

FIRST BIENNIAL REPORT  
OF THE  
Bureau of Labor Statistics

FOR THE  
STATE OF IOWA.

1884-5.

E. R. HUTCHINS, Commissioner.

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PRINTED BY ORDER OF THE GENERAL ASSEMBLY.

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DES MOINES:  
GEO. E. ROBERTS, STATE PRINTER.  
1885.

## CONTENTS.

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Origin of the Bureau.....	9
Part I, Introductory, letter of transmittal .....	11
Part II, National Convention, Blanks of Iowa Bureau.....	16
Part III, Labor organizations.....	47
Part IV, Co-operative societies .....	58
Part V, Technical education, Manual of training schools .....	67
Part VI, The City of Pullman, Illinois .....	105
Part VII, Convict labor.....	123
Part VIII, Strikes and arbitration.....	145
Part IX, Immigration .....	182
Part X, Farm labor, value, acreage and rentals .....	187
Part XI, Sites .....	194
Part XII, Views of workingmen.....	204
Part XIII, Views of operators regarding coal screens .....	229
Part XIV, Suggestions of manufacturers, storekeepers, etc.....	236
Part XV, School teachers, wages, cost of living, opinions regarding uniform text-books, etc.....	245
Part XVI, Street railways.....	267
Part XVII, Railroads .....	272
Part XVIII, The mining industry.....	281
Part XIX, Cost of living .....	287
Part XX, Tables of wages, cost of living, etc.....	297
Part XXI, Manufacturers .....	349
Part XXII, Miscellaneous: Agricultural statistics, Conclusions, Crime, Dairy interests, Improvements, Iowa regiments in the Rebellion, Poultry and eggs, Remarks of manufactur- ers (additional).....	356



## CONTENTS OF ADDENDA.

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Opinions of coal operators regarding coal screens (additional).....	370
Statistics of manufacturers .....	375
Third Annual Convention of Commissioners and Chiefs .....	365

## ORIGIN OF THE BUREAU.

### CHAPTER 132, LAWS OF THE TWENTIETH GENERAL ASSEMBLY. SUBSTITUTE FOR S. F. 83.

AN ACT to create a Bureau of Labor Statistics, and to provide for the appointment of a Commissioner of said Bureau, and to define his duties and tenure of office:

SECTION 1. *Be it enacted by the General Assembly of the State of Iowa,* That there is hereby created a Bureau of Labor Statistics, to be under the control and management of a Commissioner thereof, to be appointed as hereinafter provided by this act.

SEC. 2. That the Governor shall, within thirty days after the taking effect of this act, and biennially thereafter, with the advice and consent of the Executive Council, appoint a Commissioner of Labor Statistics; the term of office of said Commissioner to commence on the first Monday of April in each even-numbered year and continue for two years and until his successor is appointed and qualified; and said Commissioner, before entering upon the discharge of his duties, shall take an oath or affirmation to discharge the same faithfully, and to the best of his ability; and shall give bond in the sum of two thousand dollars (\$2,000), with sureties to the approval of the Governor, conditioned for the faithful discharge of his official duties.

SEC. 3. Said Commissioner shall receive a salary of \$1,500 per annum, payable monthly, and necessary postage, stationery, and office expenses, the said salary and expenses to be paid by the State as the salaries and expenses of other State officers are provided for. He shall have and keep an office in the Capitol at Des Moines, in which shall be kept all records, documents, papers, correspondence and property pertaining to his office, and shall deliver them to his successor in office.

SEC. 4. Said Commissioner may be removed from his office by the Governor for neglect of duty or malfeasance in office; and any vacancy occurring at any time may be filled by the Governor, by and with the consent of the Executive Council.

SEC. 5. The duties of said Commissioner shall be to collect, assort, systematize and present in biennial reports to the Governor, on or before the 15th day of August preceding each regular meeting of the General Assembly, statistical details relating to all departments of labor in the State, especially in its relations to the commercial, social, educational and sani-



tary conditions of the laboring classes; and to the permanent prosperity of the mechanical, manufacturing and productive industries of the State; and shall as fully as practicable collect such information and reliable reports from each county in the State, the amount and condition of the mechanical and manufacturing interests, the value and location of the various manufacturing and coal productions of the State, also sites offering natural or acquired advantages for the profitable location and operation of different branches of industry; he shall, by correspondence with interested parties in other parts of the United States, impart to them such information as may tend to induce the location of mechanical and producing plants within the State, together with such other information as shall tend to increase the productions, and consequent employment of producers; and in said biennial report he shall give a statement of the business of the bureau since the last regular report, and shall compile and publish therein such information as may be considered of value to the industrial interests of the State, the number of laborers and mechanics employed, the number of apprentices in each trade, with the nativity of such laborers, mechanics' and apprentices' wages earned, the savings from the same, with age and sex of laborers employed, the number and character of accidents, the sanitary condition of institutions where labor is employed, the restrictions, if any, which are put upon apprentices when indentured, the proportion of married laborers and mechanics who live in rented houses, with the average annual rental, and the value of property owned by laborers and mechanics; and he shall include in such report what progress has been made with schools now in operation for the instruction of students in the mechanic arts, and what systems have been found most practical, with details thereof. Such report, when printed, shall not consist of more than six hundred pages octavo. Five thousand copies thereof shall be printed and bound uniformly similar to the reports of other State officers as now authorized by law. Said reports, when published, to be disposed of as follows, viz.: To the public libraries in the State, to the various trade organizations, agricultural and mechanical societies, and other places where the Commissioner may deem proper and best calculated to accomplish the furtherance of the industrial interests of the State.

SEC. 6. The Commissioner shall have power to issue subpoenas for witnesses and examine them under oath and enforce their attendance to the same extent and in the same manner as a justice of the peace; said witnesses to be paid the same fees as are now allowed witnesses before a justice of the peace, the same to be paid by the State.

SEC. 7. This act, being deemed of immediate importance, shall be in force and take effect from and after its publication in the Iowa State Register and the Iowa State Leader, newspapers published at Des Moines, Iowa.

On the seventh day of April, 1884, the Governor appointed, and the Executive Council confirmed, E. R. Hutchins as Commissioner of Labor Statistics.

## PART I.

### INTRODUCTORY.

STATE OF IOWA,  
OFFICE OF COMMISSIONER OF LABOR STATISTICS,  
DES MOINES, August 1, 1885. }

HON. BUREN R. SHERMAN, *Governor of Iowa:*

SIR—In conformity with the provisions of the law creating this Bureau, I have the honor to submit this First Biennial Report.

The work being entirely new, not only to the Commissioner, but to all from whom information has been gathered, much greater difficulty has been connected with the work than will be attached to it hereafter, but it is believed that the somewhat crude, yet interesting and valuable data gathered, and herewith presented, will be an incentive for even a heartier co-operation on the part of the people in the future, than that already so cordially and generously accorded.

Shortly after my appointment I visited similar offices at Springfield, Illinois, and Boston, Massachusetts, and from the gentlemen in charge, Hon. J. S. Lord and Hon. Carrol D. Wright, I received much valuable aid for which I am greatly indebted. The meeting in Convention of the Commissioners of various States shortly after afforded me very great help.

On my return to the office I immediately undertook the work, the result of which is now presented to you. At first, a misapprehension existed in the minds of the public—especially among the labor organizations—to the effect that this was a *Labor Bureau*, without reference to the very feature for which it was created, namely—to *gather statistics relative to labor*. It was by very many supposed, that upon all questions of strife between the employe and employed; of wages, etc., the Commissioner was to become, by this law, the arbitrator, and in him was vested power to settle all disputes of this character.



It has been only after a long time, most extensive correspondence, and the fullest explanation that this obstacle to the work has been largely overcome. Even yet there are those who entertain these erroneous ideas. The comprehensiveness of the work, as embodied in the law is very great. Had the Bureau been established some years I should have felt justified in adopting the plan of the Massachusetts office, and selected but two or three topics from the vast field before me, but the newness of the Bureau, and the expectancy of many (much or it totally unreasonable) seemed to demand that as much of the field should be gone over as possible. Personal collection of data would have been more successful, but economy led me from such a course. The office has already reached a position of great value to the State. A voluminous correspondence has been conducted with Iowa citizens, and with those of nearly every State in the Union, Canada and across the sea. It has been the aim of the Commissioner, not only to seek information by this correspondence but to impart such as would be of value and profit to this State.

In making investigations into the great questions of labor and capital, the diversities of opinions, and the multiplicity of theories seem almost overwhelming. For years, the ablest thought has been centered upon this theme—the real relations of one to the other—and to the welfare of the wage-workers. That no further advancement has been made toward the solution of this mighty problem to the satisfaction of both classes represented, has been largely due to the fact that *reliable information has been lacking*. The highest type of thought or intellect is absolutely barren of results in the above direction, without solid facts for a basis. No solution of this question can ever be attained without reliable statistics from which can be evolved reasonable and tangible propositions. Disasters to capital, men deprived of work by closing of the mine, factory or workshop, or by their own volition, based upon disharmony between employe and employed, can only be averted by reasonable logic, founded on statistical facts, at once positive and indisputable.

To this end, and to place labor and capital in reciprocal relations—their true positions—one dependent upon the other for healthful progression and harmonious action are these Bureaus of Labor Statistics created. A large number of returns made to this office have been incomplete; others have been palpably unreliable. These have all been discarded and only those which have been complete and be-

yond question truthful, have been herein compiled. Such only are valuable for data.

The following subjects have chiefly engaged the attention of the Commissioner: Labor organizations, co-operative associations, industrial education, convict labor, arbitration, conciliation and strikes, farm labor and laborers, schools and teachers, wages and cost of living, savings, homes, etc. of working men, coal screens and company stores ("truck system"); railroads with the earnings, hours of employment, etc. of employes, the same of stores and factories, and State uniformity of text-books. A valuable report is also submitted prepared by the Commissioners of the various States, the same being a result of careful examination of the city of Pullman, Illinois, the ideal as well as the real home for working men and women. Other matter will be found of local and general interest.

A glance at the law creating this department will convince one of the magnitude of the work contemplated. To completely carry it out would require no little help in the office. The means given the Commissioner—in definite terms—did not warrant him in employing the help desired and needed. A clerk is absolutely necessary all the time, and while the law provides for "all necessary office expenses," I have only employed clerical aid when the work assumed such proportions as to insure defeat in the object desired had I not so done. Other States, regarding the work as of great value, have been much more liberal in this respect than Iowa, although by no means in better condition to be so. For instance: Massachusetts for the year ending January 1, 1884, paid her Commissioner a salary of \$2,500, chief clerk, \$1,500, and gave \$5,000 to the Bureau as a contingent fund. The reports of the Massachusetts Bureau are in demand everywhere by merchants, mechanics, laborers and manufacturers alike.

In other states the Bureaus are not so liberally equipped as in Massachusetts, yet are well cared for.

In New Jersey the Commissioner has a salary of \$2,500 per year, necessary assistants and \$5,000 for contingent expenses.

The salary of the Ohio Commissioner is \$2,000; the State providing factory inspectors and an appropriation for various bureau expenses.

In Missouri the Commissioner's salary is \$2,000 per year, and he is given regular assistants, mine inspectors and \$2,000 for expenses.

The salary of the New York Commissioner is \$2,500; he has a deputy and clerk and \$5,000 for expenses.



Michigan gives her Commissioner \$2,000, and his deputy \$1,500, and sets aside \$5,000 per year for expenses.

The salary of the California Commissioner is \$2,400; that of his assistant \$1,500, and he is given \$500 per year for expenses not otherwise provided for by the statute.

Maryland starts her Commissioner out with a salary of \$2,500 and other provisions.

In Pennsylvania the Commissioner receives a salary of \$2,500. He is also given three clerks at \$1,400, and \$2,000 for expenses outside of postage, printing, etc.

Illinois is composed of five Commissioners and a secretary.

Notwithstanding the lack of a definite appropriation as a contingent fund, and the fact that the office has been conducted upon an economical plan, yet it is hoped and believed that this report will warrant the assertion that the department is already of real practical value to the State, and capable of much greater as it grows in years, and deserving of liberal support by the State.

#### ACKNOWLEDGMENTS.

I desire to express my thanks to your Excellency for never failing cooperation and help in my work; to the press of this State and elsewhere, which, with a few rare exceptions, have courteously extended every aid possible. The following papers and periodicals have been sent regularly to this Bureau, for which my hearty thanks are returned:

The Patterson (N. J.) Labor Standard; The St. Louis (Mo.) Union; The Labor News Echo, Flint, Mich.; The American Nonconformist, Tabor, Ia.; The Labor Enquirer, Denver, Col.; The People's Advocate, St. Louis, Mo.; The Cigar Makers' Journal, New York City; The Vidette, Washington, D. C.; The Labor Vindicator, Bay City, Mich.; The Iron Moulders' Journal, Cincinnati, O.; The Fireman's Magazine, Terre Haute, Ind.; The Engineers' Monthly Journal, Cleveland, O.; John Swinton's Paper, New York City; The Irish World, New York City; Der Socialist, New York City; The Journal of United Labor, Philadelphia, Pa.

To Mr. C. S. Byrkit, of Centerville, Sec. of the Iowa Knights of Labor, I am specially indebted. Shortly after my appointment I received help from him enabling me to push my work with more rapidity, and later he was employed in this office—part of the time at my own expense and part by the State—and at all times I found him cheerfully rendering excellent service.

To a large number of county auditors and township assessors I am also indebted for marked courtesies shown me. Indeed nearly all from whom aid has been sought have responded with such a degree of heartiness that I am unable to mention many whom I should like to, and to all my thanks are due and given.

I am, sir, very respectfully your obedient servant,

E. R. HUTCHINS,

*Commissioner.*

## PART II.

NATIONAL CONVENTION—BLANKS OF IOWA  
BUREAU.BUREAUS OF STATISTICS OF LABOR IN THE UNITED STATES,  
JULY 1, 1885.

STATES.	NAME OF OFFICE.	Year estab- lished in.	PRESIDING OFFICER.		POST-OFFICE ADDRESS.
			TITLE.	NAME.	
Mass. ....	Bureau of Statistics of Labor .....	1889	Chief.	Carroll D. Wright.	Boston.
Penn. ....	Bureau of Industrial Statistics .....	1872	Chief.	Joel B. McCamant.	Harrisburg.
Ohio ....	Bureau of Labor Statistics .....	1877	Com'r.	L. McHugh .....	Columbus.
N. J. ....	Bureau of Stat. of Lab. & Industries .....	1878	Chief.	James Bishop.	Trenton.
Missouri.	Bureau of Lab. Stat. and Inspection .....	1879	Com'r.	O. Kischitzky.	Jefferson City.
Illinois.	Bureau of Labor Statistics .....	1879	Sec'y.	John S. Lord.	Springfield.
Indiana.	Bureau of Statistics .....	1879	Chief.	Wm. A. Peele, Jr.	Indianapolis.
N. Y. ....	Bureau of Labor Statistics .....	1883	Com'r.	Chas. F. Peck.	Albany.
Cal. ....	Bureau of Labor Statistics .....	1883	Com'r.	John S. Enos.	San Francisco.
Mich. ....	Bureau of Lab. & Industrial Stat's .....	1883	Com'r.	C. V. R. Pond.	Lansing.
Wis. ....	Bureau of Labor Statistics .....	1883	Com'r.	Frank A. Flower.	Madison.
Iowa ....	Bureau of Labor Statistics .....	1884	Com'r.	E. R. Hutchins.	Des Moines.
Md. ....	Bureau of Statistics of Labor .....	1884	Chief.	Thos. C. Weeks.	Baltimore.
Conn. ....	Bureau of Labor Statistics .....	1885	Com'r.	A. T. Hartley.	Hartford.
Kansas.	Bureau of Labor Statistics .....	1885	Com'r.	Frank H. Belton.	Topeka.

\* Re-established.

It will be seen that several of these Bureaus have been established a number of years, and their usefulness to the States had become so apparent that a meeting of the Chiefs and Commissioners was deemed advisable, and the first convention was held in Columbus, Ohio, September 26, 1883, at which the following States were represented:

Massachusetts, by Carroll D. Wright.  
 Pennsylvania, by Joel B. McCamant.  
 Ohio, by Henry Luskey.  
 New Jersey, by James Bishop.  
 Missouri, by H. A. Newman.  
 Illinois, by John S. Lord.

The session lasted two days, the time being spent in discussing the best methods of pursuing the work outlined in the laws creating the various Bureaus. At this meeting the subjoined resolutions were adopted:

*Resolved*, That Chiefs of Bureaus of Labor Statistics meet annually upon the first Wednesday in June, at such place as may be agreed upon from time to time.

*Resolved*, That a committee of three be appointed by the chair, to consider the matter of the organization and equipment of State Bureaus of Labor Statistics, and report with recommendations at the next annual meeting of this Convention.

*Resolved*, That the Commissioners confer with their respective delegations in Congress, to procure, if possible, land grants to the several States similar to the grants to agricultural colleges for the establishment of manual or training schools.

*Resolved*, That a committee of one be appointed by the chair, to report at the first annual Convention, a code of rules and regulations for the government of the Convention of Chiefs of Bureaus of Statistics of Labor.

The second Convention was held in the hall of the Mechanics' Exchange, in the city of St. Louis, Mo., on June 9, 1884, and continued three days. Occurring so soon after the appointment of the writer, it presented a rare opportunity for profit to him, and one which he gladly improved. At this meeting, upon the call of States, the following were found to be represented:

Massachusetts, by Carroll D. Wright.  
 Pennsylvania, by Joel B. McCamant.  
 Ohio, by Henry Luskey.  
 New Jersey, by James Bishop.  
 Missouri, by H. A. Newman.  
 Illinois, by John S. Lord.  
 New York, by Chas. F. Peck.  
 Michigan, by John W. McGrath.  
 Iowa, by E. R. Hutchins.  
 Maryland, by Thos. C. Weeks.

Mr. McCamant, chairman of the standing committee appointed for the purpose of ascertaining and suggesting the best methods for the collection of statistics, submitted the following:

At our last meeting it was resolved that a committee of three be appointed to ascertain the best methods for the collection of statistics and present the results to this Convention. In compliance therewith, as chairman of the



committee, I have the honor to present the following report for your respectful consideration:

Having had but one year's experience in the labor and methods of collecting statistics, I can speak from the knowledge derived from the compilation of one report only. In the preparation and compilation of that report I depended on the blank or circular system almost entirely. The chief merit in this system lies in the fact that it is the only feasible method at present possible in Pennsylvania, owing to the reluctance of the legislature to appropriate a sum of money sufficient to defray the expenses necessary in the collection and compilation of such information as the laws governing the bureau or statistics require.

The blank or circular system is open to the objection that it compels the bureau to propound questions to a witness with whom he has no personal relations, and of whom, in the great majority of cases, it has no personal knowledge. If the witness be a willing one, he often mistakes the meaning of some of the questions propounded, and his misapprehension leads to answers which are either totally at variance with or repugnant to the real nature of the question. If the witness, from any cause, be an unwilling one, he answers the least important questions only, thereby necessitating the sending by the bureau to him of a duplicate blank, accompanied by a reminder of his failure to comply with the law.

In many cases the persons to whom blanks are furnished answer the questions fully, but fail to return the blanks until, as they think, sufficient time has elapsed to render them worthless. If the blank system is to be preserved, it should be made efficient by the passage of stringent laws, enlarging and unmistakably defining the coercive powers of the Bureau when acting in behalf of the Commonwealth in the collection of statistics. The important point in the gathering of statistics is that they be reliable. The most that can be said in favor of the blank system is that you cannot prove that they are not reliable. Doubtless, the best and only reliable method would be found in the taking of a state census at such times as would make it follow within five years next after the taking of the United States census. If this were done, and done under the supervision of the Bureau of Statistics, there would then exist a basis upon which the Bureau could judge of the truth or falsity of returns made to it. In the matter of obtaining information regarding the social condition of the wage classes, and in questions relating to child labor, to the hours of labor, or to any of the economic questions which daily furnish food for discussion and consideration, it would be proper and wise for the legislature to authorize and empower the Bureau of Statistics to make a special inquiry into one particular subject-matter, and report back to the legislature the results of its investigations. *But your committee are of the opinion that all such information should be gathered by special agents, instead of by means of blanks.*

#### WORK OF THE CONVENTION.

The Executive Committee, appointed for the purpose of facilitating the work of the Convention, suggested that the following topics be included in the discussions of the Convention:

1st. As to the desirability of establishing a National Bureau of Statistics of Labor at Washington.

2d. The importance of the passage by Congress of the bill introduced by Mr. Cox, with reference to the State censuses to be taken in 1885.

3d. As to the advisability and practicability of preparing uniform schedules as a basis for obtaining labor and industrial statistics in the different States where bureaus have been established.

4th. With regard to the importance of manual training in our public schools.

JAMES BISHOP,  
JOHN W. MCGRATH,  
CHARLES F. PECK,  
*Executive Committee.*

Mr. Wright, chairman of the standing committee on equipment of labor statistical bureaus, submitted the following:

The committee appointed by the last Convention to consider the matter of the organization and equipment of a State Bureau of Statistics of Labor, have attended to their duty, and beg leave to report that the best organization of a Bureau consists of a chief officer, a secretary and a chief clerk, to be appointed by the chief officer, and such additional force as circumstances may require, but under the appointment and control of the chief officer.

The chief value of statistics is to be found in their preservation for comparison on a uniform basis and under the continuity of the system which comes from one mind. A numerous commission, or a chief, and a deputy not under the control of the chief, cannot work with that singleness of purpose essential in statistical undertakings. For this reason we recommend the simple organization indicated.

CARROLL D. WRIGHT,  
HENRY LUSKEY,  
JAMES BISHOP,  
*Committee.*

#### RESOLUTIONS.

The following were among the resolutions adopted by the Convention:

*Resolved*, That it is the sense of this Convention that a National Bureau of Labor and Industrial Statistics should be created.



By Mr. Wright:

The proceedings of each session of the Convention shall be printed under the direction of the secretary, and published in pamphlet form; the cost of such publication shall be borne equally by the Bureaus, and each Bureau shall be supplied with twenty-five copies thereof. Extra copies shall be supplied the various Bureaus at cost.

By Mr. Bishop:

WHEREAS, It is the purpose of this Convention to encourage every attempt upon the part of the employers of labor to advance the social, educational and moral condition of the employed; and

WHEREAS, We are informed that the city of Pullman, in the State of Illinois, furnishes a noble example of practical scientific work in this direction; therefore

*Resolved*, That a committee of three be appointed by the Chairman to arrange for a visit by the members of this Convention, early in October next, to the said city of Pullman, with the view of making a careful examination into the character of the work which we learn has there been put in operation for the benefit of the employees of the Pullman Car Company.

By Mr. McGrath:

*Resolved*, That it is the sense of this Convention that a system of manual or industrial education should be adopted in our higher schools.

*Resolved*, That a committee of five be appointed by the Chairman to formulate a series of questions to cover the varied subjects of investigation contemplated by the law in governing the several Bureaus of Statistics of Labor in the United States, and report the same at the special meeting of the convention at Pullman City for their consideration.

The following committee was appointed in accordance therewith: Messrs. Peck, Weeks, Hutchins, Bishop, and McGrath.

By Mr. Wright:

*Resolved*, That the best interests of the State Bureaus of Statistics of Labor and of the industrial forces of the country demand that such a Bureau should be administered without reference to political influence, and that all officers of such bureaus should be selected for their fitness for statistical work, and not on account of allegiance to, or services rendered, any party.

The resolution was adopted by a unanimous vote.

By Mr. McGrath:

*Resolved*, That Prof. C. M. Woodward be requested to prepare and furnish to the Secretary of this Convention a synopsis of the practical operations of the manual training school of the city of St. Louis, as outlined by him in the address made to the Convention last evening.

By Mr. Wright:

*Voted*, That the Secretary print 500 copies of the report of the proceedings of this Convention, at the expense of the Convention, and supply duplicate copies to the leading newspapers in all States not having Bureaus of Statistics.

#### THE ST. LOUIS MANUAL TRAINING SCHOOL,

under charge of Prof. Woodