730 00	1134 00	530 00	1295 00	1585 00	1815 00	1258 00	9356 00	10536 90	1180 90	
Printers.....	798 00	1370 00	400 00	1110 00	2115 00	1205 00	1933 00	8595 00	9816 00	1221 00	
Wheelwrights.....	1016 00	408 00	177 00	678 00	750 00	930 00	560 00	4519 00	4881 70	362 70	
Potters.....		354 00	163 00	156 00			200 00				
Tailors.....	208 00	351 00	161 00	520 00	980 00	952 00	400 00	3572 00	3976 55	404 55	
Jewelers.....	988 00	2259 00	585 00	1675 00	3110 00	2821 00	2985 00	14079 00	16096 20	2017 20	
Carpenters.....	3375 00	2343 00	1524 00	4062 00	6429 00	7150 00	4022 00	28742 00	29225 99	483 99	
Weavers.....	1040 00	2037 00	350 00	1460 00	1956 00	1496 00	848 00	8197 00	7712 10		484 90
Painters.....	1385 00	2083 00	745 00	1925 00	3275 00	3152 00	1805 00	14082 00	14650 78	568 78	
Skilled Workmen, Miscellaneous Trades.....	6438 00	5809 00	1712 00	5351 00	8527 00	6628 80	6097 00	37554 80	40999 95	3445 15	
Transportation Hands on Railroad.....	2185 00	1468 00	333 00	1360 00	2421 00	1376 00	1104 45	9917 45	12527 05	2609 60	
Occupations Requiring Experience.....	2735 60	1598 00	649 50	2263 50	2843 00	2966 00	2203 50	14033 10	15620 76	1587 66	
Day Laborers.....	7337 00	3743 00	1692 00	5833 00	8666 00	6792 00	4084 00	36440 00	38429 33	1989 33	
Farm Laborers.....	15955 00	1891 00	1730 00	8794 00	7986 00	9092 00	7382 00	52206 00	53682 84	1476 84	
Shoemakers.....	1178 00	2129 00	817 00	2037 00	4306 00	3656 00	1611 50	15587 70	16017 75	430 04	
	\$50224 60	\$33359 00	\$13260 85	\$43557 50	\$62134 00	\$55896 72	\$44666 45	\$292023 32	\$312216 23	\$21099 21	\$906 30

TABLE No. 9.

Cost of Living, showing Averages in each Trade or Occupation, compiled from Table No. 6, Blank No. 3.

OCCUPATION,	Expenses for Year.								Total Income for the year.	Average Excess.	
	Board.	Rent.	Fuel.	Clothing.	Groceries.	Meat and Vegetables.	Sundries.	Total.		Earnings over Expenses.	Expenses over Earnings.
Machinists .....		\$99 33	\$30 29	\$88 12	\$260 60	\$124 48	\$137 11	\$654 75	\$779 01	\$124 26	.....
Cabinet Makers.....	\$260 00	88 85	29 00	102 78	170 83	141 66	64 62	554 87	592 82	37 95	.....
Glassblowers.....		88 20	45 40	66 67	216 67	116 67	406 70	627 60	731 80	104 20	.....
Masons .....	181 50	98 75	31 45	58 00	126 17	140 09	59 64	424 27	435 83	11 56	.....
Cigar Makers.....	256 67	82 00	33 00	73 89	162 50	100 50	125 00	504 14	443 94	.....	\$60 20
Laborers on Railroad, Unskilled.....	183 10	41 30	18 62	52 28	98 59	98 75	37 71	310 97	340 11	29 14	.....
Blacksmiths .....	217 37	54 00	24 09	53 96	99 06	113 44	52 42	389 83	439 04	49 21	.....
Printers.....	266 00	91 33	36 36	69 37	192 27	120 50	138 07	537 19	613 50	76 31	.....
Wheelwrights.....	254 00	81 60	25 28	61 64	107 14	132 86	50 91	410 82	443 79	32 97	.....
Potters.....		88 50	40 75	39 00	.....	.....	200 00	.....	.....	.....	.....
Tailors .....	208 00	58 50	23 00	65 00	140 00	136 00	57 14	446 50	568 08	121 58	.....
Jewelers.....	329 33	94 12	32 50	76 14	163 68	148 47	142 14	612 13	699 84	87 71	.....
Carpenters .....	210 94	57 15	24 98	56 42	114 80	130 00	56 65	399 19	405 91	6 72	.....
Weavers .....	208 00	84 87	26 92	63 48	150 46	124 67	44 63	431 42	405 90	.....	25 52
Painters .....	197 86	74 39	22 57	55 00	116 96	116 74	51 57	391 17	406 96	15 79	.....
Skilled Workmen, Miscellaneous Trades.....	229 93	90 77	27 61	65 25	160 89	133 90	88 36	469 43	512 50	43 07	.....
Occupations Requiring Experience.....	227 97	94 00	30 93	66 57	149 63	148 30	78 70	438 53	488 15	49 62	.....
Day Laborers.....	170 63	55 04	20 39	48 20	111 10	93 04	37 13	301 16	317 60	16 44	.....
Farm Laborers.....	173 42	32 62	20 35	47 03	85 87	103 32	39 29	283 73	291 75	8 02	.....
Shoemakers .....	235 60	73 41	25 53	55 05	153 79	130 57	50 36	445 36	457 65	12 29	.....
Transportation Hands on Railroad.....	273 13	86 35	25 61	68 00	201 75	125 09	58 13	472 26	596 53	124 27	.....
Total.....	\$4083 45	\$1615 08	\$594 63	\$1331 85	\$2982 76	\$2479 05	\$1976 26	\$9105 32	\$9970 71	\$951 11	\$85 72
Average .....	\$226 86	\$76 91	\$28 31	\$63 42	\$149 14	\$123 95	\$94 11	\$455 27	\$498 53	.....	.....

## ANSWERS TO QUESTIONS Nos. 19, 20 and 21.

No. 19—*What do you think would be the result of a general reduction of the hours of labor to eight per day?*

910 answers were given: 608 in favor of such reduction, and 302 against it. The following replies will show what interest is manifested by the wage-workers of the State in this important question:

No. 452—"It would be good for the people in general."

No. 997—"Employment of surplus of labor and better wages."

No. 992—"Very good; the workman saves more of his capacity to work and receives higher wages."

No. 991—"Would be the means of employing the surplus labor and increase wages."

No. 385—"Employ more hands and raise the wages."

No. 386—"Very good; and there would be no more idle working-men."

No. 1022—"A decided advantage to all wage-workers. More regular employment and a better distribution of the wage fund; necessarily increasing consumption and enhancing the price of labor, and ultimately lead to a better and higher condition."

No. 622—"Abiding by the law of nature, eight hours work, eight hours rest, eight hours for social advancement."

No. 817—"I am satisfied that the eight hour law can be successful if undertaken."

No. 926—"Better health, better pay, more intelligence."

No. 925—"I think it would better the condition of the men."

No. 616—"A more honest laboring class."

No. 316—"Give more time for wickedness."

No. 603—"Would employ the surplus labor and give time for education."

No. 1020—"Ten men work eighty hours at eight hours a day; likewise eight men working ten hours makes eighty hours; therefore the eight men under the present system eat up the substance of two men, thus depriving these two men of employment, whereby competition is increased and pay reduced."

No. 669—"I think it would be good, provided wages are kept up."

No. 633—"Bring down wages."

No. 507—"Not bad for us but hard on employers."

No. 57—"Improvement of laborers."

- No. 45—"Lower wages without increasing demand for labor."
- No. 73—"It would tend to give every man his due."
- No. 71—"It is all nonsense."
- No. 63—"Reduction of wages."
- No. 87—"Injurious to laborer and employer."
- No. 30—"Do not think it is right as it would lead to no good result."
- No. 296—"Dissatisfaction all round."
- No. 301—"Bad unless strictly enforced."
- No. 302—"Very bad for all concerned."
- No. 326—"Bad for employers and perhaps for us."
- No. 547—"More pay and less tramps to feed."
- No. 575—"It would be good, for it would take all the surplus labor of the market and then we might get our wages raised."
- No. 588—"Better employment and wages, health and happiness to the body and mind."
- No. 594—"Good; for in England we received as much for ten as we formerly did for sixteen."
- No. 319—"Bring down wages one-fifth."
- No. 128—"It would do good if there was no job work."
- No. 543—"I think we had better have the ten-hour law enforced before we ask for eight."
- No. 532—"A reduction of wages to correspond."
- No. 627—"I will have more time for social enjoyment and intellectual improvement."
- No. 480—"More idleness."
- No. 634—"Factories would close."
- No. 647—"Make laborers unwilling to work at all."
- No. 32—"Good if national, for employer and employed. Six hours per day would balance consumption and production."
- No. 15—"Very beneficial; it would afford opportunity to laborers displaced by machinery."
- No. 445—"One-fifth more men employed, more leisure, creating higher wants and comforts, and in the end a higher civilization."
- No. 92—"The employers value their men more when they find it difficult to obtain others in place of those who are dissatisfied with their wages. If the eight-hour system were adopted generally the laborer would compel the employer to give him a more just share of his profits."

No. 33—"Very beneficial to working people, especially in enabling them to live away from the over-crowded districts of cities."

No. 328—"More failures."

No. 1001—"It is almost a necessity for me to study, after working hours, but after a full day's work I am not fitted for study. Now a reduction of the working hours to eight per day would give me two hours for study. It would benefit other workers in the same way, and indirectly, because the cultivation thus obtained would show them their rights and the means of obtaining them."

No. 998—"Very good, and that children should not be employed at all under fourteen years of age."

No. 943—"At first, reduction of wages; finally, employment for greater numbers at good wages and general physical improvement."

No. 616—"An advantage to a right principled man, and injurious to an unprincipled one."

No. 107—"Most beneficial; the workmen would feel themselves to be freemen, would behave as such, be able to have a really free labor contract, and become more intelligent."

No. 1006—"Wages will rise, since more work power will be needed, and the working man will get more time and means to enjoy intellectual pleasures which to-day he must forego. For the great mass of workmen there exists no theatre, no museum, no art collection, etc. He has no money, no time to enjoy these pleasures, and on that account he is drawn to the saloons in order there to forget his misery for the instant. Therefore, let us have a reduction of work time to such a degree as shall insure all wage-workers employment at higher wages."

No. 426—"A great benefit to all, and we will have to come to eight hours. At the rate we are increasing in population, the time will come when the masses will rise in revolution. At the present time, in all of the large cities and towns throughout the State, we find that there are more to do the work than there is work to do, and if this goes on for a few years more this idle class will be driven to the wall and will breed revolution."

No. 675—"Less competition among workingmen, and hence better wages."

No. 271—"Disastrous now, but good when the time comes for it."

No. 563—"I think it would be the first step towards labor emancipation."

No. 175—"A general reduction of wages."

No. 635—"Make employers use more machinery."

No. 488—"Would make men entirely worthless."

No. 521—"Would not do for farmers."

The following have been selected to show the character of the replies to No. 20—*It is often stated that you don't receive a just share of profit on your labor. What better system can be equitably adopted?*

No. 426—"Each year there should be a meeting of a committee of workmen with their employers in each branch of business, and the price of the article manufactured should be fixed for a given period and the profits and wages made to agree. In this way each would know what to depend on the year round."

No. 366—"By a certain share in the profits of the business."

No. 611—"Practically no better system can be adopted. I have noticed that those who agitate this question most when workingmen, when they become employers themselves are the meanest and most penurious towards their workmen. I think skilled labor is always in demand at fair wages when the financial question is at rest."

No. 15—"The law of supply and demand will always regulate the value of labor under the wage system. The co-operative system is the only one under which the laborer can depend on securing an equitable share of profit."

No. 980—"Abolish convict labor and also all contract work either by Government, State, city or private individuals. All work should be done by day's work and paid for weekly."

No. 366—"By a certain share in the profits of the business."

No. 28—"A gradual curtailment of the hours of daily labor will, when generally adopted throughout several of the most important countries, so reduce the employers' profits that they will be willing to place their business largely into the hands of their employees under a fair stipulation for a share of the profits."

No. 328—"We often get more than our employers now."

No. 350—"A plan should be adopted by the employers to give back to the employee a part of the profits."

No. 931—"Trade unions. Nothing better. Labor is individually weak and only becomes powerful when bound together for self defence."

No. 926—Cash every week in full for all labor. Co-operation and an apprenticeship law compelling employees to teach their apprentices their trade in full."

No. 145—"Pay by the day and not by the hour."

No. 219—"Greater facilities for technical education for the labor class."

No. 63—"Am satisfied now."

No. 30—"I do receive a just share of profits on my labor."

No. 199—"Can't see that any is needed."

No. 914—"Don't think there can be any except co-operative, and of this it seems we are denied because we are compelled to deal with our employers."

No. 592—"Reduce the hours of labor and stop children under twelve years of age from working."

No. 593—"If the manufacture and sale of rum were stopped I think it would be better for the workingman."

No. 239—"Am satisfied at present."

No. 630—"Cash at the end of every week's labor and no compulsion to take it out in book account in a store. If we are obliged to work for seventy-five cents a day let us have it in cash."

No. 89—"I am satisfied as things are now."

No. 569—"Labor to receive a just share of attention from our law makers."

No. 474—"By giving each employee an interest so as each one will be working for his own interest and not considering strikes and troubles which now seem necessary under the grinding of the employers with the present system."

No. 21—*Your class have derived great benefit from co-operation in England and elsewhere. Why don't you try it?*

Responded to by quite a large number of persons. The following replies make a fair exhibit of the feeling upon this question:

No. 388—"Because we have no money to start with."

No. 386—"Because the wages are so small that we cannot get a start, and all the hands cannot see into co-operation where there is no capital."

No. 1022—"It is impossible to give any particular reason why we do not."

No. 622—"Lack of confidence in each other."

No. 930—"This question has never been properly agitated in this country."

No. 931—"We lack leaders. Our first object must be to obtain organization and united action to promote and regulate the formation of co-operative societies."

No. 926—"Because we do not get cash for our work. Manufacturers keep stores, and will not employ us unless we trade at their stores."

No. 609—"It is true, but you know it requires money. Some are not able, some not willing, and the few that are able and willing among our class of workmen can seldom find sufficient to start the manufacture of window glass, as it requires a considerable capital to begin with."

No. 618—"I am willing, but not able in pocket."

No. 507—"Not enough unity of feeling."

No. 45—"Expect to."

No. 145—"We people have not been trained to it."

No. 144—"We are trying it to a certain extent."

No. 73—"We are going to."

No. 63—"Don't see the need of it."

No. 301—"I am thinking about it."

No. 302—"We are trying it to some extent."

No. 913—"Because our employer keeps a store, where I am expected to trade."

No. 15—"I am now interested in a distributive co-operative association, which I expect will lead to productive co-operation."

No. 22—"The main reason it is not being tried at present is the hard times of the past seven years. When workingmen can put away a few dollars to fall back on, they will try the experiment again, as they have done before, and perhaps fail again; but until they can afford to experiment they will be only too glad to work under the old system. In case, therefore, of a few years of prosperity co-operation will be given a thorough trial in this country."

No. 33—"The benefits derived from co-operation in England have been greatly over-estimated."

No. 101—"Have tried it to a certain extent, and find it works well."

No. 911—"Don't know how; if we did we could not, or we would be discharged."

No. 910—"We have no opportunity; we have to spend our earnings with our employers."

No. 908—"Don't know how, and the employer keeps a store, and we have to buy of him."

No. 594—"In England they are united by their nationality. In this country we are divided by national prejudices, various religious sects and bigotry."

No. 635—"We have tried it, and capitalists combined together by withholding wages for three months, and we had to deal at their store two months of that time, not having sufficient means to deal at co-operative stores."

No. 611—"American workmen are too greedy of quick fortunes, too distrustful of one another, and too independent, and, as a class, are not so improvident as some nationalities, therefore do not feel the need of co-operation."

No. 32—"A lack of self-interest. A few will labor hard to get up a society. The members change their business locality, and some families neglecting to go a few blocks to patronize their store, the thing dies for want of interest."

No. 32—"Have tried it and found it to work well."

No. 9—"I am trying it."

No. 101—"Have tried it to a certain extent, and find it works well."

No. 13—"Have been connected with a co-operative store for the past three years, and find it works well."

No. 444—"Owing to the amount of capital required in every business, you could not get enough of the laboring class to raise the capital to start on the extensive scale in which business is carried on in our time."

No. 426—"The trouble arises from lack of knowledge in conducting the business in a proper manner, and want of confidence in each other that pervades all classes in this country."



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PART II.

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MISCELLANEOUS STATISTICS

*Relating to Specific State Industries.*

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- CHAP. I.—STEAM ENGINES AND OTHER MACHINERY.  
CHAP. II.—SILK.  
CHAP. III.—TEXTILES OTHER THAN SILK.  
CHAP. IV.—HATS.  
CHAP. V.—IRON, STEEL AND HARDWARE.  
CHAP. VI.—ROLLING MILLS, FORGES AND FOUNDRIES.  
CHAP. VII.—IRON AND ZINC ORES MINED.  
CHAP. VIII.—POTTERY, BRICK, GLASS, STONE AND CLAY.  
CHAP. IX.—LEATHER AND FURS.  
CHAP. X.—JEWELRY.  
CHAP. XI.—RUBBER AND CELLULOID.  
CHAP. XII.—PAPER AND ITS PRODUCTS.  
CHAP. XIII.—CLOTHING.  
CHAP. XIV.—BOOTS AND SHOES.  
CHAP. XV.—MANUFACTURES OF WOOD,  
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CHAP. XVIII.—HARNES, &C.  
CHAP. XIX.—PAINTS, VARNISHES AND CHEMICALS.  
CHAP. XX.—SUNDRY INDUSTRIES.  
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CHAP. XXIII.—BAKERS AND CONFECTIONERS.  
CHAP. XXIV.—CIGARS AND TOBACCO.  
CHAP. XXV.—BRASS, NICKEL AND GAS FIXTURES.
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## PART II.

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N. B.—In respect to our presentation of the industries of this State, it is not unlikely that in some cases discrepancies in the total number of establishments and products will appear between the United States census returns, when published, and ours. A few observations upon this point will, in a large degree, explain the causes of such possible discrepancies.

As a matter of course, it would not be expected that exactness and completeness would, to the same extent, characterize the returns of a State department, wholly without a semblance of authority to enforce compliance with its methods of acquiring information, as in the case of the census returns which were collected under very different auspices, both in respect to authority and pecuniary outlay.

Another obstructive factor in the case is the dissimilarity of schedule and classification of subjects to be enquired into, which necessarily leads to discrepancies in the process of tabulating results.

The census schedules also, contain much more detail in the specification of industries and occupations to be embraced in the returns, while ours were not designed to compass the multitude of smaller productive industries. It was a source of regret that we did not possess the means for more adequate equipment to canvass among the lesser manufactories and productive occupations, although the tendency of extreme minutia in this direction, is to duplication, without the utmost caution is exercised.

Our meaning will best be illustrated by naming a few industries and occupations which are legitimate subjects both for State and United States census enrolment, but are simply noted here as being a type of subjects we were compelled to omit, and which, in the aggregate, run into a total product of many millions of dollars, and thousands of productive laborers—bakers, builders, blacksmiths, boots and shoes (custom), plumbers, painters, photographers, printers, meat packers and butchers, fertilizers, shirtmakers, &c., &c.

Could these, and a large number of minor industries, such as furniture, edge tools, locks, paper boxes, marble cutters, tinware, engravers,

wheelwrights, &c., &c., have been coupled with our enrolment, it would have added not less than \$12,000,000 to the aggregate.

We would say, also, in this connection, (and with no disposition to suggest queries respecting the accuracy of what we fully believe will turn out to be the most comprehensive and reliable census ever taken in this country), the liability to duplication, without extreme care, may be exemplified by blacksmiths, retailers of jewelry, boots and shoes, etc., the bulk of whose returns of product might very easily have been previously represented in the wholesale manufacturers' returns; who, in a large degree, furnished the retailers with their ready manufactured supplies.

The remaining cause of our assumed discrepancies we will mention, exists in the fact, as we are reliably informed, that the basis of the census production is the commercial value at the point of distribution, while ours is based upon the manufacturers' cost, minus profits, insurance, commissions, storage and other incidental charges, the total of which would not be less than ten per cent. This would legitimately add \$12,134,130 to the total production as represented in our tables, and which, together with the above estimated amount of minor sources of production necessarily omitted in our canvassing operations, would make the total of our presentation \$145,475,439.

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# MISCELLANEOUS STATISTICS

*Relating to Specific State Industries.*

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TABLE No. 10.—BLANK No. 2.

## STEAM ENGINES AND OTHER MACHINERY.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employes.	Native Born.	Foreign Born.	Owns Real Estate.	Months at Work.	Total Paid for Labor.	Total Value of Products.
61	General Machinery.....	2 wks	80	40	40	1	12	\$30,000 00	\$90,000 00
66	General Machinery.....	2 wks	10	.....	.....	2	12	2,000 00	9,000 00
88	Steam Engines and Boilers...	wk....	75	.....	.....	3	12	35,000 00	100,000 00
95	Engines, Flax, Jute Mach'ry	2 wks	90	60	30	3	12	50,000 00	112,000 00
116	Gen'l Mach'ry and Foundry..	2 wks	29	32	8	7	12	17,189 22	47,397 80
131	Machinery.....	wk....	4	2	2	1	12	1,600 00	5,000 00
139	General Machinery.....	wk....	35	21	14	8	12	14,500 00	50,000 00
146	Locomotives and Machinery	2 wks	650	.....	.....	11	1/2	257,000 00	800,000 00
155	Engines and other Machin'ry	2 wks	475	119	356	.....	12	288,600 00	800,000 00
157	Engines.....	2 wks	950	212	738	.....	12	380,000 00	500,000 00
160	Weavers' Supplies.....	2 wks	71	36	35	.....	12	35,500 00	40,000 00
175	Machinery.....	2 wks	45	30	15	.....	12	19,500 00	40,000 00
181	General Machinery.....	wk....	21	15	6	.....	12	10,400 00	22,000 00
184	Weavers' Supplies.....	2 wks	99	.....	.....	.....	12	22,100 00	35,000 00
192	General Machinery.....	2 wks	52	17	33	.....	12	27,000 00	50,000 00
210	General Machinery.....	2 wks	28	28	.....	.....	12	10,000 00	20,000 00
529	Machinery.....	wk....	4	4	.....	2	12	3,023 11	4,500 00
556	Machinery.....	wk....	5	1	4	.....	5	1,200 00	2,000 00
564	General Machinery.....	wk....	17	15	2	.....	12	13,000 00	25,000 00
565	Engines, Boilers, Machinery.	wk....	170	113	57	8	12	93,558 44	211,051 33
591	Foundry and Machine Shop..	wk....	42	25	17	12	12	23,650 00	60,000 00
600	General Machinery.....	wk....	25	18	7	2	12	15,600 00	20,000 00
603	General Machinery.....	wk....	33	31	2	2	12	26,000 00	50,000 00
605	General Machinery.....	wk....	70	50	20	.....	12	50,000 00	150,000 00
607	General Machinery.....	wk....	25	12	13	1	12	20,000 00	50,000 00
625	Machinery and Tools.....	wk....	5	1	4	.....	12	2,200 00	5,500 00
626	Bolts and General Mach'ry..	2 wks	50	.....	.....	.....	12	25,000 00	95,000 00
60	Silk Mach'ry, Gen'l Supplies	2 wks	30	15	15	2	12	5,300 00	16,265 00
144	Silk Machinery.....	2 wks	25	8	17	.....	12	12,500 00	30,000 00
237	Steam Boilers, Tanks, &c....	2 wks	60	20	40	.....	.....	12,000 00	50,000 00
275	General Machinery.....	wk....	45	23	22	5	12	27,000 00	130,000 00
301	Steam Boilers, Turn-tables, &c	2 wks	61	30	31	12	12	14,971 83	80,000 00
304	General Machinery.....	wk....	15	8	7	.....	12	10,000 00	45,000 00
309	Patented Machinery.....	wk....	10	10	.....	.....	12	7,500 00	35,000 00
311	General Machinery.....	wk....	4	4	.....	.....	12	1,300 00	6,000 00
315	General Machinery.....	wk....	8	3	5	.....	12	5,000 00	14,000 00
346	General Machinery.....	wk....	4	3	1	1	12	2,600 00	3,900 00
357	General Machinery.....	wk....	15	.....	.....	.....	12	7,500 00	24,700 00
366	General Machinery.....	wk....	2	.....	2	.....	6	500 00	2,000 00
380	Foot Lathes, Light Mach'ry..	2 wks	17	17	.....	4	12	7,996 38	24,665 00
387	General Machinery.....	wk....	20	15	5	.....	12	15,000 00	50,000 00
468	General Machinery.....	wk....	5	3	1	1	12	3,500 00	8,000 00
503	Emery Wheels.....	wk....	18	16	2	.....	12	7,280 00	30,000 00
611	Wood Working Machinery....	wk....	10	1	9	.....	12	6,000 00	15,000 00
632	Cotton and Wool Machinery.	wk....	25	8	17	10	12	16,600 00	45,000 00
636	Machines.....	wk....	1000	800	200	.....	12	580,000 00	1,800,000 00
671	Machinery.....	wk....	140	.....	.....	.....	12	68,500 00	200,000 00
674	Steam Boilers.....	wk....	40	.....	.....	.....	12	22,000 00	66,000 00
688	Boilers, Engines, &c.....	2 wks	195	151	44	24	12	115,000 00	375,000 00
691	Machinery and Foundry.....	wk....	60	50	10	4	12	28,600 00	75,000 00
692	Presses, Dies, &c.....	wk....	45	40	5	7	12	23,000 00	36,000 00
705	Machinery.....	wk....	8	6	2	.....	12	6,000 00	36,000 00
714	Agricultural Implements....	wk....	27	25	2	7	12	12,500 00	65,000 00
715	Agricultural Implements....	wk....	10	9	1	.....	12	5,250 00	10,000 00
728	Machinery.....	wk....	28	28	.....	.....	12	10,500 00	30,000 00
730	Machinery.....	wk....	65	44	21	15	12	21,793 46	96,929 00
766	Mach'ry, Gas Works, Found'y	wk....	75	.....	.....	.....	12	40,000 00	100,000 00
803	Machinery.....	wk....	31	16	15	.....	12	12,000 00	31,000 00
805	General Machinery.....	2 wks	35	12	23	.....	12	24,000 00	40,000 00

TABLE No. 10.—BLANK No. 2—Continued.

STEAM ENGINES AND OTHER MACHINERY—Continued.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employees.	Native Born.	Foreign Born.	Owms Real Estate.	Months at Work.	Total Paid for Labor.	Total Value of Products.
822	Machinery.....	wk.....	60	30	30	.....	12	\$34,000 00	\$250,000 00
834	Machinery.....	wk.....	20	2	18	.....	12	15,000 00	37,500 00
835	Refining Machinery..	wk.....	24	24	.....	.....	12	20,000 00	100,000 00
620	Hatters' Machinery.....	wk.....	11	8	3	4	12	6,433 00	10,700 00
862	Steamfitters' Tools.....	wk.....	7	5	2	.....	12	3,600 00	6,000 00
875	Knitting and other Machin'y	2 wks	22	17	5	.....	12	13,000 00	22,500 00
879	Machinery.....	wk.....	39	24	15	.....	12	15,000 00	50,000 00
891	Machinery.....	wk.....	40	35	5	.....	11	23,500 00	80,000 00
911	Machinery and Casting.....	wk.....	35	18	17	10	12	20,000 00	50,000 00
912	Machinery.....	wk.....	2,300	1,200	1,100	.....	12	1,088,593 00	12,185,703 00
	Total.....		7,852	3,610	3,095	158	.....	\$3,844,438 44	\$19,750,311 13

TABLE No. 11.—BLANK No. 2.

## STEAM ENGINES AND OTHER MACHINERY.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' Average Daily Wages.	Movement of Wages.
61	General Machinery.....	80			80	\$1 70			Advanced 30 per cent.
66	General Machinery.....	6		4	10	1 60		\$0 50	Advanced 20 per cent.
88	Steam Engines and Boilers...	75			75	2 30			Advanced 25 per cent.
95	Engines, Flax, Jute Mach'ry.	90			90	1 61			Advanced 15 per cent.
116	Gen'l Mach'ry and Foundry.	25		5	30	2 50		1 00	Advanced, \$1.75 to \$3.75.
131	Machinery.....	3		1	4	1 60		50	Advanced 10 per cent.
139	General Machinery.....	35			35	1 75			Advanced 25 per cent.
146	Locomotives and Machinery	650			650	1 75			Advanced 10 per cent.
155	Engines and other Mach'ry..	425		50	475	1 88		88	Advanced 20 per cent.
157	Engines.....	950			950	1 95			Advanced 20 per cent.
160	Weavers' Supplies.....	25	40	6	71	2 50	\$1 25	85	No Advance.
175	Machinery.....	41		4	45	2 00		50	Advanced 15 per cent.
181	General Machinery.....	18		3	21	2 00		65	Advanced 15 per cent.
184	Weavers' Supplies.....	16	75	8	99	2 00	75	75	Advanced 10 per cent.
192	General Machinery.....	50		2	52	1 75		60	No Advance.
210	General Machinery.....	20		8	28	1 50		75	Advanced 20 per cent.
529	Machinery.....	4			4	2 50			No Advance.
556	Machinery.....	4		1	5	2 00		65	No Advance.
564	General Machinery.....	15		2	17	2 25		85	No Advance.
565	Engines, Boilers, Machinery.	150		20	170	2 15		83	Advanced 10 per cent.
591	Foundry and Machine Shop.	35		7	42	1 85		75	Advanced 12½ per cent.
600	General Machinery.....	20		5	25	2 50		67	Advanced 10 per cent.
603	General Machinery.....	30		3	33	2 75		85	No Advance.
605	General Machinery.....	70			70	2 40			No Advance.
607	General Machinery.....	23		2	25	2 75		50	Advanced 25 per cent.
625	Machinery and Tools.....	4		1	5	1 65		50	No Advance.
626	Bolts and General Mach'ry...	50			50	1 75			Advanced 25 per cent.
60	Silk Mach'ry, Gen'l Supplies.	12		18	30	1 75		65	Advanced 10 per cent.
144	Silk Machinery.....	20		5	25	1 75		50	Advanced 10 per cent.
237	Steam Boilers, Tanks, &c.....	60			60	2 00			Advanced 40 per cent.
275	General Machinery.....	37		8	45	2 25		75	Advanced 15 per cent.
301	Steam Boilers, Turn-tables, &c	51		10	61	2 15		1 00	Advanced 20 per cent.
304	General Machinery.....	11		4	15	2 00		75	No Advance.
309	Patented Machinery.....	10			10	2 50			Advanced 20 per cent.
311	General Machinery.....	3		1	4	1 50		60	No Advance.
315	General Machinery.....	8			8	2 00			Advanced 10 per cent.
346	General Machinery.....	4			4	1 75			Advanced 10 per cent.
357	General Machinery.....	13		2	15	2 25		80	Advanced 25 per cent.
366	General Machinery.....	2			2	2 50			No Advance.
380	Foot Lathes, Light Mach'ry..	14		3	17	2 25			Advanced 10 per cent.
387	General Machinery.....	15		5	20	2 75		1 00	No Advance.
468	General Machinery.....	4		1	5	2 75		85	Advanced 10 per cent.
503	Emery Wheels.....	15		3	18	1 35		50	No Advance.
611	Wood Working Machinery...	9		1	10	2 50	2 00	50	Advanced 20 per cent.
632	Cotton and Wool Machinery..	25			25	2 00			No Advance.
636	Machines.....	1000			1000	1 90			Advanced 20 per cent.
671	Machinery.....	140			140	2 50			Advanced 20 per cent.
674	Steam Boilers.....	30		10	40	2 00		1 25	Advanced 12 per cent.
688	Boilers, Engines, &c.....	182		13	195	1 87		85	Advanced 17 per cent.
691	Machinery and Foundry.....	52		8	60	1 75		1 00	No Advance.
692	Presses, Dies, &c.....	30		15	45	2 00		80	No Advance.
705	Machinery.....	7		1	8	2 00		75	Advanced 12½ per cent.
714	Agricultural Implements.....	25		2	27	1 80		1 25	No Advance.
715	Agricultural Implements.....	10			10	1 75			No Advance.
728	Machinery.....	26		2	28	2 00		60	No Advance.
730	Machinery.....	62		3	65	1 85		75	Advanced 10 per cent.
766	Mach'ry, Gas Works, Found'y	75			75	2 08			No Advance.
803	Machinery.....	31			31	2 25			Advanced 10 per cent.
805	General Machinery.....	35			35	2 50			Advanced 10 per cent.

TABLE No. 11.—BLANK No. 2—Continued.

STEAM ENGINES AND OTHER MACHINERY—Continued.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' Average Daily Wages.	Movement of Wages.
822	Machinery .....	60	.....	.....	60	\$1 85	.....	.....	Advanced 20 per cent.
834	Machinery .....	20	.....	.....	20	2 50	.....	.....	No Advance.
835	Refining Machinery.....	20	.....	4	24	2 50	.....	\$1 75	No Advance.
620	Hatters' Machinery.....	11	.....	.....	11	2 75	.....	.....	Advanced 25 per cent.
862	Steam Fitters' Tools.....	6	.....	1	7	2 00	.....	.....	No Advance.
875	Knitting & other Machinery.	22	.....	.....	22	2 50	.....	.....	Advanced 25 per cent.
879	Machinery .....	35	.....	4	39	2 75	.....	.....	Advanced 10 per cent.
891	Machinery .....	40	.....	.....	40	1 85	.....	.....	No Advance.
911	Machinery and Castings.....	35	.....	.....	35	2 75	.....	.....	Advanced 10 per cent.
912	Machinery .....	2175	125	.....	2300	2 12	.....	.....	No Advance.
	Total.....	7356	240	256	7852	\$144 76	\$2 00	\$29 48	

These tabulations show that the 69 establishments therein represented, employ 7356 men, 240 women, and 256 boys, making an aggregate of 7852, whose wages for the year foot up \$3,844,438.44, resulting in production of \$19,750,311.13 of commercial value.

Notwithstanding the depression which has for some time prevailed in the mines, furnaces, and other more primary developments of the general iron interest, it is gratifying to remark that almost every one of our reports in this line, state that they have run steadily twelve months in the year.

Adding the average daily wages reported we have a factor of 144.26, which divided by the number of reports (144.26 ÷ 69) gives net average of \$2.12 per day for men. The wages to 240 women are shown by the same process to be 80 cents and boys 78 cents.

Fifty-nine reports of the nativities of 6705 employees show that 3610, or 54 per cent., to have been born in this country, and 3095, or 46 per cent., elsewhere.

Twenty-seven establishments, employing 1247 operators, report that 158, or 12½ per cent., own real estate—presumably in most cases their homes.

In answer to the query, "Have your employees any share in the profits of your business other than their wages?" the great majority respond negatively.

Office No. 766, says—"We pay bonus over wages for contracts with our men."

Negative responses or no responses at all, form the rule as to the query, "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*" but the following are noted as exceptions:

Office No. 301, says—"Profits, like losses, belong to men who take the risks; if employees will share in losses, and can pay such, they should have claim to profits."

The same No., in reference to question, "*How many of your employees own real estate?*" says—"Twelve own their homes. With two exceptions, the dividing line between property and non-property owners, divides the men into temperance and intemperance. By temperance we mean men who never get drunk, not teetotalers."

Office No. 565, remarks—"We think it is. We frequently make contracts with our foreman, and with our men for work on certain machinery for a specified sum, and they can work either fast or slow as they see fit, and make more or less accordingly."

No. 688, reports—"The nature of our business precludes the possibility of inaugurating such a system."

No. 692, says—"We do not know of any system better than fair wages by the hour, or to pay by piece work system, according to the amount of work done. Have never tried the co-operative plan, but do not think it very practicable."

No. 862, remarks—"Those who have brains enough to appreciate any such arrangement soon work to the top and become foremen, or start for themselves. The rest are not worth bothering about."

TABLE No. 12.—BLANK No. 2.

Statistics of Silk Manufactures in New Jersey for the year ending July 1st, 1879.

ARTICLES MANUFACTURED.—Gum Silks, Tram, Organzine, Fringe Silks, Floss Silks, Sewing Silks, Machine Twist, Dyeing, Weaving, Ribbons, Dress and Fancy Silks, Veils and Veiling, Ladies' Dress Trimmings, Braids and Bindings and Upholstery Trimmings, &c.

SILK MANUFACTURES.

Office Number.	NUMBER OF OPERATIVES EMPLOYED.				Total.	Pounds of Silk Used.	Wages Paid.	Value of Production.
	Males.		Females.					
	Men.	Boys.	Women.	Girls.				
63	8		4		12		\$10,400	
64	10	40		75	125		30,000	\$350,000
67	18	3	32		53	4,800	3,000	20,000
68		20		40	60	14,000	15,600	28,000
69	16	20	102		138	40,000	45,000	300,000
70	17	5	16	4	42	3,000	9,600	45,000
71	10	1	1	2	14	400	2,100	9,500
72	1	30		70	101	3,200	25,400	182,000
73	1	5			6		2,500	21,000
98	3			8	11		2,250	5,000
107	8			15	23	2,400	7,500	30,000
128	40	35	125		200	101,430	68,500	647,207
137	18	1	5		24	2,000	7,000	16,000
138	20	10			30		17,500	
140		1	22		23	20,000	8,000	250,000
143	25		25		50		12,500	48,000
148	1			9	10		2,950	12,000
149	100				100	14,400	47,000	150,000
151	11				11		6,250	
152	200	130	140	350	820	90,000	420,000	1,120,000
153	25	25	50		100	7,800	36,400	100,000
154	45	3	13	2	63	1,750	10,800	30,000
156	27	6		20	53	4,000	31,500	62,000
159	4	3	20		27		4,900	
162	4	1	1		6		1,600	4,500
163	5	1	2		8		1,350	3,000
164	30	20	65	25	140	45,000	40,000	200,000
165	25	1	13		39	6,000	18,750	68,000
166	215	75	148	105	543	46,800	180,000	750,000
167	400	200	400	200	1,200	101,000	198,000	1,250,000
168	28				28		22,500	
174	100	50	50	50	250	12,500	102,000	240,000
177	2	4	31		37	3,000	8,400	50,000
178	15	15	30	15	75	4,380	19,500	40,000
179	10	2			12		3,750	11,000
183	11	5			16		8,000	20,000
185	18	1	4		23	2,750	17,500	60,000
186	28	2	7		37	7,200	20,000	120,000
188	5	30	7	50	92	30,000	22,000	160,000
189	40	5	20		65	2,600	20,000	60,000
190	100	13	75	12	200	12,000	70,000	300,000
193	8	40	20	80	148	35,000	26,000	200,000
195	32	6	24	3	65	5,200	20,000	100,000
203	16	7		68	91	7,067	34,000	180,000
204	155	24	40	19	238	23,285	97,590	334,057
224	5	17	55	25	102	11,787	22,286	150,000
230	56		4		60		23,935	
238	25	25	150		200	35,000	62,000	150,000
245	16		4		20	1,700	13,660	50,000
246	3		12		15		4,900	7,500
247	63	2			65		45,000	

TABLE No. 12.—BLANK No. 2—Continued.

## SILK MANUFACTURES—Continued.

Office Number.	NUMBER OF OPERATIVES EMPLOYED.				Total.	Pounds of Silk Used.	Wages Paid.	Value of Production.
	Males.		Females.					
	Men.	Boys.	Women.	Girls.				
249	49	5	54	108	10,938	\$35,000	\$150,000	
253	1	2	4	11	1,500	1,500	.....	
255	15	4	15	39	.....	12,000	.....	
263	3	7	19	29	6,000	8,250	51,000	
264	35	.....	45	80	7,800	24,400	50,000	
267	40	4	20	64	7,800	35,000	120,000	
330	6	.....	.....	6	.....	2,400	.....	
331	250	150	150	900	90,000	298.100	1,275,000	
334	343	60	323	771	60,000	230,000	750,000	
335	54	4	25	89	10,000	19,600	94,250	
336	16	.....	6	22	2,000	8,235	26,950	
337	203	39	190	507	43,000	198,380	497,000	
338	13	1	4	18	400	4,500	11,965	
339	6	3	30	43	3,500	10,800	26,000	
340	98	10	150	308	55,500	101,440	450,000	
390	2	.....	.....	7	.....	2,500	10,000	
409	270	5	12	287	.....	113,000	.....	
509	23	2	13	40	1,000	7,000	17,000	
510	9	1	2	13	350	1,800	6,300	
511	5	1	.....	6	200	800	3,200	
512	7	.....	8	15	1,500	1,515	3,505	
513	6	2	3	12	580	3,140	11,150	
514	2	1	3	13	530	1,200	5,000	
515	7	.....	2	9	.....	1,650	3,570	
516	3	1	5	9	.....	1,590	.....	
517	7	.....	2	9	300	1,000	3,500	
518	19	1	4	24	800	3,000	9,100	
519	60	40	150	300	25,000	90,000	275,000	
520	60	15	65	140	25,000	58,000	293,515	
633	23	1	3	27	3,200	6,840	28,000	
646	85	4	51	146	9,700	74,203	269,850	
647	30	15	40	100	16,000	16,400	100,000	
648	6	2	1	9	1,560	2,600	12,500	
649	4	.....	1	5	64	900	1,080	
650	5	.....	.....	5	180	1,200	2,300	
651	18	1	3	23	3,300	10,000	75,000	
656	1	.....	8	9	.....	1,500	1,700	
672	45	2	15	67	5,600	30,000	86,325	
677	30	2	6	40	13,000	12,500	50,000	
678	5	1	2	8	200	950	3,800	
681	24	.....	16	40	1,600	17,000	38,000	
682	143	46	177	415	35,000	140,000	360,000	
768	65	12	20	97	2,857	4,000	25,000	
769	75	10	100	185	30,000	50,000	250,000	
770	40	12	20	76	3,000	29,728	56,000	
771	8	2	5	15	2,000	5,000	23,000	
772	45	5	15	67	5,600	30,000	86,325	
773	51	4	33	93	6,282	27,713	87,916	
774	23	3	5	35	4,000	21,000	60,000	
775	212	.....	225	462	35,500	112,000	497,000	
820	3	1	1	5	120	1,200	2,250	
823	.....	3	32	38	.....	10,050	.....	
828	1	.....	15	16	3,000	7,800	65,000	
833	200	70	200	720	100,000	260,000	1,050,000	
900	75	50	50	225	83,978	90,580	500,609	
	4,852	1,488	4,065	2,275	12,680	1,422,653	\$4,168,335	\$15,808,424

TABLE No. 13.—BLANK No. 2.

NUMBERS EMPLOYED, WAGES, NATIVITIES, AND OWNERS OF REAL ESTATE.

SILK INDUSTRIES.

Office Number.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Total Number Employed.	Native Born.	Foreign Born.	Periods of Payment.	Period of Running Factory.	Movement of Wages.
63	\$2 00	\$1 00	.....	12	2	10	2 weeks...	9 months...	Advanced 25 per cent.
64	1 75	.....	.....	125	.....	.....	2 weeks...	50 weeks.	Advanced 30 per cent.
67	2 50	1 25	.....	53	36	17	2 weeks...	5 months...	No Response.
68	.....	.....	90	60	.....	.....	2 weeks...	12 months...	Advanced 18 per cent.
69	1 85	90	75	138	69	69	2 weeks...	12 months...	Advanced 20 per cent.
70	1 25	90	50	42	24	18	2 weeks...	12 months...	Advanced 20 per cent.
71	2 00	.....	40	14	3	11	2 weeks...	8 months...	Advanced 15 per cent.
72	2 50	.....	1 00	101	101	.....	2 weeks...	12 months...	Advanced 15 per cent.
73	2 25	.....	90	6	.....	.....	2 weeks...	12 months...	Advanced 15 per cent.
74	2 00	.....	65	11	11	.....	Weekly ...	300 days.....	No Advance.
107	1 50	1 00	.....	23	.....	.....	Weekly ...	12 months...	No Response.
128	1 40	1 00	60	200	175	25	2 weeks...	12 months...	Advanced 10 per cent.
137	2 00	1 15	50	24	4	20	2 weeks...	12 months...	No Advance.
138	1 50	.....	1 00	30	15	15	2 weeks...	12 months...	No Advance.
140	.....	1 20	50	23	20	3	2 weeks...	12 months...	Advanced 8 per cent.
143	2 25	1 60	.....	50	25	25	2 weeks...	12 months...	No Advance.
148	1 85	.....	85	10	5	5	2 weeks...	12 months...	Advanced 10 per cent.
149	1 50	.....	.....	100	10	90	2 weeks...	12 months...	Advanced 10 per cent.
151	2 00	.....	.....	11	8	3	2 weeks...	12 months...	Advanced 10 per cent.
152	3 50	1 90	1 00	820	410	410	2 weeks...	12 months...	.....
153	2 00	1 25	60	100	33	67	2 weeks...	12 months...	Advanced 5 per cent.
154	2 00	1 00	50	63	16	47	2 weeks...	4 months...	Advanced 10 per cent.
156	2 75	.....	1 10	53	10	43	2 weeks...	12 months...	Advanced 20 per cent.
159	1 25	1 00	75	27	27	.....	2 weeks...	6 months...	Advanced 25 per cent.
162	2 00	1 00	50	6	.....	6	2 weeks...	6 months...	No Advance.
163	2 00	1 00	45	8	1	7	2 weeks...	4 months...	No Response.
164	1 20	93	65	140	.....	.....	2 weeks...	12 months...	Advanced 12½ per cent.
165	1 65	1 35	75	39	.....	.....	2 weeks...	12 months...	Advanced 25 per cent.
166	2 00	1 70	85	543	.....	.....	2 weeks...	12 months...	Advanced 10 per cent.
167	2 60	1 50	90	1200	.....	.....	2 weeks...	12 months...	Advanced 10 per cent.
168	2 50	.....	.....	28	4	24	2 weeks...	12 months...	No Advance.
174	2 00	1 00	75	250	.....	.....	2 weeks...	12 months...	Advanced 25 per cent.
177	1 85	1 20	80	37	36	1	2 weeks...	12 months...	Advanced 15 per cent.
178	2 00	1 60	80	75	65	10	2 weeks...	12 months...	Advanced 10 per cent.
179	1 05	.....	50	12	3	9	2 weeks...	12 months...	Advanced 5 per cent.
183	2 00	.....	50	16	4	12	2 weeks...	12 months...	Advanced 10 per cent.
185	1 90	1 00	50	23	.....	.....	2 weeks...	12 months...	Advanced 10 per cent.
186	2 25	1 25	50	37	10	27	2 weeks...	12 months...	Advanced 16 per cent.
188	1 30	90	60	92	.....	.....	2 weeks...	12 months...	Not much, if any.
189	2 00	1 15	60	65	16	49	2 weeks...	12 months...	Advanced 10 per cent.
190	2 00	1 15	60	200	10	190	2 weeks...	12 months...	Advanced 10 per cent.
193	2 25	70	62	148	.....	.....	2 weeks...	12 months...	Advanced 10 per cent.
195	2 00	1 25	50	65	.....	.....	2 weeks...	12 months...	Advanced 5 per cent.
203	2 00	.....	1 00	91	.....	.....	2 weeks...	12 months...	No Advance.
204	2 50	.....	15	238	.....	.....	2 weeks...	288 days.....	Advanced 15 per cent.
224	1 25	85	75	102	34	68	2 weeks...	300 days.....	Advanced 10 per cent.
230	1 83	1 50	.....	60	30	30	2 weeks...	308 days.....	Advanced a little.
238	1 50	1 00	80	200	.....	.....	2 weeks...	12 months...	Advanced 20 per cent.
245	2 00	1 30	.....	20	4	16	Weekly ...	12 months...	No Advance.
246	1 25	1 00	.....	15	10	3	2 weeks...	300 days.....	Advanced 5 per cent.
247	1 60	.....	50	65	48	17	2 weeks...	300 days.....	No Advance.
249	2 40	1 67	62	108	54	54	2 weeks...	12 months...	No Advance.
253	1 25	95	85	11	10	1	2 weeks...	6½ months...	No Advance.
255	1 10	95	95	39	30	9	2 weeks...	300 days.....	No Advance.
263	1 30	1 00	60	29	26	3	2 weeks...	300 days.....	Advanced 10 per cent.
264	1 80	1 50	.....	80	10	70	2 weeks...	313 days.....	Advanced 18 per cent.

TABLE No 13.—BLANK No. 2—Continued.

## SILK INDUSTRIES.—Continued.

Office Number.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Total Number Employed.	Native Born.	Foreign Born.	Periods of Payment.	Period of Running Factory.	Movement of Wages.
267	\$2 00	\$1 20	\$0 50	64	44	20	2 weeks...	12 months...	No Advance.
330	1 60			6		6	2 weeks...	250 days.....	No Advance.
331	2 00	1 25	67	900	450	450	2 weeks...	300 days.....	Advanced 10 per cent.
334	1 25	1 00	65	771	617	154	2 weeks...	12 months...	Advanced 10 per cent.
335	1 20	85	50	89	59	30	2 weeks...	11 months...	No Advance.
336	1 35	95		22	14	8	2 weeks...	12 months...	No Advance.
337	1 75	1 00	65	507	338	169	2 weeks...	12 months...	Advanced 10 per cent.
338	1 00	75	50	18	12	6	2 weeks...	12 months...	Advanced 8 per cent.
339	1 20	85	45	43	4	39	2 weeks...	11½ months...	No Advance.
340	1 90	1 00	66	308			weekly ...	12 months...	Advanced 10 per cent.
390	2 50		70	9	8	1	weekly ...	12 months ...	No Advance.
409	1 50	1 00	60	287	96	191	2 weeks...	12 months...	Advanced 10 per cent.
509	1 95	1 08	67	40			2 weeks...	3 months...	Advanced 10 per cent.
510	1 20	85	60	13	5	8	2 weeks...	6 months...	No Change.
511	1 65		75	6	3	3	2 weeks...	3 months...	No Change.
512	1 50	1 00		15	5	10	2 weeks...	4 months...	No Change.
513	1 50	1 00	60	12	7	5	2 weeks...	11 months...	Advanced 10 per cent.
514	83	66	50	13			2 weeks...	6 months...	Response omitted.
515	1 40	1 00		9	4	5	2 weeks...	6½ months...	Advanced 15 per cent.
516	1 25	85	50	9	6	3	2 weeks...	7 months ...	No Change.
517	1 30	85		9	3	6	2 weeks...	4 months...	No Change.
518	2 00	1 20	50	24	10	14	2 weeks...	3 months...	No Change.
519	1 25	1 00	67	300	190	110	2 weeks...	12 months...	Advanced 20 per cent.
520	1 67	1 00	75	140	40	100	2 weeks...	12 months...	Advanced 5 per cent.
633	2 50	1 00	60	27	14	13	2 weeks...	9 months...	Advanced 10 per cent.
646	2 40	1 43	67	146	80	66	2 weeks...	12 months...	Advanced various.
647	2 00	85	50	100	55	45	2 weeks...	12 months...	Advanced 10 per cent.
648	1 30	1 15	50	9	4	5	2 weeks...	12 months...	No Advance.
649	1 85	50		5	2	3	2 weeks...	5 months...	No Advance.
650	2 00			5	1	4	2 weeks...	9 months...	No Advance.
651	1 85	1 10	40	23	8	15	2 weeks...	8 months...	Advanced 15 per cent.
656	1 50	1 00		9	8	1	weekly ...	6 months...	No Advance.
672	2 00	85	60	67	33	34	2 weeks...	12 months...	Advanced 10 per cent.
677	1 50	85	60	40	20	20	2 weeks...	9 months...	Advanced 10 per cent.
678	1 50	1 08	45	8	4	4	2 weeks...	9 months...	Advanced 10 per cent.
681	2 40	1 00		40	20	20	2 weeks...	12 months...	Advanced 10 per cent.
682	1 50	1 00	60	415	265	150	2 weeks...	12 months...	Advanced 10 per cent.
768	1 00	75	50	97	49	48	2 weeks...	2 months...	No Advance.
769	2 00	1 10	50	185	123	62	2 weeks...	12 months...	No Advance.
770	2 00	1 50	55	76	36	40	2 weeks...	11 months...	Advanced 10 per cent.
771	2 00	66	42	15	7	8	weekly ...	10 month2...	Advanced 10 per cent.
772	2 00	85	60	67	17	50	weekly ...	12 months...	Advanced 10 per cent.
773	1 25	80	50	93	62	31	weekly ...	12 months...	Advanced 5 per cent.
774	1 85	1 00	70	35	25	10	2 weeks...	12 months...	No Advance.
775	1 35	85	40	462	312	150	2 weeks...	12 months...	No Advance.
820	2 00	1 00	40	5	4	1	weekly ...	6 months...	No Advance.
823		1 25	50	38	38		2 weeks...	12 months...	No Advance.
828	2 50	92		16			weekly ...	11 months...	No Advance.
833	2 00	1 50	75	720	470	250	2 weeks...	12 months...	No Advance.
900	1 75	1 00	50	225	200	25	2 weeks...	12 months...	Advanced 15 per cent.
	\$184 68	\$90 88	\$53 60	12,680	5197	3377			

We have a pleasing presentation of the silk industries of our State. It contrasts most favorably with the exhibit last year.

The tables conclusively prove that New Jersey shares more largely in the total silk product of the United States than any other State; hence, it behooves not only citizens, but our State authorities, in every appropriate and effective way, to promote and endeavor to perpetuate this invaluable expanding industry.

The following table contrasts the result of the last two years :

Tables Nos. 12 and 13.	1879.	1880.	Increase.	Decrease.	Per Cent.
Reports filed.....	66	106	40	.....	60
Men employed.....	3600	4852	1252	.....	35
Women employed.....	3176	4065	889	.....	28
Boys employed.....	1300	1488	188	.....	14
Girls employed.....	2348	2275	.....	73	3
Total.....	10,424	12,680	2256	73	21½
Wages paid.....	\$3,625,166	\$4,168,335	\$543,169	.....	15
Value of product.....	13,700,846	15,808,424	2,107,578	.....	15½

In respect to wages, we find the average for men to be \$1.79, the lowest being 83 cents, and the highest \$2.50 per day. For women, \$1.07, varying from 50 cents to \$1.90 per day. For boys and girls, 63 cents, varying from 40 cents to \$1.10 per day.

Eighty-seven mills report nationalities of their employees, but as some of the very largest mills give no information, the percentage of employees reported is not as large as the number of employers reporting. The nativities of 9074 are given, of which 5197, or 57 per cent., were born in this country, and 3877, or 43 per cent., were born abroad. Last year the nativities were shown to be about equal in numbers, but this year those of native birth, as shown above, largely preponderate.

Abstracts from custom house records of New York city and San Francisco, for the last few years, show imports at these two points, thus :

TABLE OF IMPORTS.

Year.	Bales.	Value.	Aver. Price Per Bale.	Increase in Bales Compared with preceding Year.	Decrease in Bales Compared with preceding Year.
1874.....	7,452	\$3,627,367 00	\$487 03	.....	.....
1875.....	10,552	5,327,742 00	504 90	40 per cent.	.....
1876.....	11,237	5,600,877 00	498 33	6½ per cent.	.....
1877.....	9,913	5,591,084 00	564 02	.....	11¼ per cent.
1878.....	13,734	6,807,725 00	423 60	38½ per cent.	.....
1879.....	18,936	9,921,032 00	523 92	38 per cent.	.....
1880.....	20,899	11,478,763 00	549 25	10½ per cent.	.....

The average weight of Asiatic bales is 107 lbs., that of European bales is 132 lbs. If equal numbers of each were imported they would give an average of 119½ lbs. per bale, making the aggregate importations of 1879, 2,262,582 lbs. The foregoing tables show that New Jersey used 1,422,653 lbs., leaving for the other States, 839,929 lbs. That is to say, New Jersey consumed over 60 per cent., and the other States less than 40 per cent.

Mr. William C. Wyckoff, Secretary and Statistician of the Silk Association of America, has kindly furnished us with proof sheets in advance of publication, showing aggregate production for the year ending December 31st, 1879, as follows:

Machine Twist.....	\$5,891,300
Sewing Silk.....	778,250
Floss Silk.....	166,935
Dress Goods.....	3,896,525
Satins.....	1,100,175
Tie Silks and Scarfs.....	547,675
Millinery Silks.....	977,495
Broad Goods not above enumerated.....	538,655
Handkerchiefs.....	3,583,125
Ribbons.....	5,535,205
Laces.....	406,300
Braids and Bindings.....	828,255
Fringes, Dress and Cloak Trimmings.....	3,590,860
Cords, Tassels, Passementerie and Millinery Trimmings.....	930,540
Upholstery and Military Trimmings.....	947,405
Coach Laces and Carriage Trimmings.....	23,470
Fur, Hatters' and Undertakers' Trimmings.....	62,810
Embroideries.....	54,900
Silk Value in Upholstery and Mixed Goods.....	123,750
Total.....	\$29,983,630

## RECAPITULATION.

Sewings, Twist and Floss Silk.....	\$6,836,485
Broad Goods.....	7,060,525
Handkerchiefs, Ribbons and Laces.....	9,524,630
Trimmings and Small Goods.....	6,438,240
Silk Value in Mixtures.....	123,750
Total.....	<u>\$29,983,630</u>

The figures above given are those of values at centres of commercial distribution.

TABLE No. 14.—BLANK No. 2.

## TEXTILES OTHER THAN SILK.

Office Number.	Variety of Product.	Periods of Payment.	Total Number Employees.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Product.	Per cent. of Advance in Wages.
79	Woolen Goods.....	mon..	600	300	300	12	\$104,000 00	\$507,000 00	10.
83	Turkish Towels.....	wk.....	30	10	20	12	8,500 00	31,500 00	.....
91	Turkish Towels.....	wk.....	15	7	8	9	4,000 00	16,000 00	None.
106	Printing Calicoes.....	2 wks	92	92	.....	12	40,400 00	110,032 00	5.
129	Thread, &c.....	2 wks	900	.....	.....	12	260,000 00	1,000,000 00	15.
161	Jute Bagging.....	2 wks	125	115	10	12	20,000 00	300,000 00	15.
180	Cotton Goods.....	2 wks	55	28	27	12	17,250 00	60,000 00	16.
208	Woolen Goods.....	2 wks	12	10	2	12	4,800 00	50,000 00	None.
228	Hammocks.....	wk.....	24	23	1	12	11,500 00	40,000 00	None.
258	Woolen Goods.....	mon..	260	40	220	12	48,000 00	300,000 00	15.
261	Cotton Dyeing & Printing	mon..	500	250	250	10½	210,000 00	val's elsew're	5.
259	Flocks and Shoddy.....	mon..	30	17	13	12	9,000 00	95,000 00	None.
282	Cotton Goods.....	2 wks	220	110	110	9	77,802 00	1,100,000 00	None.
260	Woolen Goods.....	mon..	140	93	47	10	30,000 00	125,000 00	None.
333	Batts and Yarn.....	wk.....	8	6	2	12	1,500 00	12,000 00	None.
411	Mosquito Nett'g & Sheet'g	2 wks	75	.....	7	.....	18,000 00	40,000 00	.....
520	Warps, Wicks and Yarns.	mon..	60	25	35	12	12,000 00	60,000 00	5.
521	Jute Goods.....	2 wks	520	.....	.....	12	160,000 00	375,000 00	5.
546	Knitt'g Yarns, Flan'ls, &c	2 wks	6	6	.....	.....	2,500 00	6,000 00	None.
557	Spool Thread.....	wk.....	22	7	15	3	1,500 00	2,500 00	None.
579	Rope and Twine.....	wk.....	6	3	3	12	2,500 00	12,000 00	20.
664	Rag Carpet.....	wk.....	2	2	.....	12	1,150 00	4,000 00	15.
670	Thread.....	wk.....	1,300	1,000	300	12	400,000 00	1,500,000 00	.....
687	Woolen and Cotton Yarn	mon..	19	12	7	12	4,800 00	30,000 00	None.
695	Cotton Goods.....	mon..	44	42	2	12	12,000 00	70,000 00	None.
699	Cotton Warp Cassimeres.	2 wks	95	92	3	12	30,000 00	.....	None.
701	Quilts, Table Cloths, &c...	2 wks	25	17	8	11	7,000 00	30,000 00	None.
752	Woolen Hosiery.....	mon..	180	179	1	12	44,000 00	125,000 00	None.
755	Woolen Goods.....	mon..	125	119	6	12	38,000 00	200,000 00	12½.
757	Woolen Goods.....	mon..	350	233	117	12	96,000 00	600,000 00	10.
758	Woolen Goods.....	wk.....	64	54	10	12	23,500 00	192,000 00	17.
776	Fancy Cassimeres.....	mon..	118	59	59	12	50,000 00	280,000 00	5.
782	Netting, Buckrams, &c...	2 wks	600	400	200	12	170,000 00	500,000 00	12½.
786	Flooring and Oil Cloth...	2 wks	392	.....	.....	12	110,367 69	501,762 90	10.
825	Blankets, &c.....	mon..	6	6	.....	12	1,500 00	10,000 00	10 to 20.
829	Woolen Goods.....	wk.....	24	22	2	12	11,500 00	35,000 00	None.
867	Woolen Cloth.....	mon..	601	420	181	12	184,407 00	1,164,361 00	10.
868	Blankets.....	mon..	36	.....	.....	.....	15,000 00	50,000 00	None.
905	Woolen Goods.....	mon..	311	191	120	12	120,000 00	600,000 00	10.
921	Knitted Underwear.....	mon..	601	529	72	12	165,400 00	600,000 00	Adv.
	Total.....		8,593	4,519	2,151	.....	\$2,527,876 69	\$10,734,155 90	

TABLE No. 15.—BLANK No. 2.

TEXTILES OTHER THAN SILK.

Office Number.	Variety of Product.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Number of Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys and Girls' Average Daily Wages.	Owens Real Estate.
79	Woolen Goods.....	400		100	100	600	\$1 75	\$1 00	\$ 80	25
83	Turkish Towels.....	10	8		12	30	1 50	1 50	55	3
91	Turkish Towels.....	5	4		6	15	1 50	1 40	55	
106	Printing Calicoes.....	60	8	24		92	2 00	85		6
129	Thread, &c.....	150	*750			900	2 29	1 08	55	
161	Jute Bagging.....	25	40	30	30	125	1 75	90	60	5
180	Cotton Goods.....	7	16	16	16	55	1 25	90	90	
208	Woolen Goods.....	4		8		12	2 25		80	
223	Hammocks.....	20	3	1		24	1 75	1 15	60	2
258	Woolen Goods.....	175	63	12	10	260	1 17	75	57	
261	Cotton Dyeing and Printing.....	375	100	25		500	1 65	1 00	75	40
259	Flocks and Shoddy.....	15	15			30	1 25	60		
282	Cotton Goods.....	152	18	38	12	220	2 12	85	50	
260	Woolen Goods.....	80	15	25	20	140	1 25	1 00	50	3
333	Batts and Yarn.....	2	2	2	2	8	1 00	58	50	
411	Mosquito Netting and Sheetings.....	75				75	1 25			
520	Warps, Wicks and Yarns.....	10		15	35	60	2 00	1 00	75	
521	Jute Goods.....	198	232	30	60	520	1 30	1 00	40	12
546	Knitting Yarns, Flannels, &c.....	6				6	1 00			4
557	Spool Thread.....	3	18	1		22	1 50	80	50	
579	Rope and Twine.....	3		3		6	1 60			
664	Rag Carpet.....	2				2	1 70			
670	Thread.....	325	975			1,300	1 25	80		
687	Woolen and Cotton Yarn.....	7		7	5	19	1 75		60	2
695	Cotton Goods.....	10		2	32	44	2 30		50	1
699	Cotton Warp Cassimeres.....	42	47	6		95	1 00	50		6
701	Quilts, Table Cloths, &c.....	11	2	5	7	25	1 50	75	50	
752	Woolen Hosiery.....	10	60		110	180	2 00	1 00	60	1
755	Woolen Goods.....	40	65	20		125	2 25	1 75	85	
757	Woolen Goods.....	140	150	60		350	1 50	1 30	65	50
758	Woolen Goods.....	13	32	19		64	1 85	1 15	60	
776	Fancy Cassimeres.....	72	3	19	24	118	1 35	85	60	
782	Netting, Buckrams, &c.....	200	200	100	100	600	1 50	1 25	70	30
786	Flooring and Oil Cloth.....	128	225	17	22	392				
825	Blankets, &c.....	4		2		6	1 25			
829	Woolen Goods.....	20		4		24	1 65		1 00	8
867	Woolen Cloth.....	288	133	116	64	601	1 20	1 00	62	30
868	Blankets.....	12	18	6		36	2 00	75		
905	Woolen Goods.....	214	80	12	5	311	2 00	1 00		
921	Knitted Underwear.....	76	253	120	152	601				
	Total.....	3,389	3,535	845	824	8,593	\$61 18	\$28 46	\$17 04	228

\* Women and Girls.

The preceding two tables are prepared from the reports furnished to us by forty manufacturers of the varieties of goods therein specified. By those tables it will be seen that \$2,527,876.69 were disbursed for wages of 3389 men, 3535 women, 845 boys and 824 girls, making an aggregate of 8593. The production of the 38 establishments reporting the same are shown to be \$10,734,155.90.

Thirty-eight report average men's wages, which added and the sum divided by the number of such reports, ( $\$61.18 \div 38$ ), shows the net average men's wages to be \$1.61 per day. A similar process, ( $\$28.46 \div 29$ ) shows women's to be 93 cents, and boys' and girls' ( $\$17.04 \div 27$ ) 63 cents per day.

Twenty report advance of 5 to 20 per cent. in wages, and seventeen say their rates are unchanged.

Seventeen, employing 3950 persons, report 228, or nearly 6 per cent., as owning real estate.

Thirty-five, employing 6670, say that 4519, or 68 per cent., were born in this country; and 2151, or 32 per cent., elsewhere. Generally the mills and other factories therein represented have run continuously throughout the year.

Attention is especially called to office No. 161, reporting a production of \$300,000 in jute bagging, and payment of \$20,000 for labor. Also, No. 521, reporting a more varied production of jute goods to the amount of \$375,000, and disbursement of \$160,000 for labor. The proprietors of the mill last referred to, have, at our request, kindly stated the amount of raw material used, showing the enormous amount of 200 bales of 400 lbs. each, or 40 tons each week, or 2080 tons per year.

No. 161, reports having used 6000 bales of jute the past year, of 400 lbs. per bale, say 1200 tons.

In response to the question, "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*"

Office No. 106, says—"Not without they share risks and losses. Best way and simplest is to become stockholders."

No. 260, remarks—"No; unless they share in losses, repairs to machinery, &c."

No. 546, answers—"I have no doubt but what it would be better for both employers and employees."

No. 699, responds—"Thought so; tried it; found it impossible to make it work smoothly."

No. 782, says—"We do not think it practicable, and the writer has had some experience in regard to this, and believes if it were put into practice a large majority of employees would not work. All would want to be bosses, and there would be no profits to divide.

TABLE No. 16.—BLANK No. 2.

HATS.

Office Number.	Period of Payment of Wages.	Number of Months at Work.	Number of Dozens Made.	Total Paid for Labor.	Total Value of Production.	Movement of Wages.
1	weekly	8	10,500	\$82,500	\$220,000	Advanced 20 per cent.
*2	weekly	6	11,670	102,500	246,000	Advanced 20 per cent.
3	weekly	5	10,800	22,250	108,000	.....
4	weekly	6	3,440	16,200	51,600	.....
5	weekly	6	2,430	10,200	30,375	.....
6	weekly	7	8,000	25,250	96,000	.....
7	weekly	4	4,320	10,500	51,840	.....
8	weekly	7	18,144	70,150	272,160	.....
9	weekly	7	4,860	22,900	102,000	.....
10	weekly	8	12,525	38,500	131,500	.....
†11	weekly	12	.....	10,000	24,000	.....
12	weekly	6	10,000	34,500	80,000	.....
13	weekly	9	6,000	59,450	126,000	.....
14	weekly	8	8,000	27,864	64,000	.....
15	weekly	8	7,500	15,250	97,500	.....
16	weekly	6	800	4,050	9,600	.....
17	weekly	9	5,000	20,750	60,000	.....
†18	weekly	9	.....	34,500	55,000	.....
19	weekly	7	3,000	7,900	36,000	.....
†20	weekly	12	.....	67,000	470,000	.....
21	weekly	8	10,000	70,500	220,000	.....
22	weekly	8	4,600	36,250	79,250	Advanced 15 to 20 per cent.
23	weekly	9	4,000	33,850	78,000	.....
24	weekly	8	7,500	48,750	157,500	.....
25	weekly	9	6,500	54,250	117,000	.....
26	weekly	9	8,000	56,750	168,000	.....
27	weekly	10	6,000	45,750	126,000	.....
28	weekly	4	750	6,850	13,500	.....
29	weekly	12	8,200	89,750	209,100	.....
30	weekly	8	7,500	56,250	127,500	.....
31	weekly	8	6,000	47,750	102,000	.....
32	weekly	5	6,500	43,250	107,750	.....
33	weekly	8	1,800	11,750	25,200	.....
34	weekly	8	5,000	32,750	90,000	.....
35	weekly	9	8,000	50,500	172,000	.....
36	weekly	8	3,000	19,500	55,000	Advanced in ratio of goods.
37	weekly	8	5,000	30,250	65,000	.....
38	weekly	6	1,630	8,750	21,190	.....
39	weekly	9	8,000	52,000	132,000	Advanced 15 per cent.
40	weekly	8	2,500	12,250	30,000	.....
41	weekly	8	6,800	39,500	102,000	.....
42	weekly	8	4,000	19,500	48,000	.....
43	weekly	5	2,600	13,850	62,400	.....
44	weekly	9	9,600	73,900	201,600	.....
45	weekly	6	3,000	13,920	39,000	.....
46	weekly	8	1,600	9,800	21,600	.....
47	weekly	12	1,300	6,500	15,600	.....
48	weekly	8	7,000	37,200	115,500	Advanced 15 per cent.
49	weekly	8	1,800	9,500	27,000	.....
50	weekly	8	2,500	13,160	37,500	.....
51	weekly	10	10,000	83,250	180,000	.....
74	weekly	6	3,500	30,000	56,000	No advance.
75	weekly	4	3,000	12,500	52,000	No advance.
78	weekly	8	7,500	62,500	135,000	No advance.
85	weekly	4	3,240	21,250	58,320	No advance.
101	weekly	10	18,000	22,250	94,500	Advanced 15 per cent.
102	weekly	7	16,200	49,500	162,000	Advanced 15 per cent.

\* Forming mill connected. † Forming mill.

TABLE No. 16.—BLANK No. 2—Continued.

## HATS—Continued.

Office Number.	Period of Payment of Wages.	Number of Months at Work.	Number of Dozens Made.	Total Paid for Labor.	Total Value of Production.	Movement of Wages.
103	weekly	4	3,240	\$21,250	\$58,320	Advanced 15 per cent.
197	weekly	9	4,374	16,500	56,500	Advanced 10 per cent.
198	weekly	6	3,240	17,250	48,600	Advanced 15 per cent.
199	weekly	4	4,320	18,500	64,800	Advanced 15 to 20 per cent
200	weekly	6	3,240	28,500	77,760	Advanced 15 per cent.
239	weekly	12	20,000	150,000	400,000	Advanced 15 per cent.
278	weekly	10	8,000	30,000	96,000	Advanced 10 per cent.
452	weekly	12	8,000	41,600	80,000	.....
469	weekly	7	6,000	33,000	98,000	Advanced 15 per cent.
471	weekly	12	6,466	28,300	70,556	Advanced 15 per cent.
†576	weekly	12	.....	7,000	17,500	Advanced 5 per cent.
578	weekly	7	18,000	55,000	170,000	Advanced 15 per cent.
580	weekly	10	10,500	42,500	140,000	No advance.
581	weekly	6	4,000	17,000	48,000	No advance.
585	weekly	6	2,000	8,000	25,000	No advance.
†619	weekly	10	.....	5,292	7,000	No advance.
639	weekly	7	5,000	15,000	60,000	Advanced 10 per cent.
†644	weekly	6	60	1,000	2,800	Advanced 10 per cent.
†645	weekly	6	125	2,000	6,200	Advanced 10 per cent.
760	weekly	10	8,000	30,000	114,000	No advance.
761	weekly	9	7,500	38,700	112,000	No advance.
762	weekly	3	1,000	3,900	13,500	No advance.
807	weekly	8	13,080	35,000	217,360	No advance.
808	weekly	8	2,672	16,032	56,100	No advance.
809	weekly	6	30,000	30,000	195,000	No advance.
810	weekly	7	8,000	23,000	140,000	No advance.
811	weekly	4	4,000	11,500	48,000	No advance.
812	weekly	6	3,900	17,000	47,000	No advance.
813	weekly	4	8,000	22,500	82,000	No advance.
814	weekly	7	3,200	21,700	68,000	No advance.
847	weekly	6	3,600	10,800	43,200	No advance.
		671	538,626	\$2,805,818	\$8,498,881	

† Forming mill. ‡ Silk hats.

TABLE No. 17.—BLANK No. 2.

HATS.

Office Number.	Number of Men Employed.	Number of Women Employed.	Number of Boys and Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.
1	160	40	8	208	\$2 00	\$1 35	85
* 2	300	75	8	383	2 00	1 35	75
3	65	25	8	98	2 00	1 00	70
4	45	15	6	66	2 00	1 00	70
5	25	10	4	39	2 00	1 00	70
6	55	15	5	75	2 00	1 00	70
7	40	10	6	56	2 00	1 00	75
8	150	6	8	164	2 00	1 00	70
9	40	15	6	61	2 50	1 10	70
10	100	25	8	133	1 50	75	70
† 11	18	5	2	25	2 50	1 00	60
12	100	.....	4	104	2 60	.....	60
13	120	30	6	156	2 00	1 10	75
14	50	2	2	54	2 50	2 00	70
15	30	10	1	41	1 65	85	65
16	12	6	1	19	1 50	1 00	70
17	40	15	3	58	1 50	1 00	70
† 18	64	.....	14	78	2 00	.....	80
19	20	7	3	30	1 60	1 00	70
20	80	20	3	103	2 25	1 00	85
21	95	30	3	128	2 75	1 50	75
22	55	16	2	73	2 60	1 40	65
23	40	13	3	56	2 75	1 40	60
24	80	10	3	93	2 50	1 50	75
25	70	18	3	91	2 80	1 25	80
26	75	23	6	104	2 50	1 50	80
27	50	15	2	67	2 80	1 50	80
28	15	5	1	21	2 50	1 40	80
29	115	25	10	150	2 00	1 25	80
30	90	18	5	113	2 50	1 40	80
31	75	24	3	102	2 50	1 25	80
32	100	50	3	153	2 50	1 25	75
33	16	7	6	29	2 00	1 25	80
34	50	18	1	69	2 25	1 25	75
35	80	20	12	102	2 25	1 00	85
36	36	12	2	50	2 00	1 00	65
37	75	25	2	102	1 65	75	65
38	22	6	1	29	2 00	1 00	85
39	75	15	4	94	2 50	1 50	80
40	30	10	2	42	1 50	60	75
41	65	20	3	88	2 25	1 60	65
42	50	12	2	64	1 50	1 00	65
43	32	12	3	47	2 50	1 00	1 00
44	110	30	3	143	2 50	90	65
45	30	10	.....	40	2 00	1 00	.....
46	20	12	3	35	1 50	1 00	75
47	8	4	2	14	1 50	1 00	75
48	58	20	2	80	2 50	1 25	80
49	19	10	2	31	1 75	80	80
50	30	10	3	43	1 50	1 00	1 00
51	125	25	6	156	2 25	80	80
74	79	27	.....	106	2 25	1 20	.....
75	40	20	.....	60	2 25	1 00	.....
78	100	25	5	130	2 50	1 50	75
85	75	15	6	96	2 25	1 10	70
101	30	20	3	53	1 65	85	65
102	120	40	8	168	1 85	85	70

\* Forming Mill connected. † Forming Mill.

TABLE No. 17.—BLANK No. 2—Continued.

## HATS—Continued.

Office Number.	Number of Men Employed.	Number of Women Employed.	Number of Boys and Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.
103	75	15	6	96	\$2 25	\$1 10	\$0 70
197	30	10	3	43	1 75	1 00	65
198	40	20	6	66	2 00	1 00	80
199	60	10	6	76	2 50	1 10	75
200	60	20	6	86	2 50	1 00	75
239	200	150	50	400	2 50	1 00	67
278	40	10	15	65	3 00	1 50	75
452	120	20	.....	140	2 50	1 00	.....
469	68	15	.....	83	2 00	85	.....
471	40	2	6	48	2 50	1 00	75
† 576	9	4	3	16	1 85	85	85
578	112	40	.....	152	1 75	85	.....
580	70	20	10	100	2 62	1 00	85
581	25	15	.....	40	90	50	.....
585	20	.....	.....	20	2 40	.....	.....
† 619	2	8	.....	10	2 00	1 25	.....
639	36	10	2	48	2 00	1 00	70
† 644	2	1	.....	3	2 50	1 20	.....
† 645	4	2	.....	6	2 50	1 50	.....
760	60	18	3	81	1 85	75	50
761	67	17	4	88	2 18	85	50
762	20	.....	.....	20	2 50	.....	.....
807	80	12	8	100	2 00	1 00	66
808	30	.....	3	33	3 00	.....	2 00
809	25	30	70	125	2 50	1 50	66
810	65	15	8	88	2 50	1 00	67
811	35	15	.....	50	2 50	1 25	.....
812	40	15	6	61	2 00	1 00	66
813	100	20	6	126	2 00	1 00	50
814	50	10	6	66	2 25	1 10	67
847	25	8	.....	33	2 25	1 50	.....
Total...	5359	1535	448	7342	\$191 00	\$91 95	\$55 19

† Forming Mill. ‡ Silk Hats.

In the two foregoing tables are presented the reports of 88 hat factories, employing 5359 men, at an average pay of \$2.17 per day; 1535 women, at \$1.11 per day, and 448 boys and girls, at 71 cents per day.

This contrasts favorably with our last year's report, which showed men's average wages as having been for the previous year \$2.09 per day, women's \$1.01, and boys' and girls' 56 cents per day, or 4 per cent. advance on men's pay, 10 per cent. on women's, and 27 per cent. on boys' and girls.'

Last year's report showed the proportion of employees to be 72 per cent. of men, 26 per cent. of women, and 2 per cent. of children.

This year's shows 73 per cent. of men, 21 per cent. of women, and 6 per cent. of boys and girls.

Last year's report showed that 17 per cent. of the factories run through the year. This year the proportion is reduced to 10 per cent. Then we reported 72 factories as producing 488,470 dozens, or an average of 6784 dozens each. Now 88 factories, including forming mills, report 538,626 dozens, or an average of 6121 dozens each, which falling off in production is fully accounted for and all other circumstances are equal, by the fewer months which the factories have run.

Last year showed the value of 488,470 dozen hats produced as \$6,708,500, or \$13.73 per dozen. This year 538,626 dozens as worth \$8,498,881, or \$15.78 per dozen, being, if qualities average the same, an advance of 15 per cent.

Last year showed the amount paid for labor in producing 488,470 dozens of hats as \$2,218,000, or \$4.54 each. This year showed the amount paid for labor on 538,626 dozen hats to be \$2,805,818, or \$5.21 per dozen, also equal to an advance of 15 per cent.

It will be noticed that the wages for hat making have not advanced as largely as might have been inferred from the increased reported cost of production. This is largely accountable to the higher standard of excellence which now obtains as compared with that of previous years.

In response to our query, "How many of your employees own real estate?" many employers respond that the tendency of hatters to shift from shop to shop, thus precluding personal acquaintance with employers, renders the latter very largely ignorant on the point referred to. But, whatever may be the reason, the fact remains that so few responses are received to that query as to make reference thereto unnecessary.

To the query, "Have your employees any share in the profits of your business other than their wages?" many, while not directly replying to the question, state that most work is paid for by the piece and on a sliding scale, graduated to the market price of the finished product. The method is good, as unity of interests of both parties is recognized and initiated, and perhaps goes far to promote the sympathetic feeling between employers and employees which is seen in this line of production when contrasted with some others.

Both employers and employees concur in lamenting the depressing

influence of convict labor, and they claim that the moderate increased prosperity of the hatting trade this year as contrasted with last year, is due to the ephemeral course of fashion, which makes a very large demand for *ladies' felt hats*, in the production of which convict labor is directly but little, if any, felt.

The annexed summary from the pen of one whose position should give his utterances peculiar force, concisely summarises this phase of production, thus :

"The hatting trade, or the manufacture of hats in New Jersey, is brought into more peculiarly close competition with convict labor than all other hat manufactures in the Union, for special reasons, to wit: New Jersey manufactures two-thirds of all the hats that are made in the United States, and nearly all of this business is centered in Essex county. Plainfield, in Union county, is the only place in the State, outside of Essex county, where hats are manufactured. New Jersey hat manufacturers are noted all over the land for their skill in the production of the coarser grade of work and ladies' felt hats, and in such coarse grades they are brought in close competition with convict labor; for the price of all grades of work is regulated by the price of the lowest grades. Therefore, the manufacturers of this State are opposed to the contract convict labor system, for the cheaper the lowest grades of hats are manufactured, that much cheaper the finer grades have to be made and sold for."

TABLE No. 18.—BLANK No. 2.

IRON, STEEL AND HARDWARE.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys and Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Owning Real Estate.
130	Steel Wire.....	5		1	6	\$1 60		\$0 60	1
194	Files.....	47		18	65	1 25		75	
196	Brass Cocks, Valves, &c.....	125		50	175	2 25		70	10
202	Cast Iron Water and Gas Pipes.....	250		65	315	1 45		65	
221	Stoves.....	21		4	25	1 75		50	
272	Nails.....	309	3	58	370	1 25	\$0 80	60	100
276	Locks.....	3		1	4	1 50		50	
277	Files.....	25		10	35	1 80		50	1
290	Steel and Iron Bits.....	14			14	2 00			
303	Locks.....	15			15	2 50			
313	Iron Railings.....	12			12	2 00			2
318	Locks.....	2		2	4	2 10		60	
321	Rules.....	4		2	6	1 75		50	
322	Planes.....	3		2	5	2 50		50	1
341	Iron and Tin Goods.....	15		31	46	1 25		75	1
343	Springs, &c.....	54		6	60	2 25		75	3
361	Scales.....	6		1	7	2 00		40	1
377	Carriage Springs.....	14			14	2 00			2
382	Tools.....	3		2	5	1 85		50	
393	Tools and General Hardware.....	14		11	25	2 00		60	2
403	Bag Frames.....	18		4	22	2 00		60	
407	Covered Buckles.....	3		3	6	1 70		60	
410	Sheet Iron.....	75			75	2 75			
448	Engraving and Die Sinking.....	11		4	15	3 00		50	
457	Metal Rings.....	6			6	2 00			
458	Mechanics' Tools.....	42		3	45	2 25		90	8
460	Coach Lamps.....	26		6	32	2 50		65	3
463	Coach Trimmings.....	12		8	20	2 00		1 00	2
480	Smoothing Irons.....	38		12	50	1 60		85	3
481	Locks.....	21		4	25	2 25		60	2
484	Iron Axles.....	3			3	2 25			
487	Hardware Tools.....	10		1	11	1 75		50	
491	Coach Lamp Mountings, &c.....	19		7	26	2 00		50	
495	Bag Frames.....	35	30		65	2 20	75		
502	Cork-Screws.....	12		12	24	2 00		1 00	
523	Axes, Hatchets, Grey Iron Castings	35			35	2 00			
534	Car Wheels.....	25			25	1 75			
548	Saws.....	100	6	45	151	2 00	1 00	75	
558	Metal Goods.....	3		1	4	1 65		75	
575	Cutlery.....	80		40	120	2 50		1 00	6
590	Hardware.....	15			15	1 25			
592	Locks, Night Latches, &c.....	8		1	9	2 25			
595	Trunk Hardware.....	21		29	50	1 80		60	4
598	Furniture Castors.....	33	4	37	74	2 50	95	1 00	12
606	Locks.....	15		23	38	2 00		50	
610	Patent Clothes Lines.....	3		1	4	2 50		50	
616	Hardware and Tools.....	12		2	14	2 00		50	
621	Tools and Hardware.....	30		5	35	1 67		60	2
624	Iron and Steel Tools.....	10		1	11	2 50		50	1
631	Carriage Hardware.....	20		15	35	2 00		75	1
658	Cutlery.....	20		10	30	2 50		1 00	
665	Saddlery Hardware.....	40		5	45	2 50		66	8
669	Carriage Hardware.....	15			15	2 00			
696	Table Cutlery.....	25		24	49	2 00		60	2
706	Locks and Hardware.....	70	8	22	100	2 00	75	70	12
709	Steel and Iron Wire and Rods.....	405		20	425	2 05		60	
751	Saws.....	75		20	95	2 00		65	35
756	Steel and Iron Manufactures.....	942		18	960	2 35		75	175
849	Iron Shutters.....	55		5	60	2 00		66	
864	Crucible Cast Steel.....	105			105	2 40			10
939	Steel.....	130		25	155	1 75		75	
	Total.....	3564	51	677	4292	\$129 82	\$4 25	\$30 92	410

TABLE No. 19.—BLANK No. 2.

## IRON, STEEL AND HARDWARE.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employees.			Months at Work.	Total Paid for Labor.	Total Value of Products.	Per cent. of Advance in Wages.
			Total	Native Born.	Foreign Born.				
130	Steel Wire.....	wk.....	6	4	2	12	\$2,750 00	\$12,000 00	10.
194	Files.....	2 wks	65	44	21	12	24,000 00	50,000 00	10.
196	Brass Cocks, Valves, &c.....	wk.....	175	117	58	12	80,000 00	300,000 00	10.
202	Cast Iron Water and Gas Pipes.....	2 wks	315	.....	.....	12	127,280 00	920,000 00	10.
221	Stoves.....	wk.....	25	25	.....	10	7,000 00	25,000 00	10.
272	Nails.....	mon.....	370	123	247	11	110,222 39	575,029 48	Adv.
276	Locks.....	wk.....	4	4	.....	12	1,500 00	7,500 00	None.
277	Files.....	wk.....	35	25	10	12	12,000 00	24,000 00	15.
290	Steel and Iron Bits.....	wk.....	14	10	4	12	7,540 00	22,500 00	None.
303	Locks.....	wk.....	15	8	7	12	7,500 00	20,000 00	None.
313	Iron Railings.....	wk.....	12	6	6	12	6,500 00	20,000 00	None.
318	Locks.....	wk.....	4	3	1	4	500 00	2,500 00	None.
321	Rules.....	wk.....	6	6	.....	12	2,400 00	5,000 00	None.
322	Planes.....	wk.....	5	5	.....	12	2,500 00	5,000 00	None.
341	Iron and Tin Goods.....	wk.....	46	34	12	10	10,000 00	60,000 00	None.
343	Springs, &c.....	wk.....	60	54	6	12	38,000 00	135,000 00	10.
361	Scales.....	wk.....	7	4	3	12	4,200 00	24,000 00	None.
377	Carriage Springs.....	wk.....	14	9	5	12	8,320 00	30,000 00	15.
382	Tools.....	wk.....	5	2	3	12	1,800 00	3,500 00	20.
393	Tools and General Hardware.....	wk.....	25	13	12	12	15,000 00	27,500 00	None.
403	Bag Frames.....	wk.....	22	18	4	12	10,000 00	17,000 00	None.
407	Covered Buckles.....	wk.....	6	5	1	12	1,700 00	3,500 00	None.
410	Sheet Iron.....	wk.....	75	.....	.....	6	27,100 00	101,200 00	.....
448	Engraving and Die Sinking.....	wk.....	15	7	8	12	2,500 00	8,000 00	None.
457	Metal Rings.....	wk.....	6	6	.....	4	1,180 00	1,500 00	None.
458	Mechanics' Tools.....	wk.....	45	42	3	12	19,500 00	52,000 00	18.
460	Coach Lamps.....	wk.....	32	24	8	12	11,700 00	25,000 00	20.
463	Coach Trimmings.....	wk.....	20	16	4	12	8,000 00	20,000 00	10.
480	Smoothing Irons.....	wk.....	50	20	30	12	25,000 00	113,000 00	None.
481	Locks.....	wk.....	25	6	19	12	14,000 00	30,000 00	5.
484	Iron Axles.....	wk.....	3	3	.....	12	1,800 00	7,200 00	None.
487	Hardware Tools.....	wk.....	11	3	8	12	5,500 00	24,500 00	None.
491	Coach Lamp Mountings.....	wk.....	26	24	2	12	10,000 00	30,000 00	10.
495	Bag Frames.....	wk.....	65	35	30	12	30,000 00	100,000 00	10
502	Cork-Screws.....	wk.....	24	21	3	12	10,000 00	20,000 00	25.
523	Axes, Hatchets, Grey Iron Cast'gs	wk.....	35	11	24	12	22,000 00	40,000 00	7½.
534	Car Wheels.....	wk.....	25	.....	.....	12	14,000 00	112,000 00	None.
548	Saws.....	wk.....	151	.....	.....	12	60,000 00	150,000 00	15.
558	Metal Goods.....	wk.....	4	4	.....	12	1,500 00	13,500 00	None.
575	Cutlery.....	2 wks	120	70	50	12	55,000 00	120,000 00	10.
590	Hardware.....	wk.....	15	.....	.....	12	5,400 00	12,000 00	12½.
592	Locks, Night Latches, &c.....	wk.....	9	.....	.....	12	4,200 00	10,274 00	None.
595	Trunk Hardware.....	wk.....	50	21	29	12	10,000 00	50,000 00	20.
598	Furniture Castors.....	wk.....	74	47	27	12	36,400 00	90,000 00	10.
606	Locks.....	wk.....	38	30	8	12	10,000 00	35,000 00	7½.
610	Patent Clothes Lines.....	wk.....	4	3	1	9	1,000 00	3,280 00	None.
616	Hardware Tools.....	wk.....	14	14	.....	12	7,500 00	15,000 00	None.
621	Tools and Hardware.....	wk.....	35	25	10	12	12,500 00	28,000 00	10.
624	Iron and Steel Tools.....	wk.....	11	4	7	12	8,000 00	14,000 00	25.
631	Carriage Hardware.....	wk.....	35	.....	.....	12	18,200 00	75,000 00	10.
658	Cutlery.....	wk.....	30	15	15	12	15,000 00	20,000 00	20.
665	Saddlery Hardware.....	wk.....	45	10	35	12	35,000 00	75,000 00	20.
669	Carriage Hardware.....	wk.....	15	14	1	12	8,850 00	15,000 00	10.
696	Table Cutlery.....	wk.....	49	.....	.....	12	18,000 00	40,000 00	5.
706	Locks and Hardware.....	wk.....	100	90	10	12	41,600 00	90,000 00	10.
709	Steel and Iron Wire and Rods.....	wk.....	425	.....	.....	12	225,000 00	910,000 00	15.
751	Saws.....	wk.....	95	62	33	12	46,800 00	90,000 00	None.
756	Steel and Iron Manufactures.....	2 wks	960	240	720	12	274,018 00	1,400,848 00	None.
849	Iron Shutters.....	wk.....	60	.....	.....	8	19,000 00	22,000 00	None.
864	Crucible Cast Steel.....	wk.....	105	40	65	12	60,000 00	350,000 00	10.
939	Steel.....	wk.....	155	.....	.....	12	97,500 00	528,500 00	5.
Total.....			4292	1426	1552		\$1,753,460 39	\$7,130,831 48	

The two immediately preceding reports are worthy of very careful consideration, as therein 69 employers give interesting statistics of factors which are very closely interwoven with the prosperity of a large portion of our industrial and social life.

It will be seen that in the 61 industrial establishments represented 3564 men, 51 women, and 677 boys, making a total of 4292, are employed, whose aggregate wages foot up \$1,753,460.39 for the past year, with a total production of \$7,130,831.48 of finished goods. So very large a proportion report having run through the year without intermission, that it seems useless in this place to note the exceptions.

The entire 61 report average of men's daily wages ( $\$129.27 \div 61$ ) at \$2.12; 5 report average women's daily wages ( $425 \div 5$ ) 85 cents, and 47 report average boys' and girls' daily wages ( $3092 \div 47$ ) 66 cents.

50 report the nativities of 2978 employees—1426, or 48 per cent. as having been born in this country, and 1552, or 52 per cent. elsewhere.

A very general and marked advance in wages is indicated in the appropriate column.

28 establishments, employing 2611 people, report 410, or more than  $15\frac{1}{2}$  per cent. as owning real estate.

In answer to the query, "*Have your employees any share in the profits of your business other than their wages?*" with but two exceptions response is omitted or in the negative.

Office number 221 says—"Some of our employees own stock." And 271 says—"No; duty of employer to employed is justice on contract, &c.; fair wages for fair work; not interfering with their personal duties, voting, worship, rest, intellectual advancement, &c. It is not right to take advantage of their ignorance. These are about all an employee can ask and all that is his claim."

In response to the query, "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*" No. 202 says—"Is it not equally so to share them with the railroad companies, furnaces and coal companies we employ in part. Will or can the employees share the losses, &c., that may accrue?" No. 273 says—"No; I see no just reason whatever, because I paid for the stock on hand and the business, and if, in my contract with my employees, I give them fair wages for fair work, that is just and fair. I do not by any

means think it is right they should share in any profits." No. 448 responds—"It is just but not practicable." No. 696 answers—"Don't know; they got all the profits year before last, and think that is enough."

No. 864 says—"Part of our work is piece work, which enables them to share in the profits, which is as far as we think practicable in our works."

TABLE No. 20.—BLANK No. 2.

FURNACES, ROLLING MILLS, FORGES AND FOUNDRIES.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employees.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Products.	Per cent. of Advances in Wages.
62	Forging .....	2 wks	150	100	150	12	\$90,000 00	\$225,000 00	25.
77	Pig Iron .....	mon..	95	.....	.....	12	32,354 84	74,716 00	25.
86	Foundry .....	wk....	28	14	14	12	14,700 00	25,000 00	18.
96	Foundry .....	2 wks	36	.....	.....	12	13,933 50	42,000 00	10.
105	Pig Iron .....	mon..	60	.....	.....	5	12,150 00	92,904 00	.....
112	Pig Iron .....	mon..	188	47	141	4½	20,000 00	117,300 00	.....
115	Pig Iron .....	mon..	147	88	59	12	59,000 00	530,000 00	30, dec. 10.
117	Rolling Mill .....	mon..	100	40	60	2½	6,237 50	10,000 00	20.
201	Rolling Mill .....	2 wks	515	172	343	12	260,000 00	875,000 00	20.
218	Pig Iron .....	mon..	204	51	153	12	18,277 15	940,360 00	50.
234	Pig Iron .....	mon..	126	42	84	7	26,525 00	181,000 00	10.
269	Pig Iron and Spiegel .....	mon..	80	27	53	12	26,661 34	234,745 86	Adv'nced
271	Rolling Mill .....	mon..	248	83	155	9½	88,211 86	502,128 00	Adv'nced
274	Pig Iron .....	wk....	55	28	27	8½	25,000 00	140,000 00	40, dec. 30.
297	Pig Iron .....	mon..	135	.....	.....	12	43,197 22	100,000 00	25.
381	Machinery Castings .....	wk....	8	6	2	12	4,500 00	5,500 00	10.
444	Malleable & Gray Iron Castings .....	wk....	110	27	83	12	35,000 00	75,000 00	15.
540	Pig Iron .....	mon..	72	10	62	3½	7,200 00	87,360 00	10.
550	Malleable & Gray Iron Castings .....	wk....	42	14	28	12	20,000 00	65,000 00	15.
553	Pig Iron .....	mon..	126	76	50	12	47,871 67	568,000 00	10.
659	Mal. Gray Iron & Com. Castings .....	wk....	80	40	40	12	33,000 00	87,000 00	10.
763	Rolling Mill .....	2 wks	20	6	14	12	11,750 00	100,000 00	None.
764	Foundry .....	2 wks	8	1	7	12	4,900 00	15,600 00	None.
804	Foundry Castings .....	wk....	20	5	15	12	8,000 00	25,000 00	None.
877	Bar Iron, Spikes and Bolts .....	wk....	50	.....	.....	.....	50,000 00	350,000 00	None.
908	Foundry .....	wk....	20	.....	.....	12	12,000 00	100,000 00	None.
909	Foundry .....	wk....	19	9	10	12	10,400 00	25,000 00	None.
Total .....			2742	886	1570	268½	\$980,870 08	\$5,593,613 86	

TABLE No. 21.—BLANK No. 2.

## FURNACES, ROLLING MILLS, FORGES AND FOUNDRIES.

Office Number.	Variety of Manufacture.	Tons of Pig Iron Produced.	Number of Men Employed.	Number of Boys Employed.	Total Number Employed.	Men's Average Daily Wages.	Boys' Average Daily Wages.	Own Real Estate.
62	Forging.....	16,292	150	.....	150	\$2 00	.....	20
77	Pig Iron.....	.....	90	5	95	1 50	\$1 00	1
86	Foundry.....	.....	28	.....	28	1 75	.....	.....
96	Foundry.....	.....	30	6	36	2 00	66	.....
105	Pig Iron.....	3,050	60	.....	60	1 55	.....	.....
112	Pig Iron.....	3,910	185	3	188	1 35	1 00	3
115	Pig Iron.....	26,500	140	7	147	1 30	75	.....
117	Rolling Mill.....	.....	100	.....	100	2 25	.....	10
201	Rolling Mill.....	.....	490	25	515	2 12	1 00	.....
218	Pig Iron.....	47,000	200	4	204	1 30	50	90
234	Pig Iron.....	8,363	126	.....	126	1 25	.....	63
269	Pig Iron and Spiegel.....	11,343	80	.....	80	1 35	.....	19
271	Rolling Mill.....	.....	242	6	248	1 67	.....	30
274	Pig Iron.....	4,954	55	.....	55	2 25	.....	6
297	Pig Iron.....	3,000	135	.....	135	1 25	.....	.....
381	Machinery Castings.....	.....	8	.....	8	1 50	.....	.....
444	Malleable and Grey Iron Castings.....	.....	102	8	110	1 50	.....	.....
540	Pig Iron.....	3,120	70	2	72	1 50	75	2
550	Malleable and Grey Iron Castings.....	.....	30	12	42	2 00	85	5
553	Pig Iron.....	20,286	120	6	126	1 20	.....	12
659	Malleable, Grey Iron & Composition Cast's.....	.....	70	10	80	2 00	50	12
763	Rolling Mill.....	.....	20	.....	20	2 00	.....	10
764	Foundry.....	.....	8	.....	8	2 00	.....	3
804	Foundry Castings.....	.....	20	.....	20	2 00	.....	.....
877	Bar Iron, Spikes and Bolts.....	.....	38	12	50	2 25	75	.....
908	Foundry.....	.....	20	.....	20	2 00	.....	2
909	Foundry.....	.....	16	3	19	2 75	.....	.....
	Total.....	147,818	2633	109	2742	\$47 59	\$7 76	288

In the foregoing tabulations of the heavier products of our iron industry, it will be noted that 2633 men and 109 boys, making an aggregate of 2742, are employed therein, with a disbursement for labor of \$980,870,08, and a production of \$5,593,613.86.

Prominent among the subdivisions of industries above stated, are 11 pig iron furnaces, reporting a product of 147,418 gross tons, valued at \$3,065,881.86.

The aggregate of running time as shown by 26 reporting the same, are found to be 268½ months, averaging about 10½ months each.

27 report net average of men's daily wages (47.59÷27) at \$1.76. Ten report average boys' daily wages (7.76÷10) at about 77½ cents. Twenty-one report the nativities of 2456 as being 886 American and 1570 foreign born, or 36 per cent. of the former and 64 per cent. of the latter. A general but moderate advance of wages from

the standard of the previous year is indicated. Sixteen establishments, employing 1614 operatives, report that 288, or 18 per cent., own real estate.

Only one response is received to the query: "*Have your employees any share in the profits of your business other than their wages?*" and that is: "They have by increase of wages."

The question: "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*" received. Office number 553 simply says "impracticable." No. 659 says, "Not practicable with the class we have employed." No. 77 says, "Yes, when they are willing to share in the losses, too." No. 234 responds, "Yes. The simplest form is by a prompt advance in wages whenever an increase in the selling price yields increased profits. This was our rule for over twenty years. We never had trouble with our men about wages." No. 297 says, "Considering that these works have been carried on at a loss since 1873, and that the employees have had all the profits, and the employers have lost money, the question should be reversed, and the State should endeavor to devise some system by which the proceeds of the business should be so distributed that capital should get some return for its use and the owners some return for their time and services. Thus far labor has the whole proceeds."

The importance and flourishing condition of the iron industry is shown in the statistics of production for the current year. The product of the furnaces, foundries, forges and rolling mills were \$5,500,000. The machine shops, in which skilled labor exerts its force upon iron, have added nearly \$20,000,000 to the wealth of the State. Although production of pig metal for the last year has shown a marked gain over its immediate predecessors, and has, during the last few months, suffered a slight falling off, owing to the sharp decline which the iron interest suffered during the early part of the year. This decline, while against the mine owners, and, to some extent, hostile to the blast furnaces and forges, has not affected unfavorably the general tone of the great industry in New Jersey.

The manufacture of steel and various forms of hardware are shown to exceed \$7,000,000, giving, inclusive of ores, an aggregate value of iron and its products of over \$35,000,000, for the year under review.

Our own mines, furnaces, forges and rolling mills are now as fully employed as at any time since the war. Everything seems to favor the continued development of this interest in our State. Our supplies of ore are vast and seemingly inexhaustible. The able Geological Reports of Prof. Cook, our State Geologist, estimates nearly 200 mines, more or less, developed, capable of producing 1,000,000 tons of ore annually. In 1873 they actually yielded 655,000 tons. These mines extend over a vast area, much of which has been very superficially prospected. There is every reason to believe from the great extent of the iron-bearing rocks, that as the demand for ore increases new mines will be discovered to meet it. The New Jersey iron ores are not only abundant, but their average richness is no less remarkable than the great diversity in quality. The magnetic ores abound and are largely worked in our own furnaces, but more largely shipped to furnaces located in other States. Brown hematites, and the extraordinary franklinite, used in the manufacture of spiegeleisen after its zinc is extracted, contribute to swell the list.

It is worthy of special note that our penetrating railroad system, canals and rivers, render our iron ore possessions marvellously accessible to all sections of the country. And these same facilities for transportation and travel, impart value to the ore regions as affording unequalled opportunities for converting the raw material into manufactured products. Our tables indicate a recognition of the unwisdom of allowing New Jersey iron ores to heedlessly enrich other States. Coal routes, guiding our State in close proximity to the mines, and limestone quarries, abound in adjacent localities. Such combinations surely urge special attention to the multiplication of iron furnaces and rolling mills within our own boundaries.

The fullest possible development of our iron manufactures is well worthy of the serious attention of the State. It will add largely to our wealth, population and general prosperity. It will increase our commercial independence and exert a healthy influence upon every other pursuit. Diversified industry gathers up the varied talents and tastes of the people; gives to each the place best suited to its capacity and thus secures both the fullest employment and education of all. No one of our varied resources is more full of promise for the future as it has been rich in results in the past. Whatever the State can do to foster its growth will be wisely undertaken, for its benefits will be shared by all.

TABLE No. 22.—BLANK No. 2.

IRON AND ZINC ORES MINED.

Office Number.	Variety of Manufacture.	Number of Months at Work.	Tons Mined.	Periods of Payment of Wages.	Number of Employes Owning Real Estate.	Total Paid for Labor.	Total Value of Products.
52	Magnetic Iron Ore.....	8	4,800	2 wks..	.....	\$8,700 00	\$24,000 00
53	Magnetic Iron Ore.....	12	12,000	mon ...	.....	20,500 00	60,000 00
54	Magnetic Iron Ore.....	12	10,000	mon ...	.....	38,800 00	50,000 00
55	Magnetic Iron Ore.....	3	2,500	mon ...	.....	12,150 00	12,500 00
56	Magnetic Iron Ore.....	12	25,317	mon ...	.....	34,000 00	126,585 00
57	Magnetic Iron Ore.....	12	18,058	mon ...	.....	32,500 00	90,290 00
58	Magnetic Iron Ore.....	2	1,000	2 wks..	.....	8,000 00	5,000 00
59	Magnetic Iron Ore.....	4	800	2 wks..	.....	1,944 00	3,600 00
104	Magnetic Iron Ore.....	5	2,600	mon ...	.....	6,250 00	10,400 00
108	Magnetic Iron Ore.....	6	4,800	mon ...	.....	8,500 00	24,000 00
109	Magnetic Iron Ore.....	12	33,368	mon ...	.....	38,000 00	166,840 00
110	Magnetic Iron Ore.....	10	4,300	mon ...	.....	15,000 00	21,500 00
111	Magnetic Iron Ore.....	10	13,342	mon ...	.....	32,000 00	66,700 00
113	Magnetic Iron Ore.....	4	450	mon ...	.....	400 00	2,250 00
114	Magnetic Iron Ore.....	4	950	mon ...	.....	1,593 00	4,750 00
118	Magnetic Iron Ore.....	9	2,244	mon ...	.....	10,904 12	11,215 70
121	Magnetic Iron Ore.....	3	180	mon ...	.....	600 00	900 00
122	Magnetic Iron Ore.....	8	1,800	mon ...	.....	3,700 00	9,000 00
123	Magnetic Iron Ore.....	12	29,541	mon ...	.....	44,161 00	147,705 00
124	Magnetic Iron Ore.....	6	2,500	mon ...	.....	6,000 00	12,500 00
125	Magnetic Iron Ore.....	12	72,260	mon ...	.....	168,500 00	361,500 00
126	Magnetic Iron Ore.....	12	11,554	mon ...	.....	19,000 00	57,800 00
127	Magnetic Iron Ore.....	12	30,000	mon ...	.....	27,500 00	150,000 00
211	Magnetic Iron Ore.....	5	1,000	mon ...	.....	2,000 00	4,000 00
212	Magnetic Iron Ore.....	12	4,000	mon ...	.....	10,000 00	14,000 00
213	Magnetic Iron Ore.....	12	6,000	mon ...	.....	18,000 00	21,000 00
214	Magnetic Iron Ore.....	12	6,000	mon ...	.....	7,250 00	24,000 00
215	Magnetic Iron Ore.....	12	8,000	mon ...	.....	7,500 00	32,000 00
216	Magnetic Iron Ore.....	12	12,000	mon ...	.....	16,000 00	36,000 00
217	Magnetic Iron Ore.....	6	1,000	mon ...	.....	2,700 00	4,000 00
219	Magnetic Iron Ore.....	4	400	mon ...	.....	750 00	1,600 00
220	Magnetic Iron Ore.....	12	2,500	mon ...	.....	3,850 00	7,500 00
222	Magnetic Iron Ore.....	8	9,000	2 wks..	.....	3,500 00	45,000 00
225	Magnetic Iron Ore.....	12	14,873	mon ...	.....	19,000 00	35,000 00
226	Magnetic Iron Ore.....	12	15,000	mon ...	.....	28,500 00	50,000 00
227	Hematite Iron Ore.....	12	9,150	mon ...	.....	17,000 00	24,000 00
228	Magnetic Iron Ore.....	12	26,603	mon ...	.....	74,500 00	140,000 00
231	Magnetic Iron Ore.....	10	2,032	mon ...	.....	11,250 00	9,500 00
232	Magnetic Iron Ore.....	9	1,822	mon ...	.....	6,750 00	9,000 00
257	Magnetic Iron Ore.....	12	12,787	mon ...	.....	37,868 00	63,935 00
270	Magnetic Iron Ore.....	11	26,974	mon ...	.....	52,323 48	64,286 75
279	Magnetic Iron Ore.....	12	7,911	mon ...	1	16,176 72	31,645 00
280	Magnetic Iron Ore.....	12	12,758	mon ...	.....	38,386 21	63,792 00
281	Magnetic Iron Ore.....	10	1,017	mon ...	.....	9,232 87	5,087 00
305	Zinc Ore.....	12	9,000	mon ...	4	13,000 00	45,000 00
306	Magnetic Iron Ore.....	12	19,984	mon ...	.....	61,658 38	119,900 00
308	Zinc Ore.....	12	15,527	mon ...	10	43,142 00	.....
379	Magnetic Iron Ore.....	7	8,000	mon ...	.....	15,000 00	40,000 00
408	Magnetic Iron Ore.....	12	47,865	mon ...	.....	85,000 00	191,460 00
507	Bessimer Iron Ore.....	8	12,000	mon ...	.....	40,000 00	63,000 00
526	Magnetic Iron Ore.....	12	2,400	mon ...	5	6,800 00	9,000 00
527	Magnetic Iron Ore.....	12	15,000	mon ...	20	39,750 00	67,500 00
528	Magnetic Iron Ore.....	12	10,000	mon ...	16	26,500 00	45,000 00
538	Hematite Iron Ore.....	3	1,831	mon ...	2	4,200 00	6,409 00
539	Hematite Iron Ore.....	3	300	mon ...	1	1,100 00	1,050 00
543	Magnetic Iron Ore.....	12	20,000	mon ...	4	36,000 00	80,000 00
554	{ Magnetic Iron Ore { Zinc and Franklinite }	12	{ 17,880 { 9,200 }	{ mon { mon }	16	38,904 77	153,800 00
630	Magnetic Iron Ore.....	12	1,800	mon ...	.....	5,000 00	7,200 00
641	Magnetic Iron Ore.....	4	2,316	mon ...	.....	6,500 00	9,266 00
642	Magnetic Iron Ore.....	5	1,769	mon ...	.....	1,320 00	7,076 00
643	Magnetic Iron Ore.....	9	1,680	mon ...	.....	4,000 00	6,540 00
679	Magnetic Iron Ore.....	12	17,365	mon ...	.....	31,641 82	69,460 00
Total .....		580	679,108		79	\$1,380,756 47	\$3,026,042 45

TABLE No. 23.—BLANK No. 2.

## IRON AND ZINC ORES MINED.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Boys Employed.	Total Number Employed.	Native Born.	Foreign Born.	Men's Average Daily Wages.	Boys' Average Daily Wages.	Movement of Wages.
52	Magnetic Iron Ore.....	30	.....	30	.....	.....	\$1 50	.....	From \$1 35 to \$2.00 and back.
53	Magnetic Iron Ore.....	40	.....	40	.....	.....	1 50	.....	Advanced 12½ per cent.
54	Magnetic Iron Ore.....	80	.....	80	.....	.....	1 50	.....	From \$1.35 to \$2 00 and back.
55	Magnetic Iron Ore.....	100	.....	100	.....	.....	1 50	.....	Advanced 12½ per cent.
56	Magnetic Iron Ore.....	75	.....	75	.....	.....	1 50	.....	Advanced 12 per cent.
57	Magnetic Iron Ore.....	70	.....	70	.....	.....	1 50	.....	To \$2.00 and back to \$1.50.
58	Magnetic Iron Ore.....	100	.....	100	.....	.....	1 50	.....	Advanced and Receded.
59	Magnetic Iron Ore.....	12	.....	12	.....	.....	1 50	.....	From \$1.35 to \$2.00 and back.
104	Magnetic Iron Ore.....	30	.....	30	.....	.....	1 50	.....	From \$1.35 to \$2.00 and back.
108	Magnetic Iron Ore.....	50	.....	50	17	33	1 25	.....	No report.
109	Magnetic Iron Ore.....	100	.....	100	33	67	1 25	.....	Advance and Decline even.
110	Magnetic Iron Ore.....	50	.....	50	16	34	1 40	.....	From \$1 to \$2 and back to \$1.25.
111	Magnetic Iron Ore.....	100	.....	100	33	67	1 25	.....	Advanced and Declined.
113	Magnetic Iron Ore.....	10	1	11	6	5	1 40	\$1 00	Adv. 10 per cent. and Declined.
114	Magnetic Iron Ore.....	20	2	22	11	11	1 40	1 00	Adv. 10 per cent and Declined.
118	Magnetic Iron Ore.....	15	2	17	3	14	1 50	75	From \$1 to \$2 and back to \$1.50
121	Magnetic Iron Ore.....	6	1	7	7	.....	1 40	75	No Advance.
122	Magnetic Iron Ore.....	15	.....	15	14	1	1 50	75	\$1 to \$1.75 and back to \$1.25.
123	Magnetic Iron Ore.....	150	3	153	51	102	1 40	75	90 cts. to \$2 and back to \$1.25.
124	Magnetic Iron Ore.....	28	1	29	9	20	1 25	75	\$1.25 to \$2 and back to \$1.25.
125	Magnetic Iron Ore.....	450	.....	450	.....	.....	1 25	.....	Advanced.
126	Magnetic Iron Ore.....	50	.....	50	17	33	1 25	.....	Advance and Decline even.
127	Magnetic Iron Ore.....	75	.....	75	25	50	1 25	.....	Advance and Decline even.
211	Magnetic Iron Ore.....	12	.....	12	6	6	1 35	.....	\$1 to \$1.40 and back to \$1.10.
212	Magnetic Iron Ore.....	20	.....	20	5	15	1 50	.....	From \$1 to \$2 and back to \$1.25
213	Magnetic Iron Ore.....	35	.....	35	9	26	1 50	.....	From \$1 to \$2 and back to \$1.25
214	Magnetic Iron Ore.....	12	.....	12	6	6	1 50	.....	From \$1 to \$2 and back to \$1.25
215	Magnetic Iron Ore.....	15	.....	15	7	8	1 50	.....	From \$1 to \$2 and back to \$1.25
216	Magnetic Iron Ore.....	45	.....	45	22	23	1 35	.....	\$1 to \$1.40 and back to \$1.10.
217	Magnetic Iron Ore.....	12	.....	12	6	6	1 50	.....	\$1.10 to \$2 and back to \$1.25.
219	Magnetic Iron Ore.....	6	1	7	7	.....	1 00	50	No Advance.
220	Magnetic Iron Ore.....	13	.....	13	2	11	1 25	.....	Advanced 10 per cent.
222	Magnetic Iron Ore.....	8	3	11	8	3	1 42	70	Advanced 15 per cent.
225	Magnetic Iron Ore.....	70	2	72	65	7	1 50	75	From \$1 to \$2 and back to \$1.25
226	Magnetic Iron Ore.....	69	6	75	28	47	1 50	75	From \$1 to \$2 and back to \$1.25
227	Hematite Iron Ore.....	76	6	82	57	25	1 10	50	90 cts. to \$1.25 and back to \$1.10
228	Magnetic Iron Ore.....	150	10	160	44	116	1 50	75	From \$1 to \$2 and back to \$1.25
231	Magnetic Iron Ore.....	30	.....	30	.....	.....	1 50	.....	From \$1 to \$2 and back to \$1.25
232	Magnetic Iron Ore.....	20	.....	20	.....	.....	1 50	.....	From \$1 to \$2 and back to \$1.25
257	Magnetic Iron Ore.....	100	3	103	.....	.....	1 50	75	From \$1 to \$2 and Receded.
270	Magnetic Iron Ore.....	179	12	191	76	127	1 58	60	From 95 cts. to \$2 and Receded
279	Magnetic Iron Ore.....	20	.....	20	5	15	1 36	.....	Advance and Decline even.
280	Magnetic Iron Ore.....	73	5	78	20	58	1 36	.....	Advance and Decline even.
281	Magnetic Iron Ore.....	25	2	27	7	20	1 36	.....	Advance and Decline even.
305	Zinc Ore.....	30	3	33	.....	.....	1 25	.....	\$1.12 to \$1.75 and back to \$1.25.
306	Magnetic Iron Ore.....	125	4	129	30	99	1 36	.....	Advance and Decline even.
308	Zinc Ore.....	120	2	122	30	92	1 25	.....	Advanced 20 per cent
379	Magnetic Iron Ore.....	50	.....	50	.....	.....	1 50	.....	Advanced 30 per cent.
408	Magnetic Iron Ore.....	225	.....	225	.....	.....	1 25	.....	From \$1 to \$2 and back to \$1.25
507	Bessimer Ore.....	200	8	208	.....	.....	1 35	50	No report.
526	Magnetic Iron Ore.....	15	.....	15	10	5	1 50	.....	90 cts. to \$2 and back to \$1.25.
527	Magnetic Iron Ore.....	68	2	70	10	60	1 50	1 00	90 cts. to \$2 and back to \$1.25.
528	Magnetic Iron Ore.....	48	.....	48	5	43	1 50	.....	90 cts. to \$2 and back to \$1.25.
538	Hematite Iron Ore.....	67	.....	67	7	60	1 25	.....	Advanced 10 per cent.
539	Hematite Iron Ore.....	63	.....	63	7	56	1 30	.....	Advanced 10 per cent.
543	Magnetic Iron Ore.....	106	10	116	87	29	1 25	.....	Advanced 20 per cent.
554	Iron and Zinc Ore.....	156	3	159	89	70	1 25	50	Advanced 10 per cent.
630	Magnetic Iron Ore.....	20	.....	20	20	.....	1 50	.....	Advanced 25 per cent.
641	Magnetic Iron Ore.....	39	.....	39	.....	.....	1 75	.....	Advanced 25 per cent.
642	Magnetic Iron Ore.....	7	.....	7	2	5	1 50	.....	Advanced 25 per cent.
643	Magnetic Iron Ore.....	14	.....	14	.....	.....	1 25	.....	Advanced 25 per cent.
679	Magnetic Iron Ore.....	60	.....	60	.....	.....	1 50	.....	No report.
Total.....		4059	92	4151	919	1475	\$86 89	\$13 05	

The foregoing presentation of iron and zinc mining must be deemed encouraging, notwithstanding the fact that so many report inactivity for more or less months. Statistics are therein presented of 62 mines, with aggregate of 580 months worked, dividing the latter by the former and it will be seen that the average of working time was but  $9\frac{1}{3}$  months.

Total out-put of iron and zinc showed the very handsome aggregate of...679,108 tons.  
 Deducting from the same the reported product of zinc ore—

Office number 305.....	9,000 tons.
Office number 308.....	15,527 tons.
Office number 554.....	9,200 tons.
	<u>33,727 tons.</u>

And the net iron ore is.....645,381 tons.

The last geological report of this State shows the product to have been :

For 1878.....	409,674 tons.
For 1879.....	488,028 tons.
	<u>78,354 tons.</u>

Increase of 1879 over 1878.....  
 Or 19 per cent.

From the above it will be seen that the increase over the productions for 1879 (645,381—488,028) is 157,353 tons, a gain of  $32\frac{1}{3}$  per cent.

It will be noticed that the zinc miners have all been active throughout the year, raising, as above related, 33,727 tons, which, when compared with the previous years of 21,937 tons, shows an increase in production of 11,790 tons, or nearly 54 per cent.

The aggregate value of production is seen to be \$3,026,042.45, and the amount paid for labor, \$1,380,756.47, or a little more than  $45\frac{1}{2}$  per cent. of values produced.

Wages have fluctuated violently, in some instances doubling and then falling back largely, but very seldom to their former level, as will be seen by column headed as "Movement in Wages."

The superintendent of one large mining company summarizes the movement of wages thus: "As regards the advance of wages during the year, would say that certain kinds of *skilled* labor at times almost doubled, but are now only about 15 per cent. higher. *Common* labor advanced about 10 per cent., but at present is about the same as it was."

The average of quotations of men's daily wages in the 62 mines employing 4059 men, add up \$86.89, which latter sum divided by the former, say  $\$86.89 \div 62$ , shows the net general averages to men to be a fraction over \$1.40 per day. Eighteen mines report 92 boys as employed, at an average wages of  $72\frac{1}{2}$  cents each per day, by the same rule, say  $\$13.05 \div 18$ .

Of 2394 miners whose nativities are reported, 919 or 38 per cent. are shown to have been born in this country, and 1475 or 62 per cent. elsewhere.

No decidedly affirmative response has been received to query 12, which asks, "*Have your employees any share in the profits of your business other than their wages?*" Most answers have been in the negative. One large proprietor responds, "Miners work on contract. Contracts are set with them each month (usually) at a stated price per ton agreed upon at time of making contract." Some ten others refer to this mode of piece work as the only apparent alternative of wages.

Responses to query 13: "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*" One remarks, "We do not know of any just plan by which they can share the PROFITS and LOSSES excepting the one we practice, viz., we raise their wages when business is good and reduce them when it becomes poor."

Another says, "The profits being *nil*, is it practicable to inaugurate a system by which the employee can share in the *losses?*"

A third responds, "The employees are mostly composed of men who are constantly changing from one mine to another."

The fourth is less didactic and more logical when he says, "It is not practicable, as *mining is but a part* of the entire process of production. Results of the whole may not be determined for months after the close of the year. We understand that this query applies only to mining."

TABLE No. 24.—BLANK No. 2.

POTTERY.

Office Number.	Variety of Product.	Periods of Payment.	Total Number Employees.			Total Paid for Labor.	Total Value of Products.	Per cent. of Advance in Wages.
			Native Born.	Foreign Born.	Months at Work.			
707	Pottery Decorator.....	wk.....	40	28	12	\$14,500 00	\$30,000 00	None.
710	Pottery Decorator.....	wk.....	9	7	2	8,500 00	19,500 00	None.
711	Pottery Decorator.....	wk.....	7	7	12	4,500 00	8,000 00	None.
712	Pottery Decorator.....	wk.....	5	5	12	2,900 00	4,250 00	None.
713	Pottery Decorator.....	wk.....	91	66	25	40,000 00	75,000 00	None.
735	Pottery Decorator.....	wk.....	22	19	3	11,000 00	25,000 00	None.
668	Pottery.....	wk.....	10	4	6	3,750 00	5,000 00	10.
689	Pottery.....	2 wks	11	9	2	1,500 00	6,000 00	None.
699	Pottery, White.....	wk.....	60	30	30	20,000 00	47,000 00	None.
701	Pottery, White and Dec'd China..	wk.....	195	135	60	85,000 00	140,000 00	None.
702	Pottery, White and Decorated....	wk.....	205	103	102	70,000 00	140,000 00	None.
725	Pottery, White Earthenware.....	wk.....	105	.....	12	38,625 00	81,400 00	None.
729	Pottery, White.....	wk.....	210	135	75	70,000 00	200,000 00	None.
736	Pottery, Porcelain Knobs.....	2 wks	20	20	9	3,250 00	22,500 00	None.
737	Pottery.....	wk.....	103	50	53	46,000 00	100,000 00	None.
738	Pottery.....	wk.....	175	100	75	70,000 00	200,000 00	None.
739	Pottery.....	wk.....	150	112	38	78,000 00	200,000 00	None.
740	Pottery.....	wk.....	180	120	60	72,800 00	135,000 00	None.
741	Pottery.....	wk.....	270	195	75	90,000 00	200,000 00	None.
742	Pottery.....	wk.....	40	16	24	6,000 00	26,000 00	None.
744	Pottery.....	wk.....	285	185	100	89,000 00	210,000 00	None.
746	Pottery.....	wk.....	12	6	6	3,600 00	4,000 00	None.
747	Pottery.....	wk.....	60	21	39	20,000 00	55,000 00	None.
748	Pottery.....	wk.....	9	3	6	3,500 00	4,750 00	None.
749	Pottery, Chinaware.....	wk.....	150	.....	12	53,500 00	117,000 00	None.
750	Pottery, Opaque China, &c.....	wk.....	175	100	75	70,000 00	150,000 00	None.
956	Pottery, Rock'ham & Yell'w Ware	mon..	38	33	5	14,000 00	20,000 00	None.
753	Pottery, Yellow.....	wk.....	30	25	5	16,500 00	50,000 00	5.
846	Pottery, White.....	wk.....	75	.....	12	50,000 00	85,000 00	None.
754	Pottery, Terra Cotta.....	2 wks	62	16	46	31,000 00	200,000 00	10.
815	Pottery, Colored.....	wk.....	5	5	12	2,450 00	6,000 00	None.
816	Pottery, White.....	wk.....	92	52	40	31,200 00	60,000 00	None.
818	Pottery, Granite, Porcel'n & Dec'd	wk.....	200	50	150	75,000 00	250,000 00	None.
716	Pottery Supplies.....	wk.....	39	14	25	18,500 00	47,647 43	None.
745	Pottery Supplies.....	2 wks	55	44	11	11,200 00	12,000 00	None.
Total.....			3195	1715	1150	\$1,225,775 00	\$2,936,047 43	

TABLE No. 25.—BLANK No. 2.

## POTTERY.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Number of Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Owning Real Estate.
707	Pottery Decorator.....	7	15	9	9	40	\$3 00	\$1 50	\$0 60	.....
710	Pottery Decorator.....	5	2	.....	2	9	2 50	1 00	50	.....
711	Pottery Decorator.....	2	4	1	.....	7	2 50	1 50	90	.....
712	Pottery Decorator.....	2	2	.....	1	5	3 00	1 50	90	.....
713	Pottery Decorator.....	65	8	18	.....	91	2 50	66	66	.....
735	Pottery Decorator.....	10	12	.....	.....	22	2 00	1 00	.....	.....
668	Pottery .....	8	2	.....	.....	10	1 40	70	.....	.....
689	Pottery .....	8	.....	3	.....	11	1 25	.....	50	2
699	Pottery, White.....	40	.....	10	10	60	2 50	.....	66	.....
701	Pottery, White & Decorated China.	110	35	50	.....	195	2 00	1 00	1 00	.....
702	Pottery, White & Decorated.....	100	25	60	20	205	2 50	75	50	50
725	Pottery, White Earthenware.....	65	13	15	12	105	2 00	75	50	.....
729	Pottery, White.....	150	20	40	.....	210	2 00	66	66	20
736	Pottery, Porcelain Knobs.....	7	.....	10	3	20	1 25	.....	50	.....
737	Pottery .....	73	15	15	.....	103	2 00	75	75	25
738	Pottery .....	115	30	30	.....	175	2 50	75	75	20
739	Pottery .....	108	22	20	.....	150	2 00	75	75	.....
740	Pottery .....	115	35	30	.....	180	2 50	75	75	.....
741	Pottery .....	145	.....	65	60	270	2 00	.....	75	.....
742	Pottery .....	36	.....	4	.....	40	2 00	.....	66	.....
744	Pottery .....	150	60	75	.....	285	2 50	66	66	.....
746	Pottery .....	12	.....	.....	.....	12	1 50	.....	.....	.....
747	Pottery .....	40	.....	10	10	60	2 50	.....	66	8
748	Pottery .....	7	.....	2	.....	9	2 25	.....	75	.....
749	Pottery, China Ware.....	100	25	25	.....	150	2 50	1 25	50	.....
750	Pottery, Opaque China, &c.....	100	25	50	.....	175	2 00	1 00	50	.....
956	Rockingham and Yellow Ware.....	25	.....	13	.....	38	2 00	.....	50	.....
753	Pottery, Yellow.....	25	.....	5	.....	30	2 00	.....	50	2
846	Pottery, White.....	55	.....	20	.....	75	2 25	.....	70	.....
754	Pottery, Terra Cotta.....	60	.....	2	.....	62	1 65	.....	85	15
815	Pottery, Colored.....	5	.....	.....	.....	5	1 50	.....	.....	.....
816	Pottery, White.....	60	12	20	.....	92	2 25	50	50	.....
818	Pottery, Granite, Porcelain & Dec..	100	50	50	.....	200	2 00	1 00	50	.....
716	Pottery Supplies.....	37	2	.....	.....	39	1 60	1 00	.....	5
745	Pottery Supplies.....	22	30	3	.....	55	1 50	66	60	1
	Total .....	1969	444	655	127	3195	\$73 40	\$20 09	\$19 51	148

TABLE No. 26.—BLANK No. 2.

BRICK, GLASS, STONE AND CLAY.

Office Number.	Variety of Product.	Periods of Payment.	Total Number Employed.			Months at Work.	Total Paid for Labor.	Total Value of Products.	Per cent. of Advance in Wages.
			Total	Native Born.	Foreign Born.				
685	Bricks.....	wk.....	17	12	5	7	\$2,500 00	\$5,000 00	20.
718	Bricks.....	wk.....	21	19	12	8	11,000 00	23,000 00	None.
719	Bricks.....	wk.....	55	35	20	8	16,400 00	35,000 00	None.
720	Bricks.....	wk.....	68	60	8	8	21,000 00	38,800 00	None.
721	Bricks.....	wk.....	65	49	16	8	20,000 00	35,000 00	None.
722	Bricks.....	wk.....	35	31	4	8	8,000 00	15,000 00	None.
723	Bricks.....	wk.....	45	35	10	10	25,000 00	40,000 00	None.
743	Fire Brick.....	wk.....	10	1	9	8	3,500 00	23,000 00	None.
698	Clay.....	2 wks	51	.....	.....	12	10,000 00	20,000 00	25.
489	Glassware.....	wk.....	18	2	16	12	7,800 00	25,000 00	10.
691	Glassware... { Windows..... } { Hollow..... }	mon..	342	329	13	{ 8 10 }	86,000 00	190,000 00	{ 30. 10.
694	Glassware, Fruit Jars, &c.....	mon..	288	.....	.....	11	104,501 00	388,400 00	Adv.
695	Glassware, Green, Hollow.....	mon..	275	.....	.....	11	125,000 00	250,000 00	10 & 12 1/2
187	Marble.....	2 wks	15	11	4	12	4,000 00	20,000 00	20.
287	Granite and Marble.....	wk.....	26	13	13	12	23,100 00	80,000 00	None.
294	Granite, Marble and Freestone.....	2 wks	54	19	35	12	40,000 00	120,000 00	25.
588	Marble.....	wk.....	7	5	2	7	1,250 00	5,500 00	None.
703	Marble.....	wk.....	4	4	.....	12	2,400 00	6,500 00	10.
726	Marble.....	wk.....	4	4	.....	12	2,200 00	6,500 00	None.
727	Freestone.....	wk.....	6	4	2	12	2,700 00	13,000 00	None.
414	Drain Pipes.....	wk.....	14	14	.....	12	7,280 00	28,000 00	10.
415	Drain Pipes.....	wk.....	12	4	8	12	5,200 00	20,000 00	25.
915	Miner and Shipper of Clay.....	mon..	27	15	12	12	8,600 00	21,000 00	18.
916	Miner and Shipper of Clay.....	mon..	35	5	30	12	13,000 00	40,000 00	12.
917	Miner & Shipper of Clay & Sand	mon..	3	.....	3	12	1,000 00	4,500 00	20.
918	Miner & Shipper of Clay & Sand	mon..	4	.....	4	12	1,400 00	2,600 00	18.
925	Fire Brick and Sewer Pipe.....	mon..	80	40	40	12	25,000 00	85,000 00	12 1/2.
926	Fire Brick and Sewer Pipe.....	mon..	3	1	2	9	500 00	1,400 00	18.
927	Fire Brick and Sewer Pipe.....	mon..	50	13	37	.....	13,000 00	50,000 00	20.
928	Drain Pipe and Tile.....	mon..	19	2	17	12	5,500 00	18,000 00	15.
929	Bricks.....	mon..	22	.....	22	6	5,000 00	10,000 00	18.
930	Clay Mining.....	mon..	25	.....	25	12	12,000 00	70,000 00	10.
931	Miner and Shipper of Clay.....	mon..	2	.....	2	12	600 00	1,200 00	20.
932	Miner and Shipper of Clay.....	mon..	1	.....	1	.....	375 00	500 00	18.
933	Miner and Shipper of Clay.....	mon..	14	6	8	12	3,300 00	4,500 00	18.
934	Fire Clays Mined and Worked....	mon..	20	9	11	12	7,500 00	15,000 00	25.
940	Bricks.....	mon..	32	5	27	7	7,000 00	15,000 00	20.
941	Bricks.....	mon..	240	40	200	8	60,000 00	90,000 00	25.
942	Bricks.....	mon..	43	5	38	7	9,600 00	19,000 00	25.
943	Bricks.....	mon..	32	5	27	7	7,300 00	15,000 00	25.
944	Bricks.....	mon..	37	8	29	7	7,300 00	16,800 00	25.
945	Miner and Shipper of Clay.....	mon..	36	.....	.....	.....	10,544 00	23,220 00	None.
946	Fire Bricks.....	mon..	51	6	45	12	19,000 00	60,000 00	25.
947	Bricks.....	mon..	75	12	63	7	19,000 00	30,000 00	25.
948	Bricks.....	mon..	62	6	56	7	14,000 00	25,000 00	25.
949	Bricks.....	mon..	36	7	29	7	7,200 00	16,700 00	25.
950	Miner of Fire Clay.....	mon..	44	6	38	11	14,500 00	30,200 00	10.
951	Miner and Shipper of Clay.....	mon..	7	3	4	5	1,200 00	8,000 00	None
953	Fire Brick.....	mon..	25	10	15	12	7,750 00	27,500 00	8.
954	Clay Mined and Shipped.....	mon..	3	1	2	12	1,000 00	2,000 00	12 1/2.
955	Clay and Sand and Brick.....	mon..	27	12	15	12	8,000 00	12,000 00	12 1/2.
957	Fire Brick.....	mon..	69	.....	.....	12	29,816 94	60,195 50	12 1/2.
475	Building Lime.....	2 wks	25	.....	.....	12	10,000 00	25,000 00	50.
Total.....			2591	868	979	512	\$858,816 94	\$2,187,015 50	

TABLE No. 27.—BLANK No. 2.

## BRICK, GLASS, STONE AND CLAY.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' Average Daily Wages.	Owning Real Estate.
685	Bricks.....	15	1	1	17	\$1 50	\$0 40	\$0 40	.....
718	Bricks.....	25	.....	6	31	1 75	.....	1 00	.....
719	Bricks.....	40	.....	15	55	1 75	.....	1 12	5
720	Bricks.....	50	.....	18	68	1 75	.....	1 00	3
721	Bricks.....	50	.....	15	65	1 75	.....	1 00	2
722	Bricks.....	27	.....	8	35	1 75	.....	1 00	1
723	Bricks.....	30	.....	15	45	2 00	.....	88	1
743	Fire Brick.....	10	.....	.....	10	1 50	.....	.....	.....
698	Clay.....	45	.....	6	51	1 25	.....	62	6
489	Glassware.....	8	.....	10	18	85	.....	70	.....
691	Glassware, Window and Hollow.....	275	15	52	342	.....	.....	.....	6
694	Glassware, Fruit Jars, &c.....	230	33	25	288	1 75	85	85	.....
695	Glassware, Green Hollow Ware.....	237	.....	38	275	2 10	.....	56	40
187	Marble.....	15	.....	.....	15	2 00	.....	.....	3
287	Granite and Marble.....	26	.....	.....	26	3 00	.....	.....	1
294	Granite, Marble and Freestone.....	52	.....	2	54	2 75	85	.....	10
588	Marble.....	7	.....	.....	7	2 12	.....	.....	.....
703	Marble.....	4	.....	.....	4	2 00	.....	.....	.....
726	Marble.....	4	.....	.....	4	1 85	.....	.....	.....
727	Freestone.....	6	.....	.....	6	2 00	.....	.....	.....
414	Drain Pipe.....	14	.....	.....	14	1 50	.....	.....	.....
415	Drain Pipe.....	12	.....	.....	12	1 65	.....	.....	.....
915	Miner and Shipper of Clay.....	27	.....	.....	27	1 18	.....	.....	4
916	Miner and Shipper of Clay.....	35	.....	.....	35	1 25	.....	.....	5
917	Miner and Shipper of Clay and Sand.....	3	.....	.....	3	1 25	.....	.....	1
918	Miner and Shipper of Clay and Sand.....	4	.....	.....	4	1 25	.....	.....	.....
925	Fire Brick and Sewer Pipe.....	60	.....	20	80	1 12	.....	50	20
926	Fire Brick and Sewer Pipe.....	3	.....	.....	3	1 00	.....	.....	.....
927	Fire Brick and Sewer Pipe.....	40	.....	10	50	1 19	.....	.....	5
928	Drain Pipe and Tile.....	16	.....	3	19	1 15	.....	75	2
929	Bricks.....	20	.....	2	22	1 25	.....	.....	.....
930	Clay Mining.....	20	.....	5	25	1 25	.....	.....	.....
931	Miner and Shipper of Clay.....	2	.....	.....	2	1 25	.....	.....	.....
932	Miner and Shipper of Clay.....	1	.....	.....	1	1 25	.....	.....	1
933	Miner and Shipper of Clay.....	14	.....	.....	14	1 25	.....	.....	.....
934	Fire Clays Mined and Worked.....	20	.....	.....	20	1 25	.....	.....	2
940	Bricks.....	27	2	3	32	1 35	1 00	85	3
941	Bricks.....	200	20	20	240	1 35	1 00	85	6
942	Bricks.....	35	3	5	43	1 35	1 00	85	5
943	Bricks.....	27	2	3	32	1 35	1 00	85	2
944	Bricks.....	30	3	4	37	1 35	1 00	85	6
945	Miner and Shipper of Clay.....	36	.....	.....	36	.....	.....	.....	6
946	Fire Bricks.....	45	.....	6	51	1 25	.....	50	5
947	Bricks.....	60	7	8	75	1 35	1 00	50	5
948	Bricks.....	60	2	.....	62	1 35	1 00	.....	.....
949	Bricks.....	30	2	4	36	1 35	1 00	85	3
950	Miner of Fire Clay.....	40	.....	4	44	1 10	.....	.....	.....
951	Miner and Shipper of Clay.....	7	.....	.....	7	1 25	.....	.....	2
953	Fire Bricks.....	21	.....	4	25	2 00	.....	65	6
954	Clay Mined and Shipped.....	3	.....	.....	3	1 12	.....	.....	.....
955	Clay, Sand and Bricks.....	25	.....	2	27	1 13	.....	50	5
957	Fire Brick.....	67	.....	2	69	1 25	.....	.....	.....
475	Building Lime.....	25	.....	.....	25	1 50	.....	.....	.....
	Total.....	2185	89	316	2591	\$76 86	\$10 10	\$17 63	172

The four preceding tables will be coupled together in these notations, since they all come under the head of Pottery.

The total number of hands employed in the several industries represented in these tables, is 5786, of which 4154 are men, 534 women, 971 boys and 127 girls.

The average wages of the men employed in the potteries is \$2.09; and in the brick, stone, glass and clay works, \$1.51 per day. Of the women in the potteries, 91 cents; and in the brick, &c., 92 cents. Of the boys and girls in the potteries, 65 cents; and the boys in the brick, &c., 76 cents per day.

Three potteries report an advance in wages from 5 to 10 per cent., and thirty no advance.

In the brick, &c., forty report an advance of from 8 to 25 per cent., one of 50 per cent., and twelve no advance.

The aggregate production, including all the pottery tables, is \$5,123,062.93.

The aggregate disbursements for labor is \$2,084,591.94. In the case of the potteries, 42 per cent. of the product was paid for labor, and in the case of the brick, &c., 39 per cent.

Seventy-nine, employing 4712, report 2583 as native born, being fifty-four per cent.

Forty-one, employing 2858, show that 320, or about twelve per cent., own real estate.

In the case of the potteries, very steady work was had through the year, but in the other class, owing to the varied interruption of the weather, etc., the average mining time was about ten months.

Office No. 818, in pottery table, replies to question, "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*" "No; our work people are now paid generally by the piece, and can if they choose earn more wages than they care to do now, and are better paid than almost any class of mechanics."

No. 698, in the brick, etc., table, says, in reply to the same question, "In my case they would willingly share any profits, but they would or could not face any losses."

No. 955 answers, "Hardly practicable in my case as I employ only regular laboring men at full regular rates of wages, from which

they might have to refund a share of losses. In fairness, I think a laboring man is best off when earning regular wages and letting his employer run the risk of his business. In good times wages for day's labor will run up quick enough, and in bad times they are not always reduced to a sufficiently low figure, that the employer can afford to wait for better times, so he has to discharge them entirely."

No. 928 says, "No; they receive their full share now. During period from 1875 to 1879 they received the lion's share. My men know their full value and would exact it if I failed to give it. I have never had a strike for I have always anticipated it by giving my employees the advantage of any rise in the labor market, thus avoiding the necessity for strikes. Individual differences have to be settled by parting company of the employee and employer. As many as possible of my employees work by the piece, and the price of this work varies as the goods rise or fall in market to a certain extent. I am always pleased to have an employee earn more for himself, and never fail to push one forward the moment he shows aptitude for a higher grade of work. The men in my employ who are the most profitable to me are those who are earning the highest wages, and those without exception are perfectly contented. The disaffected are those who overrate their own ability, who do not, as a rule, in my experience, as fully earn the money they receive as the higher paid men, and are the least profitable help I have."

TABLE No. 28.—BLANK No. 2.

LEATHER AND FURS.

Office Number.	Varieties of Manufacture.	Periods of Payment.	Total Number Employees.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Product.	Per cent. of Advance in Wages.
132	Belting .....	wk.....	4	4	.....	12	\$2,550	\$20,000	None.
302	Furs .....	2 wks	30	20	10	12	8,000	90,000	25.
352	Morocco Leather.....	wk.....	40	40	.....	12	36,400	200,000	10.
356	Morocco Leather.....	wk.....	37	19	18	12	22,800	100,000	10.
371	Belting .....	wk.....	4	4	.....	12	2,500	14,000	None.
395	Morocco, Sheep and Calf Skins.....	wk.....	45	.....	.....	12	20,000	130,000	10.
478	Tannery.....	wk.....	8	2	6	12	4,800	70,000	None.
492	Tanner and Currier.....	wk.....	4	1	3	12	1,657	11,771	None.
493	Tanner and Currier.....	wk.....	40	13	27	12	20,000	85,000	None.
494	Tanner .....	wk.....	45	35	10	12	27,500	130,000	None.
524	Currier .....	wk.....	25	.....	.....	12	11,500	40,000	10.
530	Pocket Book and Bookbinders' Leather	wk.....	9	.....	.....	11	4,240	31,322	15.
561	Furs .....	wk.....	20	.....	.....	12	4,000	15,000	None.
574	Patent and Enamelled Leather.....	wk.....	110	37	73	12	62,400	520,000	20.
577	Patent and Enamelled Leather.....	wk.....	403	103	300	12	287,500	1,000,000	15.
584	Furs .....	wk.....	12	12	.....	5	2,000	25,000	None.
597	Patent and Enamelled Leather.....	wk.....	140	47	93	12	100,000	550,000	None.
599	Patent and Enamelled Leather.....	wk.....	375	47	328	12	190,000	1,250,000	None.
602	Morocco.....	wk.....	28	18	10	12	16,000	60,000	12½.
617	Fur Cutting.....	wk.....	5	5	.....	12	950	6,000	.....
640	Patent and Enamelled Leather.....	wk.....	80	40	40	12	39,000	254,000	7½ to 10
684	Inner Soles and Heel Sheets.....	wk.....	6	.....	.....	10	1,200	2,000	None.
686	Calf Skin Wallets and Pocket Books...	wk.....	18	.....	.....	6	1,200	5,000	.....
687	Leather.....	wk.....	5	1	4	12	2,288	10,663	None.
826	Leather.....	wk.....	60	15	45	12	39,520	188,000	25.
	Total.....		1553	463	967	...	\$908,005	\$4,807,756	

TABLE No. 29.—BLANK No. 2.

## LEATHER AND FURS.

Office Number.	Varieties of Manufacture.	Number of Men Employed.			Total Number Employed.	Men's Average Wages.	Women's Average Wages.	Boys' and Girls' Average Wages.	Owr. Real Estate.
		Number of Men Employed.	Number of Women Employed.	Number of Boys and Girls Employed.					
132	Belting.....	4			4	\$2 00			
302	Furs.....	24		6	30	1 25	\$0 66	6	
352	Morocco Leather.....	35		5	40	2 20	80		
356	Morocco Leather.....	35		2	37	2 20	1 60	4	
371	Belting.....	4			4	2 25			
395	Morocco, Sheep and Calf Skins.....	38	3	4	45	2 00	\$1 00	50	
478	Tannery.....	8			8	2 00			
492	Tanner and Currier.....	3		1	4	1 50	75	1	
493	Tanner and Currier.....	40			40	2 00		3	
494	Tanner.....	45			45	2 00			
524	Currier.....	20		5	25	1 85	67		
530	Pocket Book and Bookbinders' Leather.....	9			9	1 50		1	
561	Fur Cutting.....	10		10	20	1 00	70		
574	Patent and Enamelled Leather.....	103		7	110	1 85	60		
577	Patent and Enamelled Leather.....	400	3		403	1 80	1 80		
584	Furs.....	2	10		12	2 60	1 10		
597	Patent and Enamelled Leather.....	125		15	140	2 10	75		
599	Patent and Enamelled Leather.....	350	15	10	375	1 75	1 00	60	
602	Morocco.....	26		2	28	2 00	90	1	
617	Fur Cutting.....	1		4	5	1 20	50		
640	Patent and Enamelled Leather.....	70		10	80	2 50	1 00	27	
684	Inner Soles and Heel Sheets.....	3	3		6	1 00	75		
686	Calf Skin Wallets and Pocket Books.....	2	6	10	18	1 25	85		
687	Leather.....	5			5	1 50		2	
826	Leather.....	50		10	60	2 50		10	
	Total.....	1412	40	101	1553	\$45 80	\$6 50	\$10 03	55

The immediately preceding tables are compiled from reports of 25 establishments engaged in the preparation of leather and furs, and show a production the past year of \$4,807,756, and payments for labor of \$908,005, to 1553 employees, of whom 1412 were men, 40 women, and 101 boys and girls.

The sum of averages for men's daily labor is shown in the column devoted thereto to be \$45.80, which, divided by the number of reports ( $\$45.80 \div 25$ ), shows the net average of such wages to be \$1.83. This same formula applied to women's daily wages results ( $\$6.50 \div 6$ ) \$1.08, and boys' and girls' ( $\$10.03 \div 13$ ) to be 77 cents per day.

Eleven report advance in wages of  $7\frac{1}{2}$  to 25 per cent., and fourteen no advance.

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Nine, employing 293 persons, report that 55, or nearly 19 per cent., own real estate.

Nineteen, employing 1430 persons, report that 463, or  $32\frac{1}{2}$  per cent., were born in America, and 967, or  $67\frac{1}{2}$  per cent., elsewhere. As a rule all have run steadily through the year.

TABLE No. 30.—BLANK No. 2.

## JEWELRY AND GOLD AND SILVER REFINERS.

Office Number.	Variety of Manufacture.	Periods of Payment.	Months at Work.	Total Paid for Labor.	Total Value of Products.	Owning Real Estate.	Per cent. of Advance in Wages.
320	Gold and Silver Refiners.....	wk.....	12	\$2,000 00	.....	.....	20.
342	Jewelry Manufacture.....	wk.....	12	40,000 00	\$150,000 00	.....	20.
344	Jewelry Manufacture.....	wk.....	12	20,000 00	70,000 00	.....	None.
345	Jewelry Manufacture.....	wk.....	11	1,980 00	5,000 00	2	10.
348	Jewelry Manufacture.....	wk.....	12	18,000 00	35,000 00	.....	25.
355	Gold and Silver Refiner.....	wk.....	12	1,900 00	.....	2	None.
363	Jewelry Manufacture.....	wk.....	12	4,000 00	12,400 00	.....	10.
365	Jewelry Manufacture.....	wk.....	6	4,800 00	20,000 00	1	None.
367	Jewelry Manufacture.....	wk.....	12	10,500 00	38,000 00	.....	8.
376	Jewelry Manufacture.....	wk.....	12	25,000 00	80,000 00	10	20.
385	Jewelry Manufacture.....	wk.....	12	11,500 00	40,000 00	.....	12½.
386	Jewelry Manufacture.....	wk.....	11	15,600 00	53,000 00	2	25.
389	Jewelry Manufacture.....	wk.....	12	3,300 00	12,000 00	1	None.
391	Jewelry Manufacture.....	wk.....	12	12,000 00	90,000 00	.....	10.
392	Jewelry Manufacture.....	wk.....	12	25,000 00	61,000 00	.....	10.
439	Jewelry Manufacture.....	wk.....	11	45,000 00	165,000 00	.....	25.
440	Jewelry Manufacture.....	2 wks	12	91,000 00	550,000 00	21	10.
441	Jewelry Manufacture.....	wk.....	9	8,300 00	14,000 00	2	None.
442	Jewelry Manufacture.....	2 wks	11	50,000 00	130,000 00	12	20.
470	Gold and Silver Refiners.....	wk.....	2	500 00	.....	.....	None.
508	Jewelry Manufacture.....	wk.....	12	22,500 00	67,500 00	.....	15.
549	Jewelry Manufacture.....	wk.....	11	12,000 00	55,000 00	.....	15.
559	Jewelry Manufacture.....	wk.....	11	2,450 00	6,000 00	.....	15.
566	Jewelry Manufacture.....	wk.....	12	8,700 00	10,000 00	2	10.
596	Jewelry Manufacture.....	wk.....	11	24,000 00	60,000 00	.....	None.
623	Jewelry Manufacture.....	wk.....	12	20,000 00	66,000 00	.....	20.
628	Jewelry Manufacture.....	wk.....	11	16,500 00	80,000 00	.....	None.
629	Jewelry Manufacture.....	wk.....	10	10,000 00	30,000 00	.....	20.
676	Jewelry Manufacture.....	wk.....	10	8,000 00	25,000 00	.....	10.
697	Gold and Silver Refiners.....	wk.....	12	126,700 00	10,000,000 00	.....	None.
777	Jewelry Manufacture.....	wk.....	12	21,500 00	50,000 00	.....	None.
779	Gold Refiners.....	wk.....	12	4,500 00	300,000 00	.....	None.
780	Jewelry Manufacture.....	wk.....	12	30,000 00	60,000 00	.....	15.
781	Jewelry Manufacture.....	wk.....	10	1,400 00	4,000 00	.....	None.
785	Jewelry Manufacture.....	2 wks	6	500 00	1,200 00	2	None.
788	Jewelry Manufacture.....	wk.....	11	45,000 00	100,000 00	.....	20.
819	Jewelry Manufacture.....	wk.....	11	7,500 00	55,000 00	.....	None.
821	Jewelry Manufacture.....	2 wks	11	130,000 00	500,000 00	40	20.
824	Jewelry Manufacture.....	2 wks	12	153,104 84	428,753 69	.....	None.
839	Jewelry Manufacture.....	2 wks	11	12,180 00	57,530 00	.....	10.
841	Jewelry Manufacture.....	wk.....	12	25,965 09	59,895 06	2	20.
878	Jewelry Manufacture.....	2 wks	12	25,000 00	65,000 00	.....	25.
880	Jewelry Manufacture.....	wk.....	10	9,000 00	30,000 00	.....	None.
881	Jewelry Manufacture.....	wk.....	12	3,000 00	40,000 00	.....	None.
883	Jewelry Manufacture.....	wk.....	9	720 00	2,500 00	.....	None.
906	Jewelry Manufacture.....	wk.....	12	4,000 00	20,000 00	1	7.
907	Jewelry Manufacture.....	wk.....	12	45,000 00	105,000 00	8	None.
914	Gold Chains.....	2 wks	12	19,000 00	135,200 00	6	10 to 15.
935	Jewelry.....	wk.....	12	20,000 00	70,000 00	.....	25.
936	Jewelry.....	wk.....	12	28,000 00	60,000 00	.....	.....
937	Jewelry.....	wk.....	12	2,500 00	8,000 00	.....	None.
938	Jewelry.....	wk.....	12	33,000 00	85,000 00	.....	.....
958	Jewelry.....	wk.....	12	15,000 00	75,000 00	.....	12.
Total .....				\$1,272,099 93	\$14,236,978 75	114	
Deduct the product of the Gold and Silver Refineries.....					10,300,000 00		
Jewelry Product.....					\$3,936,978 75		

TABLE No. 31.—BLANK No. 2.

MANUFACTURERS OF JEWELRY.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys and Girls Employed.	Total Number Employed.	Native Born.	Foreign Born.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.
320	Gold and Silver Refiner.....	4	.....	.....	4	3	1	\$2 00	.....	.....
342	Jewelry Manufacture.....	75	10	5	90	45	45	2 50	\$1 85	\$0 70
344	Jewelry Manufacture.....	30	4	5	39	24	15	2 50	1 40	75
345	Jewelry Manufacture.....	18	.....	5	23	17	6	2 00	.....	60
348	Jewelry Manufacture.....	12	12	4	28	27	1	2 50	1 30	80
355	Gold and Silver Refiner.....	3	.....	.....	3	2	1	1 50	.....	.....
363	Jewelry Manufacture.....	7	.....	2	9	7	2	2 00	.....	40
365	Jewelry Manufacture.....	10	2	3	15	10	5	2 50	1 00	67
367	Jewelry Manufacture.....	15	3	2	20	15	5	2 00	1 35	60
376	Jewelry Manufacture.....	40	3	2	45	25	20	2 50	1 50	50
385	Jewelry Manufacture.....	12	3	8	23	19	4	2 50	1 50	75
386	Jewelry Manufacture.....	30	5	5	40	30	10	3 00	1 30	75
389	Jewelry Manufacture.....	11	1	.....	12	6	6	1 30	1 50	.....
391	Jewelry Manufacture.....	25	1	4	30	.....	.....	2 75	1 00	75
392	Jewelry Manufacture.....	33	.....	5	38	27	11	2 80	.....	70
439	Jewelry Manufacture.....	80	.....	6	86	43	43	2 75	.....	.....
440	Jewelry Manufacture.....	92	12	6	110	55	55	3 00	1 50	75
441	Jewelry Manufacture.....	9	1	1	11	11	.....	2 50	1 50	50
442	Jewelry Manufacture.....	41	10	4	55	28	27	3 00	1 50	75
470	Gold and Silver Refiner.....	7	.....	.....	7	7	.....	1 50	.....	.....
508	Jewelry Manufacture.....	30	.....	10	40	34	6	3 00	.....	1 10
549	Jewelry Manufacture.....	14	3	3	20	.....	.....	3 75	1 30	75
555	Jewelry Manufacture.....	4	.....	4	8	6	2	2 00	.....	80
566	Jewelry Manufacture.....	9	.....	3	12	11	1	3 00	.....	70
596	Jewelry Manufacture.....	37	3	.....	40	30	10	3 00	1 50	.....
623	Jewelry Manufacture.....	27	4	12	43	.....	.....	2 50	1 15	65
628	Jewelry Manufacture.....	17	3	3	23	15	8	3 00	1 25	.....
629	Jewelry Manufacture.....	20	.....	12	32	8	24	2 00	.....	60
676	Jewelry Manufacture.....	10	.....	10	20	20	.....	2 50	.....	50
697	Gold and Silver Refiner.....	240	.....	.....	240	.....	.....	1 62	.....	.....
777	Jewelry Manufacture.....	30	.....	2	32	14	18	2 25	.....	50
779	Gold Refiner.....	8	.....	.....	8	5	3	2 00	.....	.....
780	Jewelry Manufacture.....	35	3	.....	38	21	17	2 75	1 85	.....
781	Jewelry Manufacture.....	1	.....	5	6	4	2	2 50	.....	50
785	Jewelry Manufacture.....	4	.....	4	8	4	4	2 00	.....	75
788	Jewelry Manufacture.....	50	.....	.....	50	34	16	3 00	.....	.....
819	Jewelry Manufacture.....	9	.....	3	12	9	3	3 00	.....	75
821	Jewelry Manufacture.....	169	50	42	261	176	85	2 50	1 00	50
824	Jewelry Manufacture.....	225	10	125	360	180	180	2 50	1 25	65
839	Jewelry Manufacture.....	25	.....	10	35	15	20	4 00	.....	.....
841	Jewelry Manufacture.....	33	.....	15	48	32	16	2 66	.....	.....
878	Jewelry Manufacture.....	30	2	17	49	24	25	2 50	1 75	75
880	Jewelry Manufacture.....	10	5	5	20	17	3	2 25	1 00	50
881	Jewelry Manufacture.....	2	.....	2	4	4	.....	3 00	.....	50
883	Jewelry Manufacture.....	1	1	2	4	3	1	1 80	1 50	35
906	Jewelry Manufacture.....	8	.....	2	10	6	4	3 50	.....	35
907	Jewelry Manufacture.....	60	1	10	71	51	20	2 75	1 35	85
914	Gold Chains.....	20	10	30	60	20	40	2 33	1 33	50
935	Jewelry.....	20	6	5	31	18	13	2 50	1 50	.....
936	Jewelry.....	30	.....	6	36	21	15	2 75	.....	85
937	Jewelry.....	2	.....	2	4	2	2	2 75	.....	80
938	Jewelry.....	35	8	7	50	33	17	2 75	1 50	85
958	Jewelry.....	10	5	15	30	.....	.....	2 25	1 10	50
Total.....		1779	181	433	2393	1218	812	\$133 76	\$38 73	\$25 52

The two preceding tables are compiled from forty-eight manufacturers of jewelry, and five gold and silver refiners, showing that the total number employed in the precious metal industry is 2393; of men, 1779; women, 181; and 433 boys and girls.

The aggregate paid for labor is \$1,272,099.93, and the total product in manufactures \$3,936,978.15.

By dividing \$133.76 by fifty-three establishments, we ascertain the average daily wages for men is \$2.12½. The same process extends to women, thus: \$38.73 divided by twenty-eight, makes the average \$1.38; and to boys and girls thus: \$25.52, divided by thirty-nine, makes their average sixty-three cents.

Thirty report advance in wages of from seven to twenty-five per cent., twenty no advance and three make no response.

Sixteen, employing 754 persons, report 114, or fifteen per cent., as being owners of real estate.

Forty-eight report, of 2030 employees, 1218, or sixty per cent., are natives of this country, and 812, or forty per cent., foreigners.

The large manufacturers appear to have run without interruption.

Office No. 914 says, in response to question: "*Have your employees any share in the profits of your business other than their wages?*" "No; competition being so sharp, and some unscrupulous manufacturers, who do not hesitate to make 12 carats and sell it for 14 carats, makes the price so low that we are more than lucky when the amount invested nets six per cent. per annum."

The same number responds to question: "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*" "Very much so; and whenever manufacturers learn that underselling their neighbors, and trying to do all the business themselves is not good business sense, then higher prices can be obtained, and the mechanics can share with their employers, to the advantage of both."

TABLE No. 32.—BLANK No. 2.

RUBBER AND CELLULOID.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employees.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Products.	Per cent. of Advance in Wages.
359	Celluloid Goods.....	2 wks	20	.....	.....	12	\$18,200 00	.....	None.
456	Celluloid Goods.....	wk....	6	6	.....	4	850 00	.....	None.
551	Rubber Goods.....	wk....	35	20	15	12	15,000 00	\$215,000 00	None.
582	Rubber Goods.....	wk....	48	38	10	12	26,000 00	160,900 00	None.
696	Rubber Goods.....	mon..	145	83	62	12	45,551 64	215,554 22	.....
832	Rubber Goods.....	wk....	600	450	150	12	172,000 00	.....	None.
865	Rubber Buttons, &c.....	2 wks	481	.....	.....	12	112,252 62	442,355 68	10.
869	Rubber Boots, Shoes, Carr'ge Cl'h	mon..	395	99	296	11	112,934 41	784,530 22	10.
870	Rubber Boots and Shoes.....	mon..	305	.....	.....	11	89,728 52	530,792 00	12.
903	Rubber Boots and Shoes.....	mon..	280	120	160	11	78,743 31	504,740 71	None.
919	Rubber Hose, Belting, Pack'g, &c.	wk....	52	50	2	12	25,000 00	200,000 00	None.
922	Vulcanized Rubber.....	wk....	107	.....	.....	12	45,142 17	559,421 27	10.
923	Rubber Machinery, &c.....	2 wks	.....	.....	.....	12	25,000 00	75,000 00	10.
Total.....			2474	866	695	145	\$766,402 67	\$3,687,394 10	

TABLE No. 33.—BLANK No. 2.

RUBBER AND CELLULOID.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Number of Girls Employed.	Total Number Employed.	Mens' Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Own Real Estate.
359	Celluloid Goods.....	15	.....	.....	5	20	\$2 00	.....	\$0 60	.....
456	Celluloid Goods.....	2	.....	1	3	6	85	.....	85	.....
551	Rubber Goods.....	15	18	1	1	35	1 85	.....	65	.....
582	Stationers' and Druggists' Rubber Goods..	17	30	1	.....	48	2 50	1 00	1 00	3
696	Rubber Goods.....	100	.....	10	35	145	1 35	.....	75	.....
832	Rubber Goods.....	360	150	30	60	600	1 35	.....	37	.....
865	Rubber Buttons, &c.....	219	197	25	40	481	1 75	50	32	.....
869	Rubber Boots, Shoes and Carriage Cloths..	183	167	25	20	395	1 50	1 10	65	.....
870	Rubber Boots and Shoes.....	160	105	22	18	305	1 38	1 00	63	54
903	Rubber Boots and Shoes.....	123	97	36	24	280	1 20	95	50	17
919	Rubber Hose, Belting, Packing, &c.....	50	.....	2	.....	52	1 50	.....	.....	10
922	Vulcanized Rubber.....	102	.....	5	.....	107	1 75	.....	.....	.....
923	Rubber Machinery, &c.....	.....	.....	.....	.....	.....	2 00	.....	.....	10
Total.....		1346	764	158	206	2474	\$20 98	\$7 55	\$6 32	94

Thirteen manufacturers of rubber and celluloid goods contributed these statistics to the foregoing tables. Eleven showing the employment of 1346 men, 764 women, 158 girls and 206 boys, aggregating 2474 employees. Thirteen employers report payments to labor of \$766,402.67, and nine a total production of \$3,687,394.10.

The sum of 13 men's wages is \$20.98, which, divided by 13, makes the average \$1.61 per day. The same process shows women's wages ( $\$7.55 \div 7$ ) to be \$1.08, and boys' and girls' ( $\$6.32 \div 10$ ) 63 cents per day.

Five report advance in wages of 10 to 12 per cent., seven say no advance, and one omits to respond.

Four, omitting No. 923, employing 685 persons, report 84, or over 12 per cent., as owning real estate.

Eight report that of these 1561 employees 866, or more than 55 per cent., were born in this country, and 695, or about 45 per cent., elsewhere. The average running time was a fraction over 11 months.

TABLE No. 34.—BLANK No. 2.

PAPER AND ITS PRODUCTS.

Office Number.	Variety of Manufacture.	Tons Produced.	Periods of Payment.	Total Number Employed.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Product.	Per cent. of Advance in Wages.
80	Paper.....	450	mon..	19	6	13	6	\$7,200 00	\$31,500 00	None.
84	Paper.....	1,000	mon..	27	22	5	12	9,950 00	125,000 00	4 1/2.
90	Paper.....	100	wk....	5	5	.....	12	1,425 00	6,500 00	None.
158	Paper Boxes.....	.....	2 wks	25	22	3	12	6,500 00	25,000 00	None.
205	Manilla Paper.....	1,220	2 wks	58	58	.....	12	20,590 97	180,100 31	10.
206	Tissue Paper.....	156	mon..	17	17	.....	12	8,000 00	53,040 00	None.
235	Binders' Boards.....	240	wk....	17	14	.....	8	3,000 00	16,000 00	None.
236	Tissue Manilla Paper.....	100	mon..	15	.....	.....	12	2,600 00	20,000 00	10.
241	Paper Boxes.....	.....	wk....	25	23	2	12	13,500 00	50,000 00	None.
248	Paper.....	1,240	wk....	120	31	94	12	50,000 00	300,000 00	20.
262	Paper Boxes.....	.....	wk....	20	.....	.....	12	6,450 00	12,000 00	12.
284	Paper Boxes.....	.....	wk....	56	56	.....	12	5,650 00	18,100 00	25.
296	Binders' & Trunk Boards..	500	wk....	26	26	.....	11	9,700 00	35,000 00	18.
298	Paper.....	626	mon..	19	19	.....	12	8,000 00	72,000 00	15.
299	Paper.....	1,360	mon..	60	60	.....	12	11,292 36	163,200 00	15.
300	Paper.....	485	mon..	50	31	19	12	21,467 00	117,000 00	10.
316	Paper Boxes.....	.....	wk....	130	90	40	12	46,800 00	120,000 00	None.
332	Leather Boards.....	30	wk....	4	.....	.....	8	1,200 00	5,000 00	None.
358	Binders' Boards.....	120	mon..	8	.....	.....	8	1,600 00	7,000 00	None.
432	Paper Boxes.....	.....	wk....	78	78	.....	6	6,000 00	30,000 00	None.
450	Paper.....	200	wk....	10	.....	10	12	2,000 00	20,000 00	None.
609	Trunk Papers.....	.....	wk....	7	7	.....	12	3,700 00	25,000 00	None.
652	Paper Boxes.....	.....	wk....	21	21	.....	8	8,500 00	40,000 00	8.
692	Manilla Paper.....	95	wk....	18	16	2	12	6,640 40	36,455 39	None.
693	Paper Hangings.....	.....	2 wks	83	.....	.....	12	30,338 33	178,000 00	8 & 10.
697	Paper.....	780	mon..	23	21	2	12	9,000 00	140,400 00	None.
698	Paper.....	1,000	mon..	35	32	3	12	12,000 00	190,000 00	None.
783	Trunk & Binders' Boards..	250	mon..	13	3	10	12	6,279 40	31,600 00	10.
817	Col. Medium & Envelope..	350	3 wks	40	.....	.....	8	4,000 00	17,500 00	17.
830	Paper.....	130	wk....	6	6	.....	12	2,900 00	13,000 00	None.
831	Paper.....	600	wk....	14	14	.....	12	5,250 00	36,000 00	20.
843	Labels.....	.....	2 wks	125	112	13	12	56 473 87	269,254 80	8.
844	Paper.....	435	wk....	25	25	.....	11	10,750 00	75,000 00	None.
845	Binders' and Box Boards..	1,050	mon..	87	32	55	11	31,702 46	166,500 00	None.
848	Paper.....	150	wk....	5	.....	5	12	2,400 00	24,000 00	None.
850	Paper.....	250	2 wks	15	.....	.....	6	2,200 00	13,000 00	15.
853	Paper.....	225	wk....	15	15	.....	9	4,500 00	22,000 00	None.
866	Wall Paper.....	.....	wk....	91	75	16	10	36,588 44	233,243 36	10.
902	Hanging Paper.....	.....	wk....	1	1	.....	.....	246 03	1,928 30	10.
	Total.....	13,142	.....	1413	938	292	.....	\$476,394 26	\$2,919,321 16	

TABLE No. 35.—BLANK No. 2.

## PAPER AND ITS PRODUCTS.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Number of Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Own Real Estate.
80	Paper.....	10		6	3	19	\$1 50		\$0 50	7
84	Paper.....	15	12			27	1 59	\$0 75		2
90	Paper.....	3		2		5	1 25	50		
158	Paper Boxes.....	2	20	3		25	1 50	75	50	
205	Manilla Paper.....	45		3	10	58	1 75		75	
206	Tissue Paper.....	12	2	1	2	17	1 75	1 00	50	2
235	Binders' Boards.....	15		2		17	1 25			2
236	Tissue and Manilla Paper.....	10	3	2		15	1 25	75	50	
241	Paper Boxes.....	9	16			25	2 25	1 25		4
248	Paper.....	70	50			120	1 50	1 00		
262	Paper Boxes.....	3		17		20	1 50		1 00	
284	Paper Boxes.....	6	50			56	1 50	85		
296	Binders' and Trunk Boards.....	24		2		26	1 33		1 00	2
298	Paper.....	15	2	2		19	1 25		62	11
299	Paper.....	50	2	8		60	1 73	83	65	
300	Paper.....	31	12	2	5	50	1 77	75	50	8
316	Paper Boxes.....	60			70	130	1 75		75	10
332	Leather Boards.....	4				4	1 25			
358	Binders' Boards.....	7		1		8	1 00		50	2
432	Paper Boxes.....	8	70			78	1 50	1 00		
450	Paper.....	7		3		10	2 00			2
609	Trunk Papers.....	6		1		7	2 00		50	
652	Paper Boxes.....	4		4	13	21	1 85		1 25	
692	Manilla Paper.....	12	4	2		18	2 08	67	58	3
693	Paper Hangings.....	72		11		83	2 46		44	
697	Paper.....	17	1	5		23	1 25	67	45	
698	Paper.....	25		10		35	1 50		87	
783	Trunk and Binders' Boards.....	12		1		13	1 50			6
817	Colored Medium and Envelope.....	25	10	4	1	40	1 67	67	50	1
830	Paper.....	6				6	1 50			1
831	Paper.....	14				14	1 25			5
843	Labels.....	80		45		125	2 50		75	3
844	Paper.....	16	3	6		25	2 00	75	50	
845	Binders', Trunk, Box Boards, &c.....	61	14	12		87	1 50	80	1 00	8
848	Paper.....	5				5	1 50			
850	Paper.....	13			2	15	1 25		75	
853	Paper.....	15				15	2 00			
866	Wall Paper.....	50	2	34	5	91	2 00	1 00	50	10
902	Paper Hangings.....	1				1	2 60			
	Total.....	840	273	189	111	1413	\$64 58	\$13 99	\$15 86	89

Thirty-nine manufacturers contribute the testimony from which the preceding tables are evolved. It will be seen that they represent a production for the past year of \$2,919,322.16, and have in that time disbursed \$476,394.26 for wages to 1413 operatives, including 840 men, 273 women, 189 boys and 111 girls.

Dividing the aggregate of mens' average daily wages, (\$64.58), by the number of employees reporting (39), the net average wages of

men is shown to be nearly \$1.66 per day. The same rule applied to women (1399÷17) is shown to be eighty-two cents and to boys and girls (1586÷24), sixty-six cents per day.

Nineteen report advance in wages of from four and a half to twenty-five per cent., and twenty report no advance.

Nineteen, employing 837 persons, report that eighty-nine or ten and a half per cent. own real estate.

Thirty-two report nativities of 1230 employees as having been 938 or seventy-six per cent. in this country and 292 or twenty-four per cent. elsewhere. The months average eleven.

Twenty-seven paper mills report manufacture of 13,142 tons of paper.

To the query—“*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue?*”

No. 296—“The future may achieve this desirable end, but in this industry it is the daily struggle to obtain bread. As it becomes possible to reduce manufacturing to piece work, so will this give each worker his just share of the profit.”

No. 300—“No; they have no capital to make up deficiencies on years when business is carried on at a loss, nor would they be willing to advance money for losses if they had it.”

No. 843—“No; all attempts to do so have resulted in the proposition to discharge the owner and support the leaders in idleness.”

No. 902—“According to my view no employer should live on the labor of his employees. The ten per cent. I derive from that source is for the trouble of collecting and for bad debts. The profits on the stock sold and the labor are justly my own.”

No. 844—“Unless you assume that *all* manufacturing business is uniformly profitable, I should answer in the negative. Employees, as a rule, must have a stated income for family expenses. The profits or gains from almost all manufacturing business are subject to the uncertainties of trade as well as attendant risks from bad debts. Employees (skilled labor) demand current wages or strike. Having a poor year's business, you find, after paying your labor, you have nothing remaining for use of your capital and its risk in the business. If you ask your labor to *scale* wages to meet depres-

sion he will go elsewhere if he can. The following year we will assume to be a good season for business and you make *large* profits. Shall you divide with your employees or keep the *reserve* to meet what is *inevitable* (poor trade), thereby making it possible to keep the wheels moving even at loss, to give that fixed income (the employee's necessity), to labor".

TABLE No. 36.—BLANK No. 2.

CLOTHING.

Office Number.	Varieties.	Periods of Payment.	Total Number Employees.			Total Paid for Labor.	Total Value of Product.	Per cent. of Advance in Wages.	
			Native Born.	Foreign Born.	Months at Work.				
65	Shirts.....	wk.....	255	230	25	12	\$105,000 00	\$240,000 00	10.
135	Clothing.....	wk.....	2	2	.....	12	2,000 00	6,000 00	None.
145	Shirts.....	2 wks	250	125	125	12	100,000 00	250,000 00	7½.
207	Clothing.....	wk.....	300	280	20	12	40,000 00	180,000 00	20.
256	Shirts.....	wk.....	3	3	.....	12	1,200 00	2,000 00	10.
295	Shirts.....	wk.....	380	300	80	12	115,000 00	250,000 00	15.
347	Shirt Bosoms.....	wk.....	15	15	.....	10	3,500 00	58,000 00	3.
373	Corsets.....	wk.....	32	.....	.....	12	7,000 00	24,500 00	None.
394	Clothing.....	wk.....	136	.....	.....	11	35,000 00	45,000 00	10.
402	Corsets, &c.....	wk.....	150	130	20	9½	18,000 00	50,000 00	None.
417	Clothing.....	wk.....	35	29	6	12	15,600 00	31,000 00	15.
419	Clothing.....	wk.....	80	60	20	12	28,000 00	34,500 00	10.
420	Clothing.....	wk.....	80	53	27	12	26,000 00	35,000 00	10.
424	Clothing.....	wk.....	8	6	2	12	6,000 00	40,000 00	None.
425	Clothing.....	wk.....	18	12	6	12	17,000 00	400,000 00	None.
428	Clothing.....	wk.....	13	4	9	12	12,000 00	190,000 00	None.
430	Shirts.....	wk.....	50	40	10	12	7,500 00	40,000 00	5.
434	Clothing.....	wk.....	13	12	1	12	3,500 00	14,000 00	None.
435	Clothing.....	wk.....	10	10	.....	9	3,300 00	13,000 00	None.
436	Clothing.....	wk.....	7	7	.....	12	2,288 00	11,000 00	15.
443	Corsets.....	wk.....	450	.....	.....	12	66,000 00	400,000 00	None.
488	Corsets.....	wk.....	25	13	12	12	8,100 00	15,000 00	10.
496	Clothing.....	wk.....	8	7	1	8	1,900 00	4,000 00	10.
531	Corsets.....	wk.....	129	.....	.....	12	36,000 00	100,000 00	None.
594	Corsets.....	wk.....	58	.....	.....	12	9,100 00	40,000 00	None.
604	Corsets.....	wk.....	20	20	.....	3	2,250 00	5,850 00	None.
627	Clothing.....	wk.....	300	200	100	12	38,000 00	174,000 00	25.
661	Clothing.....	wk.....	10	.....	.....	12	5,300 00	10,000 00	10.
680	Jackets, Leggings, &c. (Knit).....	bi-wk	28	24	4	12	6,800 00	33,000 00	15.
787	Clothing.....	wk.....	41	31	10	12	15,000 00	31,000 00	10.
827	Clothing.....	wk.....	64	54	10	12	21,000 00	25,000 00	None.
836	Clothing.....	wk.....	10	.....	.....	12	45,876 00	129,060 00	None.
Total.....			2980	1667	488	.....	\$803,214 00	\$2,880,910 00	

TABLE No. 37.—BLANK No. 2.

## CLOTHING.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys and Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Owning Real Estate.
65	Shirts.....	80	175	.....	255	\$1 75	\$1 25	.....	.....
135	Clothing.....	2	.....	.....	2	3 00	.....	.....	.....
145	Shirts.....	80	170	.....	250	1 66	1 00	.....	15
207	Clothing.....	10	290	.....	300	1 25	75	.....	100
256	Shirts.....	3	.....	.....	3	1 25	.....	.....	.....
295	Shirts.....	25	350	5	380	2 50	1 00	\$0 75	2
347	Shirt Bosoms.....	3	12	.....	15	3 00	1 15	.....	.....
373	Corsets.....	2	.....	30	32	1 60	.....	60	.....
394	Clothing.....	20	116	.....	136	1 50	80	.....	.....
402	Corsets, &c.....	12	138	.....	150	2 50	65	.....	.....
417	Clothing.....	5	30	.....	35	2 00	80	.....	2
419	Clothing.....	18	62	.....	80	2 00	1 25	.....	.....
420	Clothing.....	10	70	.....	80	2 20	1 25	.....	2
424	Clothing.....	8	.....	.....	8	2 50	.....	.....	3
425	Clothing.....	18	.....	.....	18	2 75	.....	.....	.....
428	Clothing.....	13	.....	.....	13	3 00	.....	.....	3
430	Shirts.....	5	45	.....	50	2 50	50	.....	20
434	Clothing.....	2	10	1	13	1 65	1 20	60	.....
435	Clothing.....	3	7	.....	10	1 50	80	.....	.....
436	Clothing.....	1	6	.....	7	1 65	1 25	.....	.....
443	Corsets.....	20	370	60	450	2 50	1 25	75	.....
488	Corsets.....	4	.....	21	25	1 50	.....	1 00	.....
496	Clothing.....	2	.....	6	8	1 45	.....	75	.....
531	Corsets.....	15	97	17	129	2 00	75	40	.....
594	Corsets.....	4	50	4	58	1 50	66	50	.....
604	Corsets.....	3	16	1	20	2 50	1 25	50	.....
627	Clothing.....	150	150	.....	300	2 50	80	.....	25
661	Clothing.....	10	.....	.....	10	1 75	.....	.....	.....
680	Jackets, Leggings, &c., (Knit).....	12	16	.....	28	95	70	.....	.....
787	Clothing.....	11	30	.....	41	1 90	1 00	.....	2
827	Clothing.....	10	.....	54	64	2 50	.....	90	.....
836	{ Clothing (Cutters), Work Principally } { done by Contract..... }	10	.....	.....	10	2 00	.....	.....	.....
	Total.....	571	2210	199	2980	\$64 81	\$20 06	\$6 75	174

The thirty-two firms which have furnished us with their reports, have enabled us to construct the foregoing tables, showing the employment of 2980 persons, of whom 571 are men, 2210 women, and 199 boys, who received for their work the past year, \$803,214, and contributed to the production of \$2,880,910 in value of goods.

The thirty-two separate reports of men's average daily wages foot up \$64.31, which divided by the number of reports, ( $\$64.31 \div 32$ ), shows general average of \$2.01 per day. Women's wages, similarly tested, ( $\$20.06 \div 21$ ), are shown to be 95 cents, and boys' and girls' wages, ( $\$6.75 \div 10$ ), 67 cents per day.

Eighteen report advance in wages of from 3 to 25 per cent., but fourteen report no advance.

Ten, employing 1457 persons, say that 174 or 12 per cent. own real estate.

Twenty-five say that of 2155 persons employed by them, 1667 or 78 are of native, and 488 or 22 per cent. of foreign birth. This business seems to have run steadily through the year with very little interruption.

Office No. 690 responds to the query: "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*" "It is probable that the present system is about as near right as the prevailing physical and mental condition of mankind will admit. Natural law governs the labor system as it does all other things, and as the process of equalization of the mental and physical capacity of the race progresses so will progress the more equal division of the profits of business."

No. 207 says: "If they would share the losses we would be perfectly willing to give them a share of the profits."

TABLE No. 38.—BLANK No. 2.

## BOOTS AND SHOES.

Office Number.	Periods of Payment.	Months at Work.	Number of Pairs Made.	Total Paid for Labor.	Total Value of Product.	Owning Real Estate.	Movement of Wages.
87	weekly .....	12	6,000	\$6,500 00	\$18,000 00	.....	No Advance.
97	weekly .....	10	13,000	20,000 00	50,000 00	20	No Advance.
120	2 weeks .....	11	132,763	50,000 00	172,500 00	6	Advanced 5 per cent.
254	weekly .....	12	20,280	5,250 00	61,000 00	5	No Advance.
235	weekly .....	12	26,000	36,780 00	130,000 00	12	No Advance.
291	weekly .....	12	26,000	62,400 00	175,000 00	.....	No Advance.
325	weekly .....	12	12,000	23,040 00	75,000 00	2	Advanced 10 per cent.
384	weekly .....	12	260,000	55,000 00	204,000 00	.....	No Advance.
416	weekly .....	12	700	6,000 00	15,000 00	.....	No Advance.
418	weekly .....	12	15,000	8,500 00	20,000 00	.....	No Advance.
422	weekly .....	10	Slippers.	9,000 00	15,000 00	...	No Advance.
423	weekly .....	10	800	1,350 00	3,500 00	.....	No Advance.
490	weekly .....	12	40,000	100,000 00	200,000 00	.....	No Response.
497	weekly .....	12	Uppers only.	5,475 00	11,000 00	1	No Advance.
498	weekly .....	5	6,750	1,800 00	4,150 00	.....	No Advance.
499	weekly .....	12	Uppers only.	4,580 00	10,000 00	1	No Advance.
504	weekly .....	12	13,762	7,879 45	30,974 00	.....	Advanced 12 per cent.
505	weekly .....	12	31,200	39,000 00	130,000 00	.....	No Advance.
643	weekly .....	12	600	900 00	2,000 00	.....	Advanced 5 per cent.
666	weekly .....	12	3,000	4,100 00	12,000 00	.....	Advanced 12½ per cent.
700	weekly .....	12	.....	13,542 13	60,000 00	10	Advanced 10 to 15 per cent.
724	weekly .....	12	5,700	4,250 00	10,000 00	.....	No Advance.
778	weekly .....	12	300,000	300,000 00	800,000 00	.....	Advanced 12½ per cent.
837	weekly .....	11	.....	19,000 00	80,000 00	.....	Advanced 10 per cent.
855	weekly .....	10	.....	15,000 00	50,000 00	.....	No Advance.
856	weekly .....	9	.....	9,500 00	18,000 00	5	No Advance.
857	weekly .....	8	.....	6,000 00	10,000 00	1	No Advance.
858	weekly .....	12	.....	4,500 00	7,000 00	.....	No Advance.
859	weekly .....	12	.....	1,500 00	4,000 00	.....	No Advance.
860	weekly .....	12	.....	19,000 00	42,000 00	1	No Advance.
861	weekly .....	11	.....	23,000 00	85,000 00	5	Advanced 10 per cent.
873	weekly .....	12	.....	18,000 00	70,000 00	.....	Advanced 10 per cent.
Total .....		359	713,555	\$880,846 58	\$2,575,124 00	69	

TABLE No. 39.—BLANK No. 2.

BOOTS AND SHOES.

Office Number.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Number of Girls Employed.	Total Number Employed.	Native Born.	Foreign Born.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.
87	12	1			13	12	1	\$1 50	\$ .75	
97	48	2			50	34	16	1 75	1 50	
120	102	55		5	162			1 80	90	\$0 40
254	9	3			12	7	5	1 75	1 00	
285	100	15	5		120	30	90	3 50	1 25	45
291	110	15			125	31	94	2 00	1 65	
325	60				60	20	40	1 50		
384	120	80			200	150	50	2 10	88	
416	10				10	5	5	1 80		
418	11	4			15	5	10	2 25	1 00	
422	15	3			18	9	9	1 50	80	
423	3				3	1	2	1 75		
490	165	35			200			2 50	1 50	
497	5	7			12	8	4	2 25	1 00	
498	16	5			21	16	5	85	65	
499	9				9	4	5	1 65		
504	11	5	4		20	10	10	1 50	1 00	50
505	85	5			90	30	60	1 30	75	
643	1	1			2	1	1	2 00	1 00	
666	6				6			2 25		
700	23	21	3		47					
724	6			4	10	10		2 00		65
778	280	70	80		430	230	200	2 25	1 10	50
837	75		18	20	113	53	60	1 50		1 00
855	12	3			15	7	8	1 50	1 25	
856	18				18	6	12	2 50		
857	4	1			5	1	4	2 50	1 20	
858	8	7			15	9	6	1 50	90	
859	2				2	1	1	1 80		
860	32	3			35	19	16	1 85	1 40	
861	44	31	8		83	76	7	1 50	1 00	50
873	25	25	7	8	65			1 50	1 00	60
	1427	397	125	37	1986	785	721	\$57 90	\$23 43	\$4 60

The thirty-two reports from which the two preceding tables are compiled shows the employment of 1427 men, 397 women, 125 boys and 37 girls, making a total of 1986 employees, to whom were distributed, the past year, \$880,846.53 as wages. The aggregate of values produced is shown to be \$2,575,124. Nineteen firms report the production of 713,555 pairs of boots and shoes.

Thirty-one firms report the average of men's wages, and by adding the same and dividing by the number of reports ( $\$57.90 \div 31$ ) the general average of men's wages is shown to be \$1.87 per day. By the same process women's wages may be quoted ( $\$23.43 \div 22$ ) at \$1.06, and boys' and girls' ( $\$4.60 \div 8$ ) at 57 cents per day.

Ten report an advance in wages of from five to fifteen per cent., but twenty-two say they made no advance. Twelve, employing 613 persons, say that 69, or  $11\frac{1}{4}$  per cent., own real estate.

Twenty-seven report that of their 1506 operatives, 785, or 52 per cent., were born in this country, and 721, or 48 per cent., elsewhere. The average time of active business is shown to have been  $(359 \div 32)$  11 months.

TABLE No. 40.—BLANK No. 2.

MANUFACTURES OF WOOD.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employees.			Total Paid for Labor.	Total Value of Products.	Per cent. of Advance in Wages.
			Native Born.	Foreign Born.	Months at Work.			
82	Planing Mill.....	wk.....	17	17	.....	12	\$10,000 00	\$45,000 00 25.
92	Scroll Sawing, Boxes, &c.....	2 wks	64	48	16	12	100,000 00	200,000 00 30.
170	Planing Mill.....	wk.....	30	22	8	12	19,500 00	25,000 00 10.
191	Wood Turning.....	2 wks	15	13	2	12	5,200 00	10,000 00 5.
209	Canal Boats.....	mon..	63	57	6	12	25,931 36	85,600 00 8.
243	Cabinet Work.....	wk.....	11	.....	.....	12	4,350 00	10,000 00 5.
312	Patterns.....	wk.....	4	4	.....	12	2,100 00	5,000 00 20.
360	Wood Turning.....	wk.....	4	1	3	12	2,683 00	6,419 95 10.
362	Wood Turning.....	wk.....	7	7	.....	12	2,000 00	5,200 00 None.
398	Wood and Planing.....	wk.....	7	5	2	12	3,150 00	10,000 00 None.
426	Furniture.....	wk.....	12	9	3	12	3,500 00	10,000 00 30.
427	Furniture.....	wk.....	3	2	1	12	1,500 00	2,000 00 10.
446	Wheels, Spokes and Wheel Stock..	wk.....	72	58	14	12	31,193 96	140,000 00 None.
454	Hat Blocks.....	wk.....	5	5	.....	12	2,620 00	10,000 00 None.
506	Wagon Wheels.....	wk.....	5	4	1	12	3,120 00	12,000 00 None.
535	Wooden Boxes.....	wk.....	78	55	23	12	82,814 30	212,132 36 None.
542	Working and Dressing Lumber....	wk.....	22	.....	.....	12	10,750 00	30,000 00 10.
567	Sash, Blinds and Paper Boxes.....	2 wks	100	80	20	12	45,000 00	140,000 00 12.
608	Sash and Blinds.....	wk.....	30	29	1	12	18,000 00	40,000 00 12½.
618	Wood and Metal Turning.....	wk.....	5	3	2	12	2,000 00	7,800 00 None.
653	Sash, Blinds and Doors.....	wk.....	150	135	15	12	100,000 00	200,000 00 15.
688	Sash, Blinds and Doors, &c.....	wk.....	20	20	.....	9	3,500 00	3,000 00 10.
690	Spokes.....	wk.....	8	8	.....	6	1,650 00	5,000 00 None.
700	Carriage Wood Work.....	wk.....	15	13	2	12	6,750 00	25,000 00 None.
708	Sash and Blinds.....	wk.....	18	17	1	12	8,400 00	12,000 00 None.
767	Sash, Blinds, Doors, &c.....	2 wks	700	575	125	10	248,000 00	496,000 00 15.
693	Sash and Blinds.....	wk.....	20	19	1	12	9,250 00	50,000 00 None.
694	Spokes, &c.....	wk.....	35	30	5	12	15,900 00	70,000 00 None.
851	Sash.....	wk.....	8	.....	.....	12	5,000 00	10,000 00 None.
876	Slack and Tight Barrels.....	wk.....	239	120	119	12	97,136 97	467,337 70 33.
894	Wheels and Spokes.....	wk.....	25	20	5	12	13,000 00	50,000 00 None.
910	Moulding and Planing.....	.....	23	.....	.....	11	7,200 00	30,000 00 .....
Total .....			1815	1376	375	.....	\$841,199 59	\$2,424,490 01

TABLE No. 41.—BLANK No. 2.

## MANUFACTURES OF WOOD.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Boys Employed.	Total Number Employed.	Men's Average Daily Wages.	Boys' Average Daily Wages.	Owning Real Estate.
82	Planing Mill.....	15	2	17	\$1 75	\$0 75	.....
92	Scroll Sawing, Boxes, &c.....	60	4	64	2 00	1 13	12
170	Planing Mill.....	23	7	30	2 25	85	6
191	Wood Turning.....	13	2	15	1 60	60	1
209	Canal Boats.....	60	3	63	1 50	1 00	2
243	Cabinet Work.....	8	3	11	1 60	50	.....
312	Patterns.....	3	1	4	2 25	85	.....
360	Wood Turning.....	4	.....	4	2 00	.....	.....
362	Wood Turning.....	3	4	7	1 66	60	1
398	Wood Turning and Planing.....	7	.....	7	1 50	.....	.....
426	Furniture.....	11	1	12	1 50	.....	1
427	Furniture.....	3	.....	3	1 65	.....	.....
446	Wheels, Spokes and Wheel Stock.....	72	.....	72	2 00	.....	.....
454	Hat Blocks.....	4	1	5	2 50	85	.....
506	Wagon Wheels.....	5	.....	5	2 00	.....	1
535	Wooden Boxes.....	56	22	78	1 75	42	.....
542	Working and Dressing Lumber.....	22	.....	22	1 65	.....	3
567	Sash, Blinds and Paper Boxes.....	80	20	100	2 00	85	.....
608	Sash and Blinds.....	30	.....	30	2 00	.....	.....
618	Wood and Metal Turning.....	2	3	5	2 00	75	.....
653	Sash, Blinds and Doors.....	145	5	150	2 00	1 25	.....
688	Sash, Blinds and Doors, &c.....	20	.....	20	1 50	.....	6
690	Spokes.....	7	1	8	1 50	50	2
700	Carriage Wood Work.....	13	2	15	1 50	1 00	1
708	Sash and Blinds.....	13	5	18	1 75	1 00	.....
767	Sash, Blinds, Doors, &c.....	688	12	700	2 00	1 00	.....
693	Sash and Blinds.....	20	.....	20	1 50	.....	3
694	Spokes, &c.....	35	.....	35	1 50	.....	.....
851	Sash.....	8	.....	8	2 50	.....	1
876	Slack and Tight Barrels.....	220	19	239	3 00	.....	.....
894	Wheels and Spokes.....	25	.....	25	1 60	.....	.....
910	Moulding and Planing.....	20	3	23	1 75	.....	.....
	Total.....	1695	120	1815	\$59 26	\$13 90	40

By the two preceding tables, it will be seen that the thirty-two manufacturers of the products of wood, employ 1695 men and 120 boys, making a total of 1815, who receive \$841,199.59 as wages, and turn out a finished product of \$2,424,490.01.

Adding the average quoted wages and dividing the same by the number of reports ( $\$59.26 \div 32$ ), and \$1.85 is the result as net average of men's wages per day. Applying the same process to boys' wages reported ( $\$13.90 \div 20$ ), and they are shown to be 69 cents per day.

Seventeen report advance in wages of from five to thirty-three per cent., and fourteen say there was no advance.

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Thirteen, employing 289 persons, report that 40, or 14 per cent., own real estate.

Twenty-eight, employing 1751 persons, report that 1376, or 79 per cent., were born in this country, and 375, or 21 per cent., elsewhere. As a rule, the manufacturers reporting have been busy throughout the year.

TABLE No. 42.—BLANK No. 2.

## ALES, BEER, &amp;c.

Office Number.	Variety of Product.	Periods of Payment.	Own Real Estate.				Men's Daily Wages.	Months at Work.	Total Paid for Labor.	Total Value of Product.	Per cent. of Advance in Wages.
			Own Real Estate.	Men Employed.	Native Born.	Foreign Born.					
141	Mineral Waters.....	wk.....	6	6	.....	\$1 50	12	\$4,500 00	\$24,000 00	25.	
147	Brewery.....	wk.....	4	4	4	2 00	12	2,500 00	15,000 00	None.	
171	Brewery.....	2 wks	4	15	5 10	2 25	12	11,500 00	100,000 00	25.	
172	Brewery, Small Beer.....	wk.....	4	4	.....	1 25	12	1,600 00	3,750 00	12.	
173	Brewery.....	$\frac{1}{2}$ -wk	45	.....	.....	1 75	12	30,000 00	Am't refused.	.....	
406	Brewery.....	wk.....	4	29	1 28	2 00	12	13,700 00	125,000 00	None.	
570	Brewery.....	mon..	3	40	5 35	2 50	12	28,000 00	384,000 00	20.	
573	Brewery.....	mon..	5	45	5 40	2 00	12	25,000 00	200,000 00	None.	
637	Brewery.....	wk.....	42	14	28	2 50	12	30,000 00	245,000 00	15.	
638	Brewery.....	wk.....	30	10	20	2 25	12	20,250 00	200,000 00	12 $\frac{1}{2}$ .	
654	Malt and Malt Liquors.....	wk.....	100	.....	.....	1 75	12	71,512 22	969,942 25	10.	
Total.....			16	360	50	165	\$21 75	\$238,562 22	\$2,266,692 25		

The foregoing table is an analysis of the returns from 11 brewers, showing employment of 360 men, at a cost for labor of \$238,562.22, and a production by ten of \$2,266,692.45 in commercial value.

As the aggregate of quoted average wages is \$21.75, it follows that the net average ( $\$21.75 \div 11$ ) is \$1.98 per day. Eight report advance in wages of 10 to 25 per cent. Four, employing 129 persons, say that 16, or 12 per cent., own real estate. Nine report of their 215 employees, that fifty, or 24 per cent., are of American, and 165, or 77 per cent., of foreign birth. Without exception, all have run continuously through the year.

TABLE No. 43.—BLANK No. 2.

TRUNKS, VALISES, &c.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employed.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Products.	Per cent. of Advance in Wages.
404	Trunks and Valises.....	wk.....	200	100	100	12	\$52,000 00	\$250,000 00	5.
412	Travelling Bags.....	wk.....	23	9	14	12	11,500 00	30,000 00	15.
486	Trunks.....	wk.....	25	8	17	12	10,000 00	60,000 00	25.
500	Trunks, Valises, &c.....	wk.....	425	213	212	12	200,000 00	700,000 00	12½.
544	Trunks, Bags and Valises.....	wk.....	350	150	200	12	100,000 00	450,000 00	25.
571	Trunks.....	2 wks	400	240	160	12	145,000 00	350,000 00	25.
784	Trunks and Bags.....	wk.....	190	.....	.....	12	90,000 00	330,000 00	10 to 25.
840	Bag Frames.....	wk.....	38	.....	.....	12	13,016 00	30,100 00	10.
Total.....			1651	720	703	.....	\$621,516 00	\$2,200,100 00	

TABLE No. 44.—BLANK No. 2.

TRUNKS, VALISES, &c.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Number of Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Owning Real Estate.
404	Trunks and Valises.....	150	12	38	.....	200	\$1 65	.....	\$0 80	30
412	Traveling Bags.....	23	.....	.....	.....	23	1 80	.....	.....	.....
486	Trunks.....	23	.....	2	.....	25	2 00	.....	70	.....
500	Trunks, Valises, &c.....	375	.....	50	.....	425	2 25	.....	60	100
544	Trunks, Bags and Valises.....	200	50	50	50	350	2 50	\$1 33	50	.....
571	Trunks.....	320	30	50	.....	400	2 00	85	1 25	.....
784	Trunks and Bags.....	125	5	60	.....	190	2 00	.....	.....	.....
840	Bag Frames.....	30	.....	6	2	38	2 00	.....	75	.....
Total.....		1246	97	256	52	1651	\$16 20	\$2 18	\$4 60	130

Eight manufacturers contribute the materials from which the preceding two tables are formulated, showing their employment of 1246 men, 97 women, 256 boys and 52 girls, footing an aggregate of 1661 operatives.

By adding the separate averages of men's reported wages, the sum of \$16.20 is produced, which, divided by the number reporting ( $\$16.20 \div 8$ ) shows the net average of men's wages to be \$2.02 per day. A similar process ( $\$2.18 \div 2$ ) shows women's wages to average \$1.09, and boys' and girls' ( $\$4.60 \div 6$ ) to be 77 cents per day.

All report a greater or less advance in wages, varying from five to twenty-five per cent.

Employers of 625 persons report 130, or 21 per cent. thereof, as owning real estate.

Six firms, employing 1423 persons, report that 720, or about 51 per cent., were born in this country, and 703, or about 49 per cent., elsewhere. This branch of business seems to have been actively engaged throughout the year.

TABLE No. 45.—BLANK No. 2.

HARNESS, SADDLERY, &c.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employees.	Native Born.	Foreign Born.	Owning Real Estate.	Months at Work.	Total Paid for Labor.	Total Value of Products.
242	Harness.....	wk.....	86	43	43	3	9	\$36,000 00	\$80,000 00
283	Harness.....	wk.....	2	2	.....	1	12	1,200 00	5,000 00
286	Harness.....	wk.....	6	3	3	.....	12	2,500 00	13,000 00
288	Harness.....	wk.....	12	8	4	.....	9	1,500 00	4,500 00
289	Saddlery Hardware.....	wk.....	19	5	14	.....	12	9,000 00	20,000 00
292	Saddlery Hardware.....	wk.....	60	30	30	.....	12	16,500 00	110,000 00
314	Saddlery Hardware.....	wk.....	15	15	.....	2	12	10,400 00	15,000 00
319	Saddlery Hardware.....	wk.....	12	8	4	2	12	3,900 00	14,700 00
324	Harness.....	wk.....	7	3	4	2	12	4,000 00	17,000 00
326	Horse Collars.....	wk.....	11	8	3	.....	12	6,300 00	15,000 00
327	Harness Saddles.....	wk.....	16	16	.....	.....	12	3,800 00	15,600 00
328	Harness.....	wk.....	3	3	.....	.....	12	1,700 00	3,000 00
329	Mexican Saddles.....	wk.....	40	40	.....	3	12	24,000 00	50,000 00
349	Saddlery Hardware.....	2 wks	41	11	30	.....	12	32,000 00	60,000 00
368	Saddlery Hardware.....	wk.....	36	9	27	1	12	10,400 00	50,000 00
372	Saddlery Hardware.....	wk.....	37	19	18	.....	12	15,600 00	45,000 00
374	Harness.....	wk.....	40	15	25	5	12	15,749 00	69,600 00
375	Harness Tools.....	wk.....	70	11	59	15	12	35,000 00	100,000 00
388	Saddlery and Harness Tools....	wk.....	25	9	16	1	12	11,500 00	30,000 00
405	Saddlery Hardware.....	wk.....	37	18	19	2	12	20,000 00	80,000 00
413	Horse Collars and Gig Saddles..	wk.....	37	.....	.....	.....	12	18,800 00	75,000 00
429	Harness.....	wk.....	15	14	1	2	12	12,000 00	38,000 00
447	Saddlery and Harness.....	2 wks	202	.....	.....	.....	12	85,000 00	360,000 00
449	Saddlery Hardware.....	wk.....	156	101	55	.....	12	60,000 00	150,000 00
451	Saddlery Hardware.....	wk.....	12	12	.....	2	12	5,200 00	11,500 00
453	Saddlery Hardware.....	wk.....	29	27	2	.....	12	13,200 00	18,000 00
455	Bridle Fronts.....	wk.....	2	2	.....	.....	12	565 00	2,500 00
459	Harness.....	wk.....	35	15	20	.....	12	18,200 00	72,000 00
461	Saddlery Hardware.....	wk.....	6	5	1	1	12	2,500 00	7,000 00
464	Harness and Pat. Leather Work	wk.....	35	20	15	.....	12	10,000 00	75,000 00
466	{ Saddlery Hardware and } { Harness Ornaments, }	wk.....	20	10	10	4	12	8,000 00	24,000 00
474	Saddlery Hardware.....	wk.....	14	14	.....	.....	6	1,720 00	6,980 00
477	Saddlery Hardware.....	wk.....	100	50	50	1	12	37,000 00	125,000 00
483	Hames (Wooden).....	wk.....	4	3	1	.....	12	2,200 00	3,600 00
547	Harness.....	wk.....	11	3	8	.....	12	5,220 00	13,229 00
583	Saddlery Hardware.....	wk.....	100	80	20	.....	12	40,000 00	141,864 00
601	Harness Trimmings.....	wk.....	90	51	39	10	12	60,000 00	140,000 00
612	Saddlery Hardware.....	wk.....	4	1	3	.....	12	1,500 00	4,600 00
759	Saddlery Hardware.....	wk.....	38	38	.....	1	12	10,000 00	37,500 00
	Total .....		1485	722	524	58	.....	\$652,154 00	\$2,103,173 00

TABLE No. 46.—BLANK No. 2.

## HARNESS, SADDLERY, &amp;c.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys and Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Per cent. of Advance in Wages.
242	Harness.....	85	1	.....	86	\$1 85	\$1 25	.....	15.
283	Harness.....	2	.....	.....	2	1 75	.....	.....	10.
286	Harness.....	4	.....	2	6	2 00	.....	\$0 50	12.
288	Harness.....	1	10	1	12	1 35	1 00	50	10.
289	Saddlery Hardware.....	18	.....	1	19	1 80	.....	60	5.
292	Saddlery Hardware.....	60	.....	.....	60	1 50	.....	.....	10.
314	Saddlery Hardware.....	10	.....	5	15	1 65	.....	90	10.
319	Saddlery Hardware.....	6	.....	6	12	1 50	.....	60	None.
324	Harness.....	6	.....	1	7	2 00	.....	50	None.
326	Horse Collars.....	10	.....	1	11	2 00	.....	1 00	None.
327	Harness Saddles.....	8	.....	8	16	2 00	.....	1 00	None.
328	Harness.....	3	.....	.....	3	2 00	.....	.....	None.
329	Mexican Saddles.....	38	.....	2	40	2 00	.....	90	None.
349	Saddlery Hardware.....	34	1	6	41	2 50	1 00	45	12½.
368	Saddlery Hardware.....	30	6	.....	36	1 65	1 00	.....	20.
372	Saddlery Hardware.....	30	1	6	37	2 50	1 50	65	None.
374	Harness.....	40	.....	.....	40	2 50	.....	.....	10.
375	Harness Tools.....	65	.....	5	70	2 50	.....	85	15.
388	Saddlery and Harness Tools.....	20	.....	5	25	2 25	.....	50	10.
405	Saddlery Hardware.....	25	.....	12	37	2 00	.....	75	10.
413	Horse Collars and Gig Saddles.....	35	.....	2	37	1 65	.....	50	15.
429	Harness.....	15	.....	.....	15	2 50	.....	.....	None.
447	Saddlery and Harness.....	200	2	.....	202	2 00	.....	.....	10.
449	Saddlery Hardware.....	95	15	46	156	1 67	83	42	12.
451	Saddlery Hardware.....	12	.....	.....	12	1 50	.....	.....	18.
453	Saddlery Hardware.....	19	.....	10	29	2 00	.....	60	None.
455	Bridle Fronts.....	2	.....	.....	2	95	.....	.....	None.
459	Harness.....	35	.....	.....	35	2 50	.....	.....	8.
461	Saddlery Hardware.....	4	1	1	6	1 65	65	50	5.
464	Harness and Patent Leather Work.....	20	15	.....	35	2 00	1 00	.....	5.
466	Saddlery Hardware and Harness Ornaments.....	14	.....	6	20	2 50	.....	65	None.
474	Saddlery Hardware.....	4	3	7	14	2 00	90	50	None.
477	Saddlery Hardware.....	75	.....	25	100	2 00	.....	62	8.
483	Hames (Wooden).....	4	.....	.....	4	1 80	.....	.....	12.
547	Harness.....	11	.....	.....	11	1 50	.....	.....	None.
583	Saddlery Hardware.....	75	.....	25	100	1 50	70	.....	5.
601	Harness Trimmings.....	78	.....	12	90	2 50	85	85	10.
612	Saddlery Hardware.....	3	.....	1	4	1 50	.....	50	12.
759	Saddlery Hardware.....	32	.....	6	38	1 25	.....	50	None.
	Total.....	1228	55	202	1485	\$74 27	\$10 68	\$15 34	

The preceding two tables are formulated from the reports of 39 employing firms, showing an aggregate of \$2,103,173 finished production, and \$652,154 paid for labor in the year under review. They also report the total number of employees to have been 1485, of which 1228 were men, 55 women and 202 boys and girls.

Adding the average men's wages paid by the 39 (see wages column) and dividing by number of reports ( $\$74.27 \div 39$ ) and the

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general average of men's wages is shown to be \$1.90 per day. By the same process women's wages are shown to be ( $\$10.68 \div 10$ ) \$1.07, and boys' and girls' wages ( $\$15.34 \div 24$ ) 64 cents per day.

Twenty-four report advance in wages from five to twenty per cent., and fifteen report no advance.

Eighteen establishments, employing 651 persons, report that fifty-eight, or nearly nine per cent., own real estate.

Thirty-seven report that of 1246 employees, 722, or 58 per cent., were born in this country, and 524, or 42 per cent., elsewhere. The activity of production has been so well sustained through the year that the exception to the rule is insignificant.

TABLE No. 47.—BLANK No. 2.

## PAINTS, VARNISHES, SOAP AND OTHER CHEMICALS.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employed.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Wages.	Total Value of Product.	Per cent. of Advance in Wages.
89	Dry Hop Yeast.....	wk.....	6	4	2	12	\$2,500 00	\$11,000 00	8.
182	Soap for Silk Manufacturers.....	2 wks	8	6	2	12	3,500 00	80,000 00	10.
229	Bleachery for Linen and Cotton.	mon ..	57	21	36	12	20,293 00	elsewhere.	10.
233	Chemicals.....	mon ..	21	7	14	12	9,000 00	80,000 00	10.
252	Soap.....	wk.....	5	4	1	12	2,150 00	50,000 00	None.
307	Oxide, Zinc, &c.....	2 wks	214	22	192	12	101,046 37	354,140 00	20.
351	Varnish.....	wk.....	5	5	.....	12	3,000 00	55,000 00	None.
353	Varnish.....	wk.....	7	6	1	12	8,072 00	70,000 00	10.
354	Varnish.....	wk.....	3	3	.....	12	3,000 00	25,000 00	None.
396	Inks, Mucilage and Sealing Wax	wk.....	10	10	.....	12	3,500 00	9,600 00	None.
473	Prussiate of Potash.....	wk.....	24	3	21	12	12,500 00	83,250 00	None.
479	Soap.....	wk.....	4	4	.....	12	3,800 00	10,000 00	None.
525	Chemicals.....	wk.....	28	10	18	12	14,300 00	133,824 00	20.
532	Ultra-marine Blue.....	wk.....	100	33	67	12	45,000 00	300,000 00	None.
572	Chemicals.....	wk.....	18	2	16	12	10,000 00	160,600 00	None.
589	Paints.....	wk.....	3	2	1	12	1,650 00	12,000 00	10.
593	Varnish.....	wk.....	30	.....	.....	12	29,874 00	200,000 00	11.
717	Fertilizers.....	wk.....	4	3	1	12	2,100 00	14,000 00	15.
702	Beeswax, Bleachery, &c.....	wk.....	4	.....	4	10	2,573 00	9,717 45	None.
731	Sulphur Matches.....	wk.....	68	67	1	12	10,500 00	62,400 00	None.
	Total.....	.....	619	212	377	.....	\$288,358 37	\$1,719,931 45	

TABLE No. 48.—BLANK No. 2.

PAINTS, VARNISHES, SOAP AND OTHER CHEMICALS.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Boys and Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Owning Real Estate.
89	Dry Hop Yeast.....	2	4	6	\$1 50	\$0 70	.....
182	Soap for Silk Manufacturers.....	8	.....	8	1 50	.....	.....
229	Bleachers of Linen and Cotton.....	30	27	57	1 67	84	6
233	Chemicals.....	20	1	21	1 50	50	.....
252	Soap.....	4	1	5	1 50	50	3
307	Oxide, Zinc, &c.....	209	5	214	1 30	.....	56
351	Varnish.....	5	.....	5	2 00	.....	.....
353	Varnish.....	7	.....	7	1 50	.....	.....
354	Varnish.....	3	.....	3	3 00	.....	2
396	Inks, Mucilage and Sealing Wax.....	8	2	10	1 25	50	3
473	Prussiate of Potash.....	23	1	24	1 65	50	6
479	Soap.....	3	1	4	1 65	80	.....
525	Chemicals.....	28	.....	28	2 50	.....	8
532	Ultra-marine Blue.....	94	6	100	1 67	67	.....
572	Chemicals.....	18	.....	18	1 50	.....	4
589	Paints.....	3	.....	3	1 75	.....	1
593	Varnish.....	30	.....	30	3 10	.....	.....
717	Fertilizers.....	4	.....	4	1 75	.....	.....
702	Beeswax, Bleachery, &c.....	4	.....	4	2 00	.....	1
731	Sulphur Matches.....	6	62	68	1 50	45	1
	Total.....	509	110	619	\$35 79	\$5 46	91

The preceding two tables are prepared from reports of twenty manufacturers, employing 619 operatives, of which 509 are men and 110 boys and girls, to whom have been paid \$288,358.37 the last year for wages. Nineteen report aggregate production of the value of \$1,719,931.45.

The 20 averages of men's daily wages reported aggregate \$35.79, which, divided by the number of reports ( $\$35.79 \div 20$ ), gives \$1.79 as the general average. A similar process shows boys' and girls' wages to be ( $\$5.46 \div 9$ ) 61 cents per day.

Ten report advance in wages of from eight to twenty per cent., and ten no advance.

Eleven, employing 534 persons, report 91, or 21 per cent., as owning real estate.

Nineteen report that of their 589 employees, 212, or 36 per cent., were born in this country, and 377, or 64 per cent., were born elsewhere. Business in this industrial department seems to have been almost entirely uninterrupted through the year.

TABLE No. 49.—BLANK No. 2.

## SUNDRIES NOT ELSEWHERE TABULATED.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employees.			Months at Work.	Total Paid for Labor.	Total Value of Products.	Per cent. of Advance in Wages.
			Total	Native Born.	Foreign Born.				
93	Lead Pencils, Pen Holders, &c...	wk....	140	100	40	12	\$50,000 00	\$250,000 00	10.
99	Photographic Apparatus.....	wk....	7	5	2	12	3,000 00	5,000 00	None.
176	Printers' Materials.....	wk....	12	12	.....	11 $\frac{1}{2}$	5,500 00	30,000 00	None.
244	Drawing Materials.....	wk....	12	7	5	12	5,500 00	13,500 00	10.
310	Stationers' Novelties.....	wk....	12	12	.....	12	2,340 00	11,000 00	20.
397	Brooms.....	wk....	9	9	.....	12	4,500 00	10,000 00	None.
445	Mattresses and Bedding.....	wk....	13	3	10	12	2,800 00	27,000 00	None.
485	Tinware.....	wk....	21	19	2	12	6,250 00	15,000 00	10.
536	Organs.....	mon..	68	68	.....	12	21,500 00	72,000 00	25.
537	Organs and Pianos.....	mon..	128	117	11	12	66,000 00	360,000 00	None.
541	Horn Goods.....	wk....	30	30	.....	12	12,000 00	30,000 00	10.
634	Tin Goods.....	wk....	200	100	100	12	54,000 00	130,000 00	10.
689	Canned Vegetables and Fruits....	wk....	282	.....	.....	11	14,255 00	68,950 00	10.
690	Hermetically Sealed Goods.....	wk....	154	154	.....	9	8,540 00	46,700 00	10.
765	Organs.....	2 wks	205	167	38	12	84,000 00	250,000 00	None.
838	Parlor Organs.....	wk....	20	20	.....	12	12,000 00	30,000 00	None.
874	Unfermented Wine and Gloves..	wk....	5	.....	.....	10	1,200 00	3,500 00	None.
882	Brushes.....	wk....	11	11	.....	12	3,000 00	10,000 00	None.
913	Canned Fruit.....	wk....	44	.....	.....	2	2,100 00	14,000 00	None.
Total.....			1373	834	208	.....	\$358,485 00	\$1,376,650 00	

TABLE No. 50.—BLANK No. 2.

SUNDRIES NOT ELSEWHERE TABULATED.

Office Number.	Varieties of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Number of Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Own Real Estate.
98	Lead Pencils, Pen Holders, &c.....	38	.....	53	49	140	\$2 00	.....	\$0 50	7
99	Photographic Apparatus.....	4	.....	2	1	7	2 00	.....	75	1
176	Printers' Materials.....	9	.....	3	.....	12	1 88	.....	72	2
244	Drawing Materials.....	6	1	5	.....	12	2 00	1 33	50	.....
310	Stationers' Novelties.....	6	2	4	.....	12	2 00	1 00	50	.....
397	Brooms.....	8	1	.....	.....	9	2 00	.....	.....	.....
445	Mattresses and Bedding.....	5	.....	6	2	13	1 50	1 00	50	.....
485	Tinware.....	7	.....	14	.....	21	2 00	.....	60	.....
536	Organs.....	59	.....	6	3	68	2 25	.....	.....	6
537	Organs and Pianos.....	101	2	25	.....	128	1 75	1 00	75	25
541	Horn Goods.....	10	8	12	.....	30	1 90	80	80	2
634	Tin Goods.....	100	20	50	30	200	1 25	67	50	.....
689	Canned Vegetables and Fruits.....	68	172	17	25	282	1 00	75	40	.....
690	Hermetically Sealed Goods.....	43	98	8	5	154	1 00	75	50	20
765	Organs.....	160	.....	45	.....	205	1 80	.....	75	53
838	Parlor Organs.....	20	.....	.....	.....	20	2 00	.....	.....	5
874	Unfermented Communion Wine and Gloves..	1	4	.....	.....	5	2 00	75	.....	.....
882	Brushes.....	2	8	1	.....	11	2 65	1 00	85	.....
913	Canned Fruit.....	14	30	.....	.....	44	1 25	90	.....	.....
	Total.....	661	346	251	115	1373	\$34 23	\$9 95	\$8 62	121

The two preceding interesting tables were formulated from the reports of nineteen manufacturers of products, some of which are conspicuous for the present sturdy development, and others are interesting as the nucleus of future very important industries.

The sum of averages of men's daily wages is as noticed in proper column \$34.23, which, divided by number of reports, shows the net average of men's wages to be ( $\$34.23 \div 19$ ) \$1.80 per day. By the same process women's wages are shown to be ( $\$9.95 \div 11$ ) 90 cents, and boys' and girls' ( $\$8.62 \div 14$ ) 61 cents per day.

Nine report advance of 10 to 25 per cent. in wages, and ten say that in their personal experience no advance has occurred. Nine state that of their 764 employees, 121, or 16 per cent., own real estate.

Sixteen, employing 1042 persons, report that 834, or 83 per cent., were born in this country, and 17 per cent. elsewhere.

Excepting the business of canning fresh fruits and vegetables, which of course must be done in the season of production, business is shown to have been continuous as a rule throughout the year.

TABLE No. 51.—BLANK No. 2.

## BUTTONS.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employed.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Products.	Movement of Wages.
350	Buttons.....	wk.....	150	149	1	12	\$38,613 00	\$100,000 00	No Advance.
378	Covered & Brass Buttons.	wk.....	65	62	3	12	18,133 19	56,000 00	Adv. 20 per cent.
400	Pearl Buttons.....	wk.....	9	6	3	9	4,000 00	10,000 00	No Advance.
401	Buttons.....	wk.....	25	13	12	12	9,400 00	20,000 00	Red. 10 per cent.
472	Buttons.....	wk.....	35	35	.....	12	13,000 00	28,000 00	No Advance.
559	Pearl Buttons.....	wk.....	50	.....	.....	11	17,000 00	50,000 00	No Advance.
560	Pearl Buttons.....	wk.....	25	22	3	10	8,600 00	25,500 00	No Advance.
562	Ivory Buttons.....	wk.....	90	.....	.....	12	35,000 00	100,000 00	No Advance.
563	Pearl Buttons.....	wk.....	110	110	.....	9	24,350 00	50,000 00	No Advance.
613	Pearl Buttons.....	2 wks	14	14	.....	10	4,400 00	17,600 00	Adv. 10 per cent.
614	Pearl Buttons.....	2 wks	7	7	.....	12	2,000 00	5,000 00	No Advance.
615	Pearl Buttons.....	2 wks	10	5	5	6	1,200 00	3,000 00	No Advance.
622	Pearl Buttons.....	wk.....	10	6	4	12	4,600 00	13,800 00	No Advance.
635	Pearl Buttons.....	wk.....	50	.....	.....	8	10,500 00	30,000 00	No Advance.
673	Pearl Buttons.....	wk.....	35	25	10	8	18,000 00	56,500 00	Adv. 10 per cent.
675	Pearl Buttons.....	wk.....	155	143	12	12	25,000 00	100,000 00	Adv. 5 per cent.
	Total.....	.....	840	597	53	167	\$233,796 19	\$665,400 00	

TABLE No. 52.—BLANK No. 2.

BUTTONS.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys and Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Owning Real Estate.
350	Buttons.....	49	68	33	150	\$1 50	\$1 00	\$0 60	1
378	Covered and Brass Buttons...	13	27	25	65	4 75	95	50	1
400	Pearl Buttons.....	7	.....	2	9	2 50	.....	80	.....
401	Buttons.....	18	.....	7	25	2 50	.....	80	.....
472	Buttons.....	4	.....	31	35	3 00	.....	55	.....
559	Pearl Buttons.....	25	13	12	50	2 00	.....	60	.....
560	Pearl Buttons.....	12	.....	13	25	2 00	.....	60	.....
562	Ivory Buttons.....	57	15	18	90	2 00	75	45	.....
563	Pearl Buttons.....	63	18	29	110	2 25	1 10	60	1
613	Pearl Buttons.....	12	2	.....	14	2 00	1 15	.....	.....
614	Pearl Buttons.....	2	1	4	7	2 00	.....	50	.....
615	Pearl Buttons.....	6	.....	4	10	2 00	.....	50	2
622	Pearl Buttons.....	7	.....	3	10	2 00	.....	45	.....
635	Pearl Buttons.....	40	.....	10	50	2 00	.....	60	.....
673	Pearl Buttons.....	17	10	8	35	2 50	1 00	50	2
675	Pearl Buttons.....	25	100	30	155	1 50	1 00	50	2
	Total.....	357	254	229	840	\$36 50	\$6 95	\$8 55	9

The two preceding tables represent an important little industry. It will be a surprise to many that we have, in our State, 16 establishments engaged in the button business, employing 840 hands—357 men, 254 women and 229 girls and boys, whose united labor amounts to \$233,796.19, the value of their product being \$665,400.

The average wages for the men is \$2.28, women 99 cents, boys and girls 57 cents per day.

Thirteen report the nativities of 650, of which 597, or 92 per cent, were born in this country.

Eleven report no advance in wages, and five an advance from five to 20 per cent.

TABLE No. 53.—BLANK No. 2.

## CARRIAGES.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employed.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Products.	Movement of Wages.
94	Carriages.....	wk.....	6	6	...	12	\$3,700 00	\$6,000 00	No Advance.
119	Carriages.....	2 wks	7	7	...	12	3,150 00	7,000 00	No Advance.
323	Carriages.....	wk.....	45	35	10	12	36,400 00	89,000 00	Advanced 10 per cent.
370	Hearse.....	wk.....	10	5	5	12	7,800 00	22,500 00	No Advance.
399	Carriages.....	wk.....	23	23	...	12	8,000 00	20,000 00	No Advance.
568	Carriages.....	wk.....	10	8	2	12	4,500 00	10,000 00	Advanced 30 per cent.
884	Carriages.....	wk.....	8	8	...	12	3,500 00	8,000 00	Advanced 10 per cent.
885	Carriages.....	wk.....	15	11	4	12	7,500 00	35,000 00	No Advance.
886	Carriages.....	wk.....	15	8	7	12	7,200 00	26,000 00	No Advance.
887	Carriages.....	wk.....	5	5	...	12	2,000 00	4,500 00	No Advance.
888	Carriages.....	wk.....	5	4	1	12	2,300 00	5,000 00	No Advance.
889	Carriages.....	wk.....	12	6	6	12	5,500 00	15,000 00	No Advance.
890	Carriages.....	wk.....	7	7	...	12	3,000 00	8,000 00	No Advance.
893	Carriages.....	wk.....	3	3	...	12	1,250 00	2,000 00	No Advance.
895	Carriages.....	wk.....	10	8	2	12	5,000 00	20,000 00	Advanced 6 per cent.
896	Carriages.....	wk.....	20	14	6	12	12,000 00	40,000 00	Advanced 2 per cent.
897	Carriages.....	wk.....	15	15	...	12	7,000 00	18,000 00	No Advance.
898	Carriages.....	wk.....	14	11	3	12	5,200 00	17,500 00	Advanced 10 per cent.
899	Carriages.....	wk.....	40	29	11	12	23,500 00	50,000 00	Advanced 10 per cent.
904	Carriages.....	wk.....	38	37	1	6	8,647 50	55,000 00	No Response.
892	Carriages.....	wk.....	12	9	3	12	5,800 00	15,000 00	No Advance.
81	Whips.....	2 wks	41	35	6	12	25,000 00	80,000 00	No Advance.
842	Carriage Mountings.....	wk.....	40	32	8	12	11,535 00	49,550 00	Adv. 20 to 30 per cent.
	Total.....	.....	401	326	75	...	\$199,482 00	\$603,050 00	

TABLE No. 54.—BLANK No. 2.

CARRIAGES.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' Average Daily Wages.	Owning Real Estate.
94	Carriages	6			6	\$2 00			
119	Carriages	7			7	1 50			
323	Carriages	40		5	45	2 20		\$0 65	
370	Hearses	10			10	2 50			3
399	Carriages	22		1	23	2 00		50	2
568	Carriages	10			10	2 25			3
884	Carriages	8			8	1 50			3
885	Carriages	15			15	1 50			2
886	Carriages	15			15	2 00			4
887	Carriages	5			5	1 50			
888	Carriages	5			5	1 50			
889	Carriages	12			12	1 50			7
890	Carriages	5		2	7	1 50		85	2
893	Carriages	3			3	1 60			1
895	Carriages	10			10	1 50			1
896	Carriages	20			20	2 00			5
897	Carriages	15			15	1 50			3
898	Carriages	12		2	14	1 50		50	1
899	Carriages	40			40	2 00			20
904	Carriages	31		7	38	1 75		40	
892	Carriages	12			12	1 60			
81	Whips	31	10		41	2 00	\$1 25		1
842	Carriage Mountings	24		16	40	1 75		70	2
	Total	358	10	33	401	\$40 65	\$1 25	\$3 60	60

In the foregoing tables 23 manufacturers of carriages and their trimmings report employment of 358 men, 10 women and 33 boys, and payment of wages to the same of \$199,482, with an aggregate production valued at \$603,050. Adding the average of reported men's wages, and dividing the same by the number of reports (\$40.65 ÷ 23) shows the net average to be \$1.77 per day, and by the same process boys' wages (\$3.60 ÷ 6) is shown to be 60 cents, and women's wages 70 cents per day.

Eight quote wages as having advanced from two to 30 per cent., and 13 say they have not advanced at all.

Sixteen, employing 283 persons, report 60, or over 21 per cent., as owning real estate.

Of the 401 employees, 326, or over 81 per cent., are reported as having been born in this country, and 75, or less than 19 per cent., elsewhere. They have, with hardly an exception, run steadily through the year.

No. 842 responds to the query, "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*" "It would be just, and result beneficially, but the intemperance and improvidence prevailing among a large class of the average workmen renders such a plan impracticable. There are very few skilled and steady men who can be depended on for a favorable result of such a plan."

TABLE No. 55.—BLANK No. 2.

## BAKERS AND CONFECTIONERS.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employees.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Product.	Per cent. of Advance in Wages.
76	Confectionery .....	wk.....	6	6	.....	12	\$2,500	\$6,000	10.
133	Pastry Baking.....	wk.....	9	7	2	12	5,350	26,000	10.
134	Bakery .....	wk.....	5	5	.....	12	3,000	15,000	10.
136	Bakery .....	wk.....	2	1	1	12	1,400	5,000	5.
142	Bakery .....	wk.....	11	8	3	12	5,250	35,000	10.
240	Bakery .....	wk.....	4	4	.....	12	2,650	10,000	10.
250	Confectionery.....	wk.....	3	2	1	12	1,300	5,000	5.
383	Bakery .....	wk.....	10	7	3	12	5,500	26,000	None.
421	Confectionery.....	wk.....	7	7	.....	12	3,500	25,000	12.
433	Confectionery.....	wk.....	8	7	1	12	6,000	20,000	None.
437	Bakery .....	wk.....	15	8	7	12	5,200	30,000	None.
438	Bakery .....	wk.....	9	.....	.....	12	4,500	23,000	20.
552	Bakery .....	wk.....	50	.....	.....	12	22,000	200,000	None.
586	Confectionery.....	wk.....	6	5	1	12	4,000	18,000	None.
657	Bakery .....	wk.....	4	.....	.....	12	2,000	9,000	10.
667	Bakery .....	wk.....	5	1	4	12	2,350	17,500	None.
732	Cracker Bakery.....	wk.....	29	27	2	10	5,000	45,000	None.
734	Bakery .....	wk.....	7	5	2	12	2,500	8,500	8.
	Total.....		190	100	27	.....	\$84,000	\$524,000	

TABLE No. 56.—BLANK No. 2.

## BAKERS AND CONFECTIONERS.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' Average Daily Wages.	Owning Real Estate.
76	Confectionery.....	4	2	.....	6	\$1 50	\$0 90	.....	.....
133	Pastry Bakery.....	7	2	.....	9	1 60	1 10	.....	2
134	Bakery.....	4	1	.....	5	1 60	1 10	.....	.....
136	Bakery.....	2	.....	.....	2	2 25	.....	.....	1
142	Bakery.....	6	2	3	11	2 00	1 00	\$0 70	.....
240	Bakery.....	2	2	.....	4	2 50	1 50	.....	.....
250	Confectionery.....	1	2	.....	3	1 60	1 10	.....	.....
388	Bakery.....	10	.....	.....	10	1 85	.....	.....	.....
421	Confectionery.....	4	3	.....	7	1 75	80	.....	.....
433	Confectionery.....	7	1	.....	8	2 50	80	.....	.....
437	Bakery.....	10	5	.....	15	1 65	1 00	.....	1
438	Bakery.....	8	1	.....	9	1 65	1 00	.....	.....
552	Bakery.....	25	.....	25	50	1 85	.....	.....	.....
586	Confectionery.....	6	.....	.....	6	2 00	.....	.....	1
657	Bakery.....	3	.....	1	4	1 75	.....	60	.....
667	Bakery.....	4	.....	1	5	1 85	.....	1 00	.....
732	Cracker Bakery.....	6	.....	23	29	2 00	.....	42	1
734	Bakery.....	2	4	1	7	1 75	1 00	50	.....
	Total.....	111	25	54	190	\$33 65	\$11 30	\$3 22	6

The preceding two tables show 18 bakers and confectioners as employing 111 men, 25 women and 54 boys, making an aggregate of 190 in all, to whom were paid for labor the past year \$84,000, with production of \$524,000.

The sum of 18 averages of men's wages are shown to be \$33.65, giving net average per day ( $\$33.65 \div 18$ ) \$1.87. Women's were ( $\$11.30 \div 11$ ) \$1.03, and boys' and girls' ( $\$3.22 \div 5$ ) 64 cents.

Eleven report an advance of wages from 5 to 20 per cent., and 7 no advance.

Five, employing 61 persons, say that 6, or 10 per cent., own real estate.

Fifteen report the nativities of 100, or 79 per cent., as American, and 27, or 21 per cent., foreign. These industries seem to have continued through the year with but little intermission.

TABLE No. 57.—BLANK No. 2.

CIGARS AND TOBACCO.

Office Number.	Variety of Manufacture.	Periods of Payment.	Total Number Employees.			Months at Work.	Total Paid for Labor.	Total Value of Products.	Per cent. of Advance in Wages.
			Native Born.	Foreign Born.					
150	Cigars .....	wk.....	6	4	2	12	\$3,000 00	\$10,000 00	12½.
169	Cigars .....	wk.....	2	2	.....	12	800 00	1,800 00	None.
251	Cigars .....	wk.....	5	4	1	12	2,350 00	10,000 00	None.
265	Cigars .....	wk.....	5	4	1	12	2,400 00	10,000 00	None.
266	Cigars .....	wk.....	3	1	2	12	1,800 00	12,000 00	None.
431	Cigars .....	wk.....	30	20	10	12	12,900 00	25,000 00	None.
476	Cigars .....	wk.....	34	22	12	12	8,702 29	31,000 00	25.
501	Cigars .....	wk.....	8	6	2	12	3,650 00	20,000 00	10.
545	Tobacco.....	wk.....	60	38	22	11	17,000 00	23,500 00	10.
569	Cigars .....	wk.....	15	12	3	12	6,000 00	13,760 00	None.
587	Cigars .....	wk.....	2	2	.....	12	513 15	2,728 00	None.
662	Cigars .....	wk.....	4	.....	.....	12	2,800 00	12,000 00	20.
663	Cigars .....	wk.....	3	2	1	12	2,000 00	6,000 00	15.
683	Cigars .....	wk.....	9	9	.....	12	6,000 00	20,000 00	None.
704	Cigars .....	wk.....	4	3	1	12	2,500 00	4,500 00	None.
733	Cigars .....	wk.....	3	2	1	12	1,150 00	2,500 00	10.
863	Specialties for Tobacconists.....	mon..	50	46	4	12	18,000 00	200,000 00	10.
920	Snuff .....	wk.....	5	4	1	10	1,650 00	14,532 00	1.
952	Snuff .....	wk.....	11	.....	.....	12	4,200 00	74,200 00	None.
Total .....			259	181	63	.....	\$97,415 44	\$493,520 00	

TABLE No. 58.—BLANK No. 2.

## CIGARS AND TOBACCO.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys and Girls Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' and Girls' Average Daily Wages.	Owning Real Estate.
150	Cigars.....	5	.....	1	6	\$1 85	.....	\$0 50	1
169	Cigars.....	2	.....	.....	2	1 25	.....	.....	.....
251	Cigars.....	4	.....	1	5	1 50	.....	85	.....
265	Cigars.....	4	.....	1	5	1 50	.....	50	1
266	Cigars.....	3	.....	.....	3	1 75	.....	.....	.....
431	Cigars.....	20	10	.....	30	2 00	\$0 75	.....	.....
476	Cigars.....	15	5	14	34	1 85	1 00	60	.....
501	Cigars.....	6	.....	2	8	1 50	.....	65	.....
545	Tobacco.....	30	19	11	60	1 75	70	70	.....
569	Cigars.....	12	1	2	15	2 00	1 00	65	1
587	Cigars.....	2	.....	.....	2	1 25	.....	.....	.....
662	Cigars.....	4	.....	.....	4	2 25	.....	.....	.....
663	Cigars.....	3	.....	.....	3	2 00	.....	.....	.....
683	Cigars.....	9	.....	.....	9	2 50	.....	.....	.....
704	Cigars.....	4	.....	.....	4	2 00	.....	.....	.....
733	Cigars.....	3	.....	.....	3	1 25	.....	.....	.....
863	Specialties for Tobacconists.....	50	.....	.....	50	1 25	.....	.....	.....
920	Snuff.....	5	.....	.....	5	1 20	.....	.....	2
952	Snuff.....	10	1	.....	11	1 30	1 25	.....	3
	Total.....	191	36	32	259	\$31 95	\$4 70	\$4 45	8

The preceding two tables are formulated from the reports of 19 manufacturers of tobacco, cigars and their adjuncts, employing 249 persons, of whom 191 are men, 36 women and 32 boys, whose wages aggregated \$97,415.44, with an aggregate production of \$493,520.

The nineteen averages of men's wages reported amount to \$32.37, which, divided by the number of reports ( $\$32.37 \div 19$ ) shows the net average to be \$1.70 per day, women's ( $\$4.70 \div 5$ ) 94 cents, and boys' ( $\$4.45 \div 7$ ) 63 cents per day.

Nine report advance in wages of from one to 25 per cent., and ten no advance.

Five, employing 42 persons, state that 8, or 19 per cent., own real estate.

Seventeen report that of their 244 employees, 181, or 74 per cent., were born in this country, and 63, or 26 per cent., elsewhere.

TABLE No. 59.—BLANK No. 2.

MANUFACTURERS OF BRASS, NICKEL AND GAS FIXTURES.

Office Number.	Varieties of Occupation.	Periods of Payment.	Total Number Employees.	Native Born.	Foreign Born.	Months at Work.	Total Paid for Labor.	Total Value of Product.	Per cent. of Advance in Wages.
100	Gas Burners, &c.....	wk.....	7	7	.....	12	\$275 00	\$1,400 00	None.
293	Brass Foundry.....	wk.....	7	4	3	12	5,200 00	7,200 00	50.
317	Brass Goods.....	wk.....	20	13	7	12	8,250 00	22,500 00	12.
364	Nickel.....	wk.....	7	7	.....	12	2,000 00	6,500 00	None.
369	Brass Foundry.....	wk.....	4	3	1	12	1,735 00	12,000 00	None.
462	Brass Foundry.....	wk.....	7	7	.....	12	3,000 00	12,000 00	10.
465	Gas Pipe Fittings.....	wk.....	6	4	2	12	3,200 00	6,000 00	None.
467	Nickel Plating.....	wk.....	7	2	5	4	1,200 00	.....	None.
482	Brass Goods.....	wk.....	90	86	4	12	46,000 00	.....	None.
660	Gas Fixtures.....	wk.....	5	.....	.....	12	4,000 00	6,500 00	5.
806	Brass Foundry.....	wk.....	9	6	3	12	4,500 00	10,000 00	None.
852	Brass Castings, Bells, &c.....	wk.....	14	6	8	12	5,000 00	75,000 00	15.
854	Fancy Brass Goods.....	wk.....	54	53	1	12	13,340 12	32,400 00	None.
	Total.....		237	198	34	...	\$97,700 12	\$191,500 00	

TABLE No. 60—BLANK No. 2.

BRASS, NICKEL AND GAS FIXTURES.

Office Number.	Variety of Manufacture.	Number of Men Employed.	Number of Women Employed.	Number of Boys Employed.	Total Number Employed.	Men's Average Daily Wages.	Women's Average Daily Wages.	Boys' Average Daily Wages.	Owning Real Estate.
100	Gas Burners, &c.....	4	.....	3	7	\$1 50	.....	\$9 50	.....
293	Brass Foundry.....	5	.....	2	7	2 25	.....	1 00	.....
317	Brass Goods.....	14	.....	6	20	2 50	.....	85	.....
364	Nickel.....	1	.....	6	7	2 50	.....	1 00	.....
369	Brass Foundry.....	3	.....	1	4	1 65	.....	60	.....
462	Brass Foundry.....	5	.....	2	7	2 50	.....	60	.....
465	Gas Pipe Fittings.....	6	.....	.....	6	2 00	.....	.....	.....
467	Nickel Plating.....	7	.....	.....	7	1 75	.....	.....	.....
482	Brass Goods.....	65	.....	25	90	2 50	.....	50	3
660	Gas Fixtures.....	4	.....	1	5	3 00	.....	1 00	.....
806	Brass Foundry.....	7	.....	2	9	2 00	.....	60	.....
852	Brass Castings, &c.....	12	.....	2	14	2 00	.....	.....	.....
854	Fancy Brass Goods.....	50	4	.....	54	2 96	\$0 66	.....	1
	Total.....	183	4	50	237	\$29 11	\$0 66	\$6 65	9

The preceding two tables are formulated from the reports of 13 manufacturers, employing 183 men, 4 women and 50 boys, making a total of 237, whose receipts for labor amounted to \$97,700.12. Eleven report value of production \$191,500.

Adding the 13 reported averages produces \$29.11, which, divided by number of reports ( $\$29.11 \div 13$ ), shows the net average of men's wages to be \$2.24 daily. By the same process women's are seen to be 66 cents, and boys' ( $\$6.65 \div 9$ ) 74 cents per day.

Five report advance in wages of 5 to 50 per cent., and 8 no advance.

Four, employing 171 operatives, say that 9, or 5 per cent., own real estate.

Twelve state that of their 232 employees, 198, or 85 per cent., were born in this country, and 34, or 15 per cent., elsewhere. Activity of production seems to have been fairly sustained throughout the year.

Office number 100, responding to the inquiry, "*Is it not practicable and just to inaugurate a system by which your employees can more adequately share in the profits which accrue from their labor?*" says, "It is both practicable and just, and ought to be inaugurated, so much so that if employees do not labor in this expectation, they have very little courage for the betterment of their condition. While bereft of this future business prospect, they are left without a proper incentive to stimulate their growing and rising manhood, save the very small and feeble incentive of becoming better workmen—to command a little more wages—in which all the energies of life are to be exhausted and end. While the great field of business enterprise, of commerce, of fulfilling the duties of citizenship, and the pleasure of doing good in the great cause of humanity, are, under the present system, almost shut out from view."

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PART III.

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FIBRE INDUSTRIES.

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### PART III.

## FIBRE INDUSTRIES.

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The fibre industries are being pursued in our State with unabated zeal. As was predicted a year ago, the bounty rewards were instrumental in arousing agriculturists to the necessity of agricultural development, with the view to counteract the serious consequences of western expansion, economic husbandry, and nominal freights on western products, which, in combination, are an impending menace to kindred interests in the Atlantic section of the continent. It is a foreboding truth, that a barrel of flour and a barrel of pork, or its equivalent in other competitive products, can be transported over trunk lines of railroad 1000 miles, for the medium price of an ordinary day laborer, viz., \$1.25. An eastern fore-handed farmer, who can cultivate productive land that is unincumbered with debt, has not the same reason for apprehension, respecting this unpromising aspect of his calling, that his less fortunate neighbor has, the bulk of whose toilsome net earnings must inevitably be abstracted to appease the owner of a mortgage on his estate.

Several years of observation and experience have not entirely removed the misgivings we entertain respecting speedy achievements of results in this sphere of industrial expansion. New productive enterprises are seldom wrought out in any degree of perfection, unaided by pecuniary outlay and tactical skill, equally essential requisites in all experimental work. The special interests we are endeavoring to advance are dependent, for furtherance, upon two classes of citizens, viz.: farmers and inventors; whose respective callings, as a rule, are not sufficiently remunerative to justify outlays of much time and money upon ventures, however strongly they may be allied to their personal interests.

Flax having for years been successfully grown in this State for seed and tow, the aim of the bounty was to render it a more productive and profitable crop, by inducing the farmer to bestow more care in the cultivation and treatment of the straw, and the inventor to renewed thoughtfulness in respect to mechanical methods for obtaining the long fibre.

This new departure, in the flax industry especially, merited the utmost pains-taking to render this year's efforts as conclusive as possible; and in our appeals to secure the prompt co-operation of the farmers, we laid great stress upon this point; not always with effect, however, for not unfrequently, after conceding the necessity of measures tending to improve this agricultural outlook, we were ingloriously repulsed with the assurance that "some of my neighbors are more enterprising than I am, and I would prefer to let them solve the flax problem."

The American Vegetable Fibre Company, Philadelphia, proprietors of the Dunton machine for working flax straw, were intent with ourselves upon hastening, under the bounty stimulus, the solution of this branch of the fibre industry. It is desirable, not only to re-establish the growth of flax in New Jersey, but, at the same time, endeavor to improve the quality and increase the yield per acre. These requisites are believed to be attainable by the introduction of European seed and methods of culture. Under this conviction, Mr. Dunton ordered some Riga seed last fall, but owing to a disappointment in its shipment, we must wait another year for the trial. His efforts are also being made to get a supply of seed, which has an established reputation in another section of our own country. And in respect to foreign instruction in the propagation and treatment of flax, an expert Belgian planter is already in this country to practice his art upon American soil next spring.

In our first and second reports reference was made to a new Philadelphia machine for manipulating flax straw into long spinning fibre. Expectations regarding the working of this machine have been verified, and the attestation of its remarkable qualities have gratified numerous Hunterdon county farmers within their own district and under their own observation.

The American Vegetable Fibre Company, who now own the machine for working and dressing flax and hemp, originally contemplated the location of their machinery for practical work, at Camden,

but were overruled by conclusive arguments pointing to the Hunterdon county region in which to establish the first station for dressing flax upon the improved method. This section has for many years given more attention to the culture of flax straw than any other in the State, and as the bulk of this year's growth is within a comparatively small compass, a central and accessible point was chosen for the reception and treatment of the straw. A printed circular of this company was distributed in July among flax growers, informing them that they had decided to locate their machinery in Frenchtown, where they would purchase for cash, properly prepared flax straw, at \$20 per ton. The farmers subsequently expressed the desire to be relieved of the rotting process, and sell their straw in its natural state, whereupon the company concluded to construct a large tank with hot water appliances, and rot the straw themselves. The farmers, receiving twelve dollars per ton for their straw in the natural state, were well satisfied with this unexpected compliance with their wishes. It may be stated that this method of water rotting is generally practised in Ireland now.

Through the instrumentality in fact, of this bureau, and the stimulus of the bounty, the practical union of the two agencies, upon whose remaining co-operation devolves the ultimate solution of the flax industry upon this new basis, has been effected, and we think under encouraging auspices.

As soon as the bounty bill became a law it was proclaimed through the rural districts by the following circular :

OFFICE OF  
BUREAU OF STATISTICS OF LABOR AND INDUSTRIES, }  
TRENTON, March 14th, 1880.

AN ACT to encourage the production and treatment of fibres in this State.

WHEREAS, There are ample assurances that the soil and climate of this State are adapted to the cultivation of Jute, Ramie, Flax, Hemp and various other fibrous plants and grasses, which are extensively grown in other countries, and largely imported into the United States; and whereas, the development of new productive industries are of essential benefit to the public welfare; therefore,

1. BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*, That with a view to stimulate individual effort in the cultivation of fibrous plants, the Treasurer of this State be hereby authorized to pay the following bounties, upon vouchers duly receipted by the payee, setting forth the quantities and prices of the products grown by him or them, whose affidavit of their truthfulness shall be first

affixed to the said vouchers, and be attested by the Clerk of the county in which the products are grown; and moreover, the said vouchers shall be certified by the chief of the Bureau of Labor and Industries of this State:

**JUTE.**—For every ton of *two thousand pounds of Abutilon Avicennæ stalks* grown in New Jersey, not less than three feet long, *five dollars*; for every ton of *two thousand pounds* of what is known as *Rose, or Marsh-mallow*, not less than three feet long, and not more than one inch in diameter at the butt, *five dollars*; fractions of not less than a quarter ton in each case will be paid for at same rate; for every pound of marketable quality of *disintegrated Jute*, *two and a half cents*.

**RAMIE.**—For every ton of *two thousand pounds of Ramie stalks* not less than *two and a half feet long ten dollars*; fractions of not less than a quarter ton will be paid for at same rate; for every pound of *disintegrated Ramie* ready for combing, *five cents*; for every pound of *Ramie yarn* ready to weave, *ten cents*.

**FLAX.**—For every ton of *two thousand pounds of Flax stalks for fibre* of the ordinary lengths, *seven dollars*; fractions of not less than a quarter ton will be paid for at same rate; for every pound of *decorticated or cleaned Flax* of first American quality, *three and a half cents*.

**HEMP.**—For every ton of *Hemp stalks of two thousand pounds*, of the ordinary lengths, *six dollars*; fractions of not less than a quarter ton will be paid for at same rate; for every pound of *decorticated or cleaned Hemp*, of best American quality, *three cents*; *provided*, that the bounties hereby authorized shall cease on the first day of April, one thousand eight hundred and eighty-five; *and provided further*, that in no event shall the total amount expended in the form of bounties under this act, exceed the sum of fifteen thousand dollars, to be apportioned as follows: *five thousand dollars* to be awarded to the *enumerated stalks*; *five thousand dollars* to the *enumerated cleansed fibre*, and *five thousand dollars* to the *Ramie yarn*.

2. *And be it enacted*, That it shall be the duty of the chief of the Bureau of Labor and Industries to certify the vouchers referred to in the first section of this act, and to have the general supervision, control and decision of all questions which may arise pursuant to the provisions of this act.

3. *And be it enacted*, That the Treasurer of this State is hereby authorized to pay any money in the treasury not otherwise appropriated, in pursuance of the provisions of this act.

4. *And be it enacted*, That this act shall take effect immediately.

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It will be observed by the preceding law that this bureau has secured the invaluable co-operation of the State, in its protracted endeavor to introduce and establish the fibre industry.

While much has been achieved in the past two years to verify our reiterated assurances respecting the domestic production of fibres, this enactment of the legislature will be interpreted as a practical recognition of the need of industrial diversity and expansion, and also of the propriety of State participation in hazards which are inseparable from the prosecution of undeveloped, and the re-establishment of essentially abandoned industries.

It is scarcely necessary to restate that success in what we now have in hand, is dependent in a very large degree upon what has in so many instances hitherto availed our countrymen in competitive conflicts involving the solution of industrial problems, viz.: appliances of science and skill in combination with natural resources.

Observations in respect to experimental results already achieved by the promoters of these industries, justify the entertainment of hopeful anticipations under these new auspices.

The second annual report of this bureau imparts the latest information respecting progress in the fibre line. We regard it as reasonably certain that the mechanical and other manipulating contrivances referred to in that report for extracting fibres from the plants relied upon to produce them, will be capable of successfully treating whatever products may be grown under the fostering stimulus of these bounties.

## JUTE.

*From the Abutilon Avicennæ.*

In respect to this plant, it will be remembered that two years ago, by means of our illustrated circular, farmers were enabled readily to recognize its spontaneous existence when found in their vicinity, and by the same method, were advised to provide themselves with seed for a possible future use. The exigency then in mind furnishes the occasion for this renewed endeavor in the line of the fibre enterprise.

The sporadic growth of this plant, in respect to soil and fertilizers, at the outset will be suggestive of methods of cultivation. An important pre-requisite, is to have soil as free from weeds and grasses as possible. The quality of the soil, amount of fertilization, drainage, etc., all need consideration in respect to these fibrous plants. Well drained meadows will probably afford best results, especially in the culture of the abutilon and marsh-mallow. Five pounds of seed to the acre, sowed broadcast, is the present allowance for abutilon.

## JUTE.

*From the Marsh-mallow.*

Within the last year our attention has been given to the rose, or marsh-mallow, from which to obtain jute, and with such good results as to render it probable that this *perennial* plant will furnish jute under conditions more advantageous to the farmer than the abutilon, which, being an *annual*, would of course need to be planted every year; whereas, the marsh-mallow, when once established, the stands would furnish successive annual cuttings.

It is not claimed that the fibres derived from these two plants are essentially different. They are thus far found to be so nearly equal in quality that their respective industrial value will necessarily be determined by future developments in the culture and ascertained characteristics of the products. They are alike indigenous to our soil, and each are worthy of consideration in the present fibrous rivalry.

As the attention of agriculturists is now for the first time drawn to the marsh-mallow plant, in anticipation of its being substituted for abutilon, it will be of interest for us to indicate some of the localities where it thrives. The most luxuriant growths we have seen are on the margins of the Assanpink, near Trenton, and in the swamps

on either side of the Pennsylvania railroad near Lawrence station, where acres of beautiful bloom in its season have for a long time rendered it a conspicuous object to travelers. In less perfection it is to be seen on the meadows bordering the upper Hackensack river, and similar conditions of growth are found in the southern part of the State. It is observable, however, in both the northern and southern sections of our State, that the plant attains greater height in fresh water localities than in the salt marshes. Still, it must not be inferred from the above, that the plant has an exclusive affinity for marshy conditions of growth. We have a singularly pertinent exemplification of its successful culture in upland. Twenty years ago, some plants were removed from the Assanpink to the banks of the Delaware, with the view of obtaining jute from them. The lack of appropriate machinery to aid the enterprise, rendered the experiment a failure, but the plants still vex the owner of the farm.

At the outset, the propagation of marsh mallow will of necessity be by transplanting, as but a limited quantity of seed can be obtained for use this spring. We have indicated sources from which roots can be had for the digging, and we hope to see a new interest awakened in jute culture.

In respect to the form of culture, each one, in some degree, must be guided by his own judgment. The roots will be found susceptible of much subdivision, care being taken to retain enough eye-germs to secure ample shoots, as in the case of potatoes. From three to four inch sections ought to insure germination.

In general we would say, bury the roots at intervals, with the eyes up, about as potatoes are planted, and let the suckers fill up the rows, one way, like a hedge, relying upon the cultivator to keep the space between the rows open for cultivation. Possibly, when seed can be had, broadcast and drill sowing may prove advantageous. It is very desirable that the stalks should be as *straight and free from branches* as possible, a requirement largely dependent upon compact growth.

#### RAMIE.

This is a prolific perennial, to be cultivated similarly to the marsh-mallow. Light, rich loam, well drained and accessible to atmospheric moisture, suits it best. It being a tender exotic, the roots will need to be covered with leaves, salt hay or stable manure previous to the frosty season. The luxuriance of growth will vary with the temperature. While but two cuttings might be harvested in the central portion of this State, three can be relied upon in the southerly section, where the experiments during the last three years have yielded good results. In Camden county three cuttings, each four feet high, have been obtained repeatedly, which verify the belief that from three to five tons of stalks can be grown upon an acre. Soil and cultivation, as in most other products, determine the yield. The foliage is heavy and drops off soon after the cutting, that it may revert to the soil.

Ramie seed cannot be had for sowing this spring, consequently this year's product will chiefly come from plants already propagated in hotbeds, to a limited extent. It is to be hoped that by another year, either domestic or imported seed may be obtained, so that this delicate exotic plant may receive the general attention of agriculturists.

If seed is available now, it must be germinated and nursed in hotbeds, well protected from the rays of the sun and kept moist. When ready to be transplanted, the soil should be plowed deep and crosswise, so as to become well pulverised, and liberally permeated with stable manure or compost.

Generally when the stalks reach four feet in height, they assume a brownish hue for a few inches above the ground, thus indicating the stage for cutting, which should be done close to the ground. Until mechanical means are provided for this process, knives will have to be used. After the crop is cut and removed out of the way, we advise the careful use of a harrow, to remove the weeds and superfluous suckers, and aerate the soil. The planting should be deferred until all danger from frost has passed, which ordinarily occurs between the middle of April and the first of May.

## FLAX.

The growing of flax for the *long staple* was long since practically abandoned in this section of the country, for two-fold reasons, viz., want of home market, and economic process of treatment. The recent establishment of eminent Irish spinners of flax upon an extended scale in our own State, removes the first impediment, and we feel confident that the "American Fibre Company," of Philadelphia, will remove the second. That company having distributed circulars over our State, embodying their methods of culture and treatment of flax, renders it unnecessary that we should do more than acquaint farmers with the source of these improved methods, together with the important fact that the company referred to will purchase flax straw upon application to Joseph F. Dunton, manager, 213 South Front street, Philadelphia, Pa., the scutching machinery, however, to be operated in New Jersey.

And we would further state that the Dunton machine is equally adapted to the treatment of hemp, and is alike designed to promote the culture of hemp and flax.

On or before the first day of June in each year we desire to be informed by those who embark in the cultivation of any of the specified products, of the kind and probable amount of each they expect to produce. Upon receipt of such notification, we will respond with specific directions respecting the condition in which the products entitled to bounties should be prepared previous to certification and delivery to the parties who will purchase the crude articles to be wrought into fibre. In this connection we would state that any information pertaining to flax and hemp can best be obtained by addressing Mr. Dunton; and further, it was contemplated that the bounty on flax and hemp should apply only to the ordinary *long staples*, and not in either case to tow.

SAMUEL C. BROWN,  
Secretary.

It was not long after the provisions of the law were understood by the farmers, before the notification referred to in the concluding paragraph of the circular began to be received, and in compliance therewith we prepared and circulated the following:

OFFICE OF  
BUREAU OF STATISTICS OF LABOR AND INDUSTRIES, }  
TRENTON, July 8th, 1880.

In our circular of March 14th we copied the recent law of this State offering bounties for various fibrous products, and assured those who undertook the culture of flax and other fibres, that upon receiving notice from them of such purpose, together with

the kind and probable amount they expected to grow, we would respond with directions respecting the condition in which the products entitled to bounty should be presented for certification and delivery to the purchasers.

Flax has been an established agricultural industry to a limited extent in this State for generations, hence there was obviously no necessity for a bounty stimulus simply to grow flax straw. The purpose of the present bounty was to invoke skillful appliances to the task of obtaining, upon an economic basis, long straight flax fibre for spinning purposes, thereby greatly enhancing the industrial value of the product; therefore the law, as stated in the aforesaid circular, did not contemplate the payment of bounties upon flax and hemp straw grown exclusively for *seed and tow*, or either separately, but *seven dollars for two thousand pounds* of straw of ordinary length, grown and rotted in this State, for the long fibre product, the seed of such growth to belong to the grower; fractions of not less than a quarter ton to be paid for at same rate; for every pound of decorticated or cleaned flax, of first American quality, *three and a half cents*; for hemp stalks, *six dollars for two thousand pounds*; and for cleaned hemp, *three cents a pound*.

As the long straight fibre cannot be advantageously obtained by any present process from unrotted straw, and the bounty payable only on straw that has been duly rotted, we require that the certificate shall specify that it has been thus rotted, otherwise the bounty will not be paid.

No distinction will be made in the distribution of the bounty between pulled and cut straw. The mode of harvesting the straw does not materially affect the quality of the fibre, hence future developments must be relied upon to indicate whether the pulling or cutting process is the most economic. In foreign countries the pulling method is almost universally adopted. But we are at liberty to improve upon old methods, and it is not unlikely that some of our experts will devise a plan for preparing the soil and surfaces of flax fields, together with mechanical contrivances, so that the straw can ere long be cut much more economically than it can be pulled.

In respect to gathering both the straw and seed this season, we think it best that each farmer should adopt his favorite method, and also in regard to rotting. All the circumstances attending the present endeavor to re-establish the flax industry in this State, appeal to us to exercise our best faculties to produce, as near as possible, definite results this season, hence let us omit no pains to further that object. Another year it is proposed to introduce some imported seed, and by the adoption of well-established foreign methods of culture and treatment, in conjunction with the substitution of the Riga and other seed, we hope to witness radical changes in the mode of prosecuting this promising industry.

Specimens of New Jersey flax have been sent to eminent Irish spinners, and recent letters in response bear the strongest testimony respecting the quality of the fibre. They say: "We can see that it is quite fit to use for fine and coarse descriptions of yarns, and is certainly well worth the attention and trouble of the farmers to bring it into a marketable state by steeping and drying." Referring to a probable visit to our State, they say: "As we have no doubt spinning mills will follow your enterprise, next fall we will visit your location and see the advantages which may be offered us to build a spinning factory. Your climate is well adapted for the growth of the finer fibre, if the farmer will only take care to break it properly, and in bleaching we learn that in six days you can accomplish what takes six weeks here."

A few "rough and ready" precautionary hints will not be amiss at this juncture:

*First.* After the straw is cut, see that it is thoroughly dried, but with as little exposure to the sun as possible, previous to rotting; after it is rotted there is no danger from exposure to the sun. Do not attempt to stack it too soon, as no crop will heat quicker if packed together in an undried state. When it is properly dried, the sooner it is ricked the better.

*Second.* When the straw is thrashed or put through the machine for lopping off the seed, the utmost care should be observed so as not to tangle or break it.

*Third.* Whichever way the straw is rotted, let it be done with great care and thoroughness. As the water process will no doubt ultimately be used in this as it is in other countries, when the farmer can conveniently prepare a small tank of not less than five hundred gallons capacity, we advise him to do so. Soft water is much preferable to hard. Place the straw in the tank in a compact form, before the water is let in, and see that it is well weighted, otherwise the expansion will force it up. At least six inches of water should cover the straw. The tank and water should be clean, and the water should not be changed until the flax is sufficiently rotted. A week is generally required to complete the fermentation. Tests of its condition can be made by rubbing several straws together, and when the fibre readily separates from the core, draw off the water from the bottom and let in a fresh supply to rinse the straw. It is now ready to be spread carefully upon grass, to lie for a few days, and turned every evening, afterwards put under cover.

*Fourth.* If you have occasion to put in another batch, clean the tank well of all foul matter, or else the succeeding straw may become discolored.

In all these processes, good judgment will promote success, and experience, ultimate perfection. They will be found less formidable than they appear in advance.

A printed voucher and stamped envelope will accompany this circular. The filling up of the blanks should be done in a legible handwriting, and after they are duly certified, replace in the envelope and mail it. We would be glad if each farmer would state on the margin of the voucher, as near as he can, both the quantity of land sowed and the seed used to produce his return of straw; and also whether his straw was water or dew rotted.

The American Vegetable Fibre Company, of Philadelphia, has already distributed circulars among farmers in this State, informing them that they have located a mill at Frenchtown, with machinery to manufacture flax fibre, and that they will purchase rotted straw in specified condition delivered at that point, and pay for it \$20 per ton in cash.

SAMUEL C. BROWN,  
Secretary.

It was our expectation to receive many responses to the first circular from farmers whose first venture in flax and hemp was upon a small scale, in some cases, less than an acre. No one can take exception to this prudential forethought.

Had it not been for the dry spring, the bearing of a single acre of flax upon another year's sowing, would have been as decisive, perhaps, as a much larger field would have been. Last spring's drought was certainly inopportune for the best results in flax and hemp. In

some cases the sowing of both was wholly lost, and in but few was there a crop up to a fair average. Equally disastrous consequences were experienced in the crops of hay, early potatoes, etc., and the disappointment in the one case, should not be any more dissuasive respecting another trial next spring, than in the other.

We are glad to receive assurances from farmers and other sources that next spring will witness a much larger sowing of flax seed by those who put in only an experimental crop this year, and the indications are that the vigorous enterprise displayed by the American Vegetable Fibre Company, under Joseph F. Dunton, Philadelphia, Manager, in the endeavor to permanently establish the flax industry in Hunterdon and adjoining counties, will be an incentive to many additional farmers to embark in the culture of flax. The movement has even awakened an interest in Bucks county, Pennsylvania. Though, of course, flax grown out of this State does not entitle the grower to bounty. We are informed that Pennsylvania farmers on the opposite side of the river to Frenchtown, are meditating planting flax next spring.

While the law is explicit in reference to the continuance of the bounties, letters of inquiry have been addressed to us in respect to that point; hence we state that, unless the sums appropriated are previously exhausted, payments will continue until April 1st, 1885.

The provision of the law in regard to fractions of a ton has been interpreted to apply to all fractions less than a quarter of a ton. The effort will be made at the coming session of the legislature to have the law so amended that the entire quantity of commodities returned above five hundred pounds (a quarter ton) will be paid for irrespective of succeeding fractional tons.

We did not anticipate that the disbursement for bounties this season would be large. As already intimated, there was a very general disinclination shown on the part of the farmers to grow flax except for the seed. They are afraid of the rotting process, not anticipating the payment of the bounty upon unrotted straw. That objection being obviated by the purchaser of the straw, we shall hope to witness a more animated interest in flax sowing another year.

All the straw grown for the fibre has not been delivered and returned to our department yet, which renders it impossible for us to estimate this year's crop. Sixty-four vouchers for straw have

already been presented, and one by the American Vegetable Fibre Company for *cleaned flax*; the total payment for bounty upon the sixty-five vouchers being \$851.48. Neither can we, for the same reason, make any calculation as to the quantity of flax fibre that will be produced under the stimulus of the bounty this year.

The energy and faith of the American Vegetable Fibre Company, in the permanency of the flax industry in our State, is well exemplified in their eagerness and purpose to secure an eligible body of land in the vicinity of Frenchtown upon which to cultivate flax upon an improved plan—conducted by an expert in its culture brought from Europe, to whom reference was made in our last report. If success attends this effort, its bearings upon the future culture of flax in this State and elsewhere, will be exceedingly valuable.

The promoters of this movement fully comprehend the prospective magnitude and value of the industry, prosecuted under such auspices as they believe to be attainable in New Jersey, and in other sections of our country. The highest degree of success is undoubtedly dependent upon the amount of skill infused, both into the system of agriculture and the handling and treatment of the straw. Moreover, the flax fibre is susceptible of degrees of refinement exceeding any other, consequently its industrial value is not easily computed.

We have at hand some tables relating to the growth and production of flax in European countries. As our State and Nation is intent upon introducing new productive industries, and more especially those pertaining to raw materials, the reproduction of these tables will have a two-fold significance on this side of the ocean. First, in showing the magnitude of the total product of the raw material. Second, the relation the United States bears to all other nations in the scale of consumption of linen manufactures.

## FLAX PRODUCT OF EUROPE.

	Statute Acres.	Tons.	Lbs. Per Acre.
Austria.....	232,494	40,367	347
Belgium.....	140,901	29,580	411
Denmark.....	17,686	2,211	250
Egypt.....	15,000	1,875	250
France.....	187,451	42,575	460
Germany.....	329,362	57,432	348
Greece.....	957	119	248
Great Britain.....	7,055	1,081	306
Hungary.....	24,888	3,111	250
Holland.....	46,700	9,273	397
Italy.....	201,023	22,791	227
Ireland.....	128,004	19,611	306
Russia.....	2,000,000	250,000	250
Sweden.....	37,500	4,688	250
Europe.....	3,369,021	484,714	282

The above figures are not deemed, by any means, strictly reliable, but as they are derived from Irish data we can safely regard them as a fair approximation to the truth. We would say, in reference to the stated average product per acre, that with our superior agricultural appliances and manual skill, we can count upon a near approach to the highest. It would not be safe for us to anticipate at present, attaining the French yield, for the general agricultural record of France is pre-eminent. So, also, Belgium. It would however, lower our self-appreciation to fix the American standard below any other than those named, after the higher culture has been brought to the test. The totals of this presentation no doubt will generally occasion surprise. Our farmers will perhaps be best able to gauge the magnitude of the industry by this parallelism:

The total acreage of New Jersey, exclusive of water, is estimated in round numbers to be 4,600,000 acres, which only exceeds the total of flax sowed in Europe last year 1,230,979 acres.

The total value of *exports* of linen manufactures from Great Britain to all countries in 1878 was \$27,673,880, of which \$10,511,905 (38 per cent.) came to the United States.

The exports of piece linens of all descriptions from Great Britain to all countries in 1879 was 156,349,100 yards, of which 85,543,400

(55 per cent.) came to the United States, the value of which was \$11,694,560.

We learn from the Bureau of Statistics of the Treasury Department that for the nine months ending September 30th, 1880, the importations of flax manufactures amounted to \$17,326,643, against the previous year with the same ending \$13,081,467.

The importations of raw flax for the nine months ending September 30th, 1880, was 4357 tons, against 1538 tons the previous year, with the same ending.

The following summary of spindles and power looms in the several European countries in which the flax and linen industry is prosecuted, will complete the tables of special interest:

	Spindles.	Power Looms.
Austria and Hungary.....	380,440	500
Belgium.....	295,140	4,755
England and Wales.....	190,808	4,081
France.....	470,000	22,000
Germany.....	318,467	8,000
Holland.....	7,700	1,200
Ireland.....	911,111	21,153
Italy.....	59,223	772
Russia.....	100,000	3,000
Scotland.....	265,263	16,756
Sweden.....	3,810	98
Switzerland.....	9,000	.....
Spain.....	.....	1,000
Europe.....	3,070,962	83,315

In view of the trending of foreign industries to this country, we think the purport of the preceding statistics have special relevancy to the production of American flax. This extraneous information will serve to show what a prospective industrial and commercial value flax possesses. We have shown that the United States consumes, in some form, nearly half of the flax product of the world; and moreover, when we have further shown that the successful culture of the raw material, upon an extended scale, in at least nine of the largest countries of Europe—where there is certainly no less diversity of climate and soil than this continent presents—only hope-

fulness and vigorous perseverance should characterize all efforts in this special line of industrial expansion.

It cannot be too often repeated, that our true interests lie in turning attention to those agricultural products which in the largest degree necessitate the employment of skilled labor to convert them into high-priced commodities. Every additional factor merged into our industrial system to enlarge its scope and emoluments to the industrial classes, tends to general and permanent prosperity.

Should the flax industry become rooted in our State, Hunterdon county will obviously be the central point of culture in its early stages. As soon as an abundant supply of the raw material can be depended upon, it is fair to assume that favorable conditions for spinning and weaving flax in proximity to the source of supply, will first attract the attention of foreign specialists in that department of industry.

In anticipation that such a demand for local manufacturing purposes will soon follow success in the production of flax fibre, a foreshadowing of what should precede the manufacturer, will tend to quicken and expand the views of farmers and others whose active co-operation is relied upon to build up these wealth-producing industries.

The townships of Alexandria, Franklin and Kingwood unitedly contain 60,151 acres of improved land. This entire body of land devoted to flax, upon the basis of 282 pounds of fibre to the acre, which is shown to be the average of the European product, would furnish 8481 tons, not quite twice the number of tons imported in the last nine months in the raw state.

For our present purpose, we will assume that to produce the \$17,326,643 of manufactured linen goods imported in the last nine months, 15,000 tons of raw flax was consumed. This, added to the 8481 tons imported during the same period, makes the total importation of flax already this year 23,481 tons, worth not less than \$5,000,000.

The entire county of Hunterdon is represented to contain 222,357 acres of improved land, which, if devoted to flax culture, upon the basis of the previous calculation, would produce 31,352 tons of fibre, proportionately, not much in excess of this year's importations.

One more calculation will suffice to impart adequate significance

to this industry. Allowing 1000 tons of flax as the average annual consumption of a single establishment, and 300 hands as the average equipment of labor, and the result is that an area equivalent to Hunterdon county could supply thirty-one flax mills with raw material, and simultaneously furnish employment to 10,850 men, women and children.

This forecasting in respect to an industry that has passed the experimental stage, is sustained by such reliable data as to warrant the utmost hopefulness that anticipations will sooner or later be realized. The requisite conditions and agencies to effect these predetermined results, remain to be actively utilized in the ratio of their importance.

In respect to the mallow fibre industry, we can only report progress in the method of stripping the bark off the ligneous substance.

The best growths of rose mallow being in the vicinity of Trenton, we persuaded the proprietors of the machine for treating it to put it into operation at Trenton. This was done last fall, and with entire satisfaction, the sole operation being to simply remove the bark from the wood, leaving the fibre embedded firmly in a resinous substance, in the form of a ribbon.

What remains to be done to demonstrate the cost and industrial value of the fibre is to release it from this vegetable gum in an unimpaired state. We very much regret that the owners of the machine have not more vigorously pursued this second process, which is wholly chemical, and, in the hands of expert manipulators, ought to be readily solved. We have urged the speedy solution of this essential problem, in view of its bearings upon experimental work in the culture of mallow next spring. We are assured that attention will be given to this part of the subject very soon.

There are indications that the mallow and ramie industry are to have a supplemental trial in Virginia soil, but under New Jersey auspices. A citizen of Newark having been moved to embark in the culture of ramie, felt constrained to locate his operations where he conceived success to be more certain than in this State. So far as ramie is concerned, the probabilities may be on his side, though we think South Jersey is well suited to its culture.

Mr. Dennis's experiments were started last spring, near Richmond. He put in both ramie and mallow plants, and expresses him-

self as being well satisfied with the results. His latest report states that he has 10,000 ramie plants propagated from the seed, and that a much larger number would have survived an ordinary spring, but owing to the excessive drought in May and June, germination was only partially successful.

He put in about two acres of India jute seed, which he represents as having an average growth of ten feet. His experiments have awakened a wide-spread interest among the Virginia planters and farmers, and it is predicted that not less than one hundred acres will be sown next spring with jute seed. Moreover, the Virginia Agricultural Society last fall, awarded *the gold medal* to Mr. Dennis for making the most important exhibit bearing upon the economic industrial resources of the State.

Should it turn out that through New Jersey inspiration, ramie and jute culture get a footing in Virginia in advance of New Jersey, the possession of the aforesaid gold medal might legitimately reanimate the question of State rights as between Mr. Dennis and his native State. At all events, it will never do for New Jersey farmers to be outdone by Virginia farmers, who, under stress of similar agricultural adversity, resort to the New Jersey method of industrial diversification, supplemented however, with more apparent vigor. Our State is further represented in this southern movement by the machinery that is relied upon to furnish the fibre from both plants, it being the same machine, in a modified form, that we have had in use upon mallow in Trenton, known as the Angel machine, from Newark.

The chief gratification we draw from the elated condition of the Virginians respecting this promising industrial innovation, is that it strengthens our faith in what we have been for several years intent upon introducing into our own State; and it will, moreover, indicate to doubting minds that the fibre industry is destined to have great prominence among the raw material products of this country.

We therefore look complacently upon this remote endeavor to establish new sources of wealth, and beg leave to bring it to bear upon our South Jersey friends, whose inertia respecting the development of their section does not accord with views we have long entertained.

Our mind is unchanged in regard to South Jersey development; first, that the owners of her unimproved lands are heedless of the

welfare of that section of the State; and, secondly, in respect to methods of development which give promise of best results.

We cannot but interpret the chronic inactivity apparently existing among the large land proprietors in that section as prejudicial to their interests. If they view their estates as having a semblance to some kinds of wine which improve by age, and are holding them under the honest conviction that the accretion in value justifies their inertness, no one can take exception to their action.

But we will be content with a single hint bearing upon possible reasons why the settlement of the eligible lands bordering upon the Camden and Atlantic, and other southern lines of railroads, are not more rapidly taken up and improved.

The character of these lands is sufficiently well known to occasion surprise that they are not more sought for by industrial specialists, who, in numberless instances, have conclusively demonstrated their productive value in special lines of tillage.

The sparse occupancy of these lands have no sort of relation to their intrinsic value, it seems to us, hence the impolicy of prolonged inattention to well-considered methods of development.

We have never felt hopeful of any considerable progress in drawing settlers into South-eastern Jersey, in the absence of a disposition to resort to a consolidation of landed interests to further that object. There are unquestionable obstacles in the way of colonization upon any extended scale, not easily surmounted, except, possibly, through the principle of co-operation.

If the chief landowners were a unit in respect to the policy of some form of distribution of their estates, it would constitute a basis for hopeful action. Until there is a nearer approach to unanimity upon some policy contemplating an improvement of these vast areas of unproductive lands, only such sluggish progress as single handed enterprise can make will be observable.

It occurs to us that if associative action cannot be obtained for selling lands, it might be feasible for a number of contiguous owners to unite in cultivating one or an indefinite number of products, or in leasing sub-divisions of their respective tracts to other parties for the same purpose for a term of years. Conditions of ulterior sale and purchase might be embodied in the lease, which would simplify the system in its relation to improvements made by the lessors.

The moment a sincere and vigorous disposition for such participation is awakened, the way will be opened for the adjustment of equitable terms. And by judicious discussion and advertising of the scheme, we should be disappointed if desirable parties were not found ready to embark in agricultural pursuits, under such auspices.

There is a great range of products adapted to the soils and climates, and also to the proposed association of interests in their culture. We would suggest both jute and flax as worthy of attention in an undertaking of this kind. Branches of husbandry already successfully established in adjacent localities, will suggest themselves as worthy of consideration.

In respect to jute, emphasis will be imparted to its culture in this connection, by the fact that its commercial and industrial importance has drawn the attention of the Egyptians to its probable adaptability to the conditions and necessities of their country. We are not informed yet of the precise method by which its culture has been initiated in that locality, but undoubtedly the primary instrumentality was associative action, under the sanction and fostering care of the government.

The Egyptians would naturally resort to the European system of advancement of material prosperity under such modifications as local circumstances might render necessary. The movement is of interest to us because of its bearings upon the great questions of raw material products, and the United States is relatively more interested in the future sources of textile raw materials especially, than any other country on the globe. If our dependence upon foreign supplies is to continue, the primary cost of production has an important bearing upon our continuous success in curtailing importations.

On the other hand if we are resolutely to prosecute our endeavors to displace the foreign with domestic growths of raw materials, we should intently scan the methods and localities with which we are brought into direct conflict, hence it behooves us to keep well informed respecting industrial enterprises in all quarters of the world.

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PART IV.

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ENSILAGE.

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## PART IV.

# ENSILAGE.

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Dr. John M. Bailey, of Massachusetts, has, by last year's successful experiments at "*Winning Farm*," imparted additional interest to the subject of *Ensilage*, or Preservation of Green Fodders, and we deem it of sufficient importance, in the line of agricultural science, to again invite public attention to it.

The doctor has embodied the results of his first year's Ensilage operations in an illustrated volume entitled, "*The Book of Ensilage, or the New Dispensation for Farmers*." He is the proprietor of the "Winning Farm," Billerica, Massachusetts, and the Virginia Stock Farm, Sussex county, Virginia.

The first half of the book is devoted to Ensilage and the remainder to the *Idlenot Papers*, which he prepared for the *Ploughman*. They treat of Percheron horses, Cotswold sheep and Berkshire swine, bred at the "Winning Farm," which are accompanied with handsome illustrations of each. The second title of the first *Idlenot Paper* may awaken a desire, out of New England, for a more intimate acquaintance with the practical suggestions of a Massachusetts specialist in the sphere of agricultural science, viz.: *Cost of producing milk, one cent a quart; of butter, ten cents per pound; pork, three cents per pound; beef, four cents per pound; and mutton for nothing if wool is thirty cents a pound.*

The general bearings of this volume are obviously upon the unpromising condition of agriculture in New England. Success in Ensilage would be of incalculable advantage to the agricultural interests of that section, and it is the purpose of the last half of the book to illustrate what is plausibly set forth in the first half.

For self-protection and aggrandizement no progressive agriculturist in this broad land can wisely ignore well demonstrated improvements

in husbandry. Industrial expansion and intense sectional rivalry, coerce attention to economic observances in all productive pursuits, and the requirements of the law constitute this department the appropriate medium to communicate to the public whatever concerns the industrial welfare of the community, we therefore regard Dr. Bailey's exploits in ensilage, especially, as eminently worthy of the renewed attention of our rural readers.

The first chapter relates to the disadvantages of the system of curing forage by desiccation or drying. In the New England and Middle States the author says the great obstacle to raising stock at a profit has always been the high price of all kinds of fodder for winter feeding. The lowest cost at which a cow can be kept in eastern Massachusetts is twenty-two cents per day for feed, allowing nothing for care except the manure. In some instances the cost is represented to be twenty-six cents per day, which would make the annual cost \$94.90 per year. He continues by saying that to meet the lowest cost above named, which is \$80.30 per year, at the highest price at which milk has been sold in eastern Massachusetts during the past few years, viz.: twenty-five cents per can of eight and a half quarts, each cow would have to yield  $321\frac{1}{2}$  cans, or 2730 quarts, about 5500 pounds. He further says, "that there is not one herd of cows in fifty which averages 5000 pounds of milk per head yearly. While this is so, that ninety-eight per cent. of the cows yield less value in milk than it costs to feed them, still as a choice of evils, farmers are obliged to keep them rather than sell the provender they consume, though it would bring more money than the milk. By gratuitously incorporating a large amount of labor into the milk they are enabled to keep up the fertility of their farms, while on the other hand were they to sell their forage they would soon impoverish their land.

"Paradoxical as it may seem, the only way the majority of farmers near our large cities can make any money is, and has been, to sell milk at less than cost to produce it."

This unsatisfactory condition of affairs the doctor aims to remedy by the substitution of the system of ensilage for that of curing forage by desiccation. He avows with great distinctness his distrust of agricultural science to solve the forage problem. He fails to see adequate beneficial results from a resort to chemical analyses of soils,

and is equally incredulous respecting the utility of ascertaining the elements of various crops, with the view of applying kindred elements of fertility to the soil. He evidently does not proscribe these scientific panaceas because of disbelief in their intrinsic value, but because of the practical difficulties in the way of their universal adoption. In justice to the author, we quote the following observations bearing directly upon the above:

"This necessitates the farmers trying all these experiments upon their own land, which is out of the question, for while they might, they certainly will not do it. Therefore commercial fertilizers will perform have to be applied in the future, as in the past, mostly at random.

"I do not wish to be understood as saying that commercial fertilizers are not valuable and useful in their place, which place is not to take the place of barn-cellar manure, but as an economical adjunct to it in the hill and drill.

"The chief objection to depending *in the main* upon them is, that in the majority of cases the fertilizer costs more than the crop they will bring.

"No great agricultural prosperity can come through the increased use of commercial fertilizers, except as aids to barn-yard manure.

"Experiments in England have demonstrated that the crop does not increase in proportion to the amount of fertilizers applied, even when the most consummate skill directs the operations."

Having given the author an opportunity in his own language to express his sentiments upon the subject of commercial fertilizers, we proceed to acquaint our readers with his experimental efforts in preserving green fodders.

In our last year's report we said all that is necessary to be said relating directly to what has been done in France and Germany in ensilage, primarily through the instrumentality of M. Goffort.

Under the conviction that invaluable elements of nutrition are lost in the hitherto universal plan of curing forage crops, Dr. Bailey studied the French system of ensilage sufficiently (1) to be impressed with its mechanical simplicity; (2) with the unwisdom of adhering to the practice of allowing essential attributes of all green forage, under the drying process, to be restored to the atmosphere; (3) with what is obviously true, that mastication, digestion and assimilation

of grasses and maize in the undried state, are more completely obtainable than after being dried. And, moreover, that rains and dews exercise a deteriorating influence upon all field cured fodders.

It will not, of course, be expected of us to reproduce the illustrations which are found in Dr. Bailey's book, and which enter so much into details as to place before the mind his silo in various stages of construction.

He informs us that in June, 1879, he selected a side hill for the location, so close to his barn that the silo, when finished, joined upon one corner of it. The side and end walls were laid seven feet deep, twelve feet high and forty-four feet long. The ground was leveled to the top of the wall, which furnished a place for an engine and cutter, and also space upon which the carts, direct from the field, could dump the material to be prepared for the silo.

Upon this foundation the silo walls were built of concrete, fifteen inches thick, in the following manner: 3x4 joists are set up at each of the angles, and also at intervals of about eight feet on each side of the walls. These scantling are placed eight feet apart. Spruce plank twelve inches wide and one and a half inches thick are set up on the inside of the scantling, which leaves fifteen inches between the plank and the thickness of the walls.

The concrete is made by mixing one barrel of cement with three barrels of plastering sand and four barrels of clean gravel. This is thoroughly mixed together while dry, then wet and mixed again, making a very thin mortar.

About three inches in depth of this mixture is put in between the planks, then stones of all sizes and shapes are packed and bedded in this layer of concrete, after which another layer of concrete is poured in on top of this layer of stones, and the operation is repeated until the space between the planks all round each silo is filled; then the planks are raised about ten inches, and the space filled as before, until the walls are at the desired height. If there is no occasion for haste, it is better to raise the planks but once a day. A 4x12 inch sill was bedded on the wall in the last layer of concrete. This sill was made of 2x12 inch spruce plank nailed together. Upon these sills a building was placed with posts five feet high, the beam on the top of these posts being thoroughly braced to the posts, thus firmly tying the whole structure together.

In sections of the country where clean sand, gravel, &c., are not easily obtained, silo walls may be constructed of brick, in the usual manner of brick buildings. Concrete is, of course, the cheapest, where the materials are convenient. The book contains a diagram of this silo completed, which has a capacity of 800,000 pounds, and the cost was about \$500, or, about one dollar and a quarter for each ton's capacity. Large sizes will cost less in proportion than small ones.

As a rule, silos should be built rectangular in form, the width being about one-third the length, and the height about two-fifths of the length, and, if possible, should be sunk about one-fifth below the surface of the ground. For obvious reasons a side-hill position will greatly facilitate the filling and weighing the contents of the silo, care being taken to have the walls against the bank capable to withstand the lateral pressure when empty, and the front wall, the inward pressure of the superincumbent weight when full.

We learn that the process of cutting the green corn fodder and filling the silo was commenced September 22d, and finished September 30th, putting in about two feet daily. Upon the top of the ensilage one foot of uncut rye straw was put, and this was floored over with one and one-quarter inch spruce plank, laid crosswise, upon which twenty-five tons of bowlders was placed. Various materials may be used for weighting when stone are not to be had. Logs of wood, bricks, bags or boxes of earth, conveniently arranged for handling, may be substituted for stone.

The doctor's estimate for cutting up the corn and hauling it, passing it through the machine which cuts it four-tenths of an inch in length, and packing it into the silo, was not far from seventy-five cents per ton. With improved methods of cutting and handling, both in the field and at the mouth of the silo, he estimates the cost would not exceed forty cents per ton, which is much less than it would cost to go to the field, cut and haul to the barn and feed the stock, than to fill a bushel at the silo and give it to each animal.

The doctor proceeds to say that when it is considered that the corn plant is at its *best* but a few days, that it can *all* be put into silos when in the best condition, and that, notwithstanding great care in successive plantings, if used directly from the fields, much has to be fed either in an immature state or when too hard for the

cattle to masticate the stalks. It will be seen that the saving, however considerable, in planting as well as harvesting the whole crop at one time, is but a trifle compared to the gain in nutritive value by being all cut at the right stage of growth, and preserved by the system of ensilage with all its elements uninjured.

Ensilage is, therefore, the most economical method of soiling. It is affirmed that succulent forage is improved by lying in the silos, and that the process constitutes the easiest and cheapest avenue for green crops to reach the manger. It practically annihilates winter, and places the stock raiser and dairyman in better circumstances than they would be in if they had green fields from which to draw winter soiling for animals.

The doctor planted some of Stowels' evergreen sweet corn, but his southern white corn yields twice as many tons per acre, and he says he will not plant any more sweet corn for ensilage. His corn was all sown in drills, about three feet apart, one bushel of seed corn to the acre; was manured with six cords of stable manure, spread broadcast, after plowing and harrowing twice. It was planted with an "Albany corn planter," which, in addition to opening the drill, dropping the corn, and covering it, also deposited about two hundred pounds to the acre of a mixture composed of equal parts of superphosphates, cotton seed meal and gypsum. It was an unfavorable year for corn—dry weather, cool nights and early frost, rendered it a short crop, but still he harvested from portions of his planting forty tons per acre. He thinks it not difficult, upon good corn land, to raise from forty to seventy-five tons per acre.

This experimental silo was closed up the thirtieth of September. Some friends, who were interested in the subject, requested the doctor to have a public opening, which he did, on the third day of December. Invitations to the opening were sent to quite a number of prominent agriculturists. We will make a few extracts from Dr. Bailey's report of the opening, to "The Country Gentleman," on the 9th of December:

\* \* \* "When the silo was first opened, December 3d, there appeared to be a strong acidity, so much so that some of the gentlemen present were somewhat disappointed; but as we got further into the mass of ensilage the acidity is much less, while the alcoholic odor upon exposure to the air several hours is much stronger.

"I tried a little experiment with it this afternoon. I had a pen of seven Oxfordshire Downs, and another pen of five maple shade-Cotswolds. They had just been fed with some clean, bright hay. In another feed trough I put some ensilage. Five of the seven Oxfordshire Downs left the hay and ate the ensilage, and four of the five Cotswolds left their hay and did likewise.

"I feed, in place of the ration of hay, twenty-five to thirty pounds of ensilage to each cow in the morning, and the same at night, which has lain upon the barn floor all night, during which time fermentation is quite active, so that it is warm in the morning. \* \* \* I am delighted with the success of the enterprise. I believe it is possible to keep four cows a year upon corn fodder ensilage raised upon one acre of land."

The editor of the "Lowell Journal," who was present at the opening, thus records his impressions: "There were twenty or thirty head of cattle on the farm, as well as sheep, swine and horses. They were all given some of the ensilage. The hogs ate it greedily. The sheep also seemed very fond of it. The neat stock were not so eager for it at first, but most of them seemed after a while to acquire a taste for it, and soon manifested a desire for more. \* \* \* One thing is certain, thus far, the fodder is so well preserved that the cattle will eat it, and there is no question but that they will thrive on it."

Ex-Governor Talbot, of Massachusetts, thus writes: "I have been watching the results of your experiment in preserving green fodder for stock for winter use, with great interest. At first the scheme seemed to me visionary and foolish, but having seen food made from corn fodder taken from your silo in May, which was cut the September previous, fed to your stock, and that they ate it very freely and wanted more, I am bound to say that you have demonstrated to my mind, that green food can be preserved, that the stock will eat it freely, and if the appearance of your cattle and sheep was any indication, will thrive on it. Your stock certainly looked well and in good condition. I hope your experiment will open our eyes to the possibility of agriculture for New England. The question of food for winter use for stock has been the almost insuperable obstacle in the way of success. 'How can we compete with the great natural and perpetual pastures of the South and West?' has been the cry of our farmers."

The editor of the "New England Farmer" visited the "Winning Farm" in May, and received favorable impressions respecting Dr. Bailey's experiments. He said that it was the general impression among visitors, that cattle would have to be taught to eat it. His doubts upon this point were quickly removed when a sample of the fodder was the next day placed in the mangers of his own cows at "Pine Hedge Farm," "Which was eaten as readily and eagerly as though it had been a mess of chopped pumpkins or apples, the animals not appearing to even stop to smell it, but grabbing at the first mouthful, and hanging to it till the last morsel disappeared, and this, too, after their usual breakfast had been served."

We could extend the testimony of reliable observers, of what has been achieved in tentative agricultural processes by the enthusiastic proprietor of the "Winning Farm," but we think the foregoing sufficiently establishes what has been claimed respecting ensilage. The principle has long been verified in all hermetical processes, leaving the method to be perfected. Its apparent pertinency to the New England agricultural exigency, does not divest it of interest in more remote sections of the country.

If, as Dr. Bailey maintains, success in ensilage essentially converts the winter months into fresh butter periods, how vastly will the dairy department of agriculture throughout the country be enhanced. And does not this system, which serves to render perpetual stock raising upon unimpaired green fodder, possible, impart a new aspect both to the domestic and foreign beef market?

Several detailed results of feeding cows on ensilage will enable experienced dairymen to approach accuracy of judgment respecting the advantages in the use of this fodder.

A neighbor of Dr. Bailey's had a small herd of six cows, of ordinary New England stock, but considered good milkers. These cows had served through the season for butter making, and on the approach of cold weather began to shrink in milk. The six cows had been fed, previous to the use of the ensilage, two bushels of flat turnips, with four quarts of bran to each cow daily, and what dry corn fodder they would eat. The amount of milk given by them daily was thirty quarts, from which eighteen pounds of butter were made per week.

Ensilage was now substituted, and in seven days in December, eighteen barrels, or fifty-four bushels, were consumed by the six cows. All but one took to the fodder at first kindly, and their appetite for it increased from day to day. There was an increase of milk from thirty quarts to thirty-five quarts daily. The cream was thicker, of richer color, and of better quality, than from their previous feeding. One sack of bran, of the value of ninety cents, was all that the cows ate during the week in addition to the ensilage, except a small amount of bog or meadow hay, of nominal value.

The result is thus stated by the farmer :

54 bushels ensilage (1620 lbs.) \$.001.....	\$1 62
1 bag wheat bran.....	90
	<hr/>
22 pounds butter, 35 cents.....	\$2 52
210 quarts skim milk, .01.....	\$7 70
	2 10
	<hr/>
	\$9 80
Cost of keeping.....	\$2 52
	<hr/>
Profit.....	\$7 28

The flavor of the butter was excellent, and its color a good yellow, equal to that which sweet pasture gives. In three days, after resuming hay feed, the cows shrank to twenty quarts daily.

Dr. Bailey says: "I have a Jersey heifer twenty months' old, which has doubled her yield of milk since I began to feed ensilage. I have one cow thirteen years old, which came in December 1st, three weeks ago. She is now giving sixteen quarts daily upon sixty pounds of ensilage and four quarts of shorts. I am feeding thirty-five head of cattle and 100 head of sheep upon forty-five bushels (about 1350 pounds) of ensilage, and eighty cents worth of shorts, and less than fifty pounds of hay daily. I cannot make the cost of corn ensilage to be more than *one mill* per pound, or two dollars per ton."

It will, therefore, be seen that the expense of keeping thirty-five horned animals and 100 sheep is as follows :

1350 pounds of ensilage, .001.....	\$1 35
90 pounds of shorts.....	80
50 pounds of hay, at \$15 per ton.....	37½
	<hr/>
Total cost per day.....	\$2 52½

The cost of keeping the above stock upon hay and grain would be as follows :

600 pounds of hay for cattle, at \$15 per ton.....	\$4 50
200 pounds of hay for 100 sheep.....	1 50
120 pounds of shorts for cattle, at \$18 per ton.....	1 08
40 pounds of shorts for sheep.....	36
	Total cost per day.....
	\$7 44
Cost of keeping on ensilage as above.....	\$2 52½
	Daily balance in favor of ensilage.....
	\$4 91½

Experience in feeding thus far, prompts Dr. Bailey to estimate ensilage to be worth one-half as much as the best timothy hay, but, at the same time, he would not be willing to exchange upon that basis. To receive the fullest benefit, he thinks some nitrogenous food, such as oats, shorts, pea, bean or oil meal should be fed with ensilage.

The doctor's method of obtaining such large yields per acre of green fodders is by close succession of crops. Thus, after the corn is cut and put into the silo—the last of August or first of September—the land should be plowed and sown with winter rye. The summer, fall and winter accumulations of manure can be hauled out and spread broadcast upon the rye at any time after it is sown, during the fall and winter months or early spring. The rye will be in blossom and ready to cut between the tenth and twenty-fifth of May, put through the cutting machine and into the silo in the same manner as the corn fodder.

Land highly manured ought to yield ten tons of green rye for ensilage per acre. The manure having been applied to the land during the time it was occupied by the rye, nothing remains but to plough in the rye stubble and drill in the corn. This is the process he relies upon to obtain from forty to seventy-five tons of ensilage from one acre of good land. He rolls his fodder-corn land as soon as planted, harrows with a smoothing-harrow just as it is pricking through the ground, and once every week or ten days until it is about a foot high. Then, if there appear any weeds, he goes through it once with a centennial horse-bar.

He claims many minor advantages in the use of the silo system. The crop can be planted at one time and in such large fields as to

save much time in ploughing and harrowing. Dairymen and stock raisers can systematize and simplify their work. After their manure has been carted out their spring work will pertain to the preparation of the garden, trimming orchards, and various other jobs, until their rye fields are ready for harvesting.

The capacity of the silo we have described was greater than will ordinarily be wanted, it will therefore serve a good purpose to reproduce a few suggestions respecting the size of silos.

Each farmer can readily gauge the dimensions of his silo by the number of animals he proposes to keep. A cubic foot of ensilage weighs forty to fifty pounds; a daily ration for a cow is fifty to sixty pounds; therefore, allow one and one-half cubic feet for each cow daily, and the silo can be adjusted to the size of the herd. First decide how many cows you want to keep under the new system irrespective of the number you kept under the old.

We are told that the "Winning Farm," previous to the introduction of the silos, could keep but six head of cows and one horse; now thirty-five cattle, five horses and 125 sheep are kept, and it is in contemplation to double the number next season. One cubic foot of ensilage will keep a sheep a week in good condition, and the rule above laid down teaches that  $547\frac{1}{2}$  cubic feet will keep one cow a year. To provide for two cows a silo ten feet square will suffice, which would hold about twenty-five tons, the product of a half acre of good corn land. For four cows double the length. Regulate the capacity or contents of the silo by the weeks or months the cows are pastured. Care should be taken that the cemented sides be free from inequalities so that the ensilage will not be impeded in settling.

Ten to twenty cow silos can be constructed the same as the cellar of a house, with cemented floor and concrete bottom an inch thick. A battened roof will keep rain and snow out. One twelve feet wide, thirty feet long, and twelve feet deep, would hold ensilage enough to winter twelve to fifteen cows, and the cost, without the labor, is stated at about fifty dollars. Its capacity equivalent to the product of two acres of good corn land.

Dr. Bailey says, not more than two feet of ensilage should be stored away each day. If from any cause the process of filling is interrupted for two or three days, attention should be paid to keeping it well trodden down. If it begins to dry or heat on top, moisten it

with a watering pot to supply the loss from evaporation. We think two small silos are better than one large one of equal capacity, for, with two, one will be empty to receive rye, clover or other green forage, in early summer. One month is ordinarily time enough for the weights to remain, and then, if necessary, the ensilage can be fed.

As we have already intimated, Dr. Bailey's work has evidently been prepared under stress of earnest conviction that New England agriculturists, old and young, long for exemption from an unrequited life of toil and drudgery. He says, "For several years I have been anxiously looking for science to show us, agricultural laymen, the way out of the wilderness into the promised land, where crops could be grown at a profit without the farmer's labor being thrown in as straw."

The depressing influence of the inundation of all kinds of grain from the west under cheap methods of culture and marvelously low rates of transportation, is felt in the Middle States as keenly as it is in New England, hence the avidity with which we draw public attention to whatever gives promise of betterment to the agricultural fraternity, whose future welfare and prosperity is menaced.

The age in which we live is one of discovery, and in this line our country has notably achieved distinction, especially in the sphere of diversified industrial progress. And owing to the world-wide recurring changes in all departments of industrial life, we need to be on the alert, not only to keep abreast with other export nations, but continually fortify ourselves for the contest, and with unabated ardor strive to maintain an aggressive attitude respecting our manufacturing and commercial pre-eminence. The rivalry is destined to continue, and in respect to this country hopefulness centers in a large degree in the rare combination of natural advantages, conceded inventive genius and tactual skill, the union of which render conspicuous our superior powers of production.

What remains unnoticed in Dr. Bailey's book, only incidentally relates to ensilage. The chapters on "The Horse of the Future, or Norman Horse;" "Sheep—Cotswold and Oxfordshire Downs," and "Berkshire Swine," all well illustrated, farmers generally would find instructive, and in conjunction with the treatises on the growth and

preservation of green fodder, useful even to those who make the raising of cattle, horses, sheep and swine a secondary branch of farming.

Whoever reads the book need not be reminded that it was written with more special reference to the promotion of agricultural interests in New England. Doubtless some of its statements and estimates will awaken interrogatory thoughtfulness respecting results in some sections of our country outside of the New England States.

If the doctor is successful in showing that "Ensilage will re-people and restore the old deserted farms of New England," "thousands of which farms, with comfortable buildings, can be bought for less than half the improvements would cost," certainly his processes have a significant bearing upon other sections of our country, where similar necessities have not yet reached the New England stage.

We have great pleasure in appending to the above a most satisfactory experiment in preserving green corn fodder upon the silo principle, last fall, in Burlington county, this State.

James Lippincott, Jr., of Mount Holly, says, in a recent letter: "My silo is nineteen feet long, ten and a half feet wide, and eight feet deep, with eight-inch brick walls, both sides and bottom cemented, and a batten roof. The whole cost is \$79.22, and has a capacity of fifty tons.

"It is located on a knoll one hundred and fifty yards from my barn, on account of water, and banked up to make it accessible for teams.

"We filled the silo about the 20th of September. The corn, when we cut it, was in full blossom, or just in the silk, at the time when the corn is fullest of sap. We cut the corn with a telegraph cutter, half an inch in length, with a two-horse power, at the rate of a ton in about fifteen minutes. Packed the corn in the silo by treading or tramping it down so as to exclude as much air as possible, while filling, as excluding the air is the whole secret of success. Without it would be impossible to cure ensilage. It occupied part of three days to fill the silo. When done filling I put on one foot of rye straw, packed well round the wall, then put on the plank cut to fit the silo, then put on the weights, which may be stone, earth, or any thing that will make weight. I shall always weight mine with earth.

"We opened the silo on the 22d of December, and found it in splendid condition. My cows ate it with a good relish, and it increased the flow of milk considerable, of first-rate quality.

"I have been in the milk business for seventeen years, and have fed most all kinds of feed, but ensilage does produce more milk, and of better quality, than any feed I have ever fed.

"I invite all farmers and others interested in curing ensilage, to call and see for themselves, and be satisfied that it is a good thing. So far, I cannot praise it too much."

In our report for 1879, page 180, will be found a reference to Clark W. Mills's experiments in the construction of silos at Pompton, N. J. Mr. Mills pursued the subject of preserving green fodders under the silo system, through last year, and in respect to his latest experiments and conclusion derived therefrom, we quote from a recent letter received from him :

"I have been practicing this method for the past two years with complete success. Last fall I filled two large silos or pits, each forty feet long, thirteen feet wide and twenty feet deep, with green maize which was grown upon thirteen acres of ground, which yielded about fifty tons to the acre. This maize, when completely ripe and filled with saccharine matter, was gathered and cut into half-inch lengths and deposited in the pits.

"My facilities for gathering, cutting and depositing the same in the pits are of such a capacity as to enable me to complete each pit in about four days. All around and upon the pit is placed a frame work of boards, extending about fifteen feet above, which acts as a feeder to the pit when the pressure is applied.

"Now, when the pit and its feeder is completely filled and leveled off, I place crosswise the pit, upon the surface of this mass, a cover of two inch pine plank, made in sections of about four feet in width, plowed and grooved, and firmly battened together in such a manner as to closely fit one into the other. The length of these sections I make about one inch shorter than the width of the pit. Upon this covering I place about fifty tons of grain in bags, evenly distributed, so as to have the same weight upon each section. This weight gradually and continually compresses the mass, until the whole is contained in the pit, when the frame feeder can be removed.

"The action of this continuous pressure is such as to force out all

the atmosphere or gases which may have accumulated in the mass, through the half inch opening between the cover and the sides of the pit, and effectually keeps it out until removed.

“Now, when I wish to use this fodder for my cattle, I remove the bags of grain from the first section of the cover, the contents of which I grind for their use while I am feeding them the fodder lying immediately underneath. This I use to the bottom of the pit, taking it down perpendicularly. While this section is being used, the pressure on the remaining sections remains the same, thereby excluding the atmosphere as effectually as if each section were a small pit of itself, and so on, one after the other, until the pit is exhausted.

“My pits were filled in September, and having no other fodder of any description on my farm, I removed the pressure and cover from the first section of my first pit on the fifteenth of October, and commenced feeding it to my animals, which number one hundred and twenty horned cattle and twelve horses. At the same time they are fed about the same amount of grain or ground feed as I would if giving them the best of hay instead.

“My first pit was exhausted last Saturday (January 22d), making a little more than three months from the time I commenced using it, at which rate of consumption my preserved fodder will last till pasture season, the first of May next. \* \* \* \*

“My two pits are located in the centre of my barn, extending its whole length, eighty feet, their tops being on a level with the floor. They are constructed of a concrete of stone and cement two feet thick, with sides and ends strictly parallel, and the bottom cemented. The cost was about \$700.

“I plant the corn in rows three feet apart, with from thirty to forty kernels to the running foot.”

Mr. Mills says hereafter he will use a horse-power cutter instead of the ordinary corn cutter. He has experimented with many kinds of corn, and for his section he finds a southern species the best.

For cutting the fodder he strongly recommends the machine sold by J. B. Brown, of the New York Plow Company.

He represents that the “600 tons of fodder in his two pits last year cost him less than \$500, and that hay to answer the same purpose, say 300 tons, would have cost him \$7500, and as the grain

consumed in either case would cost the same, one can readily see that I have actually saved, by this innovation on old methods, at least \$7000 this season, besides the milk is much heavier and richer, for which I get a premium in the New York market."

Mr. Mills claims that his process of preserving green fodders is wholly his own contriving, his first experiments having been made in 1876 and in 1877. He "devised the very method which I now use, never having heard that there was such a person in existence as Mr. Goffart, or that anyone had ever tried or thought of it."

He has since read the translation of Mr. Goffart's method, but has "failed to find anything by which to improve upon my own."

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PART V.

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IRRIGATION

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## PART V.

# IRRIGATION.

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The subject of systematic irrigation is one that has, until recently, received little attention from the farmers, market-gardeners and fruit growers of our State. Irrigation has been thought of either as a means necessary in very hot and dry countries to secure any crops at all, or as a laborious device resorted to in the crowded lands of the old world to force the soil to support the populations. Of late, however, attention has been directed to this matter, and it is one certainly deserving consideration. Although we have not yet been compelled to the painfully careful tilling of the soil that is necessary in Europe, the need of getting more from the land than we hitherto have done, is making itself felt. Irrigation offers a simple and adequate method of accomplishing this, especially where, as in portions of our State—the southern part especially—streams of water are numerous that run throughout the year.

The fruit crop, the hay crop and the garden crop, would yield the most satisfactory results from irrigation. We shall first consider the application of irrigation to the fruit crop upon which the prosperity of some sections of the State largely depends.

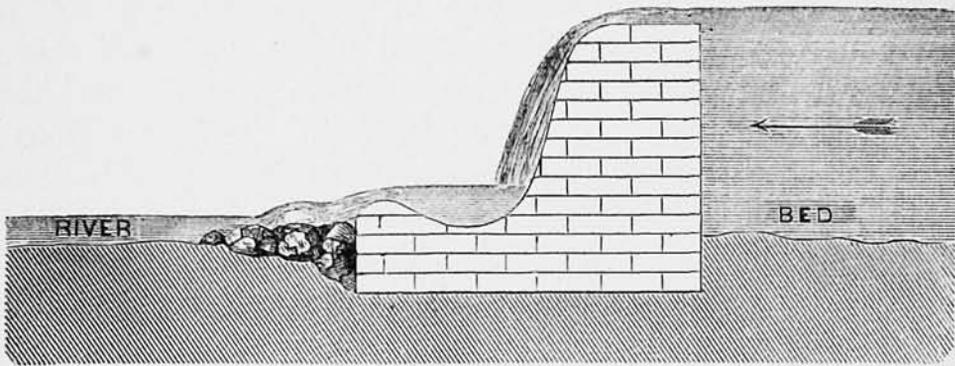
There are many modes of irrigation applicable to fruit growing lands, from the construction of costly reservoirs to the modest, but by no means inefficient, Persian wheel, which can be worked by a horse, mule, pony, bullock, or even donkey; but, of course, the physical, climatic and pecuniary condition must be taken into consideration in each particular case in dealing with the water supply.

Taking the agricultural population of New Jersey generally, we do not think they are at present prepared to expend any very large sums of money even for such a valuable commodity as water, but happily the greater part of the State is singularly well adapted to one of the most economical methods of irrigation that is known.

Nature has supplied numerous small streams all through the country with a constant flow of water which we have only to provide the means for diverting from its natural into an artificial bed so as to make available for irrigation when the scarcity of rain is felt.

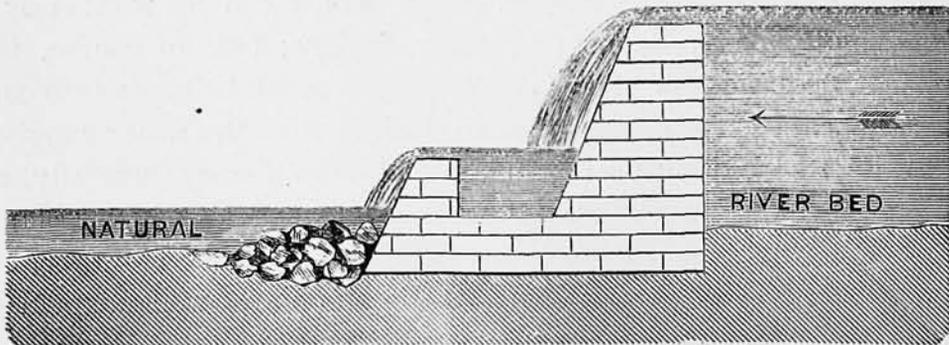
The first consideration in effecting this is the construction of a dam across the stream.

Various methods have been contrived for this, and numerous designs have been found applicable, but we are of opinion that, in the long run, nothing more economical or efficient than a solid stone structure having the water, or up stream side, perpendicular, or with a slight batter, the top not less than one-third the greatest height, and the down stream side built on the particular curve which is the natural one of still water flowing over any height, with a counter curve at the toe to prevent the overflow from tearing up the lower side of the river bed during floods, and so threatening to undermine the dam, thus :



CROSS SECTION.

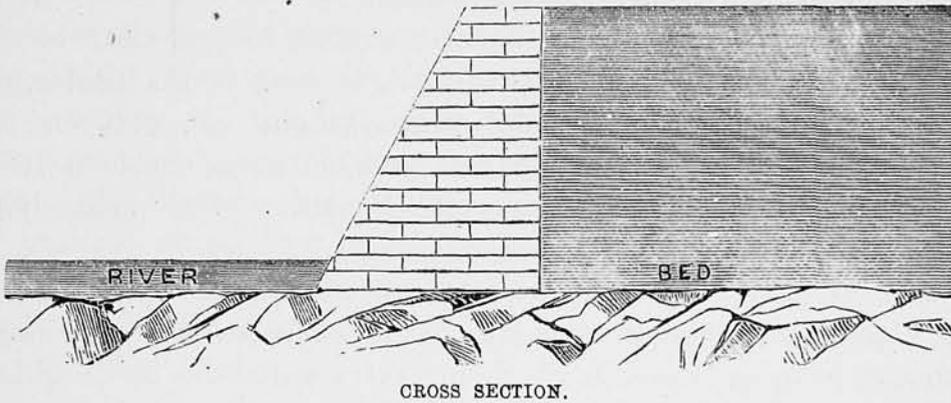
Water cushions, to obviate the same damage, have been tried, thus :



CROSS SECTION.

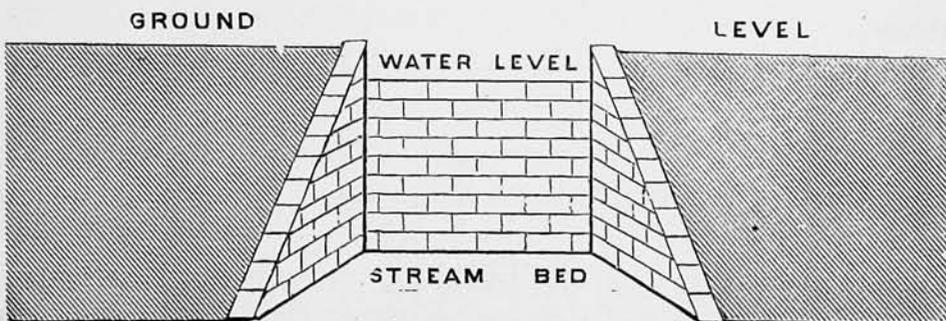
But in case of snags or other debris being carried down by the stream in a flood, great risk would be run of carrying away the lower, or basin wall of the dam, and thereby rendering the basin useless by letting out the contents, in which its sole utility lies.

Where there is a good sound rock bed we have seen a plain strong wall used with as good effect as anything else, thus :



Of course where any depth of sand or fine gravel has to be encountered special means must be resorted to, requiring skilled engineering knowledge, all of which are more or less costly. We do not, therefore, think it necessary to refer further to them, as they would be out of place in this article, which is meant as a popular and not a scientific review of the subject.

The dam should be built with the centre, or water space, lower than the side walls, according to the rise of the stream in flood, and with wing walls on the lower side to prevent side scour, thus :



FRONT ELEVATION, LOOKING UP STREAM.

This form of dam may, of course, be modified and altered in various ways to suit the exigencies of each particular case, but the

above-mentioned form will, we think, be found most applicable to the generality of streams to be met with in the State.

The next point is to provide a sluice or sluices just above the dam for diverting the water through a cutting into the artificial channel. These may be made of the very simplest, if substantial, construction, and a sluice is so well known to everyone that we do not think it necessary to enlarge further on this head.

The water channel, after the first cutting to get clear of the stream bank, should be made to follow, as near as practicable, the natural contour of the ground, with a slight fall, between two raised banks, or partial cutting and bank, so as to enable it to be drawn off by convenient sluices for irrigation of all lands lying below their level.

In crossing any depressions in the ground, or small valleys, if the land be of no particular value, the canal can be carried by a single bank, so forming a tank in which any extra water can be caught.

It is obvious that in a country where there are numerous small streams constantly running, and where the ground is of an undulating or nearly flat nature, such as it is in many parts of New Jersey, this simple system of irrigation can be carried out to almost any extent, either by companies, who would let the water at certain rates based on the acreage and nature of the crops, by landlords, who would thereby much increase their rent-roll, by combinations of proprietary farmers, who could subscribe for the construction of the works either money, labor or material, *pro rata* for the amount of their land to come under irrigation, and even, in the numerous cases of land lying near small streams, by the farmers individually themselves.

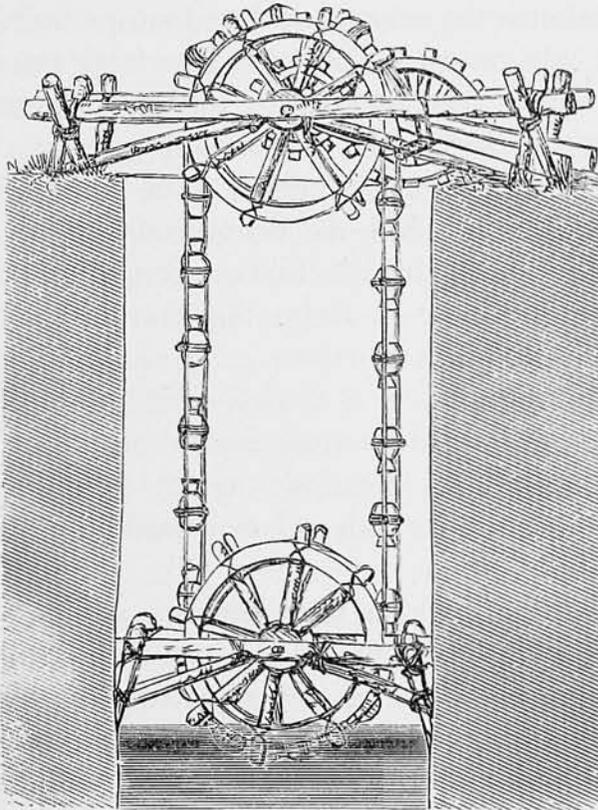
We have seen the above system carried out in various places in very economical and wonderfully successful ways, and light soils more especially immensely increased in value in consequence, and there is no reason to doubt that the same result would follow if applied to the soils of New Jersey.

For the benefit of small land-holders, who may not be situated in such a position as to find a stream available for drawing their water from, we may mention that the Persian wheel, though of very ancient origin, is by no means to be despised. It is simple in construction, cheap in erection, efficient in action, and can be managed

by a child ; and with the water lying near the surface of the ground, as it does in many parts of our State, it is particularly well adapted for use, and many a valuable crop of fruit would not only be saved but brought to full maturity by its use when the rainfall is below the natural requirements.

This mode of irrigation is very much used in all the eastern countries, where may be seen thousands of acres of rice and sugar cane, each requiring very large supplies of water, kept flourishing during the hottest weather solely by this means. Possibly many of the smaller class of land owners in the state, to whom this system would be most applicable, may not be acquainted with the construction of the Persian wheel, the principle of which consists in a series of buckets, either iron, wood or earthenware fastened at regular intervals, on two endless ropes or chains, which are hung on a vertical wheel fixed above the well, the lower buckets dipping a few feet into the water.

The following diagram will give an idea of its form :



PERSIAN WHEEL.

The main wheel is driven by a series of cog wheels, fastened to a long horizontal lever fixed high enough up to allow it to clear the main wheel as the animal yoked to it walks round and round the well; and a trough to catch the water as it is brought up and falls out of each bucket completes the construction.

The windmill, which is so largely employed for raising water, is remarkably adapted for the purpose of irrigation wherever a reservoir can be secured for storing the water. The actual history of irrigation in the United States begins with the occupation of Utah by the Mormons in 1846. At that time the territory was a waste, barren land and sage brush. In 1868, twenty-two years after, 93,799 acres were under irrigation, at an expense of \$250,000. Platte river canal, twenty-four miles long, irrigates 50,000 acres, and supplies the city of Denver. The canal is *eighteen feet* in width, and *three feet* in depth; the fall from *six feet* to *eighteen inches* per mile. The cost was *one hundred thousand dollars*.

During recent years the British government has spent \$70,000,000 in irrigating works, and more are in progress of construction. In most every instance the investment has been profitable and of great service to the cultivators of the soil. The total amount of revenue to the government has been *seven and three-quarters* per cent. The profit to the people has proved still greater. In 1860 the Ganges canal preserved green crops from destruction which fed millions of people. In 1874 the Soone canal saved the crops over a large country. In Spain, the Iberian Irrigation Company charge seven dollars per acre. In Italy, the charge is \$2.50 for maize, \$7.50 for melons and \$20 for rice.

Farming by irrigation in a climate where evaporation is excessively active requires skill to avoid misfortune. The inexperienced are liable to use water *excessively* or *too* frequently. A porous, sandy soil, with a similar sub-soil can hardly be injured by over-watering.

Lands in California which went begging at *five* dollars per acre without water, have been purchased eagerly at *twenty-five* and *fifty* dollars per acre where water was supplied. In some portions of Europe land is, by irrigation, increased in saleable value *five to ten* fold.

The charge in France for water is six or seven dollars per acre

annually. San Francisco is chiefly supplied with vegetables from irrigated gardens. A small fruit plantation of eight acres is watered by a four and one-half horse power engine, from a well. In all the instances referred to irrigation is successful and profitable.

The rent of un-irrigated land, in Spain, is *twelve shillings* per acre; irrigated land rents for *three pounds seven shillings* per acre, and upward. In the Ebro valley rents advanced from *twelve shillings* to *ten pounds two shillings* per acre. In an irrigated farm of Spain it is presumed that the land will always be receiving water, and giving two crops a year. This would, of course, very soon exhaust the soil, were it not that it is highly manured. In the plantations upon the coast there is a large amount of gnano imported. In the province of Valencia, with a rain fall of 4.6 one might expect to find its plains hot and burnt up, instead of which they are unsurpassed for green fertility and rich beauty, owing to the effect of irrigation. Irrigated land sells from *one hundred and forty-five* to *one hundred and eighty* pounds per acre; while at a distance from the city it sells from *eighty* to *one hundred* pounds per acre; whereas, an acre of unirrigated land brings no more than *sixteen pounds*. The soil is only eight or ten inches of good mould over a stratum of barren gravel.

Count Cavour, in Italy, was much interested in agriculture, and organized into an irrigating system the waters of the Crown lands derived from the Dora Baltea with surprising results.

The art of irrigation is practiced in all parts of France, but, except in the south, it is confined to what, in England, is called water meadows for the production of hay. The annual rain fall at Orange is 26.6. At Marseilles 12.8. In Vaucluse the rental of good land not irrigated is *three pounds and four shillings* per acre. Around Marseilles land sells for *three hundred and twenty* pounds per acre where it did not bring half that price before the land was irrigated. Around Madrid, according to a Spanish authority, the value of land rises by means of irrigation from *four* to *ten* fold.

In California where water has been available from rain fall or irrigation intelligently conducted, remarkable crops have been gathered, reaching from fifty to eighty bushels of wheat per acre, and as many as five crops of alfalfa, yielding an average of fifteen tons per acre a year. It is on record that in the San Joaquin valley two

crops of barley, each averaging over forty bushels per acre, were harvested in two hundred and forty-five consecutive days. Nevertheless, without a regular and constant supply of water, the limit of cultivated land will soon be reached, and consequently the limit of population.

Near Gloucester city, in Camden county, in our own State, Mr. Henry P. Gaunt, has for nine years past used the following system upon a strawberry farm of seven acres. He was led to make use of irrigation through noticing that the crops sometimes failed from lack of moisture at certain times, and that by this means he would be enabled to set out his plants whenever he desired, and could thus gain great advantage for the entire season. A well was sunk forty-two feet in depth in which was inserted a pipe three inches in diameter. The pipe was connected with a force pump run by horsepower, (Mr. Gaunt recommends steam as a better substitute), and the pump forces the water into a pipe three inches in diameter laid through the centre of the field. With this main is connected a hose, there being arrangements for attaching the hose at points on the main ten or twelve feet apart. This system, which certainly offers great simplicity and economy, Mr. Gaunt has found successful. The crop produced is from 3000 to 4000 quarts per acre. While river water, and surface water in general, is more valuable as a fertilizer than well water, where this is not to be had conveniently, the above method could be employed with success by fruit growers. If one well should be found insufficient, as many as necessary could be sunk, and the same pumping apparatus could be either moved or connected by pipes with the several wells.

It is a well-known fact to our farmers that hay is their paying crop. On the huge farms of the west and northwest the cereals can be raised with such cheapness as to make the price unremunerative to the eastern farmer. But hay is always in demand at a good price, if not in the immediate neighborhood of the farmer, certainly in the cities on the sea-board. Any means, therefore, that would increase the produce of the hay fields and render the rotation of crops unnecessary, would be a valuable help to our farming. Judicious irrigation and manuring bring about this result, for there are water meadows in Europe said to have been in use for a 1000 years. We propose to give a few hints that will enable any farmer, who has water accessible, to try irrigation.

The first step is to choose the field or fields capable of successful irrigation. The land chosen, as we have already intimated, should be nearly level, or should slope gently from one extremity to the other, and the nearness of the water source should also be taken into account. After the ground has been selected, the next thing to be done is to level the ground so that the water may be evenly distributed. Water may be stored for use in either of two ways, by damming up a stream in some such way as described above, or by pumping water into reservoirs built on a higher level. From the reservoir a canal, at least two feet deep, is constructed, running along the highest end of the field. The method pursued from this point depends upon the plan of irrigation to be followed. If the land is nearly level, and submersion is desired, a bank is thrown up along the lowest end of the field, and along its sides. The water is allowed to run from the main canal upon the field by means of boxes, about six inches by two a section, fitted with sliding plugs. When the meadow is entirely submerged, the water is allowed to stand for twenty-four hours or longer, at discretion, and is then drawn off by suitable drains. If irrigation by flowing is the method chosen, the land having more or less slope, a system of ditches will be required. Primary ditches of from six to nine inches in depth, and very wide, so as to permit the cutting of the grass by machine, run the whole length of the field. They should grow considerably narrower—perhaps half as wide in 200 yards—to preserve the depth of the water. From these ditches secondary ditches of much the same form, but a little deeper, are led at right angles until they overlap the corresponding ditches of another primary ditch. The primary and secondary ditches must be sufficiently numerous to completely flood the land with running water during the period of irrigation. The duration should be longer than in case of submersion, but varies according to the dryness of the soil. More elaborate systems than the two here described are in use in Europe, but are not adapted to our wants. As for rules to govern irrigation of meadows, a French writer on the subject gives the following explicit directions :

“Water abundantly in the winter when ice is not feared, and spring, up to May 1st, more or less extensively, according as the grass grows well or not ; when the grass is from eight to ten inches

high, stop watering till the cutting, probably in the first fortnight in June. It may be necessary to give the ground one watering in May, but it must be a short and light one. After the first cutting water again abundantly, and then give two or three ordinary waterings until the grass is again ten inches or so in height; then stop until the second cutting, unless a drought threatens to spoil the crop." The writer adds that this method is applicable to any climate, and sums up thus:

"Abundant irrigation in winter, when there is not danger of ice. One irrigation after each cutting, and ordinary irrigations when the ground is very dry to the touch. Stop irrigating when the grass is about ten inches high, and do not water again until the cutting, except in case of drought."

Another French writer gives this simple method of determining the amount of water delivered upon the land:

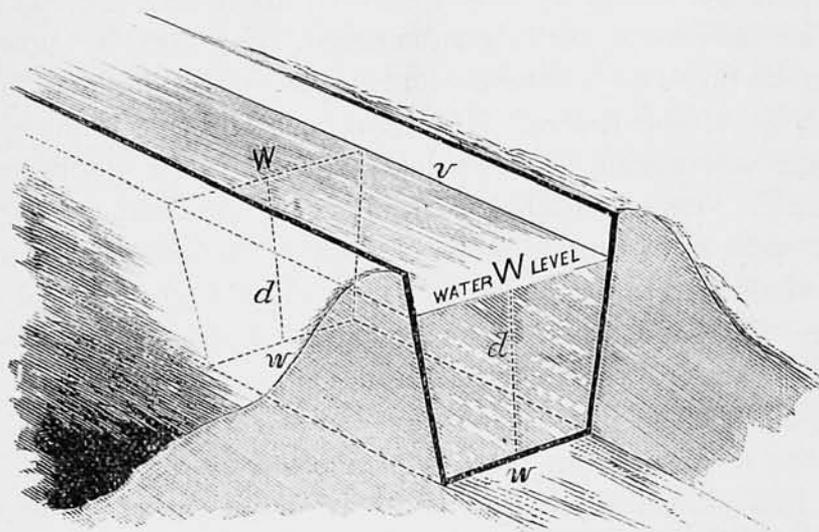


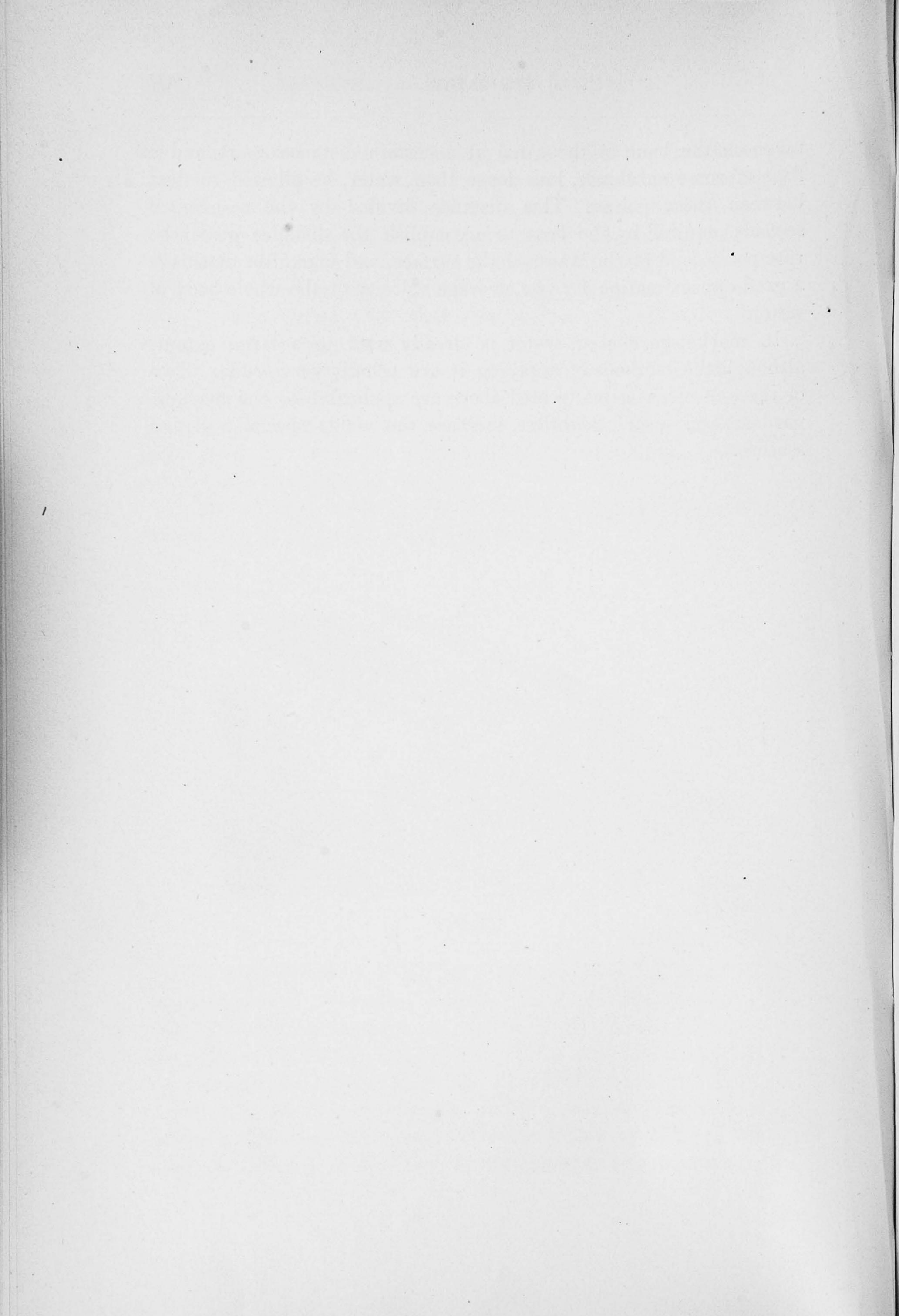
DIAGRAM.

"Let  $w$  be the width of the canal at the bottom;  $W$  be the width at the surface of the water;  $d$  be the depth of the water, and  $v$  the velocity of the water (rate per section of the flow). The area of the right section of the canal is  $(w + W) d$ , and this multiplied by the velocity per second gives the amount of water delivered per second in terms of cubic measure, and this may easily be reduced to gallons by dividing the number of cubic inches by 231. To determine the velocity of the flow by experiment, two points may be

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taken on the bank of the canal at a certain distance apart, and a float of some substance, less dense than water, be allowed to float between these points. This distance divided by the number of seconds required by the float to accomplish the distance gives the rate per second of the water at the surface, and four-fifths of this is a good approximation for the average velocity of the whole body of water."

In market-gardening, water is already used to a large extent, although the methods of applying it are usually very crude. Two or three of the systems treated above are applicable to the market-gardens, and would, doubtless, increase the yield, especially in dry seasons.



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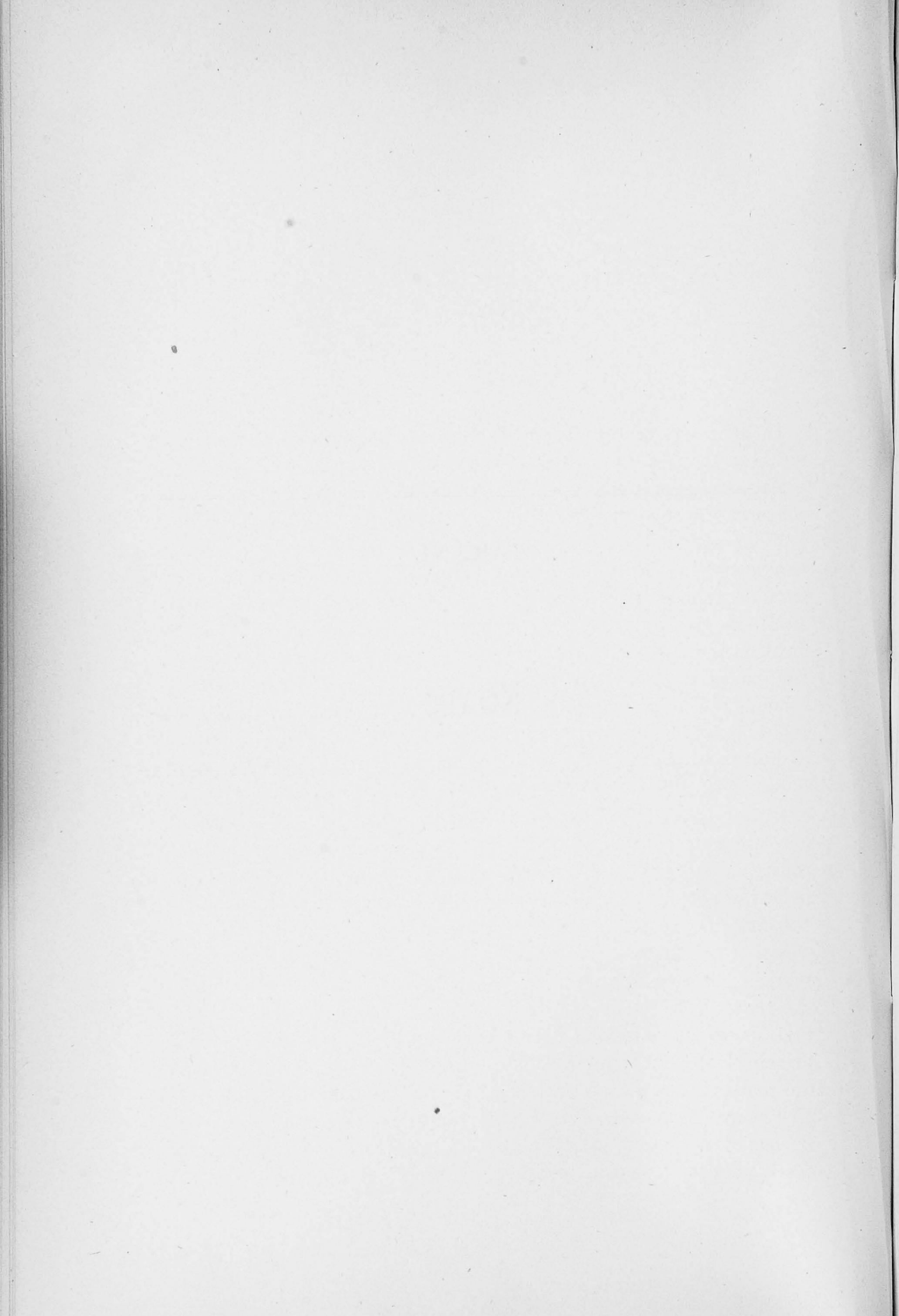
PART VI.

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ROADS.

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## PART VI.

### ROADS.

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In the previous reports of this Bureau the question of roads has not been touched upon. But it is a question that eminently deserves a place among the labors of the Bureau, since it, in no slight degree, concerns the commercial and social prosperity of the State.

"The roads of a country," says Prof. Gillespie, "are accurate and certain tests of the degree of its civilization," and the most cursory glance over the history of the world confirms this statement. As Rome grew in power and increased in civilization she built roads, until, in the days of the empire, the Roman world was like a huge well-paved city. To the excellent workmanship of these roads, the remains still to be seen, after the lapse of fourteen centuries, bear sufficient testimony. In a far-distant quarter of the globe, undreamt of by the sturdy sons of Mars, the Incas of Peru built roads which, if we may believe the historian, were little inferior in plan and execution to those of Rome. In fact, look where we will, except in our own country, we see the roads keeping pace in their improved construction with the advance of civilization. Railroads have, indeed, superseded roads in some of their uses. They have become the arteries by which the life-giving streams of population and wealth are diffused in the world, but the roads are none the less of vital importance as capillaries, to absorb and incorporate. This is the province that roads seem destined to possess for all time, and that drew the attention of the English to their highways. The principles of McAdam and Telford, intelligently applied, have made the roads of England models of what roads should be. The roads of France have also, during this century, been much improved. In our own country alone, of all the great progressive countries, there has been an apathy—a long suffering endurance—in regard to

roads, which presents an anomaly hard to explain. It seems incredible that, while in building and all the arts we have made giant strides, our roads have, as a rule, grown, if possible, worse. Nor is New Jersey, except in certain portions, an exception to this rule.

The importance of good roads to the prosperity and growth of this State cannot be over estimated. New Jersey is in great part an agricultural State. Where the interests of the people are mainly in manufactures, the importance of good roads is not so much felt, but here the facility with which the farmer can market the produce of his land at any season when there is demand for it, often decides the question of profit or loss upon his whole year's labor. Moreover, there is nothing that attracts energetic settlers to any State, or section of a State, more than the excellence of its roads, nor does anything add to the well-being of a neighborhood more than such an increase of population. It is not only the cities and towns that serve as indexes of prosperity by their growth in size and wealth. Thrifty and well-to-do farmers, fruit-growers and truckmen, in such a State as New Jersey, tell a tale of success in agricultural pursuits that is no less important to the general welfare than commercial success. Thus only is that healthy balance of supply and demand preserved between country and town, which is indispensable to a prosperous condition. To a great extent such is now the state of affairs in New Jersey, but the improvement of our public roads, so that at all seasons of the year they would be passable without strain upon horses and vehicles, would undoubtedly do much towards developing our resources. With roads almost as good in winter and spring as in summer, and the railroads that we already have, a stimulus would be given to the raising of produce for the great markets, that could not fail to bring about extraordinary results. In the case of Essex county, the only county which, by availing itself of a provision of the State Road Law (see page 220), has made systematic efforts to improve its roads, the result is surprising. The advance in the value of real estate has been so great as to sink into insignificance the increased amount of money required to be raised, either by assessments upon the property directly benefited, or by general taxation. Were efforts to be made in this direction, the first inquiry would be—how the roads of New Jersey are worked.

The present unsatisfactory state of the roads in the greater portion of New Jersey must be due to a defective system, to the defective carrying out of the system, or to both of these causes combined. The main features of the road law of this State are as follows: It provides that the township committee assign to the overseer of the highways the division of such township over which he shall have charge. The overseer is then authorized to hire laborers and also horses, wagons, ploughs, carts and other implements necessary for the work within his district. The overseer is *subject to fine* in case of not opening and clearing out any of the highways, or for their badness, want of repair or deficiency in any respect. Citizens may elect to work out their road tax, by giving notice in writing to the overseer within twenty days after the order for raising the money for working the roads shall have been passed or made, but shall be subject to the call of the overseer at any time, upon two days' previous notice. If such person or substitute shall not appear at the time and place designated, he shall pay a fine of one dollar and pay the whole or residue of his road tax to the collector. The inhabitants of the township may elect how the roads shall be worked, whether by labor or by hire. The plan shall not be changed in the township for three years. In case the township has elected to work the roads by labor, if any person, who after having received two days' previous notice to work on the roads, neglects or refuses to appear and work one day of at least eight hours, he shall forfeit and pay to the overseer of his district the sum of two dollars for every day he shall so refuse or neglect to labor, three dollars for one day's absence of a horse and cart, and four dollars for each day's absence of a wagon or cart with two or more horses or oxen so warned out. The overseer himself is subject to a fine of from five to twenty dollars, if convicted of neglect of duty, upon complaint of three inhabitants of this State. Overseers shall receive one dollar for every day they shall be employed in executing the duties of their office. Surveyors of highways, appointed by the Supreme Court or Court of Common Pleas, shall receive three dollars per day. The overseer cannot lawfully employ any person to work on any road between the first day of October and the first day of April, except to make roads passable when obstructed by snow or rain. Persons must work out their road tax between May 1st and July 1st each year. The overseer is

directed how to form the road, usually 21 feet in width, with a rise of 12 inches in the centre, regularly formed and graveled. The roads are to be scraped in the spring at least once before the 1st of April, or sooner, if the weather does not interfere, and the overseer shall be liable to a fine of twenty dollars for neglect, to be sued for by any inhabitant of the district. *Counties of 75,000 inhabitants* may, by vote of the inhabitants at an election authorized by the Board of Freeholders, authorize said Board of Freeholders to appoint five persons as members of a *Public Road Board*, to hold office for one, two, three, four and five years respectively, the time to be fixed within thirty days after their appointment, and the vacancies to be filled by the Board of Freeholders as they occur, but no county shall have more than one Public Road Board. The compensation shall be fixed by the Board of Freeholders.

That the present system of working our public roads is defective, is well known by every one that has given the subject the slightest examination. In certain favored sections of the State, where the soil is porous, and gravel, which the law requires to be furnished, at the proper price, is to be had in abundance, the roads are tolerably good. But let the observer traverse the middle counties of the State during the early spring months, and he will find to an incredible extent the roads not only bad, but in many places almost impassable. As for the value of the present system to mend matters, we quote from some letters received from various parts of the State. One gentleman writes:

“Let me relate what I witnessed a few days since in the county where I reside. Passing along the most public road in the county, in the early part of October, I saw the overseer at work upon the road. He had ploughed up the red shale-rock to the full depth of his plow without any difficulty, and was transferring that material to the road bed, to fill up the holes and round off the surface. The facts were, that during the period when the road had been soft, the wheels of the wagons had cut the road up into ruts, making holes of varied depth, and the overseer was now placing similar material—red shale—back upon the road, to be again dragged out upon the return of wet weather. If this is not a waste of road money, what is it?”

Another writes:

“If any revision of the present system, or want of system, of working the roads is in contemplation, it cannot be perfected too soon, as our roads are, for the greater part of the year, unworthy of being highways for a civilized community. The whole system, with its high wages, incompetent laborers, imperfect materials, untimely periods of working, and want of an intelligent plan of operations, is unworthy of the age, and results in the expenditure of large sums of money annually, without corresponding benefit to the taxpayers and traveling public.”

Such expressions of public opinion as the second letter quoted, show that the people are awake to the fact of bad roads and the resulting evils, though without making active efforts towards bettering them. The fact that several townships, by individually obtaining suitable legislation, have somewhat altered the method of working the roads within their borders, also goes to show this. It would not, therefore, be rash to assert that our present system of working roads is defective. When McAdam directed his attention to the road system of England, he found one great obstacle in the way of improvement in the roads to be “the division of the roads into so many *small trusts*,” which precluded any extended plan of operation for the whole. It was the removal of this obstacle that, along with improved methods of working, brought about the remarkable improvement in the English roads. For once the old world outstripped the new. The defect that the English discovered and remedied is now the vital fault in our road law. It is an axiom of business that large operations can be conducted more economically than small ones, and in the same way an immense saving could be effected by combining a certain number of all of the road districts of the present system under one management. As the case now stands, a township is to a great extent limited to the materials to be found within its bounds for repairing its roads, while under the more comprehensive system, the abundance of excellent materials in one township would be a benefit over a whole county or even farther. Moreover, the office of overseer of roads is such a petty one as to be sought only by men, perhaps sufficiently honest and industrious, but of small ability for the work they have to perform. In consequence of this fact, the roads are frequently wretchedly formed in the first place, and mended in a way, which if successful, would falsify the physical laws which govern the equilibrium of matter. Suppose, too, an overseer has been

elected who thoroughly understands road-making and road keeping, he very likely is ousted for political or other reasons before he has been long in office. No regard seems to be had to the candidate's qualifications for the duties of road superintending, and if successful in the election he feels little responsibility put upon him. Consequently, it not infrequently occurs that the overseer, although the law positively instructs him to work the roads between the first day of May and the first day of July each year, has but just begun to work on the roads when the season (between the first day of October and the first day of April) has approached, during which the law declares that "it shall be unlawful for him to employ any person to work on the road, except to make roads passable when obstructed by rain or snow." The fact that his own farm work demands his attention, or that it was not convenient for his neighbor to work out his road tax at the proper season, seems to him sufficient excuse for violating the law; and, all things considered, there is some reason on his side. We have even heard of overseers who trusted entirely to the farmer that had notified him under the law, of his intention of working out his road tax, to send his teams and do the work at his own convenience; keeping, himself, the time he had thus been occupied for the overseer, without any supervision upon the part of the overseer, as the law requires.

It is usually much easier to point out the defects in a system than to suggest a better one; yet, in this case, from the fact that a worse system than the prevailing one could not well be devised, the task is comparatively light. The most evident faults of the present system being the smallness of the road districts and the frequent changes of the overseers; a more permanent supervision might be secured through the Board of Chosen Freeholders of the county. Under this Board, a competent engineer or practical road builder, having full knowledge of the subject, might be employed, who would devote his entire time to the supervision of all repairs on the roads of the county, as well as to the laying out and construction of new roads. In this way, without any radical change, the overseers would be transformed into foremen, responsible to the supervisor for the performance, in proper shape, of the allotted work. The supervising engineer or road builder would be responsible to the Board of Chosen Freeholders for the enforcement of the road laws. That such a supervision as we have

sketched has occurred to others, is shown by a supplement to the road law, approved in 1876, giving to any county of at least 75,000 inhabitants, (*vide supra*), the right of having a Public Road Board. We would have the same species of supervision extended to all counties by law, without the extra expense of a separate Road Board. What could be done under a system of this kind will best be seen by considering

THE PRESENT COST OF THE ROADS OF NEW JERSEY.

In order to find out the cost of the roads in New Jersey, as at present worked, a printed blank was sent to each township clerk, with the request to fill out and return in the prepaid and directed envelope. Of the questions asked, the only one answered by all was that concerning the actual amount expended upon the roads of the township during the last fiscal year. Two hundred and fifty-one answers were received, showing a total expenditure of \$358,078.58. This gives an average of \$1,426.60 for each township, although the twenty highest expenditures reported average \$3,787.78 each, and the twenty smallest \$162.67.

Amount of money expended in 251 townships.....	\$358,078 58
Average amount expended in each township.....	1,426 60
Total of the 20 highest expenditures.....	75,755 54
Average each township .....	3,787 78
Total of the 20 lowest expenditures.....	3,253 28
Average for each.....	162 67

There are two hundred and sixty-four townships in the State, consequently thirteen townships were not heard from. It is fair to suppose that these thirteen townships expended upon roads the average amount for the whole State, therefore \$376,624.38 was the total amount expended, under the present road law, during the last fiscal year.

The Telford road, as described on page 220, can be constructed, when the material is conveniently near, at a cost not to exceed eighty cents per square yard. It will be apparent, therefore, that the amount expended in the State under the present system, would have laid down nearly *fifty miles* of Telford road; or, if applied to the improvement of our public roads, as suggested on page 222, about

*four hundred and thirty* miles of road could have been permanently improved.

When McAdam undertook the work of improving the roads of England he found that the sum annually expended upon the roads exceeded the net revenue of the post office, but that this large sum was so improperly used that the result was a ruinous waste. In this state a large part of the vast amount of money raised for the same purpose is just as thoroughly wasted. This waste is in great part caused by ignorance as to

#### HOW THE ROADS SHOULD BE CONSTRUCTED.

In general, a double track should be eighteen feet wide, and the surface should be as flat as possible, there being only sufficient curve to allow the water to run into the ditches at the sides. For the construction of the track there are in favor two scientific systems, those respectively of McAdam and Telford. Which of the two systems is best, although they have both been in vogue for a great many years, is still a mooted question. Each has shown extremely satisfactory results. The only fundamental difference, indeed, lies in the foundation, the use of broken stone being a feature common to both. According to the plan invented by McAdam, who superintended the construction of the magnificent road between Shrewsbury and Holyhead, in England, the road bed is first thoroughly drained and smoothed. "The application of the stones upon the well drained bed is first made in a layer three inches deep of clean fragments, spread in dry weather, and left to become nearly consolidated by travel, attention in the meantime being directed to filling the ruts as they are produced. When worn nearly smooth, another layer of the same thickness is added, and this should be done in wet weather, or with the application at the same time of water, as the two beds will then better unite. When this is properly worn a third coat is added, and for roads of heavy travel, a fourth, applied in the same way, may be required. By this method a solid crust is obtained in the shortest time and with the least wearing down of the material; while, if the whole thickness of nine or twelve inches were put on at once, the stones would be worn into spherical shapes, and be gradually reduced to powder without binding together

to form a solid bed. Very heavy rollers may be advantageously used to hasten consolidation, and clean gravel, to a limited extent, may be added to the surface of the broken stone covering and rolled in. This should be done after a shower, or with the application of water, but at a season when the road itself is dry. From the middle portion the road is made with a gentle slope to each side, just sufficient to shed the water that falls, without allowing it to form swift currents. The most perfect roads are furnished with a shallow drain on each side, and outside of these are raised foot paths, beyond which are the main drains for the road, reaching considerably below its level, and receiving under the foot paths the drainage of the road itself. These conditions, however, vary in different circumstances; a road, for instance, passing along the side of a steep hill is well made to slope towards the hill, and the ditch to pass along that side, an occasional sluiceway leading under the road, to discharge the waters down the declivity. \* \* \* The dust formed by the wearing action of the wheels and horses' feet should be constantly swept off, and wherever ruts and depressions appear, they should be at once removed by filling in fresh stones after a rain, and these should never be put on at once to a greater depth than the thickness of a single stone; when worn so as to have united with the rest, more may be added. When a road is thoroughly well made and well drained, it is estimated that the labor of one man is required on every three miles for the first two years, and on every four miles for the next two years, to keep it in order by spreading loose stones in the hollows, raking them from the middle, opening ditches, etc. The fifth year it may be necessary to make repairs by restoring to the road its original surface outline, raising the middle and cutting down the sides; and to make the new material unite with the old, the surface may be slightly broken up or lifted with short picks." The varieties of stones used are chosen for toughness, resistance to pulverization. Other materials than stone have been used, but not with the same excellent result. The stones are either broken with hand hammers or, in more modern fashion, by powerful crushers. The broken stone should be as uniform and as angular as possible, and broken into pieces not to exceed an inch in size in any of its dimensions. There should be no larger stone placed in the bottom, for the tendency is to bring the larger stones to the surface.

The Telford system differs from that of McAdam principally in its requiring a solid foundation to be first constructed. To show how in practice such a road is constructed, we copy from the "specifications," courteously furnished by the Secretary of the Essex Public Road Board, and used by that board. "The foundation of a bottom course of stone (a single layer) of a depth of eight inches is to be set by hand in the form of a close pavement; the stones to be laid with their largest side downwards, in parallel rows across the road; the joints to break as much as possible. The breadth of the upper edge of the stones not to exceed eight inches and not less than four inches. The interstices are then to be filled with stone chips firmly wedged by hand with a hammer, projecting points broken off. The whole surface to be subjected to a thorough settling or ramming with a heavy sledge hammer. On the top of the foundation, of a size not exceeding one and a-half inch in diameter, broken stone is to be placed in two layers; the lower layer is to be thoroughly rolled with a steam-roller before the upper course is placed, which is likewise to be thoroughly rolled to a sufficient state of consolidation. Sufficient stone is to be laid as will make a total depth of four inches when consolidated. When the surface is thoroughly rolled, a binding of screening and debris of the broken stone is to be spread, strewn, sprinkled and thoroughly and repeatedly rolled with a steam-roller, until the surface becomes firm, compact and smooth, and any binding materials remaining on the surface is then to be swept off and removed. All material shall be exclusively trap-rock." A road built upon this plan has just been completed from Bell avenue to Second river in Newark, a distance of one mile and a-half, with a width of ten feet on each side of the horse-car track. There is thirty-two miles of Telford pavement in Essex county under the control of the Essex County Public Road Board, and at least eighteen miles more has been constructed by towns and townships, making fifty miles in all.

The advantages of the above two systems are obvious. The road-bed is kept dry and firm by an impermeable layer of consolidated broken stone. A single deep track, the bane of our common roads, is not likely to be formed, since the road is nearly flat and equally good in all parts. The expense of keeping these roads in prime condition is inconsiderable, and therefore the chief considerations are:

## HOW GOOD MATERIALS MAY BE OBTAINED, AND THE COST.

In many parts of the State there is an abundance of stone that could be easily broken for road making, and in some parts varieties of stone are found that would require a stone-crusher to fit the stone for use. In any case, a stone-crusher would be a small expense to a county in comparison with the benefit in growth and prosperity which good roads would undoubtedly confer. Counties devoid of proper stone could purchase in some favored portions of the State. Along the line of the Delaware and Raritan canal, and connected with the Pennsylvania railroad by a branch road are the Rocky Hill quarries, worked by individuals and companies. These quarries are ready at all times to supply the very best material for road making, at moderate prices. We have before us a circular issued by J. Russell Howell, of New Brunswick, from which we make the following extracts:

“The superior and lasting advantages of crushed rock for walks and roads over gravel and soil are that, when put down in a proper manner, it keeps its place, and does not roll under the feet of man or beast.

“In the crushed rock all pieces are angular or wedge-shaped, and consequently one piece binds upon the other, and a perfectly-uniform mass is formed of the stone. Gravel being round, no mass can be formed, and it is always shifting, and is washed by heavy dashes of rain.”

Mr. Howell manufactures crushed rock for the purpose of road-making, and in reply to a communication addressed to him, names the following sizes of broken stone, and the respective prices:

No. 1, known as.....	screenings.
No. 2, known as.....	$\frac{3}{4}$ inch stone.
No. 3, known as.....	$1\frac{1}{2}$ inch stone.
No. 4, known as.....	$2\frac{1}{4}$ inch stone.

This stone can be furnished at \$1.50 per cubic yard, loaded on either cars or canal boats, at the Rocky Hill quarries. Mr. Howell says: “Rate of freight for the above, in quantities, could probably be arranged with the railroad companies at smaller figures than I

name." The present cost of crushed rock for the construction and repair of roads is as follows, according to the present rates of freight :

Cost per cubic yard at quarry, and delivered on vessel or car.....	\$1 50
Freight per Pennsylvania Railroad delivered at any distance within 25 miles.....	38
Total cost per cubic yard delivered within 25 miles.....	\$1 88

The present rates of freight as established by the Pennsylvania Railroad Company are as follows for the Rocky Hill quarries :

For any distance within 25 miles per car of 15 tons.....	5 00
For any distance over 25 miles per car of 15 tons.....	7 50
For any distance over 50 miles per car of 15 tons.....	10 00

A cubic yard is what a wagon body nine feet long, three feet wide and one foot deep will hold, a good load for a team of horses over an ordinary road.

At the above-named price of crushed rock, any ordinary country road within twenty-five miles, which can be reached by railroad or canal, and is properly formed, can be made good and durable by spreading a thickness of three inches of material upon its surface, and covering the same evenly with a very thin coating of clayey loam to bind the whole together. This could be done at a cost for each mile of \$875 for a single track of nine feet in width.

It will be seen by reference to the tables herewith presented, that an average amount of \$1427 is annually expended by each township in the State upon the roads. This money, if judiciously used upon some such plan as above proposed, would secure nearly two miles of good road in each township. Some systematic plan in the application of road money, whereby even a single mile of good road could be secured each year, would, in a few years, change the character of the public highways, and thereby not only increase individual convenience and comfort, but greatly enhance the value of country real estate. This could be effected with very little change in the present system of road control, but we should strongly recommend a county supervision of roads, such as the Public Road Board act offers to populous counties, and the improvement of the roads with money raised by taxes in sufficient amount to build the roads quickly. The experience

of Essex county, where the road taxes are paid in ten instalments, proves that this is a wise plan and will pay in the end.

There is one more suggestion we wish to offer, brought to our notice by the fact that *all the prison labor at the Caldwell Penitentiary* is employed by the Essex County Road Board, by which a saving to the county is effected. By an act of the State Legislature, passed April 21st, 1876, the Supervisor of our State Prison was authorized, with the consent of the Board of Inspectors, "to hire out and contract with any person or persons for the labor of the prisoners, or any part of them, for any period not exceeding four years." Notwithstanding the power thus given for the employment of the convicts in our State Prison, the last annual report of the New Jersey State Prison shows that out of 802 prisoners, only 340 were employed under contracts; and after deducting 119 who were either physically or mentally incapable, there were from 150 to 200 unemployed. The average amount received for these convicts who were under contract, was fifty cents per day, showing a loss to the State of from \$75 to \$100 per day on account of the enforced idleness of prisoners. The Inspectors, in their report, remark: "Why no one seeks their labor is a mystery; business in all branches has improved; labor daily grows scarcer, and wages show a tendency to rise, yet no man hires them. Whether this is due to the present agitation of the contract system, or to the unsatisfactory results achieved by the employment of convict labor, is a problem for which, we trust, the able commission now in session on the subject, may find a satisfactory solution. Certain it is, however, that these men cannot be benefited in health nor improved in morals by enforced idleness; and all idea of making the prison reformatory in character must be summarily dismissed until some occupation, either by the State or otherwise, can be found for them. Merely sending men to State Prison to be fattened, clothed and warmed, is, to the great majority, no punishment at all."

The agitation of the contract system to which the inspectors refer, does not seem to have been quieted by the commission appointed to examine the subject, but is still kept alive by the wage-working class in the State. Much time is occupied at each session of the State Legislature in the discussion of plans for the employment of the prisoners in such a way that those who are

under restraint on account of crime may not, by their labor, be brought into competition with the honest and the upright.

It is certainly a question worth consideration, whether not only the present large number of unemployed convicts, but also those now under contract, as soon as the contracts expire, might not be set to work in the preparation of blocks for street paving, and of crushed rock for road-making, thereby removing out of the way an agitating question, and providing a great aid towards improving the highways of the State. In the erection of any additional buildings that might become necessary, the convicts themselves could be largely employed, thus relieving the State from any great outlay for their construction. The necessary hammers for shaping the blocks and crushing the stone would be the only implements required.

There is at present an immense demand for these materials, and a continually growing need of an abundant and cheap supply is felt. It is beyond doubt that all the convicts in our State Prison might be profitably employed for many years to come in this way, and thus a double benefit would be conferred upon the citizens of our State. The exciting question with regard to the employment of our convicts in competition with skilled workmen would disappear, and our roads would be improved.

In many parts of the State rock of sufficient toughness for the purpose of road-making is found, but especially at Rocky Hill, in Somerset county, and at Bergen Hill, in Hudson county. Large quantities of rock have already been cut at these places for building and paving purposes, the refuse being crushed for walks and roads.

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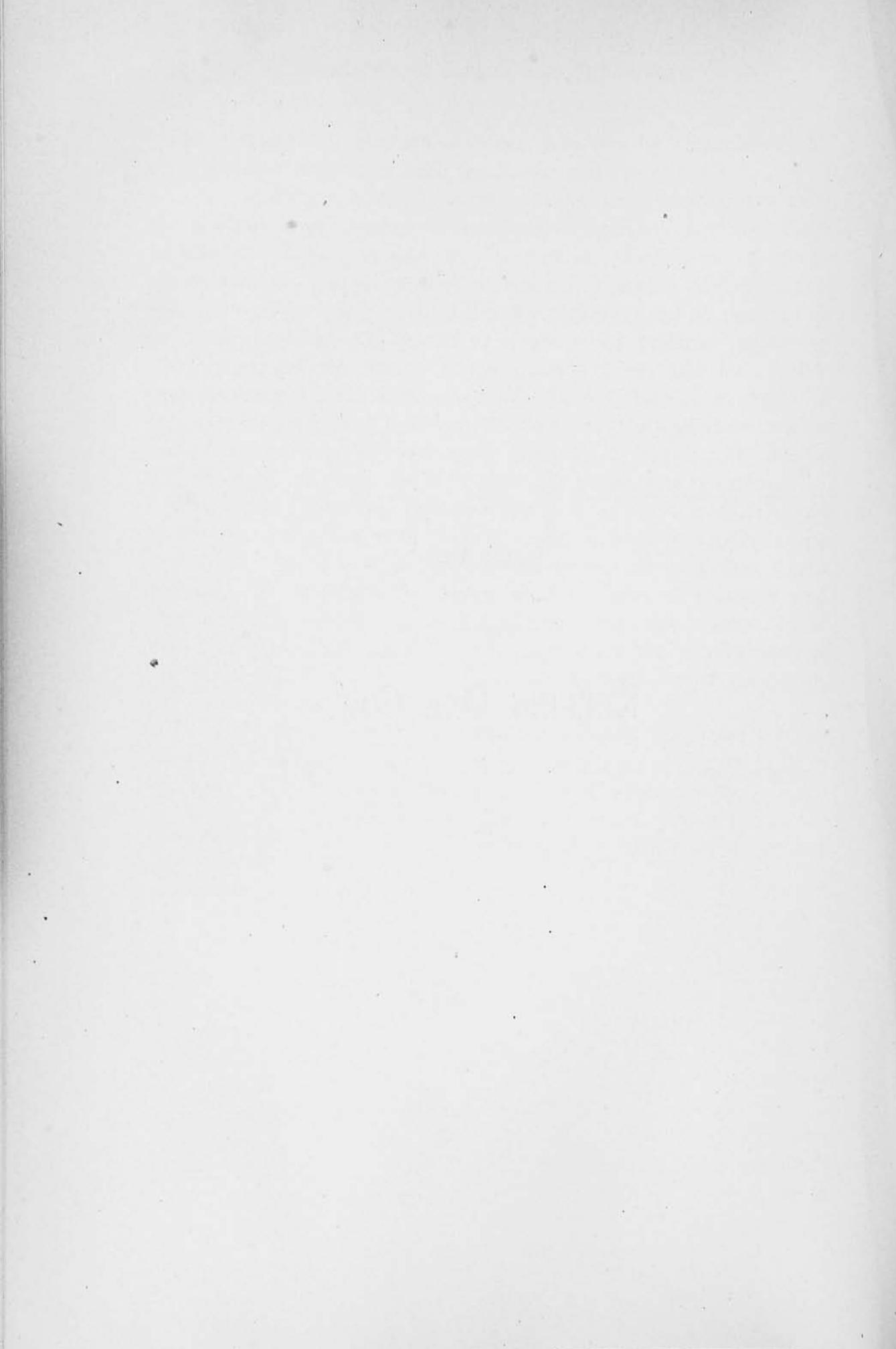
PART VII.

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KEEPING ONE COW.

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## PART VII.

# KEEPING ONE COW.

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It is the appropriate duty of this Bureau to embody in its publications whatever contributes to industrial progress, and awaken an interest in that which concerns the material interests of any considerable body of citizens. We think it is well, therefore, that this State has established a department which may be made a medium of conveying valuable information having direct bearings upon the public welfare.

It will not be denied that the most of mankind are endowed neither with a proclivity or capability for discovering methods of improving their condition in life. They are habitually unconcerned in respect to material and social progress. It can scarcely be said they are indifferent to the significant import of competence and independence, but as a rule they are devoid of emulation, and an intelligent stimulus to the acquisition of either, hence there is special need of efficient agencies to disseminate practical information relating to new contrivances and economic methods of cheapening production, which have been wrought out by the few for the benefit of the many.

In all departments of industrial life we find inventive faculties employed in the laudable endeavor, by the discovery of new processes, if possible to render all prosecuted industries remunerative and permanently prosperous. We need not say that achievements of this nature and scope are well calculated to gladden the hearts of multitudes who are longing for deliverance from unrequited toil.

This chapter is designed to form an appropriate supplement to the preceding one on "Ensilage," and it also harmonizes admirably with the succeeding one by Dr. Hunt, on "Foods." It is based upon a recent volume issued by the *Orange Judd Company*, New York,

entitled "Keeping One Cow." The purpose is substantially to reproduce the convictions and practical results derived from the series of papers relating to the milk question, which are embodied in this book.

Treatises upon economic husbandry abound, but it is seldom that the press furnishes agricultural literature which can justly be denominated chimerical. There is obviously not much latitude for charlatanism in this line of authorship. If books and papers bearing upon progressive agriculture do not always emanate from practical farmers, they nevertheless issue from sources which are habitually uninfluenced by improper motives, and for the most part, convey well authenticated information upon specific topics of interest.

These papers are the outcome of prizes quite recently offered by the publishers of this book for essays on keeping one cow. It is assumed that there is a larger number of persons who keep one cow than of those who keep more than one, and we doubt not that the diffusion of these simple directions, demonstrating as they do the feasibility of deriving both luxury and profit from the products of the cow, will tend largely to increase the number of experimentors in this line of domestic economy.

The universal use of milk as a diet constitutes it a standard food both for adults and children in all lands. Its consumption, however, among the masses is regulated by its relative cost. In Switzerland it is necessarily the prevailing diet of the peasantry. It is represented that 76 per cent. of the laboring classes in England make use of it; 83 per cent. in the form of buttermilk, and 53 per cent. as skimmed milk. In Wales farm laborers use more than two quarts per day. In North Wales nearly four quarts per day. In Scotland and Ireland the average exceeds that of Wales. We have not the data before us respecting the consumption of milk in its varied forms in this country, but its intrinsic dietary value for domestic uses is well understood, and the labor classes especially have a deep personal interest in methods which betoken an abundant supply at reduced rates.

There are various ways by which families, who need to study domestic economy, can have the benefit of a good supply of pure milk at reasonable rates, and we will rely chiefly upon the book before us to show how it can be done.

It is maintained that by the adoption of a variety of plans indicated in the essays to which we have referred, pure, rich milk can be secured at less than three cents a quart. Space will only allow such an abridgement as but partially to exemplify the methods.

Our first example is that of a practical farmer residing in the interior of the *State of New York*, who gives the result of his experience with one cow, maintained from the products of one acre.

One-half of his lot was set apart for the production of food for his cow, the remainder being occupied by buildings in part, and the rest is devoted to the culture of small fruits. He says without this land he would be obliged to hire his cow pastured through the summer, at a cost of about fifty cents a week, which he was able to save by practicing a system of soiling, the advantages of which are numerous.

He was aware that one acre would be none too much to supply a cow with food for a year, but he found that he could realize more profit by purchasing a part of her food, and devoting part of his land to the culture of small fruits, the amount of money received from the sales of which, will more than pay for the feed it would produce.

We omit the author's description of his barn, erected at a cost of about \$50, to accommodate one cow and one pig. A diagram is furnished, with an open shed under the same roof.

The mode of making manure and applying it is first described. The prevalent idea among those who keep a single cow or other domestic animal is, that the manure, instead of being saved and protected from loss with the greatest care, is a nuisance which should be summarily disposed of. It is an established fact that the liquid portion of the excrement nearly, if not quite, equals in value the solid portion, and in order to save both we must provide some means by which the liquid and volatile portions may be prevented from going to waste. This is best accomplished by absorbents, and there is nothing better or cheaper for this purpose than dried muck or earth, a good supply of which should be constantly kept under cover, where it is easily accessible. A good pile of it should be always on hand, and thoroughly dried. The bottom of the stall should be covered with ten or twelve inches of this prepared soil, over which scatter a light covering of cut straw or sawdust, so as to secure a clean bed

and a clean cow. At proper intervals, remove the entire body and renew the admixture. An occasional sprinkling of plaster is applied, both to the litter in the stall and the manure heap, which in all cases should be under cover. The plaster prevents any loss of ammonia, and hence all unpleasant odors are avoided. Whenever manure is put on the pile, it should be immediately covered with muck or earth.

Twice a year this should be hauled on to the land. Manure thus treated will not waste by washing or escape of ammonia. If artificial fertilizers are used, they may at any time be mixed with this compost. Also, when a pig is kept, its pen should be cleaned daily and the litter mingled with the general pile. Common salt may occasionally be added, but ashes never, as they tend to liberate the ammonia.

It is not necessary to have a large yard connected with the stable, as a cow is seldom inclined to exercise more than is necessary to secure her food. Twenty feet square is ample space, if food can be conveniently served. Buildings should always be constructed so that a sunny yard may be had if possible, and it is equally important to have a shaded corner reserved for the heat of summer.

The half acre set apart to supply the cow with food from May first to November first, is supposed to be under a high state of cultivation, otherwise the product would be inadequate to the purpose. To obtain requisite and wholesome fodder from a single acre, a system of rotation is essential. The half acre is subdivided into four equal parts, each containing twenty square rods, numbered one, two, three and four. Plot one, having been seeded the previous year with clover, will be ready for use about June. Plot two was sown in October with winter rye and seeded down with clover in the spring. From the patch of rye, feeding will begin about the first of May. Plot three, sow with corn, drilled thickly in rows two and a half feet apart, which will ordinarily be ready for use about August first. Plot four, sow with mangold or sugar beets. The latter is preferred, and the only crop put in for winter use. Both this crop and the corn are planted with a garden seed drill, while the rye is sown broadcast. On the first of May begin to cut the rye. Up to this time the cow has been fed on clover hay and grain.

It is very desirable to arrange to have the calf come as near the

first of April as possible. During a period of a few days previous, feed sparingly, allowing, however, the cow all the long hay she will eat, together with a peck of beets twice a day, but no grain of any kind; this reduced ration being necessary to avoid danger which might result from the too abundant secretion of milk at this time, which high feeding would tend to produce. If, at the end of the fifth day after the calf arrives, no bad results have occurred, begin gradually to increase the feed, until, at the tenth day, the following daily treatment begins:

At half-past five A. M., feed four quarts of a mixture consisting of one part each of corn meal and oat meal, and two parts of bran. Four quarts of this mixed with a heaped half-bushel of cut (chopped) hay, moistened but not soaked. While the cow is eating, clean the stable and the cow preparatory to milking. When through, take the milk immediately to the house, before it cools and absorbs odors. After breakfast, feed a peck of sliced beets, on which has been sprinkled a dessert spoonful of salt, which completes the cow's breakfast. If time and inclination permit, the curry comb or card can be used to advantage. If the weather is pleasant, let the cow run in the yard, and at noon feed her with all the hay she will eat.

Fresh water should be given at least twice a day, but not immediately before or after feeding grain. At half-past five in the afternoon feed the same as in the morning. This process is continued until the rye is large enough to use. All changes from dry to green food should be made gradually to avoid loss. By this time the supply of roots will probably be exhausted, but the green food, in a measure, takes the place of them. Continue to give the same amount of grain through the summer as through April, and also mix it with chopped hay, slightly moistened, as this insures complete mastication and assimilation. As the supply of green food increases, diminish the quantity of chopped hay until but one-half the former quantity is used, which quantity is continued through the soiling season. The one-eighth acre of rye will last until about June fifteenth, at which time the red clover will be large enough to feed. The change from one green fodder to another should be gradual. Judgment is required to ascertain the exact amount needed of this kind of food. A safe rule is to feed just as much as the cow will eat up clean, and no more. A good armful three times a day, in addition to other

food, would be a safe calculation. By the fifteenth or twentieth of July the clover will have become so ripe as to need cutting and curing, if any remain. It may be fed until the corn is large enough to take its place, which is generally about the first of August. This crop, and the second cutting of clover, will complete the course, and will furnish feed until well along into October or the first of November, after which the dependence will be upon purchased food.

The requirements for the winter are, three thousand pounds of early cut clover hay; one thousand pounds of bran; one thousand pounds of corn meal, and seven hundred and fifty pounds of oat meal. These commodities, well mixed together, will furnish a feed of eight quarts a day, which amount should be diminished during the period in which the cow is dry. The course pursued in feeding from November first until February fifteenth, at which time the cow becomes dry, is similar to that described for April. It is better to dry off the cow four, five, or even six weeks before calving.

The reader will now be interested to know the financial result of a year of soiling one cow upon the plan above described. A family consisting of four persons was supplied with butter and milk, after which the revenue from the total sales of the cow's products, amounted to \$85.99. The cost of purchased food was \$47.97.

The second example we cite is also from the *State of New York*. This author's experiment in keeping a single cow differs from the preceding one described, inasmuch as he relies more on permanent grasses for soiling crops. His plan is to divide less than an acre into two parts, the cow to be kept a few days in each alternately, with water and shade, if possible. For the purpose of soiling, have a small yard twenty to thirty feet square, containing an open shed to shelter the cow from storms and heat. Furnish bedding of forest leaves, straw, or sawdust, both for economy and comfort of the cow. Carefully collect the manure and place it under cover, mixing with it muck, leaves, and garden refuse. In addition to the pasture, have about two-thirds of an acre of land highly manured, and, with the exception of about fourteen square rods, well seeded with a variety of nutritious grasses. This quantity of land, if properly enriched, will keep a cow the year round, and keep her well, without purchasing any feed. The method of feeding should be such that nothing

be wasted. . Quite early in the season the grass upon this rich soil will be large enough to be cut and fed to the cow. While the ground is sufficiently moist in the fore part of the season the grass will grow very rapidly. When the soil becomes a little too dry, about half a bushel of plaster, or twice as much lime, or two or three bushels of wood ashes, scattered upon it, will usually renew the vigor and freshness of the crop. The waste water from the house is another excellent fertilizer, and is at all times useful. Top dressing from the manure heap will be necessary every year, applied in the fall or early in the spring.

As soon as the grass has fairly got into blossom, it should be immediately cut, and well cured for winter use, unless it may be necessary to save a small quantity to feed until that portion which was first cut for the cow shall be ready to cut again. Grass should never be allowed to stand until the seed has formed, as just previous to that time it is more nutritious than at any other period. A portion of the grass can be mown a second time for hay, and still leave enough for green feed until foddering time. The proportion for hay must be determined by circumstances. An overplus of hay has not unfrequently occurred, where the soil is very rich.

It is important to know what kind of grasses are best adapted to the production of milk and butter. The practice of seeding with a single kind of grass, or even a mixture of clover and timothy, is not a good one. Four of the most nutritious and productive kinds of grass, including timothy, white clover, and such other varieties as are well adapted to the particular nature and condition of the soil, are none too many to be sown together for pasture or meadow. Five quarts of timothy, three of white clover, six of orchard grass and three of red top (if the ground is quite moist), or other grass suited to the soil, are about the proper quantities and proportions for general use on an acre of land. Such a mixture, upon rich soil, will produce fully twice as much feed as any one kind upon the same soil. An acre of rich soil, well seeded with a good selection and variety of perennial grasses, will produce six tons of well-cured hay in one season; by mowing twice, and by early cutting, it is represented that this can be done without difficulty. This writer says he has cut at the rate of full four tons per acre the first mowing, and two tons the second.

He combats the sowing of rank-growing annuals as being more productive, alleging that the less nutritious nature of the feed, and extra expense of preparing the ground and seeding annually, overbalances the possible increase of quantity. Has omitted red clover in the mixture of grasses, because soils adapted to that variety will produce white clover equally as well, which gives a much better flavor to milk and butter, and an increased quantity. Blue-grass, either green or cured, is excellent feed for cattle, but is unprofitable on account of the small product, and that coming only in the forepart of the season, failing, as it does, just at the time when fresh feed is most needed.

During the heat of summer, the cow should be milked three times a day, at regular intervals—about five in the morning, one in the afternoon and at nine in the evening. By this practice, the yield of both milk and butter is considerably increased and the quality improved. It is thought that the milk is injured by remaining in the udder through the heat of the day, and the cow is thereby made uncomfortable, which of necessity diminishes her usefulness.

The length of time a cow should be milked depends on her capabilities for giving milk. It is thought advisable, as a rule, that a cow should go dry some eight weeks, to recover flesh, strength and vigor for another season.

The third example comes from Pennsylvania, and advocates *Jerusalem artichokes* for cow feed. The author premises by saying that ordinarily it requires the yield of several acres of land to support a cow, and consequently if a laboring man has only an acre or two of land, he finds it more profitable to devote it to other productive purposes.

It is estimated that a single cow of ordinary size will consume about 11,000 pounds of hay, or its equivalent, in a year. The dietary value of that quantity of hay is supposed to have its equivalent in 513 bushels of potatoes, and in Indian corn 137 bushels. Neither of these quantities can be raised on one acre of land, but our Pennsylvania authority claims that one acre of rich soil will produce enough *Jerusalem artichokes* to sustain two cows one year with less labor than is employed in raising an acre of potatoes, and, moreover, that pound for pound they are equal in nutritive qualities to potatoes.

From 1,000 to 1,200 bushels of these tubers is regarded as an average yield. But as these roots do not keep over summer, neither can a cow thrive on them alone, therefore they must be supplemented with other forage. From this calculation, less than half an acre will supply a surplus of artichokes for one cow, another field containing three-quarters of an acre will be required to furnish suitable nourishment to serve in combination with the roots.

Rich soil and an abundance of manure are understood requirements in all of these examples, but after the land is once adequately fertilized, the cow supplies all needful manure to maintain its fertility.

Suppose a man has three-quarters of an acre of good land, one-third of it, or one-quarter of an acre is already in clover, and being in the spring of the year, the remainder is ready for the plow, he should at once manure the land liberally. One-sixth, that is one-eighth of an acre, should be sowed with about one-half bushel of oats. One quart of clover seed and one pint of timothy seed should be sown on the oats. The oats are raised only during the first year, rye being substituted in after years, the timothy being added to increase the hay crop in the second year. One-third of the land (one-quarter of an acre) should be planted early in the season, with Jerusalem artichokes, in hills, three feet apart each way, and cultivated flat both ways. One tuber, or piece of tuber of the size of a hen's egg, is sufficient for a hill, covered to the depth of two or three inches. The patch should be stirred two or three times with the cultivator while the plants are young, and afterwards kept clear of weeds with the hoe. At the proper time one-sixth of the plot, (one-eighth of an acre,) should be planted in sweet corn. In order to extend its growth, plant half of it at an interval of four weeks. The furrows should be three feet apart, and the corn planted in drills sixteen to twenty kernels to the foot. When the corn is all used up the patch should be plowed and seeded with about a peck of rye and a pint of timothy seed, and in the following spring a quart of clover seed should be sown upon the rye. These crops will give the land a complete rotation every six years. The following diagram indicates the proper succession of the crops and shows the plat of land divided into six equal parts, containing one-eighth of an acre each :

FIRST YEAR. SECOND YEAR. THIRD YEAR. FOURTH YEAR. FIFTH YEAR. SIXTH YEAR.

	Artichokes.		Corn.	Rye.	Clover.
Clover.		Artichokes.		Corn.	Rye.
Oats.	Clover.		Artichokes.		Corn.
Corn.	Rye.	Clover.		Artichokes.	
Artichokes.	Corn.	Rye.	Clover.		Artichokes.
	Artichokes.	Corn.	Rye.	Clover.	Clover.

The manure derived from the cow during the winter should be spread in the spring on the land intended for the corn and artichokes, and plowed down, and that made in summer should be applied to the rye and clover patches in the fall. Ashes and a moderate quantity of lime spread on the clover patch early in the spring, will be beneficial, and a peck of gypsum scattered on the young clover will answer an excellent purpose.

The spring time of the first year must be tided over with hay until the clover is large enough for soiling. Green clover is then fed to the cow until the oats are sufficiently advanced. The oats are then used as long as they are fit for the purpose, cutting them a second time as far as practicable. The same course is followed with the rye in the following year. The clover should be cut for hay rather early, in order to get it in best possible condition, and secure a good second, and, perhaps, third crop. All the aftermath not fed out should be converted into hay. When the oats are exhausted, clover is fed until the corn fodder is ready, which is fed until the ears begin to appear, and what remains is cut and cured for dry winter fodder. New clover will appear the first year in the oats stubble and the second year in the rye stubble, and this can be fed until the artichokes are grown.

The artichokes will grow until the frost kills the stalks. They can be fed before they are quite ripe, in which case the cows will eat up the whole plant—root, stalk and branch. She must not have access to a heap of the tubers, lest she surfeit and seriously injure herself. As long as the whole plant is fed, she should not be allowed too many, else she will eat the tubers and leave the stalks. She will prefer the tubers to almost any food. A peck three times a day, with the stalks and some other forage, would be a fair allowance. In winter and spring she will consume a bushel or more of the raw tubers a day, together with eight or ten pounds of hay or other dry food. Her ration of artichokes should never be so large that she will reject other food.

Artichokes can be fed for eight months of the year, say from October first to the first of June, which will require about 240 bushels. These, with the hay and other fodder, will keep her in excellent condition and produce an abundance of good milk.

The artichokes should remain in the ground in autumn as long as the weather permits, and just before the earth is permanently frost bound; enough should be dug to last through the winter. As frost does not injure them, the rest should be left in the ground until the following spring. A good way to keep them in winter is to place them on the ground in the field in shallow layers, covering them lightly with the stalks of the artichoke or with straw, and then with a little earth, keeping for convenience a considerable quantity in the stable or cellar. The stalks furnish excellent material for litter for the cow. They grow from eight to ten feet high. Not being suitable for fodder after frost comes, they being very pithy, after being pounded on a block with a mallet, make a very comfortable bed for the cow, and a good absorbent of liquid manure.

Since the plants here recommended for the cow, afford the best milk-producing food the whole year round, the time of calving may be left to the option of the owner, for it will not affect the quantity of milk that the cow gives. If the milk is mostly needed in summer, the cow should calve in spring, and if it be desirable to have more milk in winter, she should calve in autumn, as butter generally commands better prices in winter. The disposal of the calf is left to the judgment of the owner. While the cow is fresh and yields a large flow of milk, the practice of milking three times a day is again

urged. We omit many other details, relating to the management and treatment of cows, and wholly what pertains to the construction of an economical stable with appliances for husbanding manure.

We cannot reproduce all that we find in this essay respecting the value of the Jerusalem artichoke as a diet for animals. It is claimed, both from experiment and analysis, that this root is fully equal to the potato as food for stock, and greatly superior to beets, turnips and carrots, is less exhaustive of the soil, produces a large crop and is less liable to failure in adverse weather. Horses, cattle, sheep and swine thrive and fatten on them. Their culture requires less labor, less fertilization, and, with the single exception of wet ground, will thrive under all conditions of soil.

We will epitomize but one more of the essays before us, entitled "The Ellsworth or Barre System of Feeding."

The author says that his own experience is confirmed by others, that a cow fed twice a day will give more milk and be in better condition than when fed three times, or more frequently. He quotes the following from Mr. Ellsworth, who was the first to adopt the system: "The idea that a cow needs only two meals a day during the winter season, as long as she is kept upon hay or other dried fodder, notwithstanding the fact that she will eat much oftener when obtaining her living from a pasture, may appear to the casual observer to be contradictory to itself, but on a closer investigation we shall notice a rational and, I believe, satisfactory reason for it. Of all the elements of which grass is composed, by far the larger part is water, which must render it much more bulky than an equal amount of hay, and for this reason more is required to supply the wants of the system. During the season, therefore, when the cow must live by her own exertions, she must labor most of the time to obtain the requisite amount of nourishments, which she is not required to do while in the barn. We must not forget, also, that pastures in general are kept down so close during the greater part of the summer, that only by continual labor can her wants be satisfied."

The same rules are applicable to the soiling of the cow during the summer months, the only difference being that green food is given in the place of dry. This may consist of rye, oats, barley, millet or Hungarian grass, corn, English grass, etc., cut while in

the milk. It will frequently be found that a proportion of dried hay will also oftentimes be highly relished, and may be essential to allay any excessive looseness of the bowels, which may be produced by the succulent food.

As to the requisite amount of food, it may be taken as a safe rule that a milch cow demands in food three per cent. of her weight. An average cow, then, will require from 18 to 20 pounds of hay, in addition to a peck or two of roots per day, or the equivalent of this amount in green food during the summer months.

If the hay is good and has been properly cured, or if rowen can be given, then there will be little or no demand for grain in any form. If otherwise, from one to two quarts of Indian meal, with two quarts of shorts per day, should be fed out, if we are to expect a good flow of milk. Good results have followed the practice of stirring the meal and shorts, or a portion of these, into a bucket of warm water, and offering this mixture immediately after the animal has consumed her dry food, and before any roots are eaten. Salt, at all times, should be accessible to the cow, and perhaps this article may be best supplied by placing a large lump of rock salt in the manger, to be licked as her wants may require.

This author shows how soiling material, sufficient for one cow through the year, can be grown on one acre of land. His system of sectional rotation is so similar to those already described, that it is not deemed necessary to rehearse it.

The tendency of this compendium of the Orange Judd Company group of essays, should be to enforce attention to visible economic and healthful advantages, which are inseparable from a plentiful supply of cow's milk. We think, by a little forethought and an average amount of tact and ingenuity, a much larger number of families of laboring men may, just as well as not, enjoy redoubled advantages derived from the ownership of one or more cows. We have set before them ways to achieve success without resorting to the public highways for pasturage.

Just here, we improve the opportunity incidentally to say, that the practice of multitudes of cow owners residing in cities and large towns of sending herds of cows under the convoy of little girls, who, it is claimed, no less unconsciously than grotesquely, legalize the untethered quartering of cattle upon sidewalks and roadsides to feed,

merits universal condemnation. It would very much mitigate the evil if city milk dealers and well-to-do citizens were not often found among this class of offenders, both against propriety and law. Suburban residents, who spend time and money in beautifying their surroundings, and endeavor to maintain well graded, clean and shaded sidewalks, the benefits of which are shared by the public, are entitled to protection against this grievous evil. Fences and gates even are not always effective barriers to these vexatious trespassers; and even if they were, the law does not impose any obligation upon the aggrieved party to fence his premises in anticipation of visits from these interdicted wanderers. But it does forbid their "running at large," and it is ludicrous for any one to maintain that so long as the animals are in the nominal custody of incompetent children, the law is powerless to shield pedestrians from peril, and rural embellishments from devastation. Such an interpretation of the statute as this, deprives public spirited property owners of all incentive to individual or associative effort in the line of external improvement and rural adornment, hence the moral of this brief episode is, to restrict town and city cows to legitimate pasturage, or to the soiling system, within city limits.

In conclusion, we liken the essays we have reviewed to "experiment stations" in behalf of agriculture, which ours, and some other State legislatures, have wisely adopted from European systems. It is not claimed that this series of papers has developed any new principles, or solved any controverted theories bearing upon the dairyman's pursuits. They were elicited for the distinct purpose of initiating a combination of methods to "obtain the best milk, plenty of it, and at the cheapest rates."

It seems to us that an admirable opportunity is presented in this sphere of domestic economy, to illustrate the principle of co-operation in town and city life. We can readily see how a number of heads of families might club together and derive great benefits from conducting a co-operative milk dairy upon the soiling system. We need not point out in detail the mode of proceeding, further than to indicate that the undertaking should be upon such a scale as to employ the services of one man in taking care of the cows, milking, distributing the milk and providing the forage, a surprising percentage of which would consist of domestic refuse collected from the participating families.

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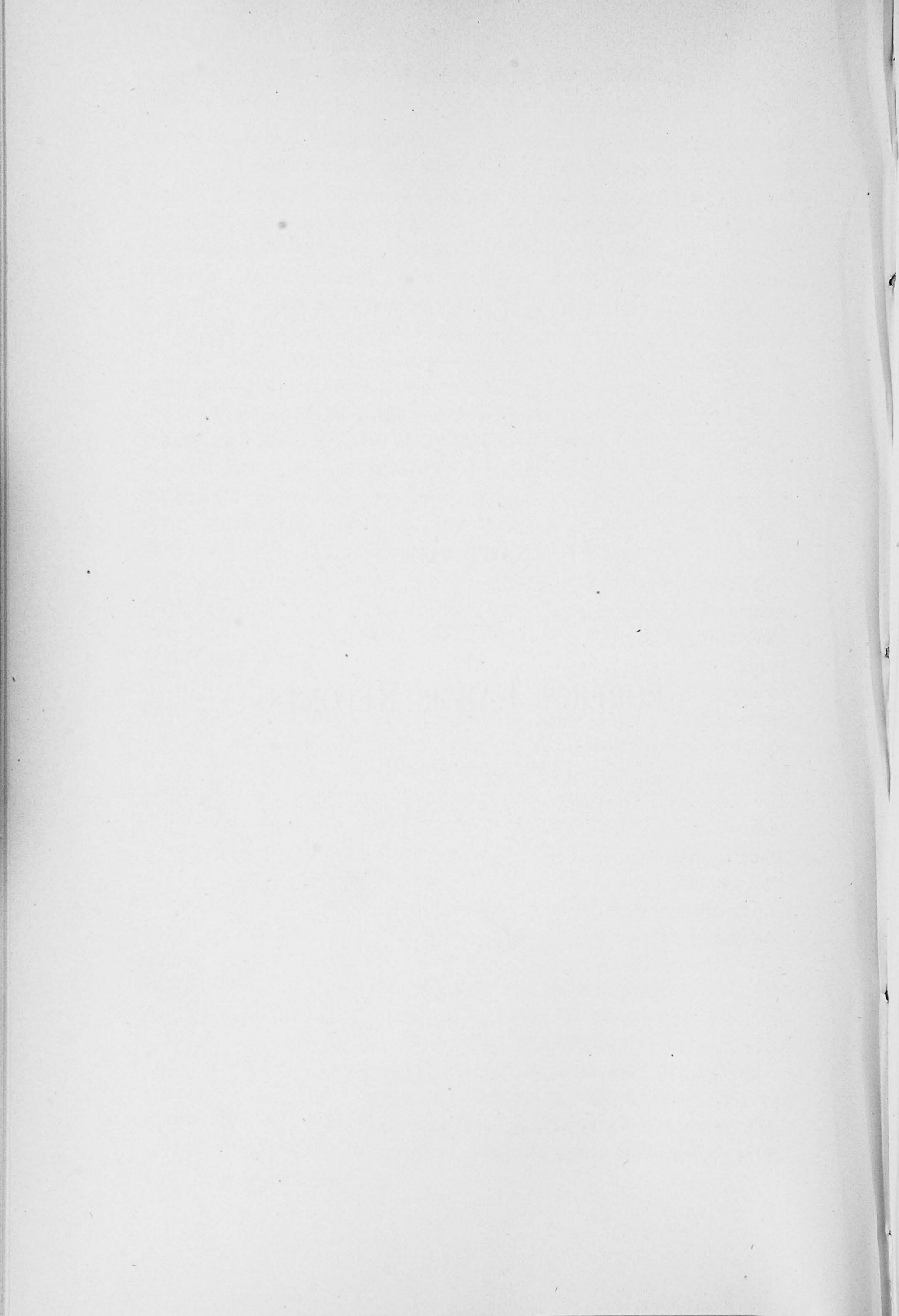
PART VIII.

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FOREIGN LABOR REPORTS.

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## PART VIII.

# FOREIGN LABOR REPORTS.

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THE RELATIVE CONDITION OF LABOR, ETC., IN EUROPE AND THE UNITED STATES, BASED CHIEFLY UPON CONSULAR REPORTS TO THE STATE DEPARTMENT AT WASHINGTON.

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The inauguration of the system of requiring reports from the Consuls of the United States, in Europe, on labor and labor statistics in their several districts, was the outcome of a conviction that the portrayal of existing low wages, enforced idleness, dear and scanty food, in a majority of the countries of Europe, would tend to enhance the appreciation, especially by the industrial classes, of the free, and in comparison with the fixed condition of the European labor populations, independent and prosperous position of the American workingmen. The field of investigation contemplated by the State Department covered the following principal subjects: Rates of wages; cost of living to the laborers; past and present rates compared; present condition of trade; business habits and systems; character of paper money, the amount in circulation and the relative value of paper money and coin to each other.

We have not space at command to present as full and instructive summary of this series of reports as their great significance demands. Since the entire range of American manufactures have within a brief period assumed international proportions, and under existing methods of development our surplus products are destined steadily to achieve new triumphs among consumers in the remote quarters of the globe, these reports have a conceded value in their bearings upon the future distribution of the products of the world.

Through these statistical details we gain an insight into the condition of foreign industrial populations, the products of whose labor have, until quite recently, excluded our surplusage not only from foreign markets, but, to a considerable extent, our own firesides. This has resulted, in a large degree, from conceded manufacturing skill and unsurpassed facilities enjoyed by our principal transatlantic competitor for prosecuting international exchanges of commodities. But it is a source of great gratification that the last few years of notable progress have demonstrated the capabilities of our people, in conjunction with unprecedented resources, to practically reverse this long-suffering dependence, and transfer manufacturing pre-eminence from the Eastern to the Western Hemisphere.

Disclosures respecting American achievements in industrial diversification and expansion have so wrought upon the minds of European rivals, that however unwelcome the conviction, it has, nevertheless, dawned upon them that we are rapidly excluding foreign products from an imposing aggregate of nearly 50,000,000 of consumers upon this continent. Computations respecting this displacement of imported commodities disclose a steady and encouraging increase of domestic skilled-labor products. This is an advance in the right direction, and indicates our purpose and ability to attain no less distinction in skilled than unskilled pursuits. But while we are gaining in the sphere of skill and taste, it is but nominal, since we are largely indebted to imported skilled labor for achievements in that direction. And this affords us the opportunity to say, that unless we make more rapid headway in providing special educational appliances for the benefit of native artisans, the period of exemption from this dependence is very remote. With this disadvantage in view, Mr. Gladstone, in his "Kin Beyond the Sea," says, "We are passing British industry on a canter."

Assurances multiply from sources antagonistic to progress in this country, that staple American products are rapidly gaining favor with consumers in all lands. Our manufacturers have it in their own power successfully to continue to invade and gain a footing in the remote markets of the world. So long as they maintain the intrinsic excellence of their products by manipulating skill, and keep aloof from the unseemly adulterating practices of some of their rivals, they have an industrial future of illimitable breadth. Whilst

our chief competitor in the most coveted foreign markets maintains unimpaired her peerless marine supremacy, our manufacturers will have to carry on the contest at a disadvantage, but achievements already hinted at will surely impart emphasis to the obvious need of instant enlargement of our commercial marine, which, to all appearances, is the essential want to ultimately complete our ascendancy in the international scale of industry.

Such a hopeful foreshadowing of prosperity to our people will meet an accordant response from all thoughtful observers of what recent years have disclosed, at home and abroad, in respect to social and material progress and reforms with which the welfare and happiness of the whole human family is inseparably interwoven. By common consent, American civilization and systems of political economy are recognized throughout as exercising a world-wide influence for good, second to no other nationality, hence it is our privilege upon all proper occasions to array before the public mind, in no invidious spirit, our country's achievements in the interests of humanity.

If we could embody in this paper more in detail the points of pertinent interest which abound in these reports, it would unfold much additional information. As it is, we will only be able partially to follow the national groupings as they appear, abstracting from those, under the circumstances, we think most likely to interest the labor classes, for we regard the character and scope of these reports as eminently calculated to engage the attention of the more advanced workingmen, who should omit no fitting opportunity to acquire reliable information which directly bears upon the relative condition and future welfare of their fraternity, in the great industrial centres of the world.

It should be remembered that these reports have, in a two-fold sense, official endorsement, which renders them peculiarly valuable. The facts and material points of interest they set before the public are derived from well authenticated sources, and have such appropriate bearings upon the interests of labor and manufactures in this country that no class of readers can wisely ignore their significance.

The manufacturing and commercial pre-eminence of Great Britain has remote antecedence, and for many generations has held commanding sway in the development of the labor element of the world.

That this abounding influence is on the wane has universal recognition. Since her own statesmen and leading manufacturers, with the utmost freedom from reserve, concede that their wonted manufacturing supremacy is inevitably quailing under the extreme pressure of American enterprise, combined with superabundant resources, we have warrant for assuming that this country will share more largely than any other in the benefits to flow from the pending disruption which labor troubles have already made apparent in that country.

It will not be expected of us to introduce all the sub-divisions of countries embraced in the large volume of reports before us, but we shall try to give some points of interest respecting those with which our readers are most familiar, in all cases omitting references to paper money, coin, &c.

LABOR CIRCULAR.

DEPARTMENT OF STATE, }  
WASHINGTON, April 11th, 1878. }

*To the Consular Officers of the United States in Great Britain, France, Germany, Belgium, Italy, Spain, the Netherlands, Sweden and Norway, and Denmark;*

GENTLEMEN:—With reference to the circular addressed to you in August, 1877, in respect of the trade of the United States with foreign countries, it is now deemed desirable that you should make inquiries and report in regard to the following points, viz.:

*First*—The rate of wages usually paid to laborers of every class, but with more especial reference to agricultural laborers, mechanical laborers, and those upon public works and railways.

*Second*—The cost of living to the laboring class, or the prices paid for what may be termed the necessaries of life.

*Third*—So far as practicable, a comparison of the present rates with those prevailing during the past five years, both as to wages and cost of living.

*Fourth*—Such information as may be obtainable touching the present state of trade, whether prosperous or otherwise; the amount and character of paper money, if any, as circulation and the amount and character of coin, with the relation borne by paper and coin to each other.

*Fifth*—And, lastly, such information as may be obtainable as to the business, habits and systems of your districts.

It is desired that the information which may come to your knowledge on the foregoing points should be embraced in a report to the Department, to be made as soon as may be practicable.

I am, gentlemen, your obedient servant,

F. W. SEWARD,  
Acting Secretary.

It will be observed that the circular to which these reports are responses was dated April 11th, 1878, and they were submitted in completed form to the public by the Secretary of State, May 17th, 1879. The simultaneous collation of this mass of information imparts exceptional value to the presentation.

Mr. Evarts accompanied the reports with an extended general statement respecting them, and appended several condensed tabulations which we propose to introduce here, and as we proceed with the summary, reproducing those of notable interest, which form the basis of the following isolated table compacted at the State Department, where the New York and Chicago prices were superadded:

WEEKLY WAGES PAID IN BELGIUM AND IN THE UNITED STATES.

OCCUPATIONS.	Brussels.	New York.	Chicago.
Building Trades—			
Bricklayers.....	\$6 00	\$12 00 to \$15 00	\$6 00 to \$10 50
Masons.....	6 00	12 00 to 18 00	12 00 to 15 00
Carpenters and Joiners.....	5 40	9 00 to 12 00	7 50 to 12 00
Gasfitters.....	5 40	10 00 to 14 00	10 00 to 12 00
Painters.....	4 20	10 00 to 16 00	6 00 to 12 00
Plasterers.....	5 40	10 00 to 15 00	9 00 to 15 00
Plumbers.....	6 00	12 00 to 18 00	12 00 to 21 00
Blacksmiths.....	4 40	10 00 to 14 00	9 00 to 12 00
Bakers.....	4 40	5 00 to 8 00	8 00 to 12 00
Cabinetmakers.....	4 80	9 00 to 13 00	9 00 to 15 00
Saddlers and Harnessmakers.....	4 80	12 00 to 15 00	6 00 to 12 00
Tinsmiths.....	4 80	10 00 to 14 00	9 00 to 12 00
Laborers.....	3 00	6 00 to 9 00	5 50 to 9 00

It will be seen by the foregoing statement that the mechanics of Brussels do not receive anything like one-half the wages received by the mechanics of New York and Chicago.

To enable those who are interested in the subject to carry the comparison further, let us submit a statement showing the prices of the necessaries of life in both countries. We regret that the Belgian reports do not enable us to present as extended a list of articles as might be desirable, but the few given will enable the reader to apply the comparative rule to those not given:

PRICES PER POUND OF THE NECESSARIES OF LIFE IN BELGIUM AND IN THE UNITED STATES.

ARTICLES.	Brussels.	New York.	Chicago.
Bread.....	4 to 5 cents.	4½ cents.	5 cents.
Beef.....	16 to 20 cents.	8 to 16 cents.	4 to 12½ cents.
Veal.....	16 to 20 cents.	8 to 24 cents.	6 to 15 cents.
Mutton.....	16 to 20 cents.	9 to 16 cents.	5 to 15 cents.
Pork.....	16 to 20 cents.	8 to 10 cents.	4 to 12 cents.
Lard.....	20 cents.	10 to 12 cents.	6 to 10 cents.
Butter.....	20 to 50 cents.	25 to 32 cents.	16 to 40 cents.
Cheese.....	20 to 25 cents.	12 to 15 cents.	5 to 16 cents.
Coffee.....	30 to 40 cents.	20 to 30 cents.	15 to 40 cents.
Sugar.....	15 to 20 cents.	8 to 10 cents.	7 to 11 cents.

The foregoing statements show that while the Belgian workingman does not receive one-half the wages of the American workingman, the former pays more for the necessaries of life than the latter.

Agricultural laborers in Denmark are paid as follows, computing the daily wages, and averaging summer and winter :

Men, without board or lodging, per week.....	\$1 85
Men, with board and lodging, per week.....	1 00
Women, without board or lodging, per week.....	1 25
Women, with board and lodging, per week.....	72
Women house servants, per year.....	19 00

Small as are these rates, they must be the maximum, for the consul says that, "as a general rule, farm hands are employed at from \$2.16 to \$2.70 per month, with board and lodging." This would give an average of only about \$31 per annum as the wages of agricultural laborers.

The wages paid to the several trades in Copenhagen and the rates paid to similar trades in New York and Chicago will be seen by the following statement :

## WEEKLY WAGES IN COPENHAGEN, NEW YORK AND CHICAGO.

OCCUPATIONS.	Copen- hagen.	New York.	Chicago.
Building Trades—			
Masons.....	\$4 45	\$12 00 to \$18 00	\$12 00 to \$15 00
Carpenters and Joiners.....	4 25	9 00 to 12 00	7 50 to 12 00
Painters.....	4 15	10 00 to 16 00	6 00 to 12 00
Blacksmiths.....	3 90	10 00 to 14 00	9 00 to 12 00
Shoemakers.....	3 30	12 00 to 18 00	9 00 to 18 00
Coopers.....	4 10	12 00 to 16 00	6 00 to 15 00
Cutlers.....	3 85	10 00 to 13 00	.....
Horseshoers.....	3 85	12 00 to 18 00	15 00 to 21 00
Millwrights.....	4 00	10 00 to 15 00	12 00 to 21 00
Printers.....	4 62	8 00 to 18 00	12 00 to 18 00
Saddlers and Harnessmakers.....	3 85	12 00 to 15 00	6 00 to 12 00
Sailmakers.....	4 85	12 00 to 18 00	12 00 to 15 00
Tailors.....	4 10	10 00 to 18 00	6 00 to 18 00

An average struck from all the reports from France—seven in number—gives the following results in regard to the wages paid to the several trades in France; the rates paid similar trades in New York and Chicago will help to make comparison between both countries:

## STATEMENT SHOWING THE RATES OF WEEKLY WAGES PAID IN FRANCE AND IN THE UNITED STATES.

OCCUPATIONS.	France.	New York.	Chicago.
Building Trades—			
Bricklayers.....	\$4 00	\$12 00 to \$15 00	\$6 00 to \$10 50
Masons.....	5 00	12 00 to 18 00	12 00 to 15 00
Carpenters and Joiners.....	5 42	9 00 to 12 00	7 50 to 12 00
Painters.....	4 90	10 00 to 16 00	6 00 to 12 00
Plumbers.....	5 50	12 00 to 18 00	12 00 to 21 00
Slaters.....	.....	10 00 to 15 00	12 00 to 18 00
Shoemakers.....	4 75	12 00 to 18 00	8 50 to 18 00
Cabinetmakers.....	.....	9 00 to 13 00	7 00 to 15 00
Coopers.....	7 00	12 00 to 16 00	6 00 to 15 00
Cutlers.....	4 63	10 00 to 13 00	.....
Printers.....	4 71	12 00 to 18 00	12 00 to 18 00
Tailors.....	5 10	10 00 to 18 00	6 00 to 18 00

The following list, although very limited, will enable us to form an idea of the relative cost of food-supplies in France and the United States :

STATEMENT SHOWING THE RETAIL PRICES PER POUND OF CERTAIN ARTICLES OF FOOD IN THE CITIES OF BORDEAUX AND LA ROCHELLE AND IN THE CITIES OF NEW YORK AND CHICAGO.

ARTICLES.	Bordeaux.	La Rochelle.	New York.	Chicago.
Bread.....	3 cents.	3 cents.	4 to 4½ cents.	4 to 4½ cents.
Beef.....	16 to 20 cents.	16 to 24 cents.	8 to 16 cents.	4 to 12½ cents.
Mutton.....	17 to 19 cents.	16 to 23 cents.	9 to 16 cents.	5 to 15 cents.
Veal.....	17 to 20 cents.	15 to 24 cents.	8 to 24 cents.	6 to 15 cents.
Pork.....	12 to 14 cents.	16 cents.	8 to 10 cents.	4 to 12 cents.
Flour.....	.....	4½ to 5 cents.	3¼ to 4½ cents.	2½ to 4½ cents.
Coffee.....	.....	30 cents.	20 to 30 cents.	15 to 40 cents.
Butter.....	.....	30 cents.	25 to 32 cents.	16 to 40 cents.

To enable the reader to compare the rates of wages in Germany with the rates prevailing in New York and Chicago, we herewith submit a statement showing the weekly wages earned, as averaged from the several reports, in Germany, and the rates paid in those two cities :

WEEKLY WAGES IN GERMANY AND IN NEW YORK AND CHICAGO.

* OCCUPATIONS.	Germany.	New York.	Chicago.
Building Trades—			
Bricklayers.....	\$3 45	\$12 00 to \$15 00	\$6 00 to \$10 50
Masons.....	4 00	12 00 to 18 00	12 00 to 15 00
Carpenters and Joiners.....	4 18	9 00 to 12 00	7 50 to 12 00
Painters.....	4 60	10 00 to 16 00	6 00 to 12 00
Plasterers.....	4 35	10 00 to 15 00	9 00 to 15 00
Plumbers.....	3 90	12 00 to 18 00	12 00 to 21 00
Slaters.....	3 90	10 00 to 15 00	12 00 to 18 00
Blacksmiths.....	3 90	10 00 to 14 00	9 00 to 12 00
Shoemakers.....	4 32	12 00 to 18 00	9 00 to 18 00
Cabinetmakers.....	4 95	9 00 to 13 00	7 00 to 15 00
Cutlers.....	3 90	10 00 to 13 00	.....
Printers.....	3 90	8 00 to 18 00	12 00 to 18 00
Brass Founders.....	5 50	10 00 to 14 00	8 00 to 15 00
Laborers, Porters, &c.....	2 60	6 00 to 9 00	5 50 to 9 00

To enable you to carry the comparison still further, we submit a table showing the food-prices in Germany and in the United States:

STATEMENT SHOWING THE RETAIL PRICES OF THE NECESSARIES OF LIFE IN GERMANY AND THE PRICES OF SIMILAR ARTICLES IN NEW YORK AND CHICAGO.

ARTICLES.	Germany.	New York.	Chicago.
Bread, per pound.....	3 to 7 cents.	4 to 4½ cents.	4 to 4½ cents.
Flour, per pound.....	5½ cents.	4½ to 5 cents.	2½ to 4½ cents.
Beef—			
Roast, per pound.....	22 cents.	12 to 16 cents.	8 to 12½ cents.
Rump, per pound....	14 cents.	14 to 16 cents.	8 to 12½ cents.
Corned, per pound...	13 cents.	8 to 12 cents.	4 to 7 cents.
Veal, per pound.....	14 cents.	8 to 12 cents.	6 to 12 cents.
Mutton, per pound.....	14½ cents.	9 to 14 cents.	5 to 15 cents.
Pork—			
Salted, per pound....	17 cents.	8 to 10 cents.	6 to 12 cents.
Bacon, per pound....	20 cents.	8 to 10 cents.	7 to 12 cents.
Ham, per pound.....	20 cents.	8 to 12 cents.	7 to 15 cents.
Lard, per pound.....	21 cents.	10 to 12 cents.	6 to 10 cents.
Butter, per pound.....	22 cents.	25 to 32 cents.	16 to 40 cents.
Cheese, per pound.....	24 cents.	12 to 15 cents.	5 to 16 cents.
Rice, per pound.....	9 cents.	8 to 10 cents.	5 to 10 cents.
Beans, per quart.....	10 cents.	7 to 10 cents.	5 to 9 cents.
Milk, per quart.....	4 cents.	8 to 10 cents.	3 to 6 cents.
Tea, per pound.....	75 cents.	50 to 60 cents.	25 to 75 cents.
Coffee, per pound.....	35 cents.	20 to 30 cents.	15 to 40 cents.
Sugar, per pound.....	11 cents.	8 to 10 cents.	7 to 11 cents.
Coal, per ton.....	\$4 25	\$5 25	\$3 00 to \$6 75

The following statement is the result of an average from the reports submitted from England, as compared with those prevailing in New York and Chicago. It should be remarked that, in many cases, the English rates are more apparent than real, and that, while nominally the English workingman appears to receive a comparatively high rate of wages, he only works on half or two-thirds time, thus gratifying his desire to preserve a high rate of wages at the expense of time—a sentimental fiction which is neither profitable nor substantial :

STATEMENT SHOWING THE WEEKLY RATES OF WAGES PAID TO THE FOLLOWING TRADES IN ENGLAND, AND THE RATES PAID TO SIMILAR TRADES IN NEW YORK AND IN CHICAGO.

OCCUPATIONS.	England.	New York.	Chicago.
Building trades—			
Bricklayers .....	\$8 12	\$12 00 to \$15 00	\$6 00 to \$10 50
Masons .....	8 16	12 00 to 18 00	12 00 to 15 00
Carpenters and joiners.....	8 25	9 00 to 12 00	7 50 to 12 00
Gasfitters.....	7 25	10 00 to 14 00	10 00 to 12 00
Painters.....	7 25	10 00 to 16 00	6 00 to 12 00
Plasterers.....	8 10	10 00 to 15 00	9 00 to 15 00
Plumbers.....	7 75	12 00 to 18 00	12 00 to 21 00
Slaters.....	7 90	10 00 to 15 00	12 00 to 18 00
Blacksmiths .....	8 12	10 00 to 14 00	9 00 to 12 00
Cabinetmakers.....	7 70	9 00 to 13 00	7 00 to 15 00
Coopers.....	7 30	12 00 to 16 00	6 00 to 15 00
Cutlers.....	8 00	10 00 to 13 00	.....
Millwrights.....	7 50	10 00 to 15 00	12 00 to 21 00
Laborers, porters, &c.....	5 00	6 00 to 9 00	5 50 to 9 00

That you may be able to make fuller comparison of the relative purchasing power of the wages of the English and American workmen, we submit the following table, showing the food-prices as averaged from all the English reports, and the prices in New York and Chicago:

STATEMENT SHOWING THE RETAIL PRICES OF THE NECESSARIES OF LIFE IN ENGLAND AND IN THE UNITED STATES.

ARTICLES.	England.		New York.		Chicago.	
Bread, per lb.....	3½ to	4½ cts.	4 to	4½ cts.	4 to	4½ cts.
Flour, per lb.....	3½ to	4½ cts.	3 to	4½ cts.	2½ to	4½ cts.
Beef,						
For roasting, per lb.		22 cts.	12 to	16 cts.	8 to	12½ cts.
Corned, per lb.....		18 cts.	8 to	12 cts.	4 to	7 cts.
Veal,						
Fore quarters, per lb		18 cts.	9 to	10 cts.	6 to	10 cts.
Hind quarters, per lb		22½ cts.	12 to	14 cts.	10 to	12 cts.
Mutton,						
Fore quarters, per lb		17 cts.	9 to	10 cts.	5 to	12½ cts.
Hind quarters, per lb		22 cts.	12 to	14 cts.	5 to	15 cts.
Pork,						
Salted, per lb.....		15 cts.	8 to	10 cts.	6 to	12 cts.
Bacon, per lb.....	12 to	16 cts.	8 to	10 cts.	7 to	12 cts.
Ham, per lb.....	13½ to	23 cts.	8 to	12 cts.	7 to	15 cts.
Lard, per lb.....	15 to	18 cts.	10 to	12 cts.	6 to	10 cts.
Butter, per lb.....	29 to	38 cts.	25 to	32 cts.	16 to	40 cts.
Cheese, per lb.....	15 to	21 cts.	12 to	15 cts.	5 to	16 cts.
Potatoes, per bush... ..	\$1 12 to \$2 00		\$1 12 to \$1 60		60 to	80 cts.
Rice, per lb.....	3½ to	8 cts.	8 to	10 cts.	5 to	10 cts.
Beans, per qt.....		9 cts.	7 to	10 cts.	5 to	9 cts.
Milk, per qt.....	6 to	9 cts.	8 to	10 cts.	3 to	6 cts.
Eggs, per doz.....	19 to	30 cts.	25 to	30 cts.	10 to	24 cts.
Tea, per lb.....	43 to	88 cts.	50 to	60 cts.	25 to	\$1 00
Coffee, per lb.....	28 to	42 cts.	20 to	30 cts.	15 to	40 cts.
Sugar, per lb.....	5½ to	9 cts.	8 to	10 cts.	7 to	11 cts.
Coal, per ton.....	\$3 20 to \$4 10		\$5 25		\$3 00 to \$6 75	

We furnish below the comparative rates of wages paid to the trades in Ireland, with the rates paid to similar trades in New York and Chicago :

STATEMENT SHOWING THE WEEKLY WAGES PAID BY THE BOARD OF PUBLIC WORKS THROUGHOUT IRELAND TO THE BUILDING TRADES, AND THE GENERAL RATES PAID SIMILAR TRADES IN NEW YORK AND CHICAGO.

BUILDING TRADES.	Ireland.	New York.	Chicago.
Bricklayers.....	\$7 58	\$12 00 to \$15 00	\$6 00 to \$10 50
Masons.....	7 58	12 00 to 18 00	12 00 to 15 00
Carpenters and Joiners.....	7 33	9 00 to 12 00	7 50 to 12 00
Gasfitters.....	7 95	10 00 to 14 00	10 00 to 12 00
Painters.....	7 54	10 00 to 16 00	6 00 to 12 00
Plasterers.....	7 68	10 00 to 15 00	9 00 to 15 00
Plumbers.....	8 46	12 00 to 18 00	12 00 to 21 00

The various reports from Scotland possess more than ordinary interest, but we will reserve for later presentation all the tables except the following, which embraces other than agricultural wages, with the New York and Chicago rates appended :

STATEMENT SHOWING THE WEEKLY WAGES PAID THE FOLLOWING TRADES IN SCOTLAND, AND THE RATES PAID TO SIMILAR TRADES IN NEW YORK AND CHICAGO.

OCCUPATIONS.	Scotland.	New York.	Chicago.
Building Trades—			
Bricklayers.....	\$9 63	\$12 00 to \$15 00	\$6 00 to \$10 50
Masons.....	8 28	12 00 to 18 00	12 00 to 15 00
Carpenters and Joiners.....	8 12	9 00 to 12 00	7 50 to 12 00
Painters.....	8 16	10 00 to 16 00	6 00 to 12 00
Plasterers.....	10 13	10 00 to 15 00	9 00 to 15 00
Cabinetmakers.....	8 48	12 00 to 16 00	7 00 to 15 00
Cutlers.....	6 25	15 00 to 25 00	.....
Printers.....	7 52	8 00 to 18 00	12 00 to 18 00
Laborers, Porters, &c.....	4 50	6 00 to 9 00	5 50 to 9 00

The rates of wages paid to the trades in Italy, as compared with the rates paid to similar trades in the United States, are as follows :

## WEEKLY WAGES IN ITALY, NEW YORK AND CHICAGO.

OCCUPATIONS.	Italy.	New York.	Chicago.
Building Trades—			
Bricklayers .....	\$3 45	\$12 00 to \$15 00	\$6 00 to \$10 50
Masons.....	4 00	12 00 to 18 00	12 00 to 15 00
Carpenters.....	4 18	9 00 to 12 00	7 50 to 12 00
Painters .....	4 60	10 00 to 16 00	6 00 to 12 00
Plasterers.....	4 35	10 00 to 15 00	9 00 to 15 00
Slaters.....	3 90	10 00 to 15 00	12 00 to 18 00
Cabinetmakers. ....	4 95	12 00 to 16 00	7 00 to 15 00
Laborers, Porters, &c.....	2 60	6 00 to 9 00	5 50 to 9 00

## FOOD PRICES IN GENOA, NEW YORK AND CHICAGO.

ARTICLES.	Genoa.	New York.	Chicago.
Flour, per ponnd.....	7 cents.	3 to 4 cents.	2½ to 4½ cents.
Beef, per pound.....	18 cents.	8 to 16 cents.	4 to 12½ cents.
Pork, per pound.....	20 cents.	8 to 12 cents.	4 to 12 cents.
Lard, per pound.....	28 cents.	10 to 12 cents.	6 to 10 cents.
Codfish, per pound.....	10 cents.	6 to 7 cents.	5 to 9 cents.
Butter, per pound.....	30 cents.	25 to 32 cents.	16 to 40 cents.
Cheese, per pound.....	28 cents.	12 to 15 cents.	5 to 16 cents.
Rice, per pound.....	7 cents.	8 to 10 cents.	5 to 10 cents.
Beans, per quart.....	8½ cents.	7 to 10 cents.	5 to 9 cents.
Milk, per quart.....	6 cents.	8 to 10 cents.	3 to 6 cents.
Coal, per ton.....	\$11 00	\$5 25	\$3 00 to \$6 75

In furtherance of the purpose which dictated this presentation, we will now proceed with condensed abstracts of these consular reports in the order of mention, noting salient points which have a direct bearing upon the potential question of future manufacturing ascendancy. Whoever thinks this question is to be irrefutably determined solely by predominating low prices of manual labor will fail in solving the problem. If there was no occasion to extend the inquiry

beyond this ignoble principle the tables already spread before the reader would obviously exclude the United States from utter hopefulness in respect to all future world-wide industrial conflicts. Those who maintain that the highest civilization and pervading prosperity among the masses is attainable where there exists the fewest impediments to the possession of wealth, education and social elevation can, with the utmost clearness, demonstrate and enforce their beneficent theory, by the conspicuous contrasts that are observable throughout the respective industrial classes of the United States and Continental Europe.

*Belgium* presents an interesting field for deductions upon other subjects than those pertaining to the working classes. It is a compact, methodical, and, for the most part, prosperous little industrial community, and in some of its aspects, so exceptional as to have no existing counterpart. It is not claimed that its working people are exempt from hardships resulting from meagre subsistence and other adverse circumstances, but they have the peculiar faculty of obviating conflicts with employers. Nothing but a reciprocal pre-disposition to abstain from extreme injustice on the part of employers and employees will account for this unvarying unity of interest. Had it been otherwise, Belgium would have been so low in the scale of commerce and the industrial arts as to have escaped recognition.

The Belgian consul states that while the unusual stagnation in business has thrown multitudes out of work, daily earnings are not so sensibly reduced as would be the case under similar circumstances in almost any other country, and this he ascribes to a better organization of labor. Many of the public enterprises in Belgium are supervised and controlled by the government, the consequence of which is that wages are not subject to as frequent fluctuations as they are under other circumstances. The just principle of long service and intrinsic merit visibly operates in behalf of laborers in leading industries, such as glass, iron, coal, etc., in Belgium. Skill and fidelity to employers will always secure permanency and uniformity of employed labor, and reasonable concessions in times of distress will be unfailing accompaniments.

On pages 247-8 will be found limited tables of rates of wages and prices of leading articles of family consumption in Belgium. We will only quote two more of the remaining Belgium tables:

WAGES PAID WORKMEN EMPLOYED BY THE HOUR IN THE LARGE CITIES AND TOWNS  
OF BELGIUM.

OCCUPATION.	Average Wages paid per Hour.	OCCUPATION.	Average Wages paid per Hour.
Carpenters.....	9 cents.	Stone Cutters.....	8 cents.
Bricklayers.....	10 cents.	Tinmiths .....	8 cents.
Stone Masons.....	10 cents.	Cabinetmakers.....	8 cents.
Plasterers.....	9 cents.	Upholsterers .....	9 cents.
House Painters.....	7 cents.	Locksmiths .....	10 cents.
Paper Hangers.....	8 cents.	Plumbers .....	10 cents.
Decorators.....	15 cents.	Carriagemakers .....	9 cents.
Machinists.....	10 cents.	Harnessmakers .....	8 cents.
Marble Workers.....	10 cents.	Gasfitters .....	9 cents.

MONTHLY WAGES PAID WORKMEN IN GLASS FACTORIES IN 1878, COMPARED WITH  
1872, '73, '74.

OCCUPATION.	Monthly Wages, 1872, '73, '74.	Monthly Wages. 1878.
Blowers.....	\$100 to \$160	\$56 to \$65
Assistants .....	24 to 30	26 to 45
Stokers .....	40 to 50	20 to 24
Flatteners .....	36 to 40	24 to 26
Cutters .....	24 to 30	20 to 24
Packers.....	26 to 30	15 to 24
Ordinary Workmen.....	16 to 20	12 to 16

The consul of *Ghent* reports agricultural laborers: Male, 17 to 20 cents per day; females, 15 to 17 cents per day, besides their eating, which is supplied. When hired as servants, with board, they are paid \$1.75 to \$2 per month.

Mechanical laborers, and those employed upon public works, earn from 60 cents to \$1 per day.

The cost of living to the laboring classes varies according to the locations they inhabit. For example, those inhabiting cities, towns, and villages, average, with rent included, 20 to 25 cents per day per person, and in the country, from 15 to 20 cents per day.

The prices of the necessaries of life are as follows, per pound: White bread, five cents; rye bread, four cents; beef, veal and pork, 16 to 20 cents; lard, 20 cents; potatoes, one cent; butter, best, 30 to 50 cents; butter, common, 20 to 22 cents; cheese, 20 to 25 cents; coffee, 30 to 40 cents; sugar, 15 to 20 cents; chickens, 50 cents to \$1 each; eggs, per 13, from 20 to 25 cents.

In regard to the habits and systems of the workmen in the Ghent district, he says: "About 80,000 of the population are work people employed in the various manufactories situated here. The habits and customs of this large number of work people are particularly noticeable for frugality, exemplary behavior towards their employers and towards each other, and their strict attention to business. Drunkenness is almost entirely unknown among them, and, according to the police reports, charges against them for crimes are very rare."

We pass *Canada* without quoting any tables, but take a few figures from the consul's report respecting prices of labor, cost of living, etc. It is affirmed that throughout the consular district of Montreal, farm labor is now (18 months ago) about 25 per cent. lower than it was five years ago, the wages usually paid being at the rate of from \$10 to \$14 per month for the summer months, and from \$100 to \$120 per year, with board. Day laborers employed by the city receive from 90 cents to \$1 per day. In the country districts mechanics, carpenters, blacksmiths, &c., receive from 80 cents to \$1.50 per day, or about 50 per cent. less than four years ago.

The cost of living in Canada was about 25 to 30 per cent. less, including house rent, food, fuel and clothing, than it was five years since. The general result seems to be that the wages paid would procure about the same quantity of the necessaries of life as the wages paid four or five years ago would have procured.

In *Ontario* workingmen live cheaply and comfortably. Neat farm houses, having from four to seven rooms, with an eighth or quarter of an acre of ground attached, rent for from \$4 to \$7 a month. The prices of food are very low, roasting pieces of beef and mutton, seven cents a pound; chickens, 36 cents per pair; white fish and trout, five cents a pound. Handsome two story houses, with stables, can be had for from \$100 to \$200 per annum, board at best hotels in Goderick from \$8 to \$12 per week, and less for permanent board.

We will take no notes from the Denmark report, and pass on to those of France, in which we will find more that is worthy of attention than time and space will justify us in bestowing upon them.

On pages 249-50 the reader will find one table of weekly wages paid in France and in the United States, and another showing the retail prices of food in the cities of Bordeaux and La Rochelle, and also in the cities of New York and Chicago.

We find in the volume seven distinct reports from as many French departments, occupying thirty-four pages. As a matter of course, each consul presents a class of facts and tabulations which local conditions and industries render necessary, thus forming a group of reports from a single notice of such unusual diversity and relative bearings upon other countries and kindred interests, their value under other circumstances, would justify a much more extended *resume* than the present occasion offered.

The greatest single industry in France is that of agriculture. In 1872, it is stated, there were 18,513,325 individuals living upon this industry in France, divided as follows:

1. Proprietors cultivating or living upon their own lands .....	9,097,758
2. Planters or share farmers.....	1,428,881
3. Farmers, small owners.....	3,141,187
4. Hands permanently hired per annum.....	940,311
5. Temporary day-laborers.....	3,255,618
6. Colliers and woodcutters.....	270,743
7. House-gardeners, market-gardeners, nurserymen.....	378,827
Total.....	18,513,325

The average highest rate of wages paid to agricultural laborers computed from five reports, is \$3.00 per week for men, without board or lodging; and the lowest \$1.75 per week, without board or lodging.

The department of the Seine, which includes Paris, is not regarded as an agricultural district, and therefore it is excluded from the following estimated average of weekly wages paid to agricultural laborers throughout France:

Men, without board or lodging.....	\$3 15
Men, with board and lodging.....	1 36
Women, without board or lodging.....	1 10

From the district of Gironde we learn that farm laborers are frequently economical to the extreme of avariciousness, and many

of them, in the course of time, become quite wealthy proprietors. They are hired either by the year, the month or day. Those hired by the year are paid from \$75 to \$85 per year, lodged and boarded by the proprietor; when hired for a more limited period, they are paid according to the season of the year and the length of time engaged, but on an average, if lodged and not boarded, at the rate of from \$100 to \$170 per year; if engaged by the day, 30 cents per day from the month of November to March, and 45 cents from March to November, with board; without board, 45 cents to 60 cents per day and one bottle of wine; clothing is very cheap, made of cotton ordinarily, at a cost for suits from \$3.00 to \$4.00.

In the district of the *Rhone*, agricultural laborers are divided into two classes, those who are engaged by the year and live on the farms, and those who work by the day.

Those who live in the farm buildings receive, in addition to food and lodging, wages, partly paid in money and partly in kind, amounting to about \$30 a year.

Those who work by the day of fifteen hours (boarding and lodging themselves) receive: men, \$30 to \$100 per annum; women, \$55 to \$65 per annum.

It is estimated that the cost to the employer in supplying food and lodging is about \$35 per capita per year.

The number of working days is as follows: Men, 200; women, 120; children, 80; working hours, 13 to 15.

It is quite customary for ordinary laborers to supplement their revenues by prosecuting secondary industries, such as weaving, wood cutting, sawing, wooden shoe making, cask making and building, by which means they add about \$40 to their earnings per annum. It is estimated that eight or ten per cent. of the agricultural laborers are thus employed.

The married farm laborer, who finds himself, may earn \$150 per annum, divided thus: husband's wages, \$80; wife's wages, \$30; three children's wages, \$40; total, \$150.

The cost of living to such a family is calculated as follows:

Lodging.....	\$10 50
Bread.....	55 00
Meat.....	10 00
Vegetables.....	8 25

Wine, beer and cider.....	\$7 00
Milk .....	5 25
Clothing .....	25 00
Groceries .....	10 00
Fuel.....	8 00
Taxes .....	2 00
Total.....	<u>\$141 00</u>

It will surprise our readers to see how little difference there is in France between the rate of wages of the ordinary laborer and the better or skilled class.

The following list, taken from various classes of employment in the district of *La Rochelle*, affords a fair idea of the prices received for a day's work of ten hours :

Draymen .....	60 cents per day.
Masons .....	80 cents per day.
Carpenters .....	80 cents per day.
Joiners .....	80 cents per day.
Cabinetmakers .....	\$1 per day.
Seamstresses.....	30 to 35 cents per day.
House servants.....	20 cents per day.
Printers .....	\$16 and \$18 per month.
Chief of Police.....	\$720 per annum.
Policemen .....	\$200 per annum.
Principal public schools.....	\$600 per annum.
Male teachers of public schools.....	\$200 per annum,

WAGES PAID TO RAILWAY EMPLOYEES.

Trackmen .....	40 cents per diem.
Brakemen .....	50 to 60 cents per diem.
Switchmen .....	\$20 per month.
Firemen .....	\$20 to \$25 per month.
Baggage masters.....	\$20 to \$25 per month.
Foremen .....	\$25 to \$30 per month.
Conductors.....	\$25 to \$30 per month.
Engineers .....	\$35 to \$66 per month.

Brakemen and trackmen, it will be observed, are employed by the day, all others by the year, though they are here stated by the month. A system of bounties is offered by the companies for certain number of years of service, and during the sickness the wages of the employee continue, and medical treatment and medicines are furnished him at the company's expense. "Brotherhoods," or such other organizations, are unknown. No strikes occur, and the

relations between the companies and their employees are entirely harmonious.

Prices paid for family supplies in this district are as follows :

Bread, first quality.....	4 cents per pound.
second quality.....	3 cents per pound.
third quality.....	2½ cents per pound.
Flour.....	\$9 to \$10 per barrel.
Potatoes.....	35 cents per bushel.
Eggs.....	16 cents per dozen.
Coffee.....	30 cents per pound.
Butter.....	30 cents per pound.
Beef and veal.....	15 to 24 cents per pound.
Mutton.....	16 to 23 cents per pound.
Pork.....	16 cents per pound.

The consul at Lyons observes that the rate of wages for working classes has increased in France since the Franco-German war 20 to 25 per cent., and that there has been little or no diminution during the last five years. The cost of living has increased in about the same proportion. He furnishes the following tables, showing the daily wages of the principal working classes in the department of the Rhone :

WAGES PER DIEM OF WORKING CLASSES AT LYONS, MAY, 1878.

[Average working time, 10 hours.]

CLASSIFICATION.	MEN.		WOMEN.		CHILDREN.
	Range.	Average.	Range.	Average.	Average.
Masons.....	\$0 60 to \$1 60	\$0 75	.....	.....	\$0 30
Carpenters.....	1 00 to 1 80	1 00	.....	.....	20
House Painters.....	80 to 2 40	95	.....	.....	25
Silkworkers.....	50 to 2 40	90	\$0 25 to \$0 80	\$0 50	12
Cottonworkers.....	50 to 1 20	65	25 to 60	35	15
Glovemakers.....	50 to 2 00	90	20 to 75	55	15
Dyers.....	60 to 1 80	90	.....	.....	12
Fine Jewelers.....	80 to 2 50	1 00	20 to 1 00	60	15
Cheap Jewelers.....	25 to 1 00	60	15 to 60	45	12
Shoemakers.....	50 to 1 60	1 00	40 to 1 00	55	18
Leatherdressers.....	60 to 1 00	80	.....	.....	35
Printing—Wool, } Cotton and Silk. }	50 to 2 00	90	50 to 60	50	30
Shuttle-makers.....	1 00 to 1 60	1 00	.....	.....	15
Pianomakers.....	60 to 2 00	90	.....	.....	15

RATES OF WAGES OF EMPLOYEES OF THE PRINCIPAL RAILWAY COMPANIES IN FRANCE,  
JUNE, 1878.

EMPLOYEES.	Wages Per Year.
Engine-drivers, four classes.....	\$405 40 to \$579 15
Stokers (firemen), three classes.....	289 58 to 347 49
Conductors, three classes.....	308 88 to 347 49
Chiefs of Stations.....	350 97 to 1351 35
Deputy Chiefs.....	289 58 to 694 98
Watchmen.....	231 66 to 318 53
Chiefs of Baggage.....	289 58 to 463 32
Baggagemen.....	231 66 to 308 88
Chiefs of the gangs (workmen).....	231 66 to 463 32
Overseers of workmen.....	250 97 to 289 58
Chiefs of Freight and Engine Depots, four classes.....	888 03 to 1158 30
Chiefs of Bureaus and Chief Clerks.....	386 10 to 772 20
Clerks.....	231 66 to 347 49
Switchmen.....	231 66 to 308 88
Ticket Agents (men and women).....	260 62 to 637 06

It should be remarked in reference to the tables we present from the Consul General of Paris, that they embrace not only the city of Paris, but the whole Department of the Seine, which contains 1836 square miles, 132 of which is occupied by the city of Paris. The remaining 1704 square miles contain over 400,000 population, but the products of its unimproved fields and market-gardens, while they come under the head of agricultural products, a higher grade of rural labor was employed in their cultivation, which explains the difference of rates of farm hands in the following and preceding tables :

THE AVERAGE DAILY WAGES, WITHOUT BOARD, ARE AS FOLLOWS :

	Ordinary.	Maximum.	Minimum.
Men.....	\$0 70	\$1 00	\$0 60
Women.....	50	60	25
Children, 12 to 16 years of age.....	30	45	20

## WAGES PER MONTH, WITH BOARD.

	Ordinary.	Maximum.	Minimum.
Men.....	\$8 00	\$10 00	\$7 00
Women.....	6 00	7 00	5 00
Children, 12 to 16 years of age.....	4 00	5 00	4 00

For the necessaries of life the workingmen calculate as follows :

Bread, per pound.....	3 cents.
Wine, per quart.....	16 cents.
Beef, per pound.....	12 cents.
Mutton, per pound.....	12 cents.
Potatoes, per pound.....	1½ cents.
Dried Beans, per quart.....	8 cents.
Cabbage, per piece.....	2 to 3 cents.

His bill of fare per day :

## FIRST BREAKFAST.

Wine.....	3 cents.
Bread.....	2 cents.
Total.....	5 cents.

## SECOND BREAKFAST.

Beef boiled in soup.....	8 cents.
One pint of wine.....	8 cents.
Bread.....	2 cents.
Cheese.....	2 cents.
Total.....	20 cents.

## DINNER.

Ragout.....	8 cents.
One pint of wine.....	8 cents.
Bread.....	2 cents.
Cheese.....	2 cents.
Total.....	20 cents.
Total per day.....	45 cents.

Laborers in the vicinity of Paris and other large cities, naturally fall into more expensive habits of living than prevail in the rural districts. They are often beguiled to supplement their frugal meals with tobacco, coffee and other palate luxuries. A typical French

family is composed of father, mother and five children, one of which is supposed to be old enough to work. The total annual earnings of such a family are estimated by the consul general of Paris at \$180, and their average annual expenses as follows :

Bread.....	\$60 40
Meat.....	17 60
Vegetables and Fruit.....	11 00
Wine and Beer.....	20 60
Milk and Eggs.....	5 40
Salt and Sugar.....	4 40
Rent and Taxes.....	13 20
Fire and Light.....	7 00
Clothing.....	18 00
Sundries.....	10 00
<b>Total.....</b>	<b>\$167 60</b>

STATEMENT SHOWING THE RATES OF WAGES OF THE SEVERAL TRADES IN PARIS, (1875).

DIFFERENT INDUSTRIES.	WORKMEN'S DAILY WAGES—						Length of time of apprenticeship.
	WITH BOARD.			WITHOUT BOARD.			
	Ordinary.	Maximum.	Minimum.	Ordinary.	Maximum.	Minimum.	
Jewelers and goldsmiths.....				\$1 30	\$2 20	\$1 10	60 months.
Washing-women.....	†\$0 80	†\$1 40	†\$0 40	60	70	50	30 months.
Butchers.....	†7 00	†8 00	†3 00	1 20	1 40	1 00	24 months.
Bakers.....				1 33	2 00	68	
Brewers.....				85	1 00	70	
Bricklayers and tilemakers.....				66	99	55	
Carpenters.....				1 20	1 30	1 10	
Wheelwrights.....	50	54	40	1 00	1 10	80	36 months.
Ropemakers.....				80	1 00	60	
Shoemakers.....				70	1 20	50	36 months.
Corset-makers.....				40	70	30	24 months.
Cutlers.....				1 10	1 50	90	36 months.
Dressmakers.....				40	80	30	36 months.
Slaters, tilers (roofmen).....				1 20	1 25	1 10	36 months.
Cabinet-makers.....				1 00	1 10	90	48 months.
Blacksmiths.....				1 30	1 80	60	
Printers.....				1 20	1 30	1 10	36 months.
Masons.....				1 00	1 10	85	24 months.
Joiners.....				1 00	1 10	90	42 months.
Plumbers.....				1 20	1 30	1 10	
Potters.....				77	1 10	55	
Stonecutters.....				1 20	1 40	1 00	

† Per week. ‡ Per month.

## COMMERCIAL AND DOMESTIC ANNUAL SALARIES, 1875.

DESCRIPTION.	PARIS.			OTHER CITIES IN FRANCE.		
	Ordinary.	Maximum.	Minimum.	Ordinary.	Maximum.	Minimum.
<i>Commercial.</i>						
Clerks in shops and stores, males...	\$240 00	\$360 00	\$200 00	\$158 20	\$255 60	\$101 00
Cashiers in shops and stores, females	160 00	300 00	120 00	105 00	156 40	74 40
Clerks in shops and stores, females	80 00	120 00	40 00	81 40	118 60	55 60
<i>Domestic.</i>						
Men,						
Valets .....	120 00	200 00	80 00	73 80	101 80	57 10
House servants.....	120 00	200 00	80 00	73 80	101 80	57 10
Coachmen .....	120 00	200 00	80 00	80 20	110 40	63 00
Women,						
Femmes de chambre .....	100 00	120 00	60 00	52 80	71 60	39 80
Maids, housemaids.....	100 00	120 00	60 00	52 70	71 60	39 80
Cooks.....	100 00	120 00	60 00	59 00	80 40	45 80
Maids of all work.....	100 00	120 00	60 00	60 00	77 80	46 20

## WAGES PAID TO THOSE EMPLOYED BY THE COMPAGNIE DES CHEMINS DE FER DE PARIS ET LYONS ET A LA MEDITERRANEE.

EMPLOYEES.	Annual Wages.	EMPLOYEES.	Annual Wages
Engine Drivers.....	\$420 to \$600	Heads of Bureaus and Chief Clerks.....	\$400 to \$300
Firemen .....	300 to 360	Clerks .....	240 to 360
Conductors.....	320 to 360	Assistant Clerks.....	180 to 240
Station Masters.....	260 to 1,400	Telegraph Clerks.....	240 to 330
Substation Masters.....	300 to 720	Telegraph Station Tenders.....	220 to 260
Watchmen .....	240 to 330	Lamp Lighters and care of Lamps.....	240 to 400
Baggage Master.....	300 to 480	Switchmen .....	240 to 320
Man employed in the Baggage Department..	240 to 320	Controllers .....	300 to 600
Foremen over Workmen..	240 to 480	Ticket Agents, Men and Women .....	270 to 660
Chief Porters.....	270 to 480	Greasers .....	200 to 260
Porters and Servants.....	200 to 320	Ordinary Workmen.....	180 to 252
Overseers over Foremen of Workmen.....	260 to 300		
Freight and Engine Depot Masters.....	920 to 1,200		

Cotton manufactures have become so much of a specialty in the city of Rouen, that it is called the Manchester of France.

The commercial agent of that city furnishes the following table of daily wages paid in the manufactories of Rouen and vicinity :

WORKMEN.	Ordinary.	Maximum.	Minimum.
Cotton Spinners—			
Men.....	\$0 75	\$1 04	\$0 60
Women.....	40	60	35
Children under 15.....	25	35	20
Cotton Weavers—			
Men.....	65	80	45
Women.....	47	64	40
Children under 15.....	25	30	20
Wool Spinners—			
Men.....	80	1 00	60
Women.....	40	50	30
Children under 15.....	19	25	14
Shawl Weavers—			
Men.....	1 00	1 30	80
Oil Cloth—			
Men.....	55	60	40
Women.....	30	40	25
Children under 15.....	20	25	15
Linen and Hemp Spinners—			
Men.....	60	75	50
Women.....	40	50	30
Children under 15.....	12	25	10
Linen and Hemp Weavers—			
Men.....	46	60	35
Women.....	40	57	31
Children under 15.....	20	25	16

The salary of a day laborer is, when fed and lodged, ordinarily, 29 cents; maximum 33 cents; minimum 22 cents. When not fed nor lodged, ordinarily, 55 cents; maximum 70 cents; minimum 45 cents. The labor is generally done by those who provide their own board and lodging.

*Workwomen* receive as follows, per diem : Washwomen, 32 cents; seamstresses, 30 cents; corset makers, 30 cents; tailoresses, 31 cents; laceworkers, 34 cents; artificial florists, 35 cents. In consequence of these very inadequate wages, these women are poorly fed and housed.

*Shoptenders.*—The wages in the retail shops of Rouen, per annum, are as follows, ordinary, maximum, and minimum : Men, \$110, \$160,

and \$60; women accountants, \$80, \$130, and \$50; saleswomen, \$70, \$110, and \$50.

*Domestics.*—The annual wages of domestics, lodged and fed, are as follows, ordinary, maximum, and minimum: Valets and footmen, \$100, \$150, and \$60; coachmen and grooms, \$120, \$160, and \$70; chambermaids, \$70, \$92, and \$40; women cooks, \$80, \$85, and \$50; general house-women, \$80, \$90, and \$50.

On pages 250–51 will be found two tables from Germany, one comparing prices of wages, and the other comparing prices of the necessaries of life in that country, with those in New York and Chicago.

We find nearly 100 pages of material collected by twelve American consuls in Germany, from which to prepare a synopsis bearing upon the condition of the laboring classes, rate of wages, cost of living, etc. Our presentation will necessarily be a very meagre one, and without much sectional classification.

We give first attention to the district of Barmen, which embraces Westphalia and a portion of the Rhine provinces.

The condition of the laboring classes in the mining districts is represented as being very distressing, chiefly in consequence of the low prices of iron manufactures, and the cost of coal is more than 40 per cent. below the average of the last twenty-five years.

“Miners in an eight-hour shift were unable to earn enough to procure the necessaries of life. Many struggle daily with bitter want. A fruitful cause of want and ruin among the laboring classes is the enormous increase of the drinking saloons and dancing halls, and the complaints are universal as to the disposition of the laborers to indulge in excessive drink.”

For agricultural laborers the rate of wages varies greatly throughout the German empire, rising or falling according as the locality is near to or remote from manufacturing centres. In exemplification of this we give below the rates of wages in 1878 for various parts of Germany:

Bremen and vicinity.....	56 cents per day.
Bavarian Highlands.....	53 cents per day.
Upper Rhine Valley.....	41 cents per day.
Lower Rhine Valley.....	31 cents per day.
Lake Constance and environs.....	40 cents per day.
Lower Highlands.....	33 cents per day.
Upper Alsace.....	45 cents per day.
Oppeln, Silesia.....	18 cents per day.

The wages paid in the Barmen district, embracing Westphalia and a portion of the Rhine provinces, were as follows :

Machinists, lock, wagonsmiths.....	51 to 71 cents per day.
Navvies and day-laborers.....	47 cents per day.
Saddlers and shoemakers.....	47 cents per day.
Coppersmiths, plumbers and plasterers.....	59 to 71 cents per day.
Carpenters, joiners and masons.....	59 to 71 cents per day.
Brewers, with board and lodging.....	\$2.14 per week.
Brewers, without board and lodging.....	\$4.28 per week.
Farm hands, with board and lodging (males)....	\$107 to \$215 per year.
Farm hands, with board and lodging (female)....	\$28 to \$36 per year.
Cooks, with board and lodging (female).....	\$36 to \$43 per year.
Housemaids, with board and lodging.....	\$28 to \$35 per year.
Painters and glaziers.....	59 cents per day.
Weavers and factory hands.....	\$2.50 to \$3.57 per week.

The Rhenish Railway pay the following wages for work now (1878) in course of construction :

Common laborer on day work.....	56 to 64 cents per day.
Common laborer on piece work.....	71 to 83 cents per day.
Masons and miners on tunnel work.....	71 to 83 cents per day.
Masons and miners on tunnel work, piece work..	95 cents per day.

CREFELD-DUSSELDORF.

Mechanics, blacksmiths and miners.....	65 cents per day.
Carpenters, bricklayers and plasterers.....	70 to 85 cents per day.
(Wages are about 24 per cent. less than formerly; working time from ten to twelve hours daily.)	
Painters.....	5 cents per hour.]
Shoemakers are paid by the piece, and can earn with twelve hours daily work.....	\$3.60 per week.
Agricultural laborers get—	
Male servants, with board and lodging.....	\$63 to \$70 per year.
Female servants, with board and lodging.....	\$43 to \$50 per year.
Day hands, with meals.....	28 to 38 cents per day.
Day hands, without meals.....	48 to 60 cents per day.
(The present rates are about 20 per cent. under those of former years.)	

## AVERAGE FOOD PRICES IN BARMEN-ELBERFELD DURING THE YEARS 1865-1871.

ARTICLE.	1865.	1866.	1867.	1868.	1869.	1870.	1871.
Wheat, per cwt.....	\$2 15	\$2 60	\$3 39	\$3 14	\$2 49	\$2 73	\$3 11
Rye, per cwt.....	1 61	1 90	2 52	2 47	2 09	2 16	2 41
Barley, per cwt.....	1 56	1 98	2 29	2 20	2 00	2 07	2 42
Oats, per cwt.....	1 59	1 94	2 04	2 22	2 07	2 01	2 15
Pease, per cwt.....	1 95	2 02	2 53	2 64	2 64	2 69	2 93
Beans, per cwt.....				3 02	2 85	3 01	3 21
Lentils, per cwt.....				2 97	2 98	3 27	.....
Potatoes, per cwt.....	64	71	96	88	73	91	1 00
Straw, per cwt.....	62	67	56	73	81	74	96
Hay, per cwt.....	1 03	83	71	91	1 05	1 23	1 12
Beef, rump cuts, per pound.....	12 $\frac{3}{4}$	12 $\frac{3}{4}$	13 $\frac{3}{4}$	13 $\frac{1}{4}$	12 $\frac{3}{4}$	13	14
Beef, belly cuts, per pound.....							
Pork, per pound.....	13	14 $\frac{3}{4}$	16 $\frac{3}{4}$	17	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$
Mutton, per pound.....	10	10 $\frac{1}{2}$	11	9 $\frac{1}{2}$	12	12	12
Veal, per pound.....	10 $\frac{1}{2}$	10	10 $\frac{1}{2}$	9 $\frac{3}{4}$	9 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{3}{4}$
Bacon, per pound.....							
Butter, per pound.....	24	23	22 $\frac{3}{4}$	25	27	25	28
Hog's lard, per pound.....							
Eggs, per 25.....	24	27	28	31	32	33	37
Wheat Flour, prime, per pound.....							
Rye Flour, prime, per pound.....							
Scotch Barley, per pound.....				4	3 $\frac{1}{2}$	3 $\frac{1}{2}$	.....
Pearl Barley, per pound.....							
Buckwheat Groats, per pound.....							
Millet, per pound.....							
Rice, Java, per pound.....				5	4 $\frac{3}{4}$	4 $\frac{1}{2}$	
Coffee, Medium Java, per pound.....				31	33	31	304
Cooking Salt, per pound.....							
Oaten Groats, per pound.....							
White Bread, per pound.....							

AVERAGE FOOD PRICES IN BARMEN-ELBERFELD DURING THE YEARS 1872-1877.

ARTICLE.	1872.	1873.	1874.	1875.	1876.	1877.
Wheat, per cwt.....	\$2 97	\$3 32	\$3 17	\$2 48	\$3 45	\$3 45
Rye, per cwt.....	2 16	2 40	2 50	2 14	2 02	1 95
Barley, per cwt.....	2 02	2 38	2 61	2 30	2 38	2 38
Oats, per cwt.....	1 66	2 13	2 38	2 20	1 90	2 38
Pease, per cwt.....	2 63	2 73	3 40	3 50	3 14	3 14
Beans, per cwt.....	2 90	2 97	3 57	3 57	3 14	3 14
Lentils, per cwt.....	3 33	3 21	4 76	5 35	3 57	3 69
Potatoes, per cwt.....	90	95	95	95	77	83
Straw, per cwt.....	71	83	95	83	83	95
Hay, per cwt.....	83	83	95	1 19	70	1 31
Beef, rump cuts, per pound.....	16½	19	19	17¾	17¾	18
Beef, belly cuts, per pound.....	15¼	15½	16	16	17	17
Pork, per pound.....	16½	17½	19	19	19	19
Mutton, per pound.....	13	14½	15¼	14½	15	16¾
Veal, per pound.....	12	14	13	12	{ 12 to 16	{ 12 to 17
Bacon, per pound.....	19	20	19	19	20	20
Butter, per pound.....	28	33	33	32	35	35
Hog's lard, per pound.....	19	20	20	20	20	21
Eggs, per 25.....	39	40	40	28	{ 35 to 45	{ 35 to 45
Wheat Flour, prime, per pound.....	4½	5	4¾	4	4	4
Rye Flour, prime, per pound.....	3¾	4	3¾	3½	3	3
Scotch Barley, per pound.....	4¾	5	5¼	5¾	5¾	5¾
Pearl Barley, per pound.....	4¾	5	4¾	5	4¾	5
Buckwheat Groats, per pound.....	4	3¾	4	4	.....	.....
Millet, per pound.....	5	5	5	5	.....	.....
Rice, Java, per pound.....	6	6	6	5	{ 5 to 9	{ 5 to 9
Coffee, Medium Java, per pound.....	28	32	33	32	32	32
Cooking Salt, per pound.....	2	2	2	2	2	2
Oaten Groats, per pound.....	4¾	4¾	5¾	5¾	5¾	5¾
White Bread, per pound.....	3¾	4	4	3	5	5

RECAPITULATION OF EIGHTEEN CLASSIFICATIONS EMBRACING A TOTAL OF 8,709 WORKMEN EMPLOYED ON THE BERGISH-MARKISCHEN RAILWAY, AND THEIR WAGES ON THE 1ST OF JANUARY, 1878, AS COMPARED WITH THOSE OF OCTOBER 1ST, 1877.

LABORERS.	OCTOBER 1st, 1877.			JANUARY 1st, 1878.		
	Number.	DAILY WAGES.		Number.	DAILY WAGES.	
		Total.	Average.		Total.	Average.
I. a. Car Recorders.....	76	\$32 02	\$0 42	77	\$32 15	\$0 41
b. Managers of Car-Recording Office.....	11	7 02	64	11	7 02	64
c. Assistant Telegraphist & Assistants.....	68	34 97	51	66	34 24	51
II. a. Night Watchmen.....	79	28 22	35	68	24 78	36
III. b. Station Workmen.....	408.25	171 75	42	403.75	170 16	42
c. Station Workmen, preliminary.....	8	4 03	50	9	4 58	51
IV. a. Warehouse Workmen.....	12	6 25	52	12	6 23	52
V. a. Coalheavers.....	62.50	31 60	51	65.50	32 44	49
VI. a. Warehouse Freight Porters.....	722	325 81	45	720	529 35	46
b. Warehouse Preliminary Workmen.....	23	12 45	54	22	11 69	53
VII. a. Baggage Porters.....	70	14 81	21	71	14 74	20
VIII. a. Trainmakers.....	282	120 66	43	300	128 49	43
IX. a. Tracklayers.....	2,432.24	983 75	40	2,304	916 67	40
b. Gang Masters.....	307.18	168 76	55	274.50	151 07	55
c. Preliminary Workmen...	32.32	15 21	47	53.99	24 57	45
d. Trackmen.....	209.94	86 00	45	180.71	82 59	46
e. Switchmen.....	67.61	30 72	45	72.95	32 45	44
X. a. Brakemen.....	236	99 68	42	247	102 02	41
XI. a. Locomotive Cleaners.....	383.50	189 78	49	392	195 83	50
b. Preliminary Workmen...	1	52	52	1	48	48
XII. a. Car Cleaners.....	97.45	42 60	44	99.75	43 49	43
XIII. a. Stokers.....	33	17 76	54	32	17 08	53
XIV. a. Car Masters' Assistants...	47	25 71	55	48	26 47	55
XV. a. Workshop Porters.....	3	1 66	55	2	1 19	59
XVI. a. Workshop Night Watchmen.....	11	4 19	38	11	4 30	39
XVII. a. Workshop Journeymen..	2,648	1,769 76	67	2,648	1,721 85	65
XVIII. a. Workshop Laborers.....	379	185 84	49	355	166 90	47
Total.....	8,708.99	4,411 01	.....	8,547.15	4,281 83	.....

The consul of Nuremburg, Bavaria, reports, that owing to the prevalence of peculiar views and prejudices respecting the question of capital and labor, it is very difficult to obtain official statistics bearing upon the condition of labor and the labor class in his district.

Published statements, if made, are withheld from those who seek statistical information; he says:

"I find that the question of wages generally, in both workshop and field, is largely a matter of personal contract, and that no two employers pay exactly the same wages, even for the same kind of work; then, again, a large proportion of the labor of this district is known as 'piece-work,' in which the laborer is paid according to the amount he accomplishes. Whenever practicable, this custom is regarded the most desirable to all concerned, except to the drones and those who are evil-disposed. All honest workmen, here and elsewhere, must admit that this plan stimulates industry and ambition, and then it is fairer to pay for results than by hours. By this means the lazy and vicious laborer soon finds his proper level.

"I think it safe to say that laborers, such as mechanics and others, receive from 50 to 75 per cent. less wages than they did five years ago, and the wages now earned vary from 25 cents to \$1 per day (without board), according to capacity. And where one man earns \$1 per day, probably twenty receive less than fifty cents. At the present time not so much complaint is made of the low price paid for labor as for the want of work. As business now is, the mechanics are not employed more than two-thirds of the time."

From Bremen the consul furnishes the following table of rates of wages:

Agricultural laborers, without board, per day.....	\$0 48
Agricultural laborers, with board, per day.....	30
Shoemakers, per week.....	\$2 40 to 3 60
Tailors, per week.....	4 80 to 6 00
Blacksmiths, per week.....	2 40 to 2 88
Carpenters, per week.....	3 60 to 4 80
Masons, per week.....	3 60 to 4 80
Joiners, per week.....	2 40 to 2 88
Laborers on public works, daily.....	36 to 60

In respect to the cost of living, unmarried men, about \$1.92 per week; families consisting of husband, wife and three children, from \$3.60 to \$4.32 weekly. In order to make life at this rate possible, women in the country raise their own garden produce and, when they can, work in the fields. In town the women keep small shops, peddle fish or fruit, knit, wash, scrub or sew. Five years ago, car-

penters', masons', joiners' and blacksmiths' wages were more than double what they are now.

In the district of Brunswick, mechanics and skilled laborers of all kinds receive from 48 to 75 cents per day, without board. Ordinary laborers, including farm and field hands, receive from 36 to 48 cents per day, without board.

Railroad hands, laborers on public works and all such as are employed for a period of time, receive from 38 to 60 cents per day, without board.

It is represented that the family of a laboring man, consisting of five persons, can live comfortably on \$216 per annum, but we take occasion to say that the earnings of the head of the family, based upon the minimum rate, needs to be supplemented with an equal amount from other members of the family, in order to make both ends meet.

*Saxony* is so densely populated that, at all times, the labor supply is greatly in excess of the demand, and this necessitates a benign subdivision, that as many as possible may share in the employment which the district affords. The inevitable consequence of this dearth of employment is diminution of earnings per capita, and the engendering of idleness. This unpromising condition of the laboring classes in Saxony demands the utmost sympathy, since they are in no wise responsible for it. We all know that hand made embroideries, curtains, hosiery, gloves, etc., have long been, for all markets, specialties in Saxony, but the inventions in recent years, of power looms and other mechanical contrivances, have driven Saxon goods even out of their own home consumption. Five years ago the embroidery and silk fringe makers earned no more than was necessary to provide them with the most common necessaries of life; now to earn 40 per cent. of their former earnings, they must work in summer from five o'clock A. M. to half past eight P. M., and in winter from daylight to dark. They cannot afford to provide light so no night work is done. We will only present parts of two tables bearing upon the working people of Saxony :

WAGES, PER WEEK, IN THE DISTRICT OF CHEMNITZ, FOR THE YEARS 1873 TO 1878.

OCCUPATIONS.	1873.	1874.	1875.	1876.	1877.	1878.
Brickmakers.....	\$3 68	\$3 68	\$3 68	\$3 09	\$2 86	\$2 53
Carpenters.....	3 64	3 64	3 64	3 64	3 14	2 85
Iron and steel workers,						
Blacksmiths.....	4 52	4 76	4 64	4 28	4 05	4 05
Founders.....	4 28	4 04	3 98	3 78	3 78	3 78
Machine-builders.....	4 75	3 91	4 32	4 39	4 17	4 17
Nailmakers.....	3 09	3 09	3 09	2 97	2 97	2 97
Planers.....	3 80	4 28	4 76	4 28	4 28	4 28
Safemakers.....	4 09	4 00	4 00	4 00	4 00	4 00
Job printers.....	5 91	5 68	5 00	4 76	4 53	4 28
Joiners.....	3 56	3 56	3 44	3 32	2 85	2 85
Laborers, servants, &c.....	2 14	2 14	2 14	2 14	2 14	2 14
Laborers, servants, &c., women.....	1 42	1 42	1 42	1 42	1 42	1 42
Laborers, per year, with board.....	31 00	31 00	31 00	31 00	31 00	31 00
Laborers, per year, with board, women...	23 80	23 80	23 80	23 80	23 80	23 80
Mechanics.....	4 40	4 40	4 40	4 40	4 05	3 70
Millers.....	4 16	4 40	4 52	4 22	4 22	4 22
Oilcloth makers.....	3 53	3 57	3 68	3 21	3 21	3 21
Painters.....	4 34	4 46	4 58	4 28	4 28	4 28
Plasterers.....	4 34	3 92	3 86	3 63	3 28	3 00
Potters.....	5 00	5 00	4 28	3 51	3 51	3 51
Saddlers.....	3 21	3 27	3 80	3 74	3 57	3 57
Shoemakers.....	2 08	2 38	2 38	2 38	2 38	2 38
Shoemakers, women.....	1 78	1 78	1 78	1 78	1 78	1 78
Slaters.....	4 82	4 82	4 82	4 88	4 88	4 88
Spinners of cotton.....	3 57	3 57	3 57	3 43	3 43	3 43
Spinners of wool.....	2 50	2 74	2 97	2 97	2 97	2 97
Stone-quarrymen.....	2 50	2 50	2 14	2 14	2 14	2 14
Stone-masons.....	4 04	4 04	4 04	3 69	3 14	2 85
Tailors.....	4 40	4 40	3 57	2 97	2 97	2 97
Tanners.....	3 39	3 57	3 57	3 57	3 57	3 57
Trunkmakers.....	4 10	3 75	3 75	3 75	3 75	3 75
Watchmakers.....	4 46	4 58	4 82	4 46	4 46	4 46
Weavers of						
Damasks.....	3 93	3 93	3 93	3 93	3 93	3 93
Dress-goods.....	3 57	3 57	3 03	2 73	2 73	2 73
Dress-goods, women.....	2 38	2 26	2 14	1 90	1 66	1 66
Hose, in factories.....	3 21	3 21	3 21	2 98	2 98	2 98
Hose, home labor.....	2 50	2 50	2 50	2 26	2 26	2 26
Wire cloth.....	2 85	2 85	2 85	2 85	2 85	2 85
Wheelwrights.....	2 97	3 09	2 97	2 85	2 85	2 85

STATEMENT SHOWING THE PRICE, IN JUNE, 1878, OF GROCERIES, PRODUCE, ETC., IN  
CHEMNITZ.

Beef, per pound.....	\$0 18.5
sirloin, per pound.....	23.8
Bread, per pound.....	6
rye, per pound.....	2.3
Butter, per pound.....	16.1
Cheese, per pound.....	33.3
Coffee, Rio, per pound.....	30
Java, per pound.....	38.3
Dried currants, per pound.....	10.9
Flour, per pound.....	5.7
Hams, per pound .....	32
Lard, per pound.....	21.4
Pork, salt, per pound.....	17.8
fresh, per pound.....	18.5
Rice, per pound.....	9.5
Salt, per pound.....	2.3
Sugar, white, per pound.....	14
brown, per pound.....	9.5
Tea, per pound.....	75
Canned peaches, from the United States, per can.....	35.7
tomatoes, from the United States, per can.....	35.7
Coal oil, from the United States, per gallon.....	30
Apples, in fall or early winter, per bushel.....	1 90
Potatoes, per bushel.....	45
Coal, per ton.....	3 15

The following tables are derived from the Consul General of  
Frankfort-on-the-Main:

## STATEMENT OF WAGES PAID TO LABORERS AND ARTISANS IN EASTERN AND SOUTHERN GERMANY DURING THE YEAR ENDING SEPTEMBER 30, 1877.

PLACE.	Kind of Labor.	Time.	Amount in United States gold.
Barr.....	Tanners.....	Day.....	\$0 56 to \$1 13
	Field-hands.....	Day.....	35 to 42
Eisenach.....	Field-hands (women).....	Day.....	21 to 28
	Masons.....	Day.....	59 to 61
	Carpenters.....	Day.....	59 to 61
	Porcelain Fabricants, best...	Week...	4 23 to 4 70
	Painters of Porcelain.....	Week...	5 87½
Rudolstadt (Thuringen) }	Field-hands.....	Week...	2 82 to 3 52
	Masons and Carpenters.....	Day.....	82
	Common Laborers.....	Day.....	59
Mayence.....	Field-hands (without board)	Day.....	59 to 94
	Field-hands (with board)....	Day.....	23½ to 47
	Mechanics.....	Week...	3 52 to 4 22
	Glassgrinders.....	Week...	4 23 to 5 64
Lurth.....	Same (women).....	Week...	1 88 to 2 35
	Field-hands.....	Day.....	47 to 70
	Workmen in Brewery.....	Month..	12 69
Culmbach.....	Coopers and Brewers.....	Month..	18 80
	Field-hands.....	Day.....	35 to 59
	Mechanics.....	Day.....	47 to 70
	Housemaids.....	Year....	9 40 to 23 50
Bayreuth.....	Salesmen.....	Year....	141 00 to 423 00
	Factory Operatives.....	Week...	2 82 to 3 52
	Same (women).....	Week...	1 17 to 2 35
	Common Laborers.....	Day.....	33 to 47
	Factory Laborers.....	Day.....	41 to 59
	Mechanics.....	Day.....	59 to 94
Bielfeld.....	Flax Factory (girls).....	Day.....	23½ to 35
	Field-hands (summer).....	Day.....	41 to 47
	Field-hands (winter).....	Day.....	23½ to 35
	Field-hands (with board)....	Year....	70 50 to 82 25
Hof in Bavaria.....	Weavers.....	Day.....	47 to 70
	Field-hands.....	Day.....	70 to 1 17½
	Cabinet Makers.....	Day.....	80
	Tailors.....	Day.....	1 00
	Masons.....	Day.....	75
Nuremberg.....	Glaziers.....	Week...	3 75
	Carpenters.....	Day.....	85
	Printers.....	Day.....	80
	Blacksmiths.....	Day.....	75
	China Factories:		
	Modelers.....	Day.....	1 50
	Decorators.....	Day.....	0 75 1 25 to 1 50
	Formers and Turners.....	Day.....	75 to 1 00
	Formers (womem).....	Day.....	37½ to 62½
	Firemen.....	Day.....	62½ to 75
	Packers.....	Day.....	50 to 62½
	Day Laborers (women)....	Day.....	37½ to 50
Sonneberg.....	Papier-mache Fabricants— (men).....	Week...	2 75 to 3 50
	Papier-mache Fabricants— (women.....	Week...	1 75 to 2 25
	Kid-glove Makers:		
	Common Workmen.....	Week...	3 00
	Skilled Workmen.....	Week...	3 75 to 4 50
	Women.....	Week...	1 50 to 3 00
	Cotton-hosiery Fabricants...	Week...	2 50 to 6 00

CURRENT PRICES OF PROVISIONS IN THE CITY OF FRANKFORT-ON-THE-MAIN, OCTOBER  
31, 1877.

ARTICLES.	Quantity.	Prices in United States gold.
Beans, white, pounds.....	222.8	\$5 88 to \$6 58
Butter, pounds.....	1.114	18 to 29
Cabbage, per 100 heads.....		2 82 to 3 52
Eggs, dozen.....		15 to 22
Hay, pounds.....	111.4	61 to 77
Lentils, pounds.....	222.8	7 05 to 8 93
Meat—		
Beef, pounds.....	1.114	14 to 20
Bacon, pounds.....	1.114	26
Mutton, pounds.....	1.114	11 to 16
Pork, pounds.....	1.114	18 to 20
Veal, pounds.....	1.114	15 to 17
Potatoes, pounds.....	222.8	1 32 to 1 41
Pease, shelled, pounds.....	222.8	6 58 to 7 75
Rye meal, pounds.....	222.8	5 82 to 5 95
Rye meal, coarse, pounds.....	222.8	5 34 to 5 58
Straw, pounds.....	111.4	51 to 56

We could introduce many more interesting tables from various sections of Germany, but do not think it necessary, and will conclude with abstracts of reports from England, Ireland and Scotland, and possible brief references to some minor countries of Europe:

COMPARISON OF WAGES AND COST OF LIVING IN BIRMINGHAM AND NEIGHBORHOOD IN THE YEARS 1878 AND 1873.

ARTICLES OF CONSUMPTION.	1878.	1873.
Flour—Fine wheat, per barrel.....	\$8 75	\$8 50
Extra wheat, per barrel.....	9 75	9 00
Beef—Good roasting, per pound.....	22	21
Soup pieces, per pound.....	12	12
Rump steak, per pound.....	28	26
Corned beef, per pound.....	18	18
Veal—Forequarters, per pound.....	17	16
Leg, per pound.....	20	18
Cutlets, per pound.....	28	26
Mutton—Forequarters, per pound.....	16	16
Leg, per pound.....	22	21
Chops, per pound.....	24	24
Pork—Fresh, per pound.....	16	15
Corned, per pound.....	15	14
Bacon, per pound.....	15 to 22	15 to 20
Hams, smoked, per pound.....	24	24
Shoulders, per pound.....	12	10 to 12
Sausages per pound.....	18	18
Lard, per pound.....	16 to 18	14 to 18
Butter, per pound.....	28 to 32	24 to 28
Cheese, per pound.....	18	18
Potatoes, per pound.....	2	2
Rice, per pound.....	8	6
Beans, white, per pound.....	5	6
Milk, per quart.....	8	6
Eggs, per dozen.....	16 to 24	16 to 24
Tea, good black, per pound.....	50 to 70	60 to 72
Coffee—Rio, green, per pound.....	28	24
Rio, roasted, per pound.....	36	32
Sugar—Brown, per pound.....	6	8
Yellow, per pound.....	7	7
Coffee B. per pound.....	8	8
Molasses—New Orleans, per pound.....	6	6
Porto Rico, per pound.....	4	4
Soap, common, per pound.....	6	6
Starch, per pound.....	8	10
Coal, per ton.....	4 50	4 36
(On the foregoing articles of provision there is an average increase of about 7½ per cent.)		
Shirtings—Brown, 4-4, per yard.....	8	10
Bleached, 4-4, per yard.....	11	13
Sheetings—Brown, 9-8, per yard.....	12	14
Bleached, 9-8, per yard.....	15	17
Cotton flannel, per yard.....	9	10
Tickling.....	26	30
Prints.....	11	13
M. de laine.....	20	21
Boots, elastic sides, per pair.....	2 50	2 50
(On the foregoing fabrics there has been a decrease of about 14½ per cent.)		

## RATES OF WAGES.

Carpenters (54 hours per week), per hour.....	\$0 17	\$0 15
Joiners (54 hours per week), per hour.....	17	15
Bricklayers (54 hours per week), per hour.....	17	15
Stone Masons (54 hours per week), per hour.....	18	16
Plasterers, per hour.....	17	15
Painters, per hour.....	15	14
Plumbers, per hour.....	17	15
Fitters, per hour.....	17	15
Blacksmiths, per hour.....	17	15
Strikers, per hour.....	12	10
Navvies, Masons, Laborers, &c., per hour.....	12	9½
Agricultural Laborers, average per week.....	4 25	3 75
(On the foregoing there has been an increase of about 14 per cent. in five years.)		
House rent in towns, front, per room, per week.....	36	.....
House rent in towns, back, per room, per week.....	30	.....
Agricultural Laborers, cottages, per week, average.....	50	.....

The Consul at Bristol furnishes us with the maximum of wages of the best men in Somersetshire, and the minimum in Wiltshire and Devonshire, and also the average of wages paid in his Consular District, as follows :

KIND OF LABORERS.	YEAR.		
	Highest per Week.	Lowest per Week.	Average per Week.
Agricultural.....	\$3 66	\$2 16	\$2 91
Excavator or Navyy.....	5 10	3 36	4 23
Quarryman.....	5 34	3 60	4 47
Mechanical.....	6 54	3 84	5 19
Builder.....	5 34	3 66	4 50

## COST OF LIVING.

ARTICLES.	YEAR.	
	1878.	1872.
Bread, per quartern, (4 pounds).....	\$0 13	About same.
Meat, Beef and Mutton.....	\$0 14 to 20	Somewhat cheaper.
Bacon or Pork.....	12 to 24	Same.
Cheese.....	10 to 20	Slightly cheaper.
Sugar.....	06	Slightly cheaper.
Butter, Salted.....	20 to 32	Cheaper.
Potatoes, per 10 pounds.....	12 to 24	Much cheaper.
Rents, per week.....	24 to 96	Considerably cheaper.

The Consul deemed it best to avoid unreasonable detail, to divide the laborers into five kinds. In respect to prices of the necessaries of living, he says there has been but a slight advance since 1872. The general food of the classes represented above, consists of bread, bacon, cheese, salt butter or lard, potatoes, tea and sugar, all of the cheapest sort. As a rule, the laborers eat meat but twice a week, and that of the very cheapest kinds.

From the Liverpool Consulate, we are informed that in Cheshire the average wages of agricultural laborers are \$3.00 a week, and have been the same during the last five years. Previous to that time they rose gradually from \$2.40, in 1855, to \$3.00, in 1872. To these prices, perquisites in harvest time, consisting of food and beer, straw, milk, and sometimes potato grounds, add to their compensation.

In North Wales, the following is a comparison of present prices and those paid five years ago, in the coal and iron mining districts, per day :

DESCRIPTION.	Present Wages.	Old Wages.
Mechanics, Smiths and Carpenters.....	\$1 20	\$1 00
Common Laborers.....	\$0 80 to 84	64
Agricultural Laborers.....	72 to 80	64
Railway Navvies.....	80 to 88	72
Masons.....	1 32	1 20
Colliers.....	1 80	96
Enginemmen.....	1 12	96

Of the \$1.80 paid colliers, about 60 cents is spent by them in beer.

The following are the average earnings of men employed in the collieries of North Wales during the month of February, 1878 :

## EARNINGS OF COLLIERS IN NORTH WALES.

	Per Day.
Colliers, Underground.....	\$1 02
Smelt Work.....	1 02
Holers, Hewers.....	82
Fillers (Men filling up coal in pit).....	74
Smelt.....	72
Wagoners and Hookers.....	70

EARNINGS OF COLLIERS IN NORTH WALES—*Continued.*

	Per Day.
Bymen, Day Laborers.....	\$0 70
Contract Work.....	74
Firemen, Overlookers.....	90
Pitmen (Men repairing the pit).....	82
Furnacemen.....	64
Horsekeepers.....	64
Bankmen, Contract Work at the surface.....	90
Day Work.....	68
Smelt Work.....	68
Engine Workers, Winders.....	90
Deep Winders.....	82
Stokers.....	66
Smiths.....	92
Smith Strikers.....	58
Fitters, Mechanics.....	1 04
Boilermakers.....	80
Carpenters.....	98
Sawyers.....	80
Laborers about surface.....	66

The Liverpool district, besides North Wales, comprises Lancashire.

## RATES OF WAGES IN LIVERPOOL.

(Generally per week of 54 hours, 9 hours constituting a day's work.)

Engineering—	
Millwrights and Fitters.....	\$7 70
Pattern-makers.....	8 42
Turners.....	8 42
Smiths, in all branches.....	8 90
Molders.....	8 90
Brassfounders and Coppersmiths.....	7 22
Shipbuilding trades—	
Ship Carpenters, wood and iron.....	10 20
Joiners.....	9 50
Sailmakers.....	8 75
(Sailmakers work only 8 hours during the four winter months, so called.)	
Mast and Blockmakers.....	9 00
Painters, in summer.....	8 22
(Painters work 9½ hours in summer and 9 hours in winter.)	
Painters, in winter.....	7 74
Boiler-makers.....	7 30
Platers.....	10 20
Riveters.....	8 75

RATES OF WAGES IN LIVERPOOL—*Continued.*

Building trades—	Per Week.
Joiners .....	\$9 00
Stonemasons (Feb. 1st to Nov. 10th, 8 $\frac{1}{4}$ hours per day).....	9 00
(Stonemason's reduction of 5 $\frac{1}{2}$ hours per week, two years ago.)	
Stonemasons (Nov. 11th to Dec. 4th, 7 $\frac{5}{8}$ hours per day).....	8 60
(Dec. 5th to Jan. 10th, 6 $\frac{1}{2}$ hours per day).....	7 50
(Jan. 11th to Feb. 1st, 7 $\frac{5}{8}$ hours per day).....	8 60
Bricklayers, (in summer, 9 $\frac{1}{8}$ hours per day).....	10 00
(In winter, Nov. 1st to March 1st, 7 $\frac{1}{2}$ hours per day).....	8 67
Slaters and Plasterers (8 $\frac{1}{4}$ hours per day).....	9 72
Plumbers, in winter.....	8 65
In summer.....	9 50
Painters and Paper-hangers, (9 $\frac{1}{8}$ hours per day).....	8 50
Grainers and Decorators (9 $\frac{1}{8}$ hours per day).....	8 50
Gilders, (9 $\frac{1}{8}$ hours per day).....	7 30
Gas Fitters, (9 $\frac{1}{4}$ hours per day).....	7 80
Cabinet-makers.....	8 00
Upholsterers.....	8 75
Wood-turners.....	7 75
Coopers.....	8 75
Wheelwrights.....	7 80
Coach-builders.....	8 25
Farriers.....	8 53
Printers, daymen (8 $\frac{1}{2}$ hours per day).....	10 68
nightmen (8 $\frac{1}{2}$ hours per day).....	10 68
Bookbinders—	
Finishers.....	9 25
Forwarders.....	7 80
Paper-rulers.....	7 80
Saddlers.....	7 30
Pavers, (9 $\frac{1}{4}$ hours per day).....	8 25
Watchmakers, (rough estimate).....	8 75
Piano tuners and repairers, (8 hours per day).....	9 25
Shoemakers, (9 $\frac{1}{2}$ hours, piece work).....	8 75
Teamsters (11 hours per day).....	7 05
Carters.....	6 30
Laborers, (roughly averaged).....	5 82

## COST OF LIVING IN LIVERPOOL.

Tea, per pound.....	\$0 40 to \$0 85
Coffee, per pound.....	24 to 40
Sugar, moist, per pound.....	05 to 08
Sugar, lump, per pound.....	07 to 08
Rice.....	04 to 10

COST OF LIVING IN LIVERPOOL—*Continued.*

Sago .....		\$0 08
Tapioca, per pound.....	\$0 12 to	20
Beef, per pound.....	16 to	22
Mutton, per pound.....	16 to	22
Lamb, per pound.....	24 to	28
Veal, per pound.....	14 to	20
Ham, per pound.....	16 to	24
Bacon, per pound.....	12 to	20
Pork, fresh, per pound.....	14 to	18
Butter, per pound.....	24 to	36
Cheese, per pound.....	12 to	20
Lard, per pound.....		16
Eggs, per dozen.....	14 to	18
Potatoes, per peck.....	30 to	36
Flour, per 6 pounds.....	20 to	28
Oatmeal, per 6 pounds.....	21 to	24
Pease, white, per quart.....	05 to	06
Pease, green, per quart.....	08 to	10
Bread, 8-pound loaf.....	24 to	32
Milk, per quart.....	06 to	08
Rib Pork, per pound.....		08
Tongues, ox, per pound.....		14
Tongues, pig, per pound.....		12
Cocoa, per pound.....	12 to	48
Corn-flour (farina), per pound.....		16
Candles, per pound.....	12 to	24
Barley, per pound.....	04 to	06
Biscuit, per pound.....	08 to	32
Soap, per pound.....	04 to	10
Coal, per ton.....	3 65 to	4 38
Rent, 3 to 4 small rooms, in courts, per week.....	60 to	1 08
Rent, artisans' cottages, 5 rooms and attic.....	1 32 to	2 04
Rent, laborers' cottages, 4 or 5 rooms.....	1 20 to	1 68
Laborers' and artisans' working suits.....	7 30 to	9 20
Sunday suits.....	14 60 to	19 50

## RATES OF WAGES IN ST. HELENS AND VICINITY, LANCASHIRE.

## Plate-glass works, per week—

Laborers.....	\$4 48
Mechanics' laborers.....	5 34
Mechanics.....	8 50
Glassgrinders.....	10 92
Women, experienced.....	3 60
Polishers, boys.....	3 36
Casting-hall mixers.....	6 96
Furnace and table men.....	9 39

RATE OF WAGES IN ST. HELENS AND VICINITY, LANCASHIRE—*Continued.*Plate-glass works, per week—*Continued.*

Potmakers .....	\$7 68
Glassgrinders, boys.....	2 40
Women, young.....	1 20
Warehouse-packers.....	\$4 32 to 6 00
Blacksmiths .....	8 16
Sandmen.....	6 72
Plaster-turners.....	8 64
Smoothers and overlookers.....	10 92
Polishers men.....	7 92

## Iron-works, per week—

Engineers.....	\$8 25
Fitters.....	7 90
Turners.....	7 80
Pattern-makers .....	8 25
Molders, loam .....	8 75
Molders, greensand.....	8 25
Smiths.....	8 75
Strikers.....	5 82
Joiners.....	8 50
Boiler-makers.....	8 50
Platers and anglesmiths.....	\$9 25 to 9 72
Holders-up.....	6 78
Riveters.....	7 86
Laborers.....	4 62
Planers .....	6 78
Grinders.....	6 78

Agricultural laborers earn from \$4.40 to \$5.35 per week. Navvies employed on public works and railways, earn from \$6.54 to \$7.30 per week, according to the work on which they happen to be employed. Colliers earn about \$5.80 per week. Bricklayers, who work 54 hours per week, \$9.72, or 18 cents per hour. Bricklayers' laborers, \$6.50.

## PRICES OF FOOD.

Flour, per five and six pounds.....	\$0 24
Bread, per pound.....	05
Butter, per pound.....	\$0 24 to 36
Cheese, per pound.....	16 to 24
Meat, per pound.....	20 to 24
Bacon, home-cured, per pound.....	20
Bacon, American, per pound.....	10 to 16
Rice, per pound.....	03 to 04
Oatmeal, per pound.....	04

PRICES OF FOOD—*Continued.*

Sugar, per pound.....	\$0 05 to \$0 09
Tea, per pound.....	60 to 88
Potatoes, per bushel.....	1 56 to 1 92
Coffee, per pound.....	36
Milk, per quart.....	08

In the *Falmouth* district, the rates of wages per diem are as follows :

Agricultural laborers.....	\$0 60
Navvies and other laborers on railways and other public works. (These are only few in number.).....	84
Engine drivers.....	\$1 20 to 1 68
Steam-crane drivers.....	96
Donkey-engine drivers.....	72
Iron-foundry men—	
Molders .....	1 20
Fitters .....	1 32
Iron-ship builders.....	1 20
Furnacemen .....	84
Laborers .....	80
Stonemasons and smiths.....	1 08
House carpenters and joiners, plasterers, bricklayers, sail-makers, carpenters, plumbers, painters, coopers, cabinetmakers and upholsterers.....	96
Ropemakers, printers, tailors, bakers and gardeners.....	84
Tin and copper miners, per month.....	12 00 to 15 00
China-clay laborers.....	84
Unskilled laborers of other kinds in towns.....	72

The foregoing are the general rates, but superior workmen of all classes earn more. The hours of labor of the laboring classes vary from 8 to 10½ hours.

Beef and mutton is 15 cents per pound; pork, 14 cents per pound; milk per quart, 6 cents; eggs, 17 cents a dozen; bread, 14 cents per quartern 4½ pound loaf.

In towns, 20 shillings a week (for a family) would be little enough to put as the approximate cost of living to the laboring class, (rent included); but in the country districts, where house rent is usually lower, 18 shillings a week would probably cover it.

The *Leeds* consul represents that the rates of wages in the various industries in his district have not materially changed during the past 4 or 5 years. Employers have been compelled to shorten the

time of work, but the rate of pay has been maintained. Strikes lately have been made, not for higher wages, but against contemplated reductions, and have often accomplished their purpose.

Agricultural laborers, who five years ago received an average wages of from \$4.32 to \$5.75 per week of 60 hours, now receive only \$3.84 to \$5.28 for the same work.

In the large foundry of Messrs. Greenwood & Bartley the wages of skilled artisans range from \$6.72 to \$10.08 per week of 54 hours; \$8.64 being regarded as a fair, good price.

The following fairly represents the state of wages usually paid to persons employed in the woolen mills of this district. The week comprises 54 work hours :

Woolsorters, per week.....	\$6 24 to \$6 72
Scourers and Dyers, per week.....	4 80 to 5 75
Dyers (not foreman), per week.....	5 25 to 5 75
Teasers, per week.....	4 32 to 5 25
Scribblers (foremen), per week.....	9 60 to 14 40
Fitters, per week.....	4 32 to 5 75
Feeders, per week.....	1 92 to 2 88
Spinners, per week.....	7 70 to 9 69
Piecers, per week.....	1 92 to 2 40
Weavers (men), per week.....	6 00 to 8 40
Weavers (women), per week.....	3 60 to 4 80
Millers, per week.....	4 80 to 5 75
Millers (foremen), per week.....	9 60 to 14 00
Raisers and Cutters, per week.....	6 00 to 7 20
Raisers and Cutters (boys), per week.....	1 92 to 2 88
Burlers, per week.....	1 92 to 2 40
Pressers, per week.....	5 75 to 6 72
Laborers, per week.....	4 32 to 5 25

RATES OF WAGES OF THE VARIOUS CLASSES OF SKILLED ARTISANS, PER WEEK OF 54 HOURS.

Boiler-plate makers.....	\$8 64
Riveters.....	7 32
Engineers.....	\$7 20 to 7 68
Machinemen.....	6 72 to 7 68
Blacksmiths.....	7 20 to 7 68
Pattern makers.....	8 16
Ship Carpenters.....	7 92 to 8 64
Bricklayers.....	8 64
Coopers.....	8 64 to 9 10
Carpenters.....	9 12 to 9 62

## ORDINARY LABORERS PER WEEK OF 56 HOURS.

Cement-works laborers.....	\$5 10
Stonedressers,.....	6 30
Oil-mill laborers.....	5 85
Bricklayers' laborers.....	5 68
Pattern-makers' laborers.....	4 86
Boiler-makers' laborers.....	5 34
Holders up laborers.....	5 98
Strikers' laborers.....	5 34
Railway-pulley laborers.....	5 58
Platform laborers.....	5 34
Permanent-way laborers.....	4 62
Agricultural laborers.....	4 08
Dock-side laborers receive 10 cents per hour.	

The cost of living to the laboring classes (or the prices paid for what may be termed the necessaries of life) is as follows :

2½ stone (stone = 14 pounds) flour, at 48 cents per stone.....	\$1 20
8 pounds bacon (American) 96 cents; 1½ pounds butter, 42 cents..	1 38
3 pounds sugar, 18 cents; tea or coffee, say, 24 cents; rice, 8 cents.	50
1 pound soap, 6 cents; candles or paraffine, 12 cents; vegetables, 24 cents.....	42
Salt, vinegar, pepper, mustard, starch, baking-powder, blacking, black lead, firewood.....	18
Coals, 24 cents; milk, 12 cents; tobacco, 12 cents; clothing, 24 cents; shoes, 24 cents.....	96
3 children to school (board school) 4 cents per week each.....	12
Sick club, 12 cents; funeral club, 6 cents.....	18
House rent.....	60
Cost per week.....	\$5 54

The following tables come from the consul at London :

## WAGES OF LABORERS AND ARTISANS IN THE CONSULAR DISTRICT OF LONDON, 1878.

Agricultural laborers, (beer found, rent about 24 to 36 cents per week for families) per week.....	\$1 92 to \$2 88
Agricultural laborers' children on farms, per week...	24 to 1 20
Laborers, (builders) per week.....	4 38 to 5 10
Gardeners, per week.....	4 38 to 7 26
Bricklayers, (day of 9 hours) per week.....	7 30 to 9 72
Carpenters and Joiners, (day of 9 hours) per week...	7 30 to 9 72
Masons, stone, per week.....	8 46 to 10 94
Masons, marble, per week.....	8 46 to 14 58
Engineers, (working) per week.....	7 30 to 9 72

WAGES OF LABORERS AND ARTISANS IN THE CONSULAR DIST. OF LONDON, 1878—*Continued.*

Cabinet-makers, (often by piece work) per week.....	\$8 46 to \$12 15
Pianoforte makers (often by piece work) per week...	8 47 to 12 15
Printers and Lithographers, per week.....	8 70 to 12 15
Bookbinders, per week.....	8 22 to 12 15
Jewelers, per week.....	8 46 to 14 58
Silversmiths, per week.....	7 30 to 10 93
Bootmakers, per week.....	4 86 to 8 46
Tailors, per week.....	6 10 to 8 46
Tinmen, per week.....	4 86 to 7 30
Smiths, (various) per week.....	4 86 to 14 58
Butchers, per week.....	6 10 to 8 46
Butchers' boys, per week.....	2 43 to 3 35
Bakers, (with partial board) per week.....	4 38 to 7 40
Porters and messengers (with partial board) per week	4 38 to 6 08
Dressmakers, (with board and lodging) per annum...	73 00 to 243 00
(If out of the establishment) with dinner, per week.....	1 69 to 6 08
Hatters, per week.....	6 08 to 12 15
Omnibus-drivers and conductors, per day.....	1 20 to 1 92
Domestic servants, per annum, with board and lodging—	
Housekeepers.....	97 20 to 486 00
Cooks.....	87 48 to 243 00
Housemaids.....	64 00 to 97 20
Nursery maids.....	48 60 to 97 20
Butlers.....	97 20 to 486 00
Coachmen, (with livery).....	243 00 to 374 00
Railway employees, porters, oilmen, railway guards, (conductors) per week.....	5 10 to 12 15
Engine-drivers, per day.....	1 44 to 1 93
Firemen, per day.....	96 to 1 44
Laborers on public works—	
Wood workers, (according to skill and ability) per week.....	4 32 to 7 30

The cost of living for the working classes has increased in London very much during the last five years; rents have risen nearly thirty per cent., and food of every description is much dearer.

The present prices are :

## COST OF LIVING IN LONDON.

Beef, per pound.....	\$0 16 to \$0 32
Mutton, per pound.....	14 to 32
Pork, per pound.....	14 to 24
Veal and Lamb, per pound.....	20 to 32

COST OF LIVING IN LONDON—*Continued.*

Bread, the 4-pound loaf.....	\$14 to \$0 17
Butter, per pound.....	24 to 48
Cheese, per pound.....	16 to 28
Flour, per quartern of 3½ pounds.....	13 to 18
Sugar, raw, per pound.....	6 to 12
Sugar, refined, per pound.....	8 to 14
Tea, per pound.....	40 to 1 20
Coffee, pure, per pound.....	32 to 56
Potatoes, per pound.....	2 to 4

Rent in London, for artisans, from \$1.20 to \$2.40 per week for one or two rooms; more for better accommodations. Respectable lodgings for clerks or warehousemen, from \$122 to \$242 per annum. Small houses can be had for \$175 per annum, with taxes, which amount to about one-fifth of the rental.

The consul of Manchester furnishes the following table :

## STATEMENT SHOWING THE RATE OF WAGES PAID PER DIEM TO THE MILL OPERATIVES OF MANCHESTER.

Pickers—	
Man.....	\$0 90
Openers.....	55
Pickers.....	55
Carding-room—	
Overseer.....	1 75
Grinders.....	90
Stickers.....	95
Oilers.....	95
Lapboys.....	60
Cardboys.....	50
Strippers.....	65
Drawing-girls.....	75
Slubber-girls.....	75
Intermediate girls.....	75
Flyframe girls.....	75
Roving-boys.....	65
Sweeper.....	30
Warp spinning—	
Overseer.....	1 30
Second hand.....	65
Oiler and rover.....	50
Doffer.....	55
Assistant doffer.....	35
Girls (400 spindles each).....	45

STATEMENT SHOWING THE RATE OF WAGES PAID PER DIEM TO THE MILL OPERATIVES  
OF MANCHESTER—*Continued.*

Mule-spinning—	
Overseer.....	\$1 70
Second hand.....	70
Buck boys.....	35
Spinners.....	1 70
Dressing-room—	
Overseer.....	1 40
Second hand.....	95
Spooler.....	60
Warper.....	90
Drawing-girl.....	70
Weaving-room—	
Overseer.....	1 70
Second hand.....	1 30
Section hand.....	1 00
Weaver.....	62
Yard and watch—	
Watchman.....	84
Fireman.....	88
Shop—	
Foreman.....	2 00
Wood workers.....	75
Iron-workers.....	75
Cloth-room—	
Overseer.....	1 70
Man.....	60
Folder.....	1 00
Inspector.....	1 00

From *Newcastle-upon-Tyne* much information has been furnished by the consul in that district, bearing upon labor, wages, cost of living, &c. The coal of Northumberland and Durham is the basis of the commercial and manufacturing importance of this district. The year 1873 was the "high water mark of commercial prosperity in England." During the summer of that year the famous twenty weeks' strike for the nine hour system, of over 8000 Newcastle engineers, took place. It was a dear-bought triumph, but it led to a recognition of the nine hour rule all over England. The subsequent four years, however, witnessed a total reduction of miners' wages of over forty-four per cent., leaving the weekly earnings in 1878 \$4.20, as against \$10.80 in 1873.

It is represented that agricultural labor in this district is 35 per cent. better than it was 30 years ago. It is stated that owing to

the superior intelligence of the peasantry in Scotland over the South of England, that wages are 30 per cent. higher in Scotland. This difference is ascribed to the early establishment of parochial schools in Scotland. The following table illustrates this fact:

	1850.	1873.	1878.
Average weekly wages paid in the southeastern parts of Scotland and northeastern counties of England.....	\$2 75	\$4 35	\$4 10
Average weekly wages paid in the southern counties of England.....	2 12	2 90	2 75

The consul says, personal inquiries among the farmers, respecting the prices of agricultural laborers in Northumberland and Durham, furnish the following result:

CHARACTER OF EMPLOYMENT.	WAGES.		REMARKS.
	1873.	1878.	
Hinds (Stewards, generally } Married Men), per week }	\$5 52 to \$6 68	\$5 28 to \$6 25	{ With house and firing ; also privilege of planting 10 stone of potatoes and 4 to 6 bushels of wheat.
Ordinary Laborers (Men), } per week, }	4 32 to 5 04	4 20 to 4 80	{ Harvest wages, with bed and board.
Ordinary Laborers (Men), } per week, }	6 72	6 56	{ Harvest wages, with- out bed and board.
Men Servants, per annum....	83 00 to 102 00	78 00 to 98 00	With bed and board.
Women Servants, per annum.	39 00 to 54 00	34 00 to 49 00	With bed and board.
Women (Ordinary), per day..	30	30	{ Without board, while preparing land for crops, and doing other small work.
Women (Ordinary), per day..	48 to 60	48 to 60	{ Harvest wages, with- out board.

AVERAGE RATES OF WAGES PAID BY THE PRINCIPAL MANUFACTURERS AND OTHERS TO SKILLED AND UNSKILLED WORKMEN AT NEWCASTLE-UPON-TYNE, ENGLAND.

OCCUPATION.	WAGES PER WEEK.			
	1859.*	1869.*	1873.†	1878.†
Braziers .....	\$6 84	\$6 84	\$6 84	\$7 20
Bricklayers .....	5 88	7 20	7 20	6 96
Brickmakers .....	6 66	6 66	8 40	7 92
Boilersmiths .....	7 62	7 32	6 96	7 44
Carpenters.....	7 68	7 68	8 36	8 16
Carpenters, Ship.....			8 64	8 16
Fitters.....	6 78	6 84	6 84	7 14
Forgemen .....	8 22	8 28	8 40	8 40
Grinders .....	6 60	6 92	6 84	6 16
Horseshoers .....	6 84	7 00	7 44	7 20
Joiners, Patternmakers and Sawyers.....	5 88	5 86	7 44	7 20
Painters.....	5 48	5 56	6 84	6 24
Painters, Ship.....			7 68	7 20
Molders.....	7 04	6 84	6 96	7 36
Plasterers .....	6 90	6 96	7 20	6 96
Platers .....	7 92	8 28	8 64	8 40
Platers, Ship.....	7 68	8 16	8 88	8 64
Plumbers .....	6 72	6 84	7 20	6 96
Plumbers, Ship.....	6 96	6 96	8 64	8 28
Riveters .....			8 16	7 68
Riveters, Holders-up.....	5 52	5 76	6 00	5 76
Riveters, Holders-up, Ship.....	5 52	5 76	5 76	6 24
Saddlers .....	4 72	4 86	6 72	6 56
Sailmakers .....			7 20	7 20
Smiths.....	6 96	6 44	6 58	7 06
Stone Masons.....	6 60	6 84	7 20	6 96
Strikers.....	4 56	4 80	4 80	4 56
Turners.....	6 80	6 84	6 72	7 16
Watchmen, Night.....	4 80	5 04	5 76	5 52
Laborers in Ship-yards.....			5 52	5 76
Laborers in Brick-yards .....	4 56	4 80	5 76	5 04

\*Hours worked, 59 per week. †Hours worked, 54 per week.

WAGES PAID TO RAILWAY EMPLOYEES IN THE NORTH OF ENGLAND DURING THE YEARS  
1870 AND 1878.

CHARACTER OF EMPLOYMENT.	RATE PER WEEK.		HOURS PER WEEK	
	1870.	1878.	1870	1878
<b>Engineering Department—</b>				
Inspectors.....	\$6 48 to \$8 40	\$6 72 to \$9 60	...	...
Gaugers.....	5 28	5 76	61	56
Navvies (pickmen).....	4 32	5 28	61	56
(shovelers).....	4 08	5 04	61	56
Plate-layers.....	3 84 to 4 56	5 04	61	54
Joiners.....	4 80 to 6 24	5 76 to 7 44	61	54
laborers.....	4 32	5 28	61	54
Masons.....	5 76 to 6 72	7 68	61	54
laborers.....	4 32	4 80	61	54
<b>Locomotive Department—</b>				
Foremen.....	9 60 to 17 28	10 08 to 18 00	61	54
Fitters.....	4 56 to 7 20	5 04 to 7 68	61	54
Boilersmiths.....	5 52 to 6 96	5 52 to 8 64	61	54
Blacksmiths.....	4 80 to 7 20	6 72 to 8 16	61	54
Brassmolders.....	6 24	5 76 to 7 92	61	54
Brassfinishers.....	6 24 to 7 20	7 44 to 7 92	61	54
Carriage builders.....	4 32 to 7 20	4 32 to 7 68	61	54
Wagon builders.....	4 32 to 6 72	4 32 to 7 68	61	54
Carriage painters.....	4 32 to 5 76	4 32 to 6 24	61	54
Painters.....	6 24	7 44	61	54
Patternmakers.....	6 24 to 7 20	7 68 to 8 64	61	54
Laborers.....	3 36 to 5 04	3 60 to 6 00	61	54
Engine drivers.....	7 20 to 10 08	7 92 to 10 80	72	60
Firemen.....	4 32 to 5 76	4 32 to 5 76	72	60
Engine cleaners.....	2 88 to 4 32	2 88 to 4 32	61	54
Boiler cleaners.....	4 32 to 6 00	5 28 to 7 20	61	54
Stationary-engine drivers.....	5 28 to 6 24	6 48 to 7 20	61	54
Coke and coal fillers.....	4 32 to 4 80	4 80 to 7 20	61	54
<b>Passenger Department—</b>				
Inspectors.....	6 56 to 6 96	8 16 to 9 60	...	...
Station masters.....	4 32 to 23 00	4 32 to 27 60	...	...
assistants.....	4 80 to 9 24	5 52 to 9 60	...	...
Booking and parcel clerks.....	1 20 to 8 40	1 20 to 9 00	...	...
Telegraph clerks.....	1 20 to 6 48	1 20 to 9 60	...	...
Conductors.....	4 80 to 6 24	6 12 to 7 20	...	...
assistants.....	4 80	5 28 to 5 64	...	...
Foremen porters.....	4 32 to 5 28	5 28 to 6 60	...	...
Porters.....	3 84 to 4 32	3 84 to 4 80	...	...
Lampmen.....	.....	.....	.....	.....
Carriage cleaners.....	4 08	4 80	.....	.....
Ticket collectors.....	4 80 to 6 24	5 04 to 7 20	.....	.....
Signalmen.....	4 32 to 5 28	4 80 to 7 20	.....	.....
Gatemen.....	1 20 to 2 40	1 20 to 3 60	.....	.....
<b>Goods Department—</b>				
Inspectors.....	4 80 to 6 72	5 28 to 8 40	.....	.....
Goods agents.....	9 60 to 20 16	12 00 to 25 20	.....	.....
guards.....	4 80 to 6 00	5 28 to 7 20	.....	.....
Foremen.....	5 76 to 8 40	6 48 to 9 72	.....	.....
Porters.....	4 08 to 6 00	4 32 to 6 00	.....	.....

PRICES PAID FOR THE NECESSARIES OF LIFE AT NEWCASTLE, 1873 AND 1878.

ARTICLES.	1873.	1878.
<b>Provisions—</b>		
Wheat flour, superfine, per barrel.....	\$6 17	\$7 56
extra family, per barrel.....	6 70	7 92
Rye flour, per barrel.....	4 90	5 64
<b>Beef—</b>		
Fresh roasting pieces, per pound.....	22	20
soup pieces, per pound.....	14	14
rump steaks, per pound.....	24	24
Corned, per pound.....	16	16
<b>Veal—</b>		
Fore quarters, per pound.....	18	18
Hind quarters, per pound.....	20	20
Cutlets, per pound.....	24	24
<b>Mutton—</b>		
Fore quarters, per pound.....	16	18
Leg, per pound.....	20	20
Chops, per pound.....	22	22
<b>Pork—</b>		
Fresh, per pound.....	16	16
Corned or salted, per pound.....	16	16
Bacon, American, per pound.....	18	14
Hams, smoked, Wiltshire, per pound.....	24	24
Shoulders, American, per pound.....	16	10
Lard, per pound.....	20	16
Codfish, dry, per pound.....	08	.....
Butter, per pound.....	\$0 24 to 32	\$0 24 to 32
Cheese, per pound.....	18	16 to 22
Rice, per pound.....	04	03 to 10
Beans, per quart.....	08	08
Milk, per quart.....	08	07
<b>Groceries, &amp;c.—</b>		
Tea, Oolong and other good black, per pound.....	48 to 72	32 to 60
Coffee—Rio, green, per pound.....	24	22
roasted, per pound.....	28	32
Sugar—Good brown, per pound.....	07	05
Yellow C, per pound.....	08	07
Coal (retail), per ton.....	4 80 to 5 28	2 88 to 3 60
Oil, petroleum, per gallon.....	54	48
<b>Domestic Dry Goods, &amp;c.—</b>		
Shirtings—Brown, 4-4, standard quality, per yard.....	09	09
Bleached, 4-4, standard quality, per yard.....	16	15
Sheetings—Brown, 72 inch, standard quality, per yard.....	18	18
Bleached, 98 inch, standard quality, per yard.....	24	21
Cotton flannel, good quality, per yard.....	16	16
Tickings, good quality (single linen), per yard.....	20	24
(double linen), per yard.....	.....	60
Prints, per yard.....	14	10
Mousseline de laines, per yard.....	24	24
Cloth, all wool, suitable for workingmen's clothes, per yard.....	76	72
Boots, men's heavy, per pair.....	2 64	2 52
<b>House rent—</b>		
Four-roomed tenements, per week.....	1 25	1 20 to 1 80
Two-roomed tenements, per week.....	.....	84 to 1 20
Six-roomed tenements, per week.....	1 75	1 92 to 2 40
<b>Boarding and lodgings—</b>		
For men, per week.....	.....	2 88 to 3 85
For women, per week.....	.....	2 16 to 2 88

The consul of *Sheffield* informed us that the rate of wages in most of the Sheffield trades has been kept up to the standard of five years ago. But the amounts actually earned are much diminished, from the fact that there is so much less work to be done.

The following tables give a fair average of what men in the various trades can earn, if working full time, at the present rates of wages :

## RATE OF WAGES IN SHEFFIELD TRADES.

## Railway employees : \*

Engine-drivers, 12 hours per day.....	\$1 20 to \$1 80
Firemen, 12 hours per day.....	72 to 1 32
Passenger guards, per week.....	4 86 to 9 72
Goods guards, per week of 72 hours.....	6 06 to 7 30
Passenger porters, per week of 72 hours.....	3 66 to 4 38
Goods porters, per week of 72 hours.....	4 38 to 5 01
Laborers, per week of 72 hours.....	3 90 to 4 86

## Workers in iron (foundries, machine-shops, &amp;c.) per week :

Puddlers.....	7 83
Puddlers' assistants.....	5 34
Shinglers.....	12 79 to 14 58
Shinglers' assistants.....	8 76 to 9 72
Ball-furnace men.....	12 79
Ball-furnace men's assistants.....	6 06 to 8 76
Charcoal-lumpers.....	14 58
Rollers.....	9 96 to 14 58
Rollers' assistants.....	6 66 to 9 12
Metal-refiners.....	10 92
Plate-rollers.....	14 58 to 19 44
Furnacemen.....	13 38 to 18 24
Firemen.....	7 30 to 10 92
Forgemen.....	12 15 to 18 24
Pattern-makers.....	8 26 to 8 74
Molders.....	8 74 to 9 72
Laborers.....	4 86 to 6 18
Irontrailers.....	3 00 to 5 10
Springfitters.....	9 72
Springfitters' assistants.....	4 86
Tire-rollers.....	9 72
Machinists.....	5 82 to 8 76
Joiners.....	7 30
Turners (same as machinists).....	5 82 to 8 76
Engine-fitters.....	8 25
Blacksmiths.....	8 50
Millwrights.....	8 00

\*Men in goods department work six days per week, while those in passenger department work seven days. Engine-drivers, working 18 hours, get pay for two days; 16 hours, one day and a half; 14 hours, one day and a quarter.

RATE OF WAGES IN SHEFFIELD TRADES—*Continued.*

Boiler-makers:	
Riveters and bulkers.....	\$7 53
Holder-on .....	5 82
Blacksmiths .....	7 02
Flangers .....	8 00
Laborers or helpers.....	4 86
Enginemen.....	6 78
Steelworkers:	
Melters .....	19 50
Teemers .....	9 72
Cokers .....	5 82
Fileworkers:	
Forgers.....	8 52
Strikers .....	8 52
Hardeners.....	7 30
Grinders.....	\$10 94 to 13 38
Cutters .....	8 52
Sawmakers:	
Long and circular sawsmiths.....	12 12
Short and circular sawsmiths.....	8 04
Grinders.....	12 12 to 14 58
Handle-makers.....	9 72 to 12 12
Edge-tool workers:	
Forgers .....	13 38
Strikers .....	12 12
Grinders.....	14 50
Hardeners .....	6 30 to 7 30
Pocket cutlery:	
Forgers .....	5 82 to 10 92
Grinders.....	9 72 to 14 58
Table cutlery:	
Forgers .....	7 30 to 9 72
Strikers .....	6 06 to 8 52
Grinders.....	8 52 to 9 72
Building trades:	
Carpenters and joiners.....	8 10 to 8 62
Masons and bricklayers.....	9 12
Hod carriers.....	6 06
Slaters.....	9 12 to 9 62
Plasterers.....	7 78 to 8 26
Painters.....	7 30 to 8 52
Grainers.....	9 72 to 10 92
Agricultural laborers, with small cottage and garden....	4 14 to 4 86

The following are the prices of the principal necessities of life at the present time in Sheffield :

## COST OF LIVING IN SHEFFIELD.

Flour, superfine, per 14 pounds.....		\$0 54
Beef, roasting, per pound.....		22
Beef, soup, per pound.....		19
Beef, rump steak, per pound.....	\$0 30 to	32
Veal, fore quarter, per pound.....		18
Veal, hind quarter, per pound.....		19
Veal cutlets, per pound.....		24
Mutton, fore quarter, per pound.....		21
Mutton, leg, per pound.....		22
Mutton chops, per pound.....		24
Pork, fresh, per pound.....		20
Pork, bacon, per pound.....	06 to	14
Pork, ham, per pound.....	11 to	14
Lard, per pound.....	12 to	18
Fish, fresh, per pound.....	05 to	24
Butter, per pound.....	32 to	36
Cheese, per pound.....	16 to	20
Potatoes, per peck of 20 pounds.....		32
Rice, per pound.....	03 to	08
Milk, per quart.....		08
Eggs, per 16.....		24
Tea, good black, per pound.....	36 to	96
Coffee, per pound.....	24 to	44
Sugar, per pound.....	05 to	10
Molasses, per pound.....	05 to	06
Kerosene, per quart.....		08
Coal, per ton.....	2 88 to 4	15
Gas, per 1000 feet.....		68
Shirtings, brown, per yard.....	06 to	14
Shirtings, bleached, per yard.....	06 to	14
Shirtings, cotton and wool, per yard.....	13 $\frac{1}{4}$ to	28
Sheetings, per yard.....	21 to	42
Flannel, medium, per yard.....	19 to	24
Flannel, red, per yard.....	23 upwards.	
Prints, per yard.....	07 to	19
Boots, men's heavy, per pair.....	2 04 to 6	06
Four-roomed tenements, clear of rates, per week.....	96 to 1	20
Six-roomed tenements, with rates to pay, per annum...	78 00 to 97	50
Board for men, mechanics, per week.....	2 88 to 3	60
Board for women employed in factories, per week.....	1 44 to 1	92

It is represented by the consul at Dublin that the earnings of agricultural laborers in Ireland are supplemented by the produce of a small plot of ground attached to their cabins, and that there are 120,557 holding under five acres, and 36,143 holders of less than one acre. \*

The great majority of the holders of one acre, and a considerable percentage of holders of over one acre, may be fairly classed as agricultural laborers; *i. e.* working for neighboring farmers as laborers, and cultivating their small holdings in over-time. During the harvesting months of August and September high prices of labor tempt those living on the west coast of Ireland to England.

## RETURN OF WAGES PAID TO AGRICULTURAL LABORERS IN IRELAND.\*

	PER DAY, WITHOUT BOARD.		Yearly, with Board.
	Permanent.	Busy Seasons.	
Males:			
Ploughmen.....	\$0 28 to \$0 60	\$0 60 to \$0 88	\$58 00 to \$97 00
General men.....	24 to 48	60 to 88	48 60 to 88 00
Boys.....	12 to 24	24 to 36	39 00 to 58 00
Females:			
Dairy maids.....			58 00 to 97 00
Farm servants.....			29 16 to 48 60
Women for field work.....	24 to 36	36 to 60	
Girls (weeding).....	12 to 24	24 to 36	

\*The rate of wages paid to laborers in Ireland varies very much according to locality and seasons. Near large towns the rate is much higher than in the country districts; also in spring and harvest the rate is higher than at other seasons.

We give below the wages paid by the board of public works in some of the districts of *Ireland* :

## WAGES PAID IN IRELAND.

DESCRIPTION.	1876.	1877.	Time.
<i>Northwestern District.</i>			
Carpenters .....	\$0 96 to \$1 12	\$0 96 to \$1 12	Per day.
Masons and bricklayers.....	96 to 1 08	1 08 to 1 20	Per day.
Stonecutters .....	1 32 to 1 40	1 38	Per day.
Plasterers.....	96 to 1 08	1 08 to 1 20	Per day.
Painters and glaziers.....	7 29 to 8 50	7 20 to 8 50	Per week.
Plumbers, in town.....	6 78	6 78	Per week.
Gasfitters, in town.....	6 78	6 78	Per week.
Smiths.....	96 to 1 08	96 to 1 02	Per day.
Fitters.....	1 44 to 1 62	1 44 to 1 62	Per day.
Laborers, attending masons, &c.....	3 36	3 60	Per week.
Laborers, ordinary.....	2 40	2 88	Per week.
Laborers on engineering work } (navvies),	4 38	4 38	Per week.
Laborers, agricultural, ordinary.....	2 40	2 88	Per week.
Laborers, agricultural, superior.....	4 86	4 86	Per week.
<i>Eastern District.</i>			
Carpenters .....	6 90	6 90	Per week.
Masons and bricklayers.....	6 90	7 02	Per week.
Stonecutters .....	7 39	7 41	Per week.
Plasterers .....	7 02	7 14	Per week.
Painters and glaziers.....	6 30	6 52	Per week.
Plumbers .....	8 76	8 76	Per week.
Gasfitters .....	9 72	9 72	Per week.
Smiths.....	7 82	7 82	Per week.
Fitters.....	8 25	8 76	Per week.

## WAGES PAID IN IRELAND—Continued.

DESCRIPTION.	58 hours.	58 hours.	Time.
<i>Southwestern (Limerick) District.</i>			
Carpenters .....	\$7 26	\$7 74	Weekly.
Masons and Bricklayers.....	7 26	7 74	Weekly.
Stonecutters.....	7 26	7 98	Per week.
Plasterers.....	7 26	7 74	Per week.
Painters and Glaziers.....	7 26	7 26	Per week.
Plumbers .....	7 74	8 76	Per week.
Gasfitters .....	\$6 30 to 7 74	\$6 78 to 7 74	Per week.
Smiths.....	7 26	7 26	Per week.
Fitters.....	7 26	7 26	Per week.
Laborers, attending masons, &c.....	3 36	3 84	Per week.
Laborers, ordinary.....	2 88	3 84	Per week.
Laborers on engineering work, } (navvies).	2 88	3 84	Per week.
Laborers, agricultural, ordinary.....	2 88	2 88	Per week.
Laborers, agricultural, superior.....	3 36	3 36	Per week.
<i>Southern District.</i>			
Carpenters .....	7 98	7 98	Per week.
Masons and Bricklayers.....	7 98	7 98	Per week.
Stonecutters .....	7 98	8 76	Per week.
Plasterers.....	7 98	7 98	Per week.
Painters and Glaziers.. ..	7 26	7 26	Per week.
Plumbers .....	8 22	8 22	Per week.
Gasfitters .....	6 78	7 26	Per week.
Smiths.....	7 98	8 22	Per week.
Fitters .....	8 70	8 70	Per week.
Laborers, attending masons, &c.....	3 36	3 60	Per week.
Laborers, ordinary.....	2 88	2 88	Per week.
Laborers on engineering work, } (navvies).	3 60	3 60	Per week.
Laborers, agricultural, ordinary.....	3 60	3 60	Per week.
Laborers, agricultural, superior.....	\$3 60 to 3 60	\$3 60 to 4 32	Per week.

The consul in *Belfast* gives the following rate of wages and cost of living:

Agricultural laborers, with board and lodging, per week.....	\$1 92
Railway and other laborers, without board and lodging, per week.	4 38
Mechanics, per week.....	\$4 38 to 6 06

At these rates the workingmen are not able to accumulate anything, as all their wages are expended in living.

The rates of wages remain about the same as five years ago.

The necessaries of life may be quoted, at retail, about as follows :

Flour, per stone (14 pounds).....	\$ 56
Oatmeal, per stone.....	40
Lard, per pound.....	12
Butter, per pound.....	34
Potatoes, per stone.....	24
Indian-meal, per stone.....	28
Tea, per pound.....	80
Sugar, per pound.....	08
Rent and taxes, according to location, per annum.....	\$30 00 to 82 00

The consul of *Cork* reports as follows :

Agricultural laborers, per day.....	\$0 48
Boatmen, per day.....	73
Coal heavers, per day.....	1 09
Machinists, per day.....	1 09
Gasfitters, per day.....	1 09
Bakers, per day.....	1 09
Masons, per day.....	1 21
Shoemakers, per day.....	1 21
Printers, per day.....	1 21
Joiners, per day.....	1 21
Engineers (steamers), per week.....	12 16
Firemen (steamers), per week.....	6 68
Sailors (steamers), per week.....	6 07

The laborers in the Hawlbowl Extension Works, where large royal navy locks are being constructed, are paid as follows, per day, 48, 54 and 60 cents, according to class; boys, 24, 32, 36 and 40 cents, according to class; excavators and quarrymen, 73 cents.

On the Great Southern and Western Railway, the principal line in this country, the employes are paid as follows :

Conductors, per week.....	\$4 38 to \$7 29
Head porters, per week.....	4 13 to 4 86
Porters, per week.....	3 40 to 3 89
Engineers, per day.....	1 21 to 1 70
Firemen, per day.....	60 to 85
Cleasers and steam raisers, per week.....	2 92 to 4 38
Gaugers, per week.....	4 13
Milesmen, per week.....	3 40

The food of the above classes, with the exception of engineers and guards, is made up of a selection from tea, milk, bread, oatmeal, potatoes, dried fish, and, among the poor people, a coarse Indian meal, which is used instead of oatmeal. The cost of this subsistence varies slightly in different localities, the highest, 14 cents per day, being about the expense in Cork, Queenstown, and their neighborhoods. Rent and clothing cost about \$35 a year, making a total of about \$85.

The mechanic pays something more for a better lodging, but in other respects his living is the same as the laborer.

The consular reports from *Scotland* are very complete and worthy of more extended abstracts than we can present. From the consul of *Leith* we abstract the following respecting agricultural wages:

## THE LOTHIAN AND EAST OF SCOTLAND.

1873.	1878.
Free cottage, garden, and allowances of fire, food, &c., amounting to about.....	Free cottage, &c., and allowances, slightly increased to.....
\$105 60	\$108 00
Money wages.....	Money wages.....
112 80	134 40
Total.....	Total.....
\$218 40	\$242 40

Day laborers in the Lothians receive from 40 to 84 cents per day, according to the quality of the labor and the exigencies of the time. In 1873 they had fully 10 per cent. less than at present.

## SOUTHWEST OF SCOTLAND.—MARRIED MEN.

1873.	1878.
Allowance of meal and potatoes, with free cottage and garden, valued at.....	Allowance of meal and potatoes, with free cottage and garden..
\$67 20	\$67 20
Money wages.....	Money wages.....
144 00	163 20
Total.....	Total.....
\$211 20	\$230 40

## SINGLE MEN.

1873.	1878.
Board and lodging, equal in value to.....	Board and lodging, equal in value to.....
\$74 80	\$74 80
Money wages.....	Money wages.....
136 80	153 60
Total.....	Total.....
\$211 60	\$228 40

1873.		WOMEN.	1878.	
Board and lodging, &c., equal to	\$67 20		Board and lodging, &c., equal to	\$67 20
Money wages.....	60 00		Money wages.....	76 80
Total.....	<u>\$127 20</u>		Total.....	<u>\$144 00</u>

Day laborers received from 36 to 48 cents per day in 1873; now they receive about 72 cents per day.

(From Aberdeen to Inverness.)

1873.		MARRIED MEN.	1878.	
Cottage .....	\$14 40		Cottage .....	\$14 40
6½ bolls oatmeal*.....	31 20		6½ bolls oatmeal.....	31 20
Pint of milk per day, at 8 cents.	29 12		Pint of milk per day, at 8 cents.	29 12
Four loads peat, at \$1.20.....	4 80		Four loads peat, at \$1.20.....	4 80
Allowance of potatoes.....	9 60		Allowance of potatoes.....	9 60
Money wages.....	108 00		Money wages.....	132 00
Total.....	<u>\$197 12</u>		Total.....	<u>\$221 12</u>

1873.		SINGLE MEN.	1878.	
6½ bolls oatmeal.....	\$31 20		6½ bolls oatmeal.....	\$31 20
Pint milk per day, at 8 cents.....	29 12		Pint milk per day, at 8 cents.....	29 12
Fire and houseroom.....	7 20		Fire and houseroom.....	7 20
Money wages.....	127 20		Money wages.....	153 60
Total.....	<u>\$194 72</u>		Total.....	<u>\$221 12</u>

1873.		WOMEN.	1878.	
(For Housework.)				
Board and lodging.....	\$62 40		Board and lodging.....	\$62 40
Money wages.....	28 80		Money wages.....	38 40
Total.....	<u>\$91 20</u>		Total.....	<u>\$100 80</u>

Taking Scotland as a whole, the following is about as reliable an estimate as can be given of the average yearly rate of wages paid to plowmen now and five years ago :

1873.		1878.	
Allowances in kind.....	\$74 40	Allowances in kind.....	\$74 40
Money .....	129 60	Money .....	148 80
Total.....	<u>\$204 00</u>	Total.....	<u>\$223 20</u>

\* A boll equals four American bushels.

## TRADES WAGES.

DESCRIPTION.	1873..	1878.
	Per week.	Per week.
Passenger department—		
Passenger Guards.....	\$4 80 to \$6 00	\$5 04 to \$6 48
Goods Guards.....	5 28 to 6 96	5 76 to 7 20
Block Signalmen.....	4 56 to 5 04	5 00 to 5 50
Pointsmen.....	4 32 to 4 56	4 32 to 4 80
Ordinary Station Porters.....	4 00 to 4 20	4 00 to 4 20
Porters in Edinburgh.....	4 32 to 4 56	4 32 to 4 56
Goods Porters.....	4 32 to 4 56	4 32 to 4 80
Goods Porters in Edinburgh.....	4 80	5 04
Foremen in goods department.....	4 80 to 5 57	4 80 to 5 76
NOTE.—Sunday duty is paid for in addition to the above.		
Engineer's department—		
Chief Foremen.....	5 76 to 6 48	6 76 to 6 48
Squad Foremen.....	5 28 to 5 52	5 04 to 5 28
Ordinary Surfacedmen.....	4 56	4 32
Special Squads.....	4 80 to 5 04	4 56 to 4 80

DESCRIPTION.	1873.	1878.
	Rate per day of 12 hours.	Rate per day of 12 hours.
Locomotive Department:		
Passenger engine drivers.....	\$1 44 to \$1 68	\$1 44 to \$1 68
Goods engine drivers.....	1 08 to 1 56	1 20 to 1 56
Passenger firemen.....	72 to 84	84 to 96
Goods firemen.....	72 to 84	76 to 84
Cleaners.....	56 to 64	Usually 64
Running shop fitters.....	1 08 to 1 16	1 08 to 1 28
Moulders.....	1 00 to 1 28	1 08 to 1 28
Dressers.....	80 to 1 00	1 00 to 1 10
Laborers.....	70	72
Patternmakers.....	1 00 to 1 25	1 06 to 1 35
Blacksmiths.....	1 06 to 1 20	1 06 to 1 25

The following are the number of workmen employed at the docks in *Leith* since 1874, and the wages paid to them since that time :

## WAGES PAID AT THE DOCKS IN LEITH.

DESCRIPTION.	1874.		1875.		1876.		1877.		1878.	
	Number of Men.	Per Day.								
Carpenters and Joiners.....	20	\$1 40	18	\$1 40	18	\$1 30	21	\$1 30	20	\$1 25
Blacksmiths .....	5	1 30	5	1 30	5	1 15	6	1 10	6	1 05
Hammermen.....	5	80	5	85	5	85	6	85	6	80
Fitters .....	4	1 36	4	1 40	4	1 40	6	1 40	8	1 30
Engine Drivers.....			3	1 10	6	1 20	12	1 15	16	1 10
Engine Shinters.....			3	1 00	4	1 10	6	1 05	6	1 05
Masons .....	3	1 44	30	1 70	52	1 62	32	1 62	69	1 50
Laborers of all kinds.....	58	90	204	90	450	90	662	84	844	80

## Prices of certain articles of family consumption :

Bread, four-pound loaf.....	\$0 14 to \$0 16
Butter, per pound.....	28 to 40
Barley, per pound.....	04
Cheese, per pound.....	14 to 40
Coffee, per pound.....	40 to 48
Currants, per pound.....	10
Coal, per ton.....	2 40 to 2 91
Chickens, per pair.....	96 to 1 32
Ducks, per pair.....	96 to 1 20
Eggs, per dozen.....	24 to 26
Flour—Corn, per pound.....	12
Wheat, per peck.....	30 to 36
United States, per barrel.....	6 54 to 9 24
Canadian, per barrel.....	7 25 to 9 24
Meat—Boiling beef, per pound.....	12 to 22
Steak, per pound.....	24 to 34
Mutton, per pound.....	20 to 24
Lamb, per pound.....	36
Veal, per pound.....	24 to 30
Pork, per pound.....	14 to 16
Smoked ham, per pound.....	24 to 28
Milk, per pint.....	06
Meal—Barley, per peck.....	30
Oat, per peck.....	30 to 36
Potatoes, per stone.....	24 to 30
Raisins, per pound.....	12
Rice, per pound.....	06
Sugar—Brown, per pound.....	07 to 08
White, per pound.....	09 to 12

We select, from a very elaborate report, a few of the most prominent trades, as follows :

COMPARATIVE STATEMENT SHOWING THE NUMBER OF HOURS WORKED PER WEEK BY, AND THE RATE OF WAGES PAID TO, LABORERS AT DUNDEE DURING THE PAST FIVE YEARS (1878 BACK TO 1874, INCLUSIVE).

OCCUPATION.	1878.		1877.		1876.		1875.		1874.	
	PER WEEK.		PER WEEK.		PER WEEK.		PER WEEK.		PER WEEK.	
	Hours of Labor.	Wages.	Hours of Labor.	Wages.	Hours of Labor.	Wages.	Hours of Labor.	Wages.	Hours of Labor.	Wages.
House Building Trades—										
Bricklayers .....	51	\$10 20	51	\$10 20	51	\$9 18	51	\$8 16	51	\$8 16
Bricklayers' Laborers...	51	6 63	51	6 63	51	6 63	51	6 12	51	6 12
Masons .....	51	8 16	51	8 67	51	9 18	51	10 20	51	8 16
Masons' Laborers.....	51	6 12	51	6 63	51	6 63	51	6 63	51	6 12
Carpenters and Joiners..	51	7 65	51	8 16	51	7 65	51	7 14	51	6 63
Gasfitters and Plumbers.	51	8 67	51	8 16	51	7 65	51	7 14	51	6 63
Glaziers .....	51	7 14	51	7 14	51	6 63	51	6 63	51	6 12
Painters.....	51	7 65	51	7 65	51	7 14	51	7 14	51	6 63
Plasterers .....	51	10 20	51	10 20	51	11 22	51	10 20	51	9 18
Slaters .....	51	8 16	51	7 65	51	7 14	51	7 14	51	7 14

COMPARATIVE STATEMENT SHOWING THE NUMBER OF HOURS WORKED PER WEEK, AND THE WAGES PAID.

OCCUPATION.	1878. Per week.		1877. Per week.		1876. Per week.	
	Hours of Labor.	Wages.	Hours of Labor.	Wages.	Hours of Labor.	Wages.
Ship-building trades—						
Iron riveters, piece work.....	51	\$7 00 to \$8 50	51	\$7 00 to \$8 50	51	\$7 00 to \$8 50
Iron workers, laborers.....	51	4 50 to 5 00	51	4 50 to 5 00	51	4 50 to 5 00
Carpenters.....	51	7 00 to 7 50	51	7 00 to 7 50	51	7 00 to 7 50
Wrights or joiners.....	51	7 25 to 7 50	51	7 25 to 7 50	51	7 00 to 7 50
Smiths.....	51	6 50 to 7 00	54	6 50 to 7 00	51	6 50 to 7 00
Coach-building trades—						
Body makers.....	51	6 50 to 7 00	51	6 50 to 7 00	51	6 50 to 7 00
Smiths.....	51	7 00 to 8 00	51	7 00 to 8 00	51	7 00 to 8 00
Painters.....	51	6 25 to 7 00	51	6 50 to 7 00	51	6 25 to 6 75
Wheelwrights.....	51	6 75 to 7 50	51	6 75 to 7 25	51	6 75 to 7 25
Upholsterers.....	51	6 25 to 6 75	51	6 25 to 6 75	51	6 25 to 7 00
Engine and machine-making trades—						
Pattern workers.....	51	7 00 to 8 00	51	7 00 to 8 00	51	7 00 to 8 00
Molders.....	51	7 00 to 7 50	51	7 00 to 7 50	51	7 00 to 7 50
Machine fitters and finishers.....	51	6 00 to 6 25	51	6 00 to 6 25	51	6 00 to 6 25
Blacksmiths.....	51	6 50 to 7 00	51	6 50 to 7 00	51	6 50 to 7 00
Boiler makers.....	51	6 75 to 7 25	51	6 75 to 7 25	51	6 75 to 7 25
Laborers.....	51	4 00 to 4 75	51	4 00 to 4 75	51	4 00 to 4 75
Miscellaneous trades—						
Bakers.....	51	6 25 to 7 00	51	6 25 to 7 00	51	6 25 to 7 00
Bleachers.....	51	4 00 to 4 75	51	4 00 to 4 75	51	4 00 to 4 50
Bleachers, women.....	51	2 25 to 3 00	51	2 25 to 3 00	51	2 25 to 2 50
Boatbuilders.....	51	6 25 to 7 00	51	6 25 to 7 00	51	6 25 to 7 00
Bookbinders.....	54	6 50 to 7 00	54	6 50 to 7 00	54	6 50 to 7 00
Bookbinders, women.....	54	2 25 to 3 00	54	2 25 to 3 00	54	2 25 to 3 00
Shoemakers, by machinery.....	56	7 00 to 8 00	56	7 00 to 8 00	56	7 00 to 8 00
Shoemakers, by hand, piece work.....	56	5 25 to 5 75	56	5 25 to 5 75	56	5 25 to 5 75
Shoemakers, by machinery, women.....	56	2 00 to 3 25	56	2 00 to 3 25	56	2 00 to 3 25
Brewers.....	56	4 75 to 5 50	56	4 75 to 5 50	56	4 75 to 5 50
Butchers.....	59	4 50 to 5 00	59	4 50 to 5 00	59	4 50 to 5 00
Cabinet-makers.....	51	6 75 to 7 25	51	6 75 to 7 25	51	6 75 to 7 25
Chairmakers, piece work.....	51	6 50 to 7 00	51	6 50 to 7 00	51	6 50 to 7 00
Coppersmiths.....	51	7 00 to 7 25	51	7 00 to 7 25	51	7 00 to 7 25
Curriers, piece work.....	56	7 00 to 8 50	56	7 00 to 8 50	56	7 00 to 8 50
Cutlers.....	51	6 00 to 6 50	51	6 00 to 6 50	51	6 00 to 6 50
Dyers.....	56	4 75 to 5 75	56	4 75 to 5 75	56	4 75 to 5 75
Horseshoers.....	51	6 50 to 7 50	51	6 50 to 7 50	51	6 50 to 7 50
Jewelers.....	53	7 00 to 8 50	53	7 00 to 8 50	53	7 00 to 8 50
Marble-cutters.....	51	7 00 to 7 50	51	7 00 to 7 50	51	7 00 to 7 50
Millwrights.....	51	7 00 to 8 00	51	7 00 to 8 00	51	7 00 to 8 00
Printers, letter-press.....	54	7 00 to 9 00	54	7 00 to 9 00	54	7 00 to 9 00
Sailmakers.....	54	5 75 to 6 25	54	5 75 to 6 25	54	5 75 to 6 25
Tanners.....	56	6 50 to 7 00	56	6 50 to 7 00	56	6 50 to 7 00
Tailors.....	54	7 00 to 8 00	54	7 00 to 8 00	54	7 80 to 8 20
Railway employes—						
Engine-drivers, freight.....	60	8 50 to 9 00	60	8 50 to 9 00	60	8 50 to 9 00
Firemen, freight.....	60	5 50 to 6 00	60	5 50 to 6 00	60	5 50 to 6 00
Engine-drivers, passenger.....	60	9 00 to 10 00	60	9 00 to 10 00	60	9 00 to 10 10
Firemen, passenger.....	60	5 75 to 6 25	60	5 75 to 6 25	60	5 75 to 6 25
Brakemen, freight.....	60	6 00 to 6 50	60	6 00 to 6 50	60	6 00 to 6 50
Brakemen, passenger.....	60	6 50 to 7 00	60	6 50 to 7 00	60	6 50 to 7 00
Porters, freight.....	60	4 00 to 5 00	60	4 00 to 5 00	60	4 00 to 5 00
Porters, passenger.....	60	4 00 to 4 50	60	4 00 to 4 50	60	4 00 to 4 50

STATEMENT SHOWING THE AVERAGE VALUE OF COMMODITIES THAT MAY BE TERMED THE NECESSARIES OF LIFE DURING THE FIVE YEARS 1874-78, AT DUNDEE.

Bread, per 4-pound loaf.....	\$0 15
Butter, per pound.....	30
Sugar, per pound.....	08
Tea, per pound.....	88
Coffee, per pound.....	32
Ham, per pound.....	24
Eggs, per dozen.....	30
Oatmeal, per 7 pounds.....	28
Flour, American, per 7 pounds.....	28
Flour, European, per 7 pounds.....	27
Beef, fresh, per pound.....	24
Beef, American, per pound.....	16
Mutton, per pound.....	16
Rice, per pound.....	4
Cheese, per pound.....	14
Codfish, salted, per pound.....	06
Potatoes, per 28 pounds.....	38
Milk, per pint.....	04
Pork, salted, per pound.....	13
American Canned Beef, per pound.....	20

From the Consul of *Florence*, Italy :

OCCUPATIONS.	Daily Wages with- out board, 1877, 1878.	Daily wages with- out board during the past five years.	Increase.
Blacksmiths.....	\$0 80	\$0 75	\$0 05
Carpenters .....	85	80	05
Machinists .....	1 00	90	10
Masons .....	75	70	05
Shoemakers .....	70	60	10
Stonecutters.....	65	60	05
Straw Laborers (Women).....	17	15	02
Tanners .....	60	60	02
Tailors.....	80	75	05
House Servants*.....	65	50	15
French Servants*.....	20	14	06
Experienced Hands, Winter.....	40	30	10
Experienced Hands, Summer.....	60	50	10
Ordinary Hands, Winter.....	35	30	05
Ordinary Hands, Summer.....	50	40	10
Common Laborers.....	40	40	10
Tinsmiths.....	60	60	10

\*With board.

STATEMENT SHOWING THE COST OF LIVING TO THE LABORING CLASS, OR THE PRICES PAID FOR THE NECESSARIES OF LIFE, COMPARED WITH THE COST PREVAILING DURING THE PAST FIVE YEARS.

ARTICLES.	Prices, 1877, 1878.	Prices for the past five years.	Increase.
Flour, wheat, per pound.....	\$0 07	\$0 06	\$0 01
Beef, per pound.....	18	15	03
Pork, per pound.....	20	18	02
Lard, per pound.....	28	25	03
Codfish, dry, per pound.....	10	08	02
Butter, per pound.....	30	25	05
Cheese, per pound.....	28	25	03
Potatoes, per pound.....	03	02	01
Rice, per pound.....	07	06	01
Beans, per pound.....	04	03	01
Milk, per quart.....	06	05	01
Eggs, per dozen.....	19	17	02
Coal, per ton.....	11 00	10 60	40
House rent—			
Four-roomed tenement, per six months.....	30 00	40 00	*10 00
Six-roomed tenement, per six months.....	50 00	60 00	*10 00
Board—			
For Men, per week.....	4 00	3 50	50
For Women, per week.....	3 00	2 60	40

The fare of the Italian laborer is usually very simple, consisting of bread, boiled chestnuts, *polenta* (mush), and minestrone, a substantial soup, composed of vegetables, olive oil, and macaroni. This, with an occasional bottle of ordinary wine, a relish of stockfish or cheese, and at rare intervals, on great festivals or holidays, a dinner of fresh meat, constitutes the homely fare of the Italian laborer or peasant.

From the Consul of *Turin*, Piedmont :

*Agricultural laborers.*—Males: Daily wages, say, nine months, and nine hours per day, without maintenance, 24 cents; say nine months, twelve hours per day, without maintenance, 40 cents per day; say three months in harvest time, fifteen hours per day, without maintenance, 60 to 70 cents per day. Some proprietors, in harvest time, pay per day 40 to 50 cents, with a bottle of common wine and a dish of soup. In winter time some laborers are paid 30 cents per day, without maintenance. Females are paid about one-half of the above

\* Decrease, owing to the removal of the capitol.

rates of wages. Youths fourteen to sixteen years of age are paid from \$20 to \$24 per annum, with board. There are field hands who receive \$18 per annum, with board.

*Railroad laborers.*—The Great Northern Railway, now run by the National Government, pays about as follows: Males, ordinary daily laborers are paid from 50 to 60 cents. Engineers, first-class, \$42 monthly; second-class, \$36 monthly; third-class, \$30 monthly, besides a small interest on the economy made on coal (in the quantity fixed by the railway authorities and based on the distance); on the average this bonus amounts to \$12 monthly. Chief conductors of trains, \$360 to \$400 per annum; other conductors of trains, \$240 to \$280 per annum.

*Public works.*—Public works are let out to the lowest bidder. Generally speaking, therefore, contractors pay a lower rate of wages than those heretofore noted.

*Silk spinners.*—Females are paid from 18 to 24 cents per day of 13 hours, with lodging in common, wood and light. Others are paid 24 cents per day of 12 hours, without anything else.

*Mechanics.*—Males, bricklayers, stonemasons, carpenters, smiths, 50, 60, 70, 80 cents, and \$1 to \$1.20, for 12 hours' work, and according to the season of the year; upon an average, 65 cents per day.

*Cooks.*—Females, \$3, \$4, and \$5 per month; housemaids, \$2.50, \$3, to \$3.50 monthly.

*Cost of Living.*—Agricultural laborers spend 16 to 20 cents daily; females, 15 to 16 cents. The agriculturist, both farmer and laborer, lives very economically; hardly knows what fresh meat is, except half a dozen times a year, on state and church festivals, the latter being too numerous for the moral and physical well-being of the laboring classes. Sometimes he eats a little sausage, but the daily food consists of polenta (a kind of mush made from cornmeal. Maize is not so succulent and nourishing as in the United States); rice bread, where rice grows, soups, made generally of wheat flour pastes, rice, except in time of garden vegetables, sometimes with a little lard in the soups by way of a luxury, cheese, greens, and chestnuts in their season. Some laborers keep poultry, which is shared with the owner of the land. Agricultural families also have wheat bread occasionally, which they make at home.

From the Consul of *Amsterdam*, Netherlands:

*Agricultural laborers*, who are employed by the year, and who have their homes and receive their subsistence upon the premises of their employers, are paid from \$50 to \$60 per annum, and usually receive, in addition, two common suits of clothing during the same time.

*Farm laborers*, hired by the day during the busy seasons, receive from 40 to 50 cents per day.

*Florists and nursery laborers*, at the city of Harlem and its neighborhood, engaged in raising bulbs or flower roots, are paid \$2.90 per week for nine months in the year and \$265 for the other three months.

*Female servants* are paid from \$20 to \$60 per annum; but those whose wages are only from \$20 to \$30 are not living in the houses of their employers altogether, but come early in the morning and leave at about four o'clock in the afternoon.

The following statement shows the wages paid certain workmen per hour, the working hours being never less but often more than 12 per day: Carpenters, 7 to 10 cents; painters,  $6\frac{3}{4}$  to  $9\frac{1}{4}$  cents; masons, 7 to 10 cents; plumbers,  $6\frac{1}{2}$  to 9 cents; paper hangers,  $6\frac{1}{2}$  to 9 cents; blacksmiths, 7 to 10 cents; stucco-workers,  $8\frac{3}{4}$  to 10 cents; shoemakers, best, \$6 to \$6.60 per week; ordinary and repairers, \$2.40 to \$3.60; tailors, best, \$5.60 to \$6.80 per week; ordinary and repairers, \$2.40 to \$3.60; cigar makers, when steadily employed, make from \$5.20 to \$6.80 per week; common railroad laborers and laborers employed on public works and by contractors, receive from 40 to 60 cents per day.

From the Consul of *Rotterdam*, Netherlands:

The rate of wages usually paid to laborers of every class in the Netherlands is comparatively low, especially as compared to the rates of wages paid for mechanical and unskilled labor in the United States.

The usual or average rate of wages paid to agricultural laborers is 39 cents per day, or about \$10 per month.

The average rate of wages paid for mechanical labor is shown by the following table:

Machinists, per day.....	\$0 80 to \$1 20
Molders, per day.....	80 to 1 20
Carpenters, per day.....	60 to 1 00
Masons, per day.....	60 to 1 00
Smiths, per day.....	60 to 1 00
Painters, per day.....	60 to 1 00
Plasterers, per day.....	60 to 1 00

The rate of wages paid to porters, jobbers, and common laborers is 40 cents to 60 cents per day.

The usual rate of wages paid for mechanical labor upon public works and railways, is from 10 to 15 per cent. higher than the above stated prices.

The cost of living in the Netherlands consumes the wages of the mechanic and laborer. Meat, excepting sausage and chipped beef, is regarded by the mechanic and laboring man as a luxury, and is rarely indulged in except upon extra occasions. Bread, rice, fish, potatoes, and other vegetables constitute the staple articles of food for the laboring classes of the Netherlands.

From the Consul of *Shanghai*, China:

As there was nothing in the first volume of consular reports relating to Chinese labor, we avail ourselves of the recent second volume to present a few facts respecting the prices of labor in China. The report from which we obtain these statistics is dated Shanghai, June 23d, 1880.

The prices given are not local, but such as prevail all over the country.

In respect to skilled labor, we are informed that artisans and manufacturers live mostly in towns or cities, where the higher cost of living and house rents exact a corresponding higher income.

Art, taste and genius, while highly appreciated by the people, do not, as in Europe and America, command that high premium which so much encourages art. It is represented that the painters and designers of those beautiful works of art, on porcelain, silk and enamel, which are the admiration of the world, are content if they and their families can earn enough to live upon, and lay aside sufficient to provide for funerals of their parents and themselves, and contribute something to their children's wedding.

Gold and silver workers, in consideration of the responsibility incident to their calling, receive some additional remuneration. The highest paid day laborer is, perhaps, the silk reeler or spinner, who must not only possess a good degree of skill, but owing to the condition of the cocoons at times, much night work is necessary. They receive from \$1 to \$2 per diem.

The average of an income under the head of skilled labor, is as follows :

For a master, per week, \$3.....	\$156 00 per annum.
For a workman, per week, \$1 50.....	78 00 per annum.
For a youngster or female, per week, \$0 50.....	26 00 per annum.

The expense of living will be, respectively,

For a master, per annum—

For food, &c.....	\$72 00
For rent, &c.....	36 00
For clothing, &c.....	12 00
Total.....	<u>\$120 00</u>

For a workman, per annum—

For food, &c.....	\$45 00
For rent, &c.....	12 00
For clothing, &c.....	8 00
Total.....	<u>\$65 00</u>

The females and youngsters are considered to absorb all they earn.

The master lives generally at his workshop, in the room, to furnish which costs him from \$20 to \$30.

On a Chinese farm every member of the family must work. Two and one-half acres of good, arable land, with a mud and reed house, a bullock or cow, two pigs, a few fowls and a few primitive agricultural implements, constitute the property of a well-to-do farmer.

A man, wife, and two children, support themselves upon about 20 cents per day. The ordinary food is rice, salted vegetables, bread made of flour and millet, and the commonest tea. On festive occasions, pork, fowl or salted eggs, and a cup or two of wine. Two and one-half acres of good land, costs about \$400.

The annual value of the crop is estimated at.....	\$160
Cost to work the land, manure, taxes, &c.....	\$62
Cost of living of the family.....	73
	— 135
Income for the year.....	\$25

The farm laborer permanently employed, receives about \$12 a month, with board and lodging. During harvest time he is paid, besides meals, worth about 10 cents, from 10 to 15 cents per day, or 70 cents to \$1.05 a week. By the month, he receives \$1.50 to \$2.00, besides board. A man thinks he does pretty well if he saves \$3.00 or \$4.00 a year.

Cooly labor comprises the carriers, boatmen, wheelbarrowmen, &c., and their earnings average 15 cents a day, which is equal to \$4.50 per month. It varies from 5 cents a day to 30 cents, without board and lodging, depending upon the physical strength of the men. Most of the Cooly labor in China is controlled by companies, who support them when sick, and consequently have a mortgage upon their labor.

The Consul of *Kanagana*, Japan, informs us under date of October 6th, 1880, that in 1878 the number of farmers, out of a population of 35,000,000, was something over 15,500,000, of which over 7,000,000 were women; but as most of this number are engaged in household duties, spinning, weaving, making clothing, &c., not more than 2,000,000 or 3,000,000 are employed in the field.

All farm labor is mere hand work. Plows are seldom seen, the soil being worked over with mattocks. Ninety-nine per cent. of all labor is still manual.

The wages of able-bodied farm hands are about \$35 per year, with board; and without board, \$50. Per day, with board, the average is not more than 15 to 20 cents. To do work in a house or on a farm, stout, hearty women get from \$8 to \$10 per year, with food; and without food, from \$25 to \$30; and by the day, at from 10 to 15 cents. The average number of hours of labor will average from 8 to 9 hours.

Experience and skill are necessary in the cultivation and preparation of tea, silk and sugar, and double wages are ordinarily allowed to this class of laborers.

The food of farm laborers is almost entirely vegetable. For clothing, \$4 to \$5 a year will suffice.

The Japanese artisan, in social relations, ranks with the merchants and bankers. The antiquity and perfection of Japanese mechanical art has no parallel. Their artistic and useful products, in steel, bronzes, porcelain, silk, etc., antedate all other nationalities. It is represented that between 5,000,000 and 6,000,000 work, more or less at mechanical trades. As in agriculture, so in all branches of mechanical art, labor-saving machinery has no place. It is thought there are not more than two sawmills in the Empire.

Skilled labor commands relatively high wages. A good turner at the pottery wheel gets from 50 to 70 cents per day; and the best painters, from 75 cents to \$1.15. The average is much less. Makers of flowers and figures of birds, &c., for ornamenting the larger vases in bas relief, receive from 50 to 70 cents per day. Safe persons, skilled in boxing the vases, can be had for from 40 to 60 cents per day; and clay workers and mixers, at from 20 to 30 cents. Makers of enameled copper and porcelain receive about the same wages. The enameled copper or cloisanne of the present time commands higher prices.

Bronze makers get about the same wages as workers in porcelain. The highest skill in inlaid bronze manufacture commands from \$1 to \$1.50 per day, but ordinary skill can be had for from 30 to 70 cents per day.

Ivory carvers get from \$10 to \$20 per month; carpenters from 25 to 50 cents per day; blacksmiths cheaper, and can be had for from 18 to 40 cents per day.

As in China, the Cooly takes in the lowest class, and of course, the most degraded. In the last twelve years this class has been greatly improved, and as a consequence, higher wages and schools for their children are provided. Fishermen and miners are about on a level with the Coolies, in respect to wages and degradation. The former receive about 15 to 20 cents per day; and the latter, common grade, from 8 to 20 cents per day, and by the month, less.

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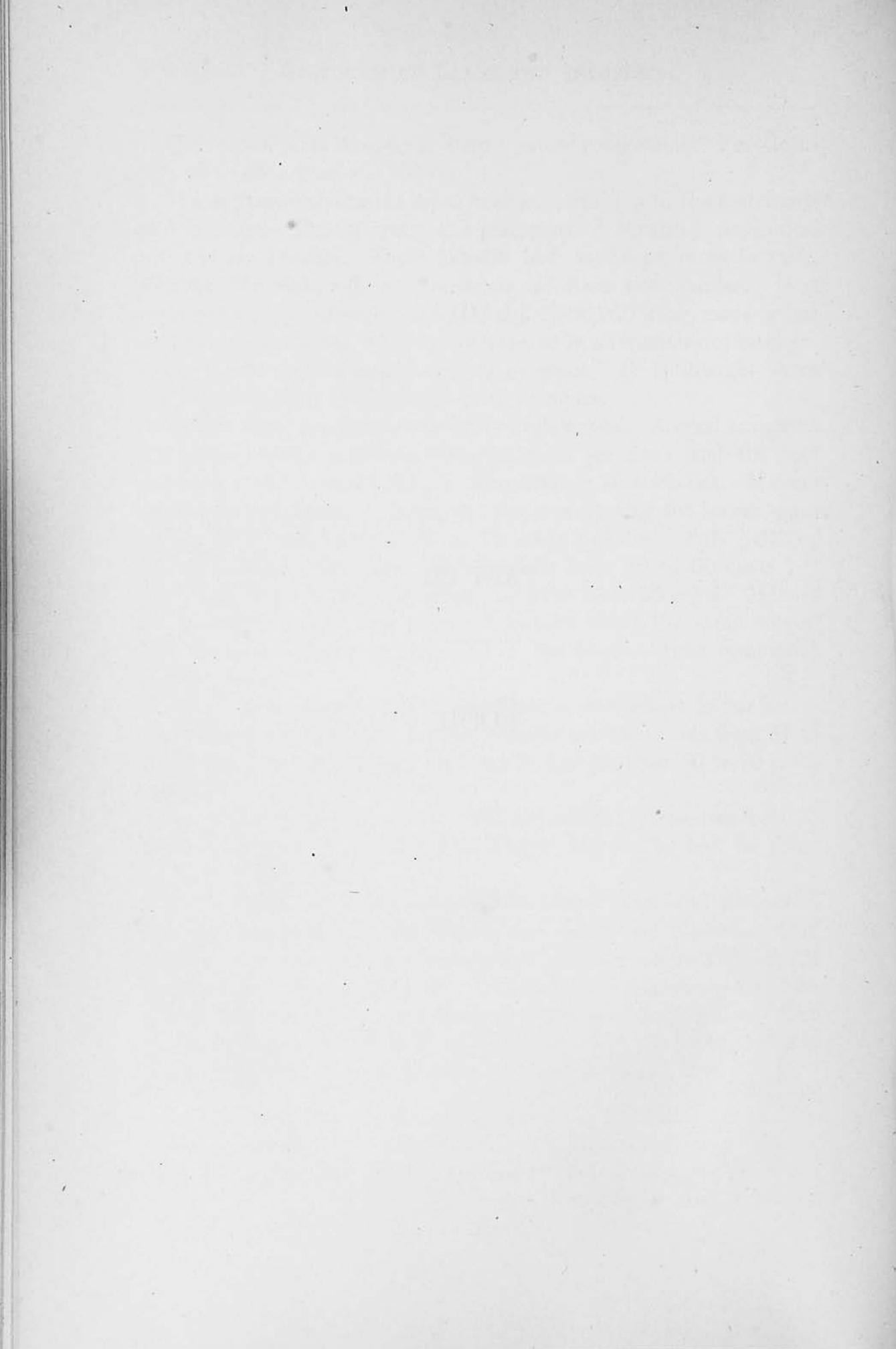
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PART IX.

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FOOD.

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## PART IX.

### FOOD.

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BY EZRA M. HUNT, M. D.

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The bearing of personal and family health on the success and comfort of the laborer, is at once recognized when duly considered, yet, perhaps, no one interest is so uniformly overlooked. The success of the laborer, and not less of his employer, requires that large attention should be given to the health condition, not only of the artisan himself, but of all those dependent upon him.

The wage question is not merely one of pay per day, what the amount received will do, must not be lost sight of in the study of the adjustment of reward for service rendered. First there must be a compensation adequate to the work performed, next, there must be a recognition that the physical welfare of the person and those supported by him largely decides whether his wages are adequate, whether from them he is making a living consistent with effective work, and whether he is to have that spirit of contentment and that energy of service which are requisite to good labor. So fully has this been realized, by some engaged in large manufacturing interests, that they are careful to look after the home life of their operatives, to incite those who are not likely to be diligent in self-support, and then to aid them in planning, not as a mere philanthropy, but as a part of their own industrial success. Profitable labor demands that the worker shall be comfortably clothed, housed and fed; that in his work he should not suffer from unhealthy surroundings, and that he should be able to avail himself of the fullness of natural force and of the money he acquires thereby to secure comfort to himself and to those who must look to him for support.

Low wages are not half so oppressive as ill health from avoidable causes or insufficient food for the work demanded, or as any necessity for spending what would otherwise be thrift, in compensating for avoidable evils. The greatest burden on the wage classes to-day is their inability to secure avoidance from expenses which ought not to be; such as those owing to sickness, to inability to buy food at the lowest prices; from not knowing which are the most economical materials for or combinations of food, or how so to prepare it as to be most acceptable to the palate, most digestible, and most nourishing. The time has come when we are able, with a good degree of certainty, to estimate what are the relations of force to food, what are the demands made by labor in the various food supplies, and how so to furnish the food as that from it shall be derived the greatest amount of ability for work.

We propose in this brief article to give an outline of food values and to add a few suggestions as to modes of preparation and reception of foods. An attempt has been made to measure the value of various articles as foods, by finding what materials they contain such as are found in the human system, or such as may be convertible into them. We shall note a few of these comparisons, not because they alone enable us to fully determine food values, but because they serve as helps in observation and aid to throw light on our experience. The division of materials contained in the system which has been generally maintained is into two classes. First, that which furnishes the substance for the body itself; and next, that which furnishes the heat which maintains the temperature of the body. These are often distinguished as flesh-producing and heat-producing foods. The chemists term them nitrogenous and non-nitrogenous foods, nitrogen being a chief constituent of the flesh or body-forming foods. If we could accurately draw the line betwixt the two, it would be expressed as follows :

I. Nitrogenous—

Flesh forming.

Muscle or tissue repairing.

II. Non-nitrogenous—

Fat forming.

Heat producing.

Force giving.

The nitrogenous matters are so largely represented by albumen, of which the white of eggs is an example, that these are sometimes called the *albuminates*. These also exist largely in meat, and in some vegetables, as beans.

Fruit, sugar and starch belong to the opposite, or carbonaceous class.

If we desire to give the chief examples of each of these divisions of foods we might state them thus :

- I. Albumen, as in eggs, etc.  
Casein, as in milk, cheese, etc.  
Fibrine, as in meat.  
Gelatine, as in jellies.
- II. All fats or oils,  
Starch, as in potatoes, rice, etc.  
Sugars.

These two classes of foods, with water as the great conveyancer or medium of exchange, and with a few alkaline or other salts, are indispensable to labor.

The salts are chiefly combinations of chlorine, as common salt or calcium, as the lime of bones, or potassium, magnesium and iron.

Milk as containing all these aliments in their readiest form, is a representative food.

The distinction between the flesh-forming and the heat-producing foods cannot be perfectly drawn, since under some circumstances the one seems convertible into the other. Most foods contain some proportion of each. As a rule, those foods which contain each about in the proportion required by the system in a state of health, practically are found to be the foods in most universal use. In digestion the starches are converted into sugars, and thus about equally aid in producing animal heat and fat. The heat-producing power of fat in its natural state, is about twice as great as that of starch or sugar. An attempt to reckon the value of foods precisely from the proportion of their constituents fails, because neither class of foods is entirely exhausted of its energy or power in digestion, and because the conditions of the system and various self-contained powers of temporary supply, modify the close relation between the constituents of foods and of the body, once sought to be established. Those,

however, who have studied these subjects, have not confined themselves to theoretical considerations, but with these in view, and with comparison made by the actual weighing and assortment of foods, have been able to deduce many valuable guides as to their effective and economical use.

Dr. Edward Smith, one of the most recent and pains-taking experimenters and observers, estimates "the requirements of the adult body, of nitrogen daily, at 200 grains with light occupation, and 250 grains for ordinarily hard working laborers." Also, the amount of carbon at  $9\frac{1}{2}$  to  $10\frac{1}{2}$  ounces by the middle and laboring classes, and of  $12\frac{1}{2}$  and  $14\frac{1}{2}$  ounces by the ordinarily hard working classes. These are contained in about 2 pounds 4 ounces of good bread. The amount of the carbonaceous food and various salts needed, is stated after Parkes, thus: Phosphoric acid is combined with soda, lime and magnesia, &c., and is required by an adult of middle age, in quantities varying from 32 grains to 79 grains, or an average of about 50 grains daily.

Chlorine is chiefly combined with soda in the form of common salt, and is required in quantities varying from 51 to 175 grains daily. When reckoned as common salt, the daily requirement is about 200 grains, or something less than one-half an ounce. Sulphuric acid is required in daily quantities of from 17 grains to 41 grains. Potash is used in quantities varying from about 27 grains to 107 grains daily; soda from 80 to 171 grains; lime from  $2\frac{1}{2}$  to  $6\frac{1}{2}$  grains; and magnesia from  $2\frac{1}{2}$  to 3 grains."

Other outlines have been made by comparing, on a large scale, various dietaries and the excretions, and the daily requirements of the body have thus been stated:

	Nitrogenous, or Flesh-producing Food.	Carbonaceous, or Heat-producing Food.
During idleness.....	2.73 ounces.	20.60 ounces.
During routine or regular work.....	4.48 ounces.	26.44 ounces.

The first of these is equivalent to a little over two pounds of wheat bread, lightly buttered, and the second to  $3\frac{1}{2}$  pounds. This gives for a working man a need of about six times as much of the heat or force-producing, as of the flesh or tissue-producing foods.

Without going into extended detail it is easy for any one to see how important are the studies of the food-values of different articles

as now being conducted. We have come to know very nearly what are the requirements of the human system as to the material it is seeking to obtain from without.

We are able in many substances to identify the precise materials which are thus required for the body and their amount as stored in foods.

We are also able to determine whether they are in the simple form for a ready digestibility or whether they are so combined as to embarrass their ready appropriation by the system.

In many cases, like that of starch, while not finding the precise article required by the system, we find an article readily convertible into the one required, and can precisely determine the method and conditions of its conversion.

We are also able to estimate circumstances in which not only by excessive work, but by loss of sleep, or foulness of air, or special states of health, extra demands are made upon the system, which must be met by corresponding increase of food.

We find also that many vegetables have in store the very foods that are contained in flesh. Although there is a sense in which flesh is an advance in the process of digestion and a concentrated food, since the animal is an extract from the vegetable, yet as in albuminous substances for instance, we find some vegetables equally rich and giving up their food very readily to the system. Thus the common (haricot) or kidney bean or the lima bean has a large store of such food and is very valuable to the laborer as a substitute for meat. Indian corn, well cooked, has much of the strength of meat, and is rich in oil.

While from the composition of each food it is not easy to state what amount should be consumed by each laborer, and while, therefore, it is not worth our while here to repeat the elaborate tables which have been made, yet it is easy to see how by studying these, by collecting the experience of different workmen as to foods, and by studying both the science and the art of feeding, we are able to arrive at many valuable results. We can thus quite confidently indicate what are the best and most economical foods for workmen in general, and for those engaged in the various departments of work. The subject demands the careful study of every State, for be assured that the welfare of the laborer, his provision of good and sufficient food in the best manner and at the least expense, is a very

important element in our industrial success as a nation, as a state, as capitalists, or as workmen.

With the constituents needed by the system as flesh-producing and heat or force-producing foods, (p. 94), we note next to what extent these are found in some of the more valued foods.

The fibrine, albumen, casein and gelatin, and gluten, are the chief nitrogenous foods.

Fibrine is found chiefly in butchers' meat and poultry, 19 to 22 per cent.; in fish, 13 to 15 per cent.

Albumen, in butchers' meat and poultry, 2 to 3 per cent.; in fish, 4 to 5 per cent.; in eggs,  $15\frac{1}{2}$  to  $17\frac{1}{2}$  per cent., and in ox liver 20 per cent.

Casein, is chiefly in milk, the proportion for that of cows being  $4\frac{1}{2}$  per cent.

Gelatin, in fish and butchers' meat, 6 to 7 per cent.; in bones, 39 to 49 per cent.; in isinglass, 70 to 93 per cent.

"The chemical composition of animal and vegetable albuminates is very similar, and they manifestly serve equal purposes in the body.

"Gluten, in common turnips, .011; in cabbage, 8 to 0 per cent.; in red beets,  $1\frac{1}{3}$  per cent.; in potatoes, 3 to 4 per cent.; in Indian corn, dry peas and rice, about  $3\frac{1}{2}$  per cent.; in barley, 6 per cent.; in oats, (Scotch),  $8\frac{3}{4}$  per cent.; in wheat, (usual range), 11 to 15 per cent.; in rye, 8 to 10 per cent.; in beans,  $10\frac{1}{3}$  per cent.

"Fats are supplied as follows: Lard and drippings contain 98 to 99 per cent.; suet and fresh butter,  $87\frac{1}{2}$  per cent.; dried bacon,  $74\frac{1}{2}$  per cent.; green bacon,  $71\frac{1}{2}$  per cent.; fresh mutton, 45 per cent.; cocoa and chocolate, 42 per cent.; fresh beef,  $33\frac{1}{2}$  per cent.; salted,  $12\frac{3}{4}$  per cent.; cheese, 28 per cent.; eggs, 11 per cent.; fresh herrings, 7 per cent.; Indian corn,  $5\frac{1}{2}$  per cent.; oat meal, 5 per cent.; new milk,  $3\frac{1}{2}$  per cent.; skim milk, 2 per cent.; buttermilk,  $1\frac{1}{2}$  per cent.; wheaten flour, 1 per cent.; and even bread and rice,  $\frac{3}{4}$  per cent. These quantities would have been larger had the fat been stated in its ordinary and not dried state; but the difference is in the water which the fat ordinarily contains."—*Parkes*.

Sugar and starch, as the chief representatives of the carbo-hydrates or carbonaceous foods which are not fat, are found mostly in vegetable foods.

Of sugar, we have as follows: Rice, about 0.1 to 0.2 per cent.; maize,  $1\frac{1}{2}$  per cent.; peas, 2 per cent.; rye meal and wheaten bread,

3¼ to 3½ per cent.; cows' milk, 4⅔ per cent.; oatmeal, 8 per cent.; wheaten flour, from 6 to 8 per cent.; beet root, 5 to 10 per cent. Fruits vary from 10 to 20 per cent. Potatoes have about 2 per cent.

Of starches, various kinds of potatoes vary from 12 to 24 per cent.; beans, 34 to 36 per cent.; wheaten bread, 53½ per cent.; wheaten flour, 56½ to 72 per cent.; oat meal, 59 per cent.; rye meal, 61 per cent.; barley meal, 67 per cent.; maize, 81 per cent.; rice, 83 to 85 per cent.; and in a yet larger proportion, arrow root, sago and tapioca.

It is well thus briefly to refer to these as showing how readily yet variously these aliments are furnished. The table of Parkes, which gives in column, the water, the albuminates or nitrogenous, and the carbonaceous foods, as represented by sugar, starch and the salts, is also instructive :

SUBSTANCE.	ONE OUNCE (437.5 GRAINS) CONTAINS IN ITS NATURAL STATE IN GROWING—			
	Water.	Nitrogen.	Carbon.	Salts.
Uncooked meat (beef).....	328	10.35	64	7
Uncooked fat meat (beef).....	275.6	9.6	98.3	16
Cooked meat.....	236	19	117.7	13
Salt meat.....	215	20.4	69.7	92.3
Salt pork.....	192	18	85	99.7
Fat pork.....	170	6.8	192	10.1
Dried bacon.....	65.6	6.1	273.8	12.7
White fish.....	341	11.5	52.4	4.4
Poultry.....	324	14.5	62	5.2
Bread.....	175	5.5	119	5.6
Wheat flour.....	55.6	7.6	169	7.4
Biscuit.....	35	22.7	183	7.4
Rice.....	43.7	3.5	176	2.2
Oatmeal.....	65.6	8.7	172	13
Maize.....	59	7	176	6
Peas.....	65.6	15	161	10
Potatoes.....	324	1	49	4.4
Carrots.....	398	.4	18	3
Butter.....	26	.2	315	11.8
Eggs.....	321	9.3	71.5	4.4
Cheese.....	161	23	162	23.6
Milk.....	380	2.75	30.8	2.6
Cream.....	289	1.9	93.5	7.9
Skimmed milk.....	385	2.8	25	3.5
Sugar.....	13	.....	187	2
Pemmican.....	31	24.3	273.5	8

The following table for calculating diets is also instructive :

TABLE FOR CALCULATING DIETS.

ARTICLES.	In 100 Parts.				
	Water.	Albuminates.	Fats.	Carbo-hydrates.	Salts.
Meat of best quality, with little fat, like beefsteaks.....	74.4	20.5	3.5	.....	1.6
Uncooked meat, of the kind supplied to soldiers, beef and mutton. Bone constitutes one-fifth of the soldier's allowance	75	15	8.4	.....	1.6
Uncooked meat of fattened cattle, calculated from Lawes' and Gilbert's experiments. These numbers are to be used if the meat is very fat	63	14	19	.....	3.7
Cooked meat, roast, no dripping being lost. Boiled assumed to be the same.....	54	27.6	15.45	.....	2.95
Salt beef, (Girardin).....	49.1	29.6	.2	.....	21.1
Salt pork, (Girardin).....	44.1	26.1	7	.....	22.8
Fat pork, (Letheby).....	39	9.8	48.9	.....	2.3
Dried bacon, (Letheby).....	15	8.8	73.3	.....	2.9
White fish, (Letheby).....	78	18.1	2.9	.....	1
Poultry, (Letheby).....	74	21	3.8	.....	1.2
Bread, white wheaten, of average quality.....	40	8	1.5	49.2	1.3
Wheat flour, average quality.....	15	11	2	70.3	1.7
Biscuit.....	8	15.6	1.3	73.4	1.7
Rice.....	10	5	.8	83.2	.5
Oat meal, (Letheby).....	15	12.6	5.6	63	3
Maize, (Poggiale).....	13.5	10	6.7	64.5	1.4
Peas, (Dry).....	15	22	2	53	2.4
Potatoes.....	74	1.5	.1	23.4	1
Carrots, (Cellulose excluded).....	85	.6	.25	8.4	.7
Cabbage.....	91	.2	.5	5.8	.7
Butter.....	6	.3	91	.....	*2.7
Egg, (10 per cent. must be deducted for shell from the weight of the egg).....	73.5	13.5	11.6	.....	1
Cheese.....	36.8	33.5	24.3	.....	5.4
Milk, (sp. gr. 1030 and over).....	86.7	4	3.7	5	.6
Milk, (sp. gr. 1026).....	90	3	2.5	3.9	.5
Cream, (Letheby).....	66	2.7	26.7	2.8	1.8
Skimmed milk, (Letheby).....	88	4	1.8	5.4	.8
Sugar.....	3	.....	.....	96.5	.5
Pemmican, (de Choumont).....	7.2	35.4	55.2	.....	1.8

## BREAD AND BREAD STUFFS.

Of all the bread stuffs wheaten bread is the most economical for working men. Flour that has been separated from the bran is to be preferred. The buying of so-called brown bread, is never to be encouraged by the laborer. It is usually made of middlings, molasses and bran, and serves as a cover for the poorest grades of flour. Whether rolls or loaves shall be used depends much upon how long they are to be kept, as the former fast become stale. Fresh bread is not digestible, mostly by reason of its tenacity and imper-

\* Variable, estimated.

fect mastication. Bread of the day after baking is to be preferred. After that baker's bread is stale, but home-made bread will keep longer. Average white bread has 28.5 per cent of carbon, and 1.27 per cent. of nitrogen, and hence one pound will contain 1996 grains and 89 grains of these elements. It is, therefore, at usual prices, a good standard of nutritive, economical food. One pound of Scotch oatmeal has 2800 grains of carbon, and 140 of nitrogen, and is not so economical as household flour.

Indian corn is a nutritious and economical food, and deserves as such, far more attention than it receives. Its nutritive value is, in carbon, the same as wheaten flour, and its 19 grains less of nitrogen is compensated by a considerable quantity of free hydrogen, which is found in the fat, in which the grain is somewhat rich. It depends for its digestibility and for its relish more on cooking than does the wheat flour. It requires long boiling, and to be carefully stirred into hot water while being prepared. If thus allowed to boil for an hour or more, and not to become too thick when cold, it can be cut into slices and used for frying, and thus form both a nutritious and savory dish.

Rye, rice and barley scarcely need our notice as farinaceous, economical food for workmen, and are only valuable as additions for soup or for occasional change.

#### MILK.

Milk (see table, page 325) takes its place as a leading food, because containing each and all of the food constituents, in the best proportions. Each pint of good milk has 546 grains of carbon, and  $43\frac{3}{4}$  grains of nitrogen, with all needed salts. The two leading constituents are the casein, which makes cheese, and the fat, which makes butter. It would be a valuable addition to the food of every laborer. It is better warmed, but not boiled, when taken with meals, as this mingles the oil and casein more fully with the milk if it has been kept standing. Skim milk has only lost the most of the oil of the milk, and is therefore inferior only in this one ingredient. At one cent per pint, Smith says of it, that there is no animal food which is cheaper. When used in cooking, a little suet added supplies the place of the cream. Buttermilk is equally valuable as a food except

when it is churned from very sour milk, or has become cheesy by age. Even in this state it is largely eaten in Ireland, and it is found that the amount of food derived from it in this condition is more than half of that of skimmed milk.

Smith, in his Dietary, insists that skim milk, buttermilk, and even the whey of milk have such value as foods, that unless there is very unusual cheapness of other articles, none of these should find their way to the pigs. They are more valuable for human foods.

The whey, although having lost its fat and cheese, has sugar of milk and lacteal acid, and is nutritive as well as often aiding digestion. Many who cannot keep a cow can keep a goat. However much of a nuisance goats may be to some, as a matter of food economy we wish that every laborer who has a family had a goat of the best milch variety.

Cheese, if it can be had as the pure representative of the casein of the milk, is a cheap food; but to it as found in market there are limitations. While a little may aid digestion, enough for a meal is only partially digested, so that it is doubtful if more than one ounce at a time is available. If a pure milk cheese, it is, in this form a ready food, but should enter very sparingly into the laborer's diet.

#### BUTCHERS' MEAT.

Meat is desirable as a part of the laborer's dietary, as it is a form of food which, when rightly prepared, is easily transformed as a part of our own flesh or tissue. But in its ultimate composition it does not differ much from flour, and, in its albuminates, but little from some vegetables. "The fact is that there is much more water in flesh than in flour," although with this extracted, the flesh is a very concentrated food. Of all flesh beef and mutton are the best regular foods. The evil effects which are so generally claimed to follow the use of pork and veal, says Smith, "have not, I believe, any connection with the composition of those meats, but depend upon the imperfect way in which they are masticated and prepared for the process of digestion. The lean flesh of pork is hard, whilst the fibres of the flesh of veal are held loosely together, so that in the former case the teeth separate the fibres with difficulty, and in the latter the fibres elude the grinding process of mastication; and

in both cases the meat is swallowed in masses too large for the ready action of the gastric juice." So much depends upon right cooking and right mastication. Inferior cuts of meat often differ only in value because of the absence of fat between the layers of fibre, and their less juiciness and consequently less flavor. For nutrition, much can be made up by cooking, and the flavor is improved by cheap vegetable additions. When kept for a short time the fibre is made tenderer. "Boiled or stewed meat is more digestible than roasted meat, but as the fluid in cooking draws out the salts, it should be eaten at the same meal with the meat," or it may be left for soup another day. Thus, the water in which mutton has been boiled, will make, with vegetable additions, an excellent soup for the next day.

"Coarseness of fibre interferes with mastication and thereby with digestion." A neck of beef, for instance, in order to aid its digestion, should hang as long as possible, and be cooked by boiling. The question of nutrition, also of economy, is largely to be considered in cookery. When meat is to be roasted, its outside should be dried as quickly as possible by a quick heat, or it can be dropped five minutes in boiling water, as thus the evaporation of the juices inside is diminished, and it is kept more juicy.

Bones are an addition, especially to soups. So, in the English market, with every particle of flesh removed, they connect a small piece for food. Bones broken and boiled for six or eight hours give much nutrition as an addition to broths and soups.

Pork or bacon, although so often talked against, and so unpopular with some because of fear from parasites, must ever be an important food of the working classes. "Bacon," says Smith, "differs from beef and mutton only in the two facts, that the proportions of fat to lean is much greater, and that it has undergone the process of salting, and being dry it possesses a larger amount of nutriment to a given weight than when the flesh was fresh." It therefore supplies more carbon, and thereby diminishes the necessity for bread; but it offers less nitrogen, and thereby renders the demand for milk and other highly nitrogenous food greater. In point of practical economy to the poor man, bacon exceeds fresh meat, but at the same time it may not afford him the full amount of nutriment which he would have if he could obtain fresh meat in an unlimited quantity. It is true of it as of all salted meats, that "the salt draws out the

juices of the meat, and at the same time hardens the fibre and diminishes and takes away its digestibility." The fat of the pork, however, is not toughened by it so as to interfere with digestion.

As pork can now be preserved without so large an addition of salt, and as thorough cooking overcomes objections grounded on the presence of parasites, which also exist in other foods, we believe that great care should be used to secure a large produce of this food, and a proper condition of it before salting.

#### EGGS.

"Eggs are very valuable as adjuncts to other food since they consist chiefly of nitrogenous matter, but being deficient in carbonaceous material they must be eaten with bread or other carbonaceous food. The economy of the food depends upon the price charged for it since it is not a food essential for nutrition." Smith reckons that an egg at one cent is a little cheaper, as food, than a quart of milk at eight cents.

#### FISH.

Fish is compared with butchers' meat by remembering that while it has from 19 to 22 per cent. of fibrine, fish has 13 to 15 per cent. and 4 to 5 per cent. of albumen as against 2 to 3 per cent. in butchers' meat, and about the same quantity of gelatine. If only they can be procured fresh, and properly cooked, they are a cheap and valuable food. As such, fish culture is largely deserving of State patronage. Those not rich in oil need the addition of fat in frying or as dressing, but the food is highly available for the working classes. Salting makes the same variation of value as is made by the salting process for meats. But if the fibre is not tough and the overplus of salt is removed, salt fish is both appetizing and economical.

#### BEANS.

Beans deserve a very high rank among the dry farinaceous foods. They are far more palatable and available than the dry peas which are used largely abroad. The small beans, the Kidney or Haricot beans and the Lima bean are all very valuable, the economy depend-

ing on their comparative price. "The nutritive value of this class of food is very high—the highest of all vegetable foods since they somewhat exceed that of wheaten flour in carbon and have more than double the amount of nitrogen." Bean soup made after the beans have had proper soaking, and with no undue amount of pork and good seasoning of pepper, or baked beans or beans dried after cooking and ground, and used as a kind of flour for admixture in puddings, make a most valuable and economical dish.

#### POTATOES.

Potatoes, also, can be classed among the farinaceous foods, and in value and economy, need very careful attention from all householders. They are capable of furnishing one most valuable addition to bread stuffs, and oils and meat; but very much depends on the quality of the potato and the modes of preparation.

In each pound of good peeled potatoes there are 770 grains of carbon and 24 grains of nitrogen. As they are below the value of bread, etc., their economy will depend on the relative price. In the west of Ireland, where other foods are very dear and potatoes plenty, 10 pounds, and a large supply of buttermilk therewith, is made to substitute bread, butter, cheese and whey.

It is a great misfortune that laborers are not oftener able to select good potatoes and store them for food. A potato which, after cooking, cuts like soap, or is eaten cold, yields up its nutriment tardily. It is more economical to boil than to roast them, and to cook them with the skins on, in which case they should be eaten hot. When intended for stew or other use, close peeling is better. Their proper preparation is so much a part of plain cookery, and of family comfort for all classes, that a small book of cookery might be written upon them.

#### GREEN VEGETABLES.

Cabbage, turnips, carrots, parsnips and onions, contain from 85 to 92 per cent. of water before cooking; and therefore, their amount of nutrients is small in proportion to bulk.

Parsnips rank next to potatoes in nutriment, and possess 6 per cent. of carbon and 0.22 per per cent. of nitrogen.

Carrots take the next place, and offer 55 per cent. of carbon and 0.20 per cent. of nitrogen.

The Swedish turnip and onion contain 4.5 per cent. of carbon and 0.22 of nitrogen. The common turnip ranks a little lower.

Cabbage, although so much used, ranks inferior to these "in the nutriment which a given weight contains. "For practical purposes, *all succulent* vegetables may be classed together, and 1 pound of each computed to contain 420 grains of carbon and 14 grains of nitrogen."

It is to be borne in mind that most of these vegetables have gluten, as a nitrogenous food in an available form, which is to be taken much in account in their absolute value and in their comparative rating. The amount of this as found in some of them is as follows :

Beans, (farinaceous vegetable).....	10½ per cent.
Cabbage.....	8 per cent.
Potatoes.....	3 to 6 per cent.
Red beets.....	1½ per cent.

Poor wheat has as low as 9 per cent., and barley and Scotch oats from 6 to 7 per cent.

Potash and soda, and phosphorous, are found combined in most vegetables; and iron is met with in carrots, potatoes, cabbage, and even in cucumbers.

It is plain that these vegetables are to be rated at rather more than their values because of their juices as appetizers and as slight nutrients. Parsnips, carrots and beets "possess much sugar in their valuable juices, and a considerable amount of other elements of nutrition. The same can be said of onions, which, like cabbage, seem to draw a large portion of their food from the atmosphere, and to have something of the tonic effect of pure air. The essential oil of the onion is a stimulant to digestion. Cabbage resists certain kinds of fermentation. All these vegetables are available as changes from the regular diet, and, like the fruits, as having juices whose full advantage is to be learned almost solely by close watching of effect.

It is true of all of them, that they are most digestible when well cooked, without grease, and seasoned and oiled, if need be, afterward.

#### SUGARS.

These, as available to man, are found all ready in some foods, and in most fruits, and are derived in different forms from the sugar cane,

from beets, and from Indian corn, in the crystallized form of cane-sugar; in that of diastase or grape sugar, and in fluids containing sugar which cannot be wholly crystallized, as in molasses, we are familiar with them. As a rule all artificial sugars are not economical as a part of working diet. Nature converts the starch of many of our foods, such as bread, potatoes, etc., into sugar, and avails itself of the natural supply contained in milk, fruits, etc., so that in a perfect diet for perfect health much sugar is not needed.

It has no nitrogen and contains 2800 grains of carbon to a pound. Smith speaks of it thus: "Sugar is the first article to be cut off or discarded in times of pressure, and in districts where milk is very abundant and cheap, its ordinary use is almost unknown. \* \* \* It is, however, a very valuable food, since it is most rapidly digested and supplies heat forming materials to the body. When, however, it is compared with wheaten flour it is a very dear food, since three to four times more carbon will be obtained for one penny in flour, besides the nitrogen, none of which is found in sugar. It has also been proved that even its fattening properties, when it is supplied in excess of the quantity which the daily wants of the body require to produce heat, are not greater than that of starch as found in the cheapest grains. \* \* \* Whilst it is a good food it is not an economical one." Children do not derive quite as much sugar from the starches as do adults, and eaten with bread in the form of a syrup it is a little more needed by them.

#### DRINKS.

As artificial drinks are in common use with foods it is well to note their value. With many of the working classes the use of tea, coffee, cocoa, or its preparation, chocolate, and of chicory, has little reference to the kinds used or the amount of extract secured. It is a warm drink of water to which milk and sugar have been added and a slight flavor afforded. At meal times warm fluids in moderate quantities aid the process of digestion more than cold, except in very warm weather. As to the articles themselves, they have little claim as nutrients. The chief power of tea is "to increase the respiratory process and to promote the transformation of starchy and fatty food; but in addition to this, it tends to increase the action of the skin,

and by inducing perspiration, to lessen the heat of the body. Its action upon the respiration takes place whether the infusion be drunk hot or cold. Its tannin gives it a purifying effect on water.

"Tea should be essentially the adjunct of the food of those who eat too much food; but it should be as far as possible avoided by those who need their money to be spent upon nutritious foods."

"Coffee, in contrast with tea, tends to lessen the action of the skin and to increase the action of the heart. It is valuable almost entirely as forming an agreeable hot beverage and as promoting the digestion and assimilation of foods. As used by the working classes, it is not to be condemned, but should not be too strong or in too large quantities at a time. 'Coffee,' says Parkes, 'is a most important article of diet for soldiers, as not only is it invigorating, without producing subsequent collapse, but the hot infusion is almost equally serviceable against both cold and heat; in the one case, the warmth of the infusion, in the other the action on the skin being useful, while in both cases the nervous stimulation is very desirable.' It is claimed by some good authorities that an addition of about one part of good chicory to coffee improves its flavor. It, like tea and coffee, but to a smaller degree, increases the respiratory process. It is best to buy pure coffee and pure chicory if you can and mix to suit."

Cocoa and its preparation, chocolate, have about 42 per cent. of fat, not so readily digestible as in other forms. Albumenoid substances add to its value, but as a drink it cannot take the place of either coffee or tea on grounds of economy or invigoration. We need not discuss at length any of the alcoholic beverages as related to labor. The alcohol in them has no nutritious power and their stimulus or exhilaration is not needed in healthful life. The matter of expense as compared with any of the other foods or drinks, shows them to be too expensive to be included in any dietary for the laboring classes. This is conceded even by those who would advocate their use in times of extreme fatigue akin to disease. Beer as used by the working classes in some localities, is a cutting down of daily wages as real as if a reduction was made by employers.

#### CONCLUSION.

With these outlines as to the most desirable and economical foods, it needs constantly to be borne in mind that in some way the work-

ing classes should be able to secure right qualities of various foods, and at prices that shall not be oppressive by reason of the small measure system. It is therefore a legitimate study how far they can by law be protected from inferior grades, or from admixtures and falsifications, and also how far a co-operative system can overcome the disadvantages of small purchases, and the practical reduction of wage benefit resulting therefrom.

Many workmen suffer from having to eat a meal, at noon, too cold, or in other ways unsuitable. The provision which has been made in some English factories by which the workman is furnished with a soup to take before or after his own furnished meal, aids much both in comfort and digestion. The cold coffee, which may be carried, is a poor substitute for this.

The rapid eating to which many of the working classes are subjected, or to which they subject themselves, has much to do with indigestion and bilious and other complications. No one more than the laborer needs to eat his meal in quietness, and with time for deliberate chewing and partial rest. He is mostly dependent upon kinds of food that should have thorough mastication, and so should have every inducement and opportunity therefor.

The matter of cooking is so important that it well might furnish a theme for a separate article. It is quite as important, both as a nutritive and an economy, as the material of the food itself. We can only now say that it should be made a careful subject of study by every housewife. There is no way in which she can better contribute her share of the skillful work, and give both comfort and health to the artisan and to the family.

Ready hand-books are now to be had at a small price. Such a little dime book as "Mrs. Corson's 15 and 25 cent dinners," contains suggestions and plans which can add largely both to the comfort and the cash of the household.

As a sample of cheap dietaries for the laboring classes we cannot do better than refer to those prepared by E. Smith for the English Government, reckoned at a first cost for the food, of not over ten cents per day for each person, and which allows of carbon 1500 grains at breakfast, 1800 at dinner, and 1000 at supper; and of nitrogen 70, 90 and 60 grains respectively.

While some variations and additions are required with us, where

laborers are more heartily fed, these directions are not without value as guides.

As to the whole subject we must say, that it needs to be very closely studied in the interest of American labor: 1st. To find out what is really needed for the adequate support of industrial life. 2d. How it can best be furnished and prepared. 3d. What additions are desirable to be made to it, in order that at times luxury may be added to necessity; and 4th. The actual cost of such provisions. With these in view, the laborer is able to study that part of the betterment of his condition which comes from a wise use of his income, at the same time that he better fits himself to earn the highest wages that the healthful skilled workman can command.

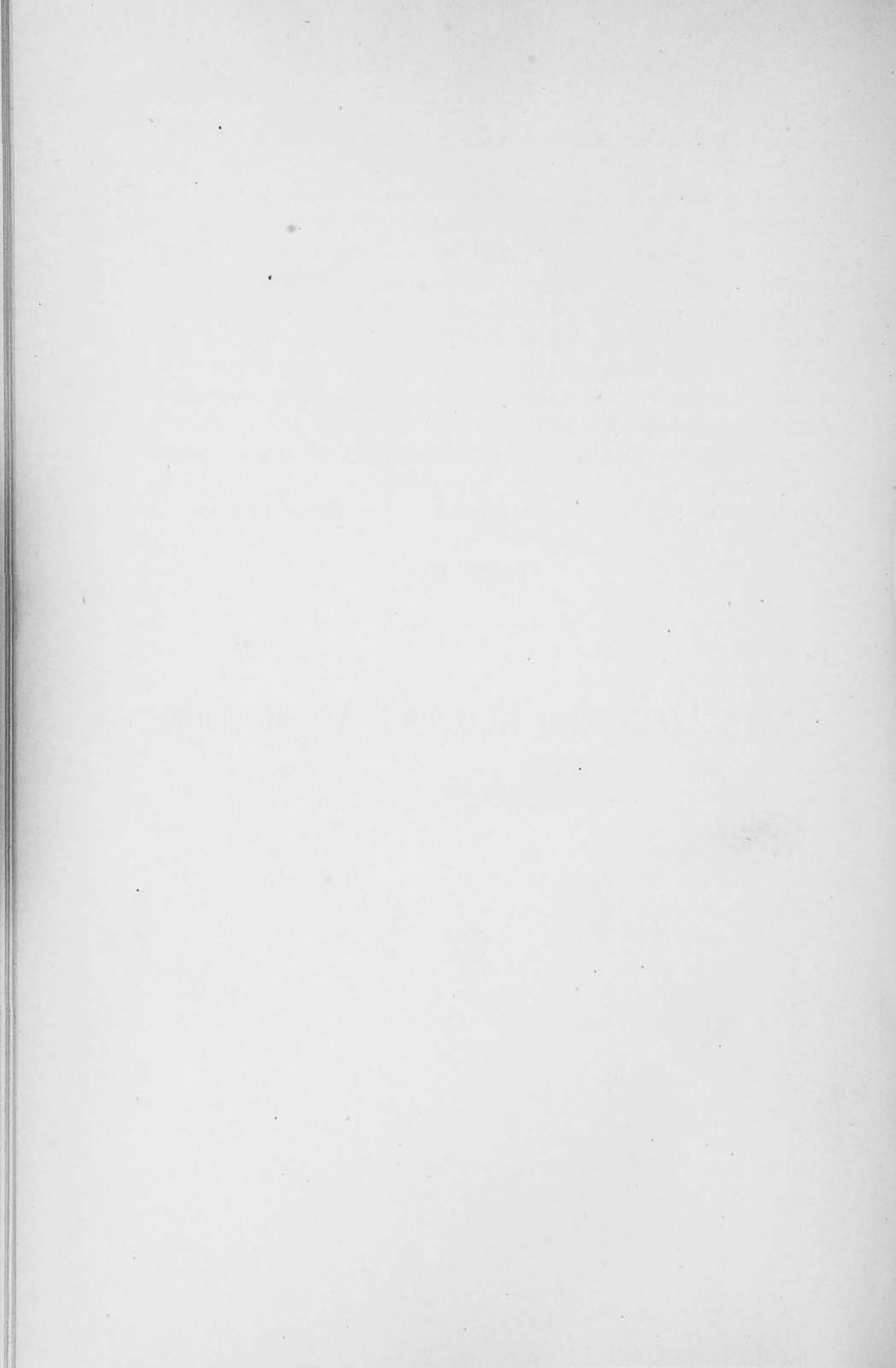
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PART X.

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STATE LOAN AND BUILDING ASSOCIATIONS.

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## PART X.

# STATE LOAN AND BUILDING ASSOCIATIONS.

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Among the varied agencies employed to advance the material interests of the multitude whose opportunities for accumulating property are very much circumscribed, that of mutual association in some of its forms is making rapid headway in various countries and communities. In the two preceding reports of this department the subject of co-operation in its special bearings upon the industrial classes has been amply set forth, and we do not hesitate to affirm that the annals of the co-operative movement in foreign countries, cumulatively indicate that its permanency is insured.

The phase of co-operation which is now to engage our attention is that relating to Loan and Building Associations, a scheme which had its origin in Scotland. The first society contemplating the establishment of homes for its members dates back to 1815, under the auspices of the Earl of Selkirk. The scheme was so obviously adapted to the needs of the working classes that it was not long in finding its way into the English manufacturing districts, and for a series of years in some form, the benefits of the system were enjoyed by large numbers of operatives in England.

In 1836 Parliament passed a law authorizing the establishment of societies "for the purpose of enabling the members to erect and purchase dwelling houses, or acquire other lease-hold estate; but it shall be mortgaged to the society until the amount or value of the share drawn on shall be repaid, with interest and all other appropriate payments."

Under the law of England, the Registrar reported, in 1878, the names of 907 societies in England, Ireland and Scotland, and 288,818 members. The assets of these societies was £25,761,220.

Frankford, near Philadelphia, claims to have established the first society in this country, January 3d, 1831, under the name of "The Oxford Provident Building Association." The "Kensington Building Association" was the next one organized. It is estimated that there are more than 2000 such organizations in the State of Pennsylvania now, of which, 650 are in Philadelphia. Their membership will average 150 each, making a total of 300,000 in the State, and nearly 100,000 in the city.

The latest information we have received regarding the Philadelphia associations, authorizes us to state that they have erected 60,000 small but comfortable houses, and have enabled 25,000 house holders to pay off mortgages that most likely would otherwise have been foreclosed. They have made 80,000 owners of real estate, and 80,000 direct taxpayers. Moreover, they have been the means of permanently investing, within the city limits, not less than \$100,000,000, which might otherwise have been squandered by dissipation and improvidence. But the crowning benefits resulting from these home-procuring institutions are chiefly shared by wives and children.

In the Eastern cities of New York and Boston, the over-crowded tenement house system has been so long in vogue, and under the control of interests adverse to the substitution of modern "homes for the people," that building associations encounter obstacles so overpowering as to deter the advocates of independent property owners among the working class, from vigorous endeavors to introduce the Philadelphia system into those cities.

It must be conceded that both in New York and Boston the *territorial* obstacle has hitherto been a grave one to combat, but this has, in a large degree, been solved by "rapid transit." The way is now open to extend the approved model house system for the behoof of thrifty workingmen, into Westchester county, and not long hence into the Long Island and other suburban districts.

The most reliable estimates of the tenement house population of New York, is 500,000. We learn from a report read at the meeting of the Social Science Association, held in Cincinnati in 1878, on "Homes for the People" and "Building Associations," that the crowded condition of tenement houses has, to some extent, been alleviated by removals to the west and into the suburbs, and that

through the instrumentality of committees, something has been achieved towards remedying the sanitary defects in these grossly constructed apartments.

A member of the Social Science Association living in Brooklyn, has constructed several "model tenements," which are believed to be notable improvements, both in sanitary appointments and in respect to dividends. The same gentleman has built upon an improved plan in Brooklyn and elsewhere, several blocks of single two-story and basement houses, which rent singly for \$18 per month, and another costing \$1,000 each, the rent of which is not named.

The same report informs us that in the city of Cincinnati are not less than twenty thousand people occupying very undesirable tenement houses. Something is being done in that city through the organization of building associations, to provide cheap and comfortable homes for the working classes. The first association was started in 1868, and had successfully closed up its first series. It was represented that 15,000 people in Cincinnati were interested in building associations, who paid into their treasuries \$60,000 weekly.

The building associations of Massachusetts are doing a great work for the operative classes, who are struggling to obtain, by means of savings, homes that they can call their own. Two years ago the Massachusetts legislature passed a law authorizing savings banks on a plan similar to that of the Pennsylvania building associations. The "Pioneer" association, under the new law, was established at once, and sold two thousand shares, the subscribers paying one dollar a month on each share, until their deposits accumulated, at compound interest, to the sum of \$200. The association then sold the money at as high rate as it would command. The amount of the association's assets last January was \$42,596.20. The nine others, organized the same year, 1877, had a total, including the above, making ten, of \$205,235.43. The provisions of the Massachusetts law amply protect the shareholders, who were restricted to twenty-five shares, thus guarding against capitalists getting the control of the concern. Other organizations have been formed upon the same plan, and with equally satisfactory results.

In West Virginia, Illinois, Michigan, California, and other remote States, there are many notably successful building and loan associations. The last few years have developed various methods by which

the laboring classes are admonished and encouraged to systematic saving of earnings during seasons of prosperity. The tendency of a series of savings bank disasters has been in no slight degree to diminish confidence in their being absolutely safe custodians of earnings which praiseworthy economy and self-denial have rendered possible in a multitude of cases. The annals of savings banks, however, continue to be indicative of existing thrift and prosperity in the ranks of the working classes, and there is no likelihood that they will soon be superseded by any subsequent device. In passing, it is worthy of note, that in 1876 there were in the United States 781 savings banks, with 2,367,630 depositors, and a total of \$941,350,255 deposits, and furthermore, it is assumed that an average of five persons are interested in each depositor, which gives us a total of 11,743,150.

We have said that there are probably 2000 building and loan associations in the State of Pennsylvania. If there are 1000 in all the other States, which is less than others have estimated it, the total would be 3000 in the country. It is safe to say that the average membership would be 150, and the total 450,000. Applying the average of five persons interested in each, as in the case of the savings banks, and we have a total of 2,250,000. This, added to the 11,743,150 as above shown, and we have the momentous presentation of 14,110,780, or more than 28 per cent. of the entire population of this country, through association with these two classes of savings institutions, who have a direct pecuniary interest not only in the stability of those beneficent institutions, but in no less degree incidentally solicitous respecting the maintenance of all governmental and public institutions of the land unimpaired. To persons who are habitually unobservant and uninterested in matters of this sort, the above figures, coupled with their distinct bearings upon the happiness, social and material welfare of over 14,000,000 of men, women and children, will be a new revelation.

Loan and building associations constitute a form of associative effort for the diffusion of benefits, which have no secondary place among beneficent institutions. As a scheme for acquiring homes through systematic savings of wages, nothing can be more simple and effective. How otherwise can a wage-laborer so readily and speedily put himself in the way of becoming independent of land-

lords? In the early stages of occupancy of a house, which, under the uninterrupted auspices of his chosen methods of acquiring it, is destined sooner or later to belong to him, he experiences a foretaste of the fruits of economic savings which are inseparable from the ownership of a home.

Dependence is by no means an inevitable concomitant of a life of toil. Observation that is almost universal, teaches us that poverty is the inheritance chiefly of idleness and unwary spendthrifts. If a workingman has, to a reasonable extent, continuous employment, good health, industrious, frugal habits, conjoined with a resolute purpose to achieve success in the sphere of wage-saving, success is practically assured.

Ten or twelve years' of house rent, ordinarily, is equivalent to the cost of a comfortable home. The co-operative method we are advocating to utilize this otherwise unavoidable annual outlay, to convert the industrial class tenants into landlords, has thousands of registered illustrations to verify its practicable efficiency. It is an application of the associative principle, whose antecedent workings scarcely furnish an authentic failure, under good leadership and well enforced regulations. It demands from the body of its membership but little thought and personal sacrifice of time, and furnishes an opportunity for a prudently-inclined workingman, who has no capital, to acquire a reasonable amount, always in the ratio of his earnings and saving propensity, and without diminishing his essential comforts.

The acquirement of a homestead through the medium of one of these associations, entitles both the managers and the elated proprietor to a tribute of high praise for an achievement wrought under circumstances of peculiar interest and hopefulness, in respect to the future liberation of multitudes engaged in industrial pursuits, from the exactions of landlords and capitalists. Such eminently practical illustrations of what is to be gained by enforced economy and thrift furnish lessons not to be lightly esteemed by masses whose condition and attainments warrant the expectation of like results. The feeling of independence incident to the ownership of a home adequate to the requirements of an average household, is rarely the inheritance of wage-laborers who derive no stimulus from the animating and indispensable principle of self help.

We believe that a much larger proportion of the great body of

artisans, skilled and unskilled, than is ordinarily conceived, possess the instinctive desire to advance in life. The first step in that direction for the head of a family is to avail himself of the surest method, by dint of industry and economy, to obtain as good a home for himself and family as his income will warrant; and, from our observation and study of the various schemes designed to afford security for husbanded earnings, we regard the one now under consideration as most worthy of adoption. The moment a man becomes the owner of his dwelling, his citizenship is more highly prized by himself and the community generally. He is now a taxpayer and entitled to recognition as an independent citizen, and by voice and vote identifies himself with whatever concerns the public welfare of the township or city in which his lot is cast.

It will thus be seen how easy it is for an industrious and economical working man, bent on bettering his condition and that of his family, to achieve his purpose through the instrumentality of building and loan associations. A person who makes up his mind to possess a house, enters the society as a member, and instead of paying his rent to the landlord, pays his subscription and interest to a committee of his friends; and in course of time, when his subscriptions are paid up, he finds himself the owner of a comfortable homestead, in the improvements and embellishment of which the united members of his household will share with him in proportion to his subsequent prosperity.

At the outset, these associations generally proceed upon the plan of twenty-five or more individuals forming themselves into an association, after which they issue as many shares as are subscribed, the ultimate value of which is \$200. The holder pays by agreement, monthly, not less than \$1 upon each share, until, with the accumulation of interest and profits, they become fully made up shares, and the holder is entitled to \$200. A limited number of shares to one person is necessary to guard against speculation in the shares. When the total accumulation of payments amounts to one or two thousand dollars, as the case may be, the sum is usually placed before the members or shareholders in some form of competition, and the amount standing in the name of each shareholder is awarded to those who offer the highest premium for the sum he has occasion to borrow, which premium goes to profit account and at the proper

time is divisible among the shareholders. It will be observed that there is a continual accession of profits from interests, premiums and bonuses, for the benefit of the entire membership, thus unfolding advantages obviously equal, if not superior, to those derived from savings banks. It is not alone the discerning thrifty shareholder who acquires a homestead through the auspices of these associations that participates in their beneficent possibilities. In the ultimate distribution all share in the net earnings of the association.

In reading a recent number of the "Journal," our eye rested upon the following illustration of the system we have under consideration: "A., B. and C., having removed ten years ago to a block of three houses, each having a value of \$2000. A. was timid and decided to pay rent at twenty dollars per month. At the end of ten years he has paid the landlord \$2400, and is no nearer owning the house than when he entered it ten years ago. But let us see what advantages his neighbors B. and C. obtain, and what it cost them. B., being averse to paying rent, bought the house and mortgaged it to a savings bank for \$1260, at six per cent., and for \$800 on a second mortgage to a friend at 8 per cent. His annual interest was \$136, to which add 2 per cent. for insurance, taxes and repairs, and his grand total in ten years is \$1760; and though no nearer owning the house than when he entered it, the \$2000 due upon his mortgages being still unpaid, has improved a little on A., as his rent cost him about \$15 per month. C. also enters as a landlord, having taken ten shares in a flourishing building association, and borrowed the purchase-money at a premium of 50 cents per share. His monthly payments were \$10 for dues, \$10 for interest, \$5 for premium, total monthly payment, \$25; to which add 2 per cent. for insurance, taxes and repairs, and the grand total in ten years is \$3400, or only \$1000 more than A. has paid, and \$1640 more than B. has paid, and by the maturing of C.'s shares his mortgage is canceled, and he owns his house free and clear."

Having referred to what has been done in England in the line of building associations, the following from the "Building Societies' Gazette," London, will be read with interest:

"The accumulation of property has the effect which it always has upon thrifty men; it makes them steady, sober, and diligent. It weans them from revolutionary notions, and makes them conserva-

tive. When workmen, by their industry and frugality, have secured their own independence, they will cease to regard the sight of others' well-being as a wrong inflicted on themselves; and it will no longer be possible to make political capital out of their imaginary woes.

"These societies have taught a healthy frugality they never else would have known; and enabled many an industrious son to take to his home his poor old father—who expected and dreaded to die in the workhouse—and set him down to smoke his pipe in the sunshine in the garden of which the land and the house belonged to his child.

"The Leeds Permanent Building Society, which has furnished healthy tenements for about 200 families, sets forth the following recommendations of the influence which they have exercised amongst the working classes of that town: 'It is truly cheering to hear the members themselves, at occasional meetings, tell how, from small savings hitherto deemed too little for active application, they began to invest in the society; then to build or buy; then to advance in life, and come to competence, from extending their savings in this manner.' \* \* \* \* The provident habits and knowledge thus induced are most beneficial to the members. And the result is, that the careless become thoughtful, and, on saving, become orderly, respectable, propertied, and in every way better citizens, neighbors, and more worthy and comfortable. The employment of money in this useful direction encourages trade, advances prices and wages, comforts the working classes, and at the same time provides the means of home enjoyments, without which such advances would be comparatively useless, and certainly uncertain.

"There are also exceptional towns and villages in Lancashire where large sums of money have been saved by the operatives for buying or building comfortable cottage dwellings. Last year Padiham saved about £15,000 for this purpose, although its population is only about 8000. Burnley has also been very successful. The building society there has 6600 investors, who saved last year £160,000, or an average of £24 for each investor. The members consist principally of mill operatives, miners, mechanics, engineers, carpenters, stonemasons, and laborers. They also include women, both married and unmarried. Our informant states that 'great numbers of the working class have purchased houses in which to live. They have likewise bought houses as a means of investment. The building

society has assisted in hundreds of these cases, by advancing money on mortgage, such mortgage being repaid by easy instalments.'

"Building societies are, on the whole, among the most excellent methods of illustrating the advantages of thrift. They induce men to save money for the purpose of buying their own homes; in which, so long as they live, they possess the best of all securities."

We learn from the Secretary of State's Register of Corporations, that June 9th, 1880, there were 106 Loan and Building Associations in this State, and, with one exception, every county is represented in the list. As would naturally be the case, they predominate more largely in the section where the Philadelphia sentiment respecting loan associations is most influential.

We addressed the following postal circular to the secretaries of associations :

OFFICE OF  
BUREAU OF STATISTICS OF LABOR AND INDUSTRY, }  
TRENTON, N. J., June 8th, 1880.

DEAR SIR :—For statistical purposes of this Bureau, we seek information respecting Building and Loan Associations in this State. That no township may be omitted, a card will be sent to each. In case of there being more than one association in a township, the recipient of this card will please report to us on a postal, the name and P. O. address of such association or associations, and the date of organization, and as far as possible, the sum total of individual benefits resulting from your association during its existence.

It is our desire that each secretary will send us a copy of his last report, or otherwise inform us of the name, number of shares and shareholders, amount of capital, loans, etc., of his association.

Whatever use we make of the details you furnish us, the name and locality of your organization will be withheld if you so request.

SAMUEL C. BROWN,  
Secretary.

And hoped to receive reports in response, especially from those in active operation; but it will be noticed that less than half of the number responded, leaving us uninformed respecting the reasons.

We can readily conceive reasons why an unwillingness should exist on the part of individual associations, to give publicity to what concerns their financial condition, but it would be truly lamentable to have occasion to conclude that large numbers were in that category. It is not infrequent that adversity befalls both private and public institutions, which does not reflect seriously upon the business capacity or integrity of their managers.

No one who feels a sincere interest in the maintenance of irreproachable public institutions, can fail to recognize conservative influences to flow from the judicious exercise of public scrutiny into the conduct of such institutions. With special emphasis does this bear upon those whose beneficent purposes are chiefly shared by the industrial classes. But the infrequency of disaster from official malfeasance among building and loan associations throughout the country renders them well nigh unamenable to *surveillance*. The essential characteristics of safety and economy are thus far so identical with these benevolent organizations that laboring men need not hesitate to accord confidence in their general management. Indeed, each shareholder is amenable to self-censure if he omits to avail himself of the utmost personal freedom to scrutinize the transactions of the board of directors and other officers in loan associations.

We encountered considerable difficulty in preparing a condensed tabulation of the statements sent to us by the secretaries of associations in this State, no two being exactly alike in form or expression. As it would have exceeded our limit to print each report separately, a form of abridgment was prepared and sent to the secretary of each association, with the following note appended :

OFFICE OF BUREAU OF STATISTICS OF LABOR AND INDUSTRIES, }  
TRENTON, August 17th, 1880. }

The annual statements of loan associations which have come into our hands are so varied in form and expression, that we concluded the easiest and surest way of obtaining a uniform tabulation of them would be to prepare a blank, and ask each secretary to fill it up and return to this office. If any association contemplate making a report the first of September, and prefer to embrace it in their presentation, they can retain this blank for that purpose; otherwise we will be glad to have it returned as soon as is practicable. It will be understood that in this statement we ignore classes and series, the desire upon the present occasion being to avoid needless detail. We hope that no serious difficulty will be encountered in adjusting details to the requirements of this table. Should a column be returned to us unfilled, we will reproduce in our report such explanation as the secretary will furnish us. Please return this sheet in the enclosed printed and stamped envelope.

Very respectfully,

SAMUEL C. BROWN,

Secretary.

It will be observed from the table that only 51 of the 106 associations registered in the office of the Secretary of State last June, have furnished us with adequate statements for the present purpose.

In passing, we take occasion to say, that the third year's experience in the statistical line, indicates conclusively a growing conviction respecting the value of statistical knowledge, and the consequent expediency of the utmost freedom in imparting information. The studious avoidance by this department of disclosures bearing upon private and corporate interests, it is to be hoped, will ultimately remove all impediments and unfriendliness to the work of the statistician.

The incompleteness of this presentation of our State's Building and Loan Associations is no doubt in part due to the recent expiration and winding up of associations. How many omissions to fill up our blank are explained by the following endorsement upon one, we cannot say: "We desire the name and location of our association withheld." As but one came to us under this ban, we concluded not to place it on record.

It is proper for us to state that in a very few instances we supplied omissions in the return blank according to our best interpretation of the reports that were sent to us. In but few instances did we take the liberty of abstracting therefrom the "total net gains." It is a source of regret that so many blanks exist in that column. Since the table is so incomplete, we leave the reader to analyze the presentation to suit his own purposes. It is, nevertheless, an exhibit well worthy the attention of the wage-labor class, whose small earnings can be more advantageously entrusted to them than to any other kindred associations.

Industrial enterprises are so rapidly multiplying in this State, that in the near future we shall witness throughout its borders clustering centres of industry only surpassed by some of the New England States. It behooves us therefore to urge the attention of the operative classes, to the formation of associations of this character. The tens of thousands of thriving artisans which throng our towns and cities may just as well as not occupy houses, the ownership of which has been wrought out by themselves under the auspices of associations corresponding with those which have won such homestead achievements in the city of Philadelphia.

Our State is in the way of becoming permeated by the leaven of Philadelphia thrift and economy. There is no need to postpone an organization of this sort until there is an amassing of an indus-

trial population. An adequate number of citizens can be found in almost any hamlet, to constitute an association, and when once successfully organized, and its designs well understood, it will draw a membership from remote surroundings.

It will be noticed that the largest and most successful associations represented in our table are not found in the most populous centres. For example, Salem, Belvidere, Gloucester City, Perth Amboy, Burlington, Woodbury, &c. If the scope of the present investigation had been extended to local inquiries in regard to the beneficent working of loan associations, we could doubtless have acquired and detailed practical results of special interest. But all the annals respecting organizations of this character, uniformly proclaim their utmost subserviency to the best interests of the working class.

Since degrees of social elevation and domestic happiness are the exclusive inheritance of no class or grade of society, can the sincere promoters of reformatory measures to alleviate the condition of the masses, employ their faculties more judiciously than by devising methods which render self-help indispensable? It is an essential pre-requisite in all co-operative schemes, and constitutes the primary element of success in loan and building associations.

BUILDING AND LOAN ASSOCIATIONS.

NAME.	LOCATION.	Number of Shares.	Number of Shareholders.	Office Expenses.	Taxes and other charges.	Net Assets.	Total Net Gains.	HOW ASSETS ARE INVESTED.				Years Organized.
								Real Estate.	Bond and Mortgage.	Other Forms of Investment.	All Dues to Association.	
1 Franklin B. & L. A., No. 3.	Camden	1827	285	\$323 85	\$1,010 19	\$103,345 22	\$25,321 22	\$11,200 00	\$1,880 00	\$37 50	\$122 78	6
2 City B & L. A., No. 2.	Camden	1021	152	338 12	821 59	71,023 46	13,543 46	10,600 00	63,600 00	37 50	755 92	6
3 Third Excelsior B. & L. A.	N. Brunswick	1887	.....	840 70	.....	74,286 45	15,430 74†	2,646 47	67,325 00	2,387 28	1,927 70	3
4 The B. & L. A., No. 4.	Phillipsburg	834	150	208 00	521 71	46,521 49	14,671 63	4,000 00	39,414 57	1,380 17	1,726 75	4
5 The Asbury Park B. & L. A.	Asbury Park	572	189	250 00	15 82	43,564 22	17,782 82	1,000 00	40,200 00	.....	2,364 22	6
6 Quinton L. & B. A.	Quinton	193	40	57 00	161 76	28,279 86	631 40	.....	28,279 88	.....	.....	10
7 Mechanics' and Laborers' B. & L. A.	Cape May C. H.	171	96	98 00	64 50	16,556 30	1,986 72	.....	12,000 00	4,556 30	.....	8
8 Raritan B. & L. A., No. 2.	Raritan	438	72	126 00	402 14	52,424 54	15,732 22	11,409 26	37,281 85	.....	4,313 40	7
9 Industry B. & L. A.	Mount Holly	1598	183	218 00	546 47	50,093 11	11,933 75†	2,545 53	45,600 00	1,606 63	340 95	6
10 Keyport Mutual L. & B. A.	Keyport	479	109	200 00	85 11	91,968 00	34,488 00	2,498 02	76,900 00	9,125 00	3,444 98	10
11 Hammon L. & B. A.	Hammon	399	110	112 00	5 06	39,499 65	18,034 15	3,000 00	32,855 28	1,180 00	2,464 24	8
12 Odd Fellows' B. & L. A.	Hammon	1308	190	326 00	963 62	71,549 03	12,215 00	11,000 00	83,244 00	3,451 00	2,316 00	10
13 Raritan Centennial B. & L. A.	Camden	650	130	154 63	.....	43,125 82	11,917 82	.....	40,700 00	163 22	2,262 60	4
14 Raritan B. & L. A.	Perth Amboy	866	171	220 80	.....	177,973 01	32,237 00	14,841 80	148,700 00	3,753 35*	10,677 86	11
15 Raritan City B. & L. A.†	Perth Amboy	932	207	37 50	.....	3,818 50	512 00	.....	2,200 00	.....	280 00	1
16 Camden B. & L. A.	Camden	1900	432	394 50	1,159 02	159,110 73	107,757 54	54,975 00	113,800 00	200 00	.....	13
17 Artisans' B. & L. A.	Camden	412	103	156 25	24 00	25,729 77	8,083 77	2,950 00	21,700 00	.....	.....	7
18 Woodbury Real Estate Mutual L. A.	Woodbury	1528	265	247 65	833 54	92,142 46	25,314 46	1,100 00	89,600 00	1,442 46	.....	9
19 Mutual Aid, L. & B. A.	Hammon	928	63	114 06	1 00	25,296 19	8,880 19	.....	25,113 60	.....	.....	6
20 Home B. & L. A.	N. Brunswick	1007	125	558 00	287 67	171,895 16	17,491 57	6,400 00	154,425 66	3,348 40*	182 59	6
21 United Mutual L. & B. A.	Gloucester City	1556	251	331 00	2,502 32	185,377 61	61,002 73†	.....	195,895 00	53 32	7,721 10	9
22 Fieldsboro Mutual B. & L. A.	Fieldsboro	209	50	88 00	105 05	32,539 20	.....	2,250 00	29,514 00	.....	1,177 55	14
23 Flemington B. & L. A., No. 2.	Flemington	423	76	100 00	96 72	14,891 46	846 00	.....	2,500 00	12,240 00	775 20	9
24 Elwood L. & B. A.	Elwood	83	21	12 00	277 26	7,684 77	2,141 68	250 00	4,800 00	1,840 00	200 00	2
25 Paterson Mutual B. & L. A.	Paterson	396	.....	124 00	185 30	5,544 90	.....	.....	4,700 00	.....	171 57	9
26 Peoples' R. & L. A.	Harrison	1064	167	341 03	92 69	51,647 87	12,623 87	9,187 69	44,419 30	210 00	403 52	6
27 Mullica Hill B. & L. A.	Mullica Hill	354	.....	144 20	95 10	17,234 23	2,917 34†	.....	15,396 50	1,436 26*	401 47	4

\* Cash. † Estimated from report by the bureau. ‡ Gain the last year.

BUILDING AND LOAN ASSOCIATIONS.—Continued.

NAME.	LOCATION.	Number of Shares.	Number of Shareholders.	Office Expenses.	Taxes and Other Charges.	Net Assets.	Total Net Gains.	HOW ASSETS ARE INVESTED.				All Dues to Association.	Years Organized.
								Real Estate.	Bond and Mortgage.	Other Forms of Investment.	All Dues to Association.		
28 North Hudson Co. B. & L. A.	West Hoboken.	52	16	\$150 00	\$1,006 51	\$4,166 85	\$31,053 01	\$10,353 87	\$3,312 00	\$854 35*	\$4,057 14 9	1	
29 Oxford B. & L. A.	Oxford.	389	132	459 04	55 36	73,065 01	29,583 24	34,921 04	51,400 00	7,254 00	3,520 55 11	9	
30 Freehold Mutual L. A.	Freehold.	693	132	127 16	55 36	82,924 24	28,801 60†	2,150 00	84,131 80	1,004 74	1,016 77 10	11	
31 Princeton B. & L. A.	Princeton.	376	450	413 75	356 21	73,016 77	5,352 38†	2,150 00	72,000 00	3,032 68*	605 13 13	13	
32 Mutual B. & L. A.	Newark.	450	791	168 58	590 14	30,037 81	9,238 88†	4,900 00	24,250 00	2,964 24*	716 94 8	8	
33 Mechanics' B. & L. A.	Mount Holly.	791	791	165 00	681 86	55,078 18	9,560 38†	1,200 00	46,497 00	533 29*	1,233 76 10	8	
34 Monroe B. & L. A.	Williamstown.	1481	1481	14 88	681 86	282,308 85	84,579 90†	7,667 90	239,805 00	11,522 98	3,312 97 10	10	
35 Raritan B. & L. A.	N. Brunswick.	922	73	232 66	1,380 89	12,106 86	63,849 00†	2,907 21	9,900 00	1,061 80*	1,159 94 4	4	
36 Rutherford Mutual L. & B. A.	Rutherford.	342	342	235 60	217 76	179,424 23	42,821 50†	7,850 00	169,921 72	5,117 46	1,477 84 10	4	
37 Belvidere Mutual L. & B. A.	Belvidere.	881	881	235 60	812 12	108,550 17	38,835 08†	3,700 00	90,600 00	3,672 14	10,100 17 9	9	
38 Farmers and Mechanics' B. & L. A.	Burlington.	1028	556	403 03	1,212 30	92,906 52	18,884 36†	18,801 85	87,700 00	1,027 82	1,026 85 7	7	
39 Citizens' L. A.	N. Brunswick.	2421	556	54 00	1,741 59	188,177 08	19,863 72†	30,370 00	166,885 00	2,164 67	2,483 68 8	8	
40 Franklin L. & B. A.	Salem.	378	184	54 00	1,075 63	45,618 27	3,735 15	30,370 00	25,800 00	2,164 67	2,483 68 8	8	
41 Peoples' Mutual B. & L. A.	Newark.	1270	184	54 00	1,075 63	96,044 38	3,735 15	30,370 00	71,200 00	2,164 67	2,483 68 8	8	
42 Mutual B. & L. A.	Camden.	2019	184	383 63	383 63	27,965 10	19,844 00	7,600 00	27,600 00	6,161 00 1	365 10 1	1	
43 Excelsior B. & L. A., No. 2.	Newark.	658	100	420 00	82 70	51,072 00	19,844 00	7,600 00	63,560 00	6,161 00 1	365 10 1	1	
44 New Brunswick B. & L. A.	N. Brunswick.	1385	273	382 16	428 70	92,631 41	21,615 41	10,100 00	75,400 00	5,314 54	2,272 93 6	6	
45 Mutual L., Savings & B. A.	Haddonfield.	124	28	250 00	966 63	17,245 72	4,100 68	6,900 00	7,625 00	1,825 42*	895 30 7	7	
46 Linden Park L. & B. A.	Trenton.	2055	366	236 47	1,929 44	161,368 37	34,315 37	14,535 19	120,800 00	10,379 42	15,653 76 8	8	
47 Mercer Mutual L. A.	Trenton.	1058	225	225 87	1,789 20	122,207 63	27,504 96	13,286 34	91,200 00	4,267 29	13,454 00 8	8	
48 Mechanics' Mutual L. A.	Trenton.	2158	195	717 80	607 40	390,539 33	114,249 41	69,389 00	301,271 00	45,950 00	15,475 51 11	11	
49 Union B. & L. A.	N. Brunswick.	532	67	389 50	13 59	63,033 36	11,912 02	12,000 00	45,950 00	3,161 72 8	15,475 51 11	11	
50 Empire B. & L. A.	N. Brunswick.	3071	458	400 00	.....	38,000 00	4,343 71	.....	35,700 00	.....	3,161 72 8	8	
51 Peoples' B. & L. A.	N. Brunswick.	3071	458	400 00	.....	38,000 00	4,343 71	.....	35,700 00	.....	3,161 72 8	8	
Total.....	.....	46869	6310	11,527 71	26,498 30	4,002,647 70	1,097,260 79	425,111 17	8,458,612 66	110,445 23	135,641 35	.....	

\* Cash. † Estimated from report by the bureau. ‡ Gain the last year.

No. 10 was started in September, 1869, and closed up in February, 1880, having run 10 years and 5 months.

No. 14 is based upon the eleventh annual report, and the association is being closed up.

No. 24 is based upon the ninth annual report. This association is represented as having met with quite a heavy loss during last year, which made an assessment of the shares necessary to provide for the deficiency. The amount, however, was not stated.

No. 30 is based upon the annual report of June, 1880. The first series expired in October, 1879, when the shares were worth \$200 each, after having run 10 years and  $3\frac{1}{2}$  months.

No. 31 is based upon both the tenth annual report and final statement dated June 24th, 1880, in the latter of which, we find the total gain on each share stated to be \$76.60.

No. 34 was organized in February, 1870, and the first series matured in February, 1880, there being then 131 shares. The tenth series commenced February 6th, 1880, with 100 shares.

No. 37 is based upon the tenth annual report. A note from the secretary, says: "Our association commenced operations in August, 1869, and continued to receive dues until January 1st, 1880. We now believe we have assets sufficient to pay the stockholders \$200 per share without further dues being paid. If correct, the stockholders have paid on each share \$125, and will receive \$200. Out of 150 stockholders, I do not believe there are 10 who have not been benefited by their membership, and a number are to-day owners of houses which would not have been the case had they not been able to pay for them in monthly instalments."

No. 40 is based upon the nineteenth annual report. A note accompanying the statement, says: "The Franklin Loan and Building Association of Salem, was organized in April, 1861, since which time there has been distributed to shareholders, over \$248,000. There are at the present time 2421 shares, held by 615 persons (mechanics, tradesmen and laborers mostly)."



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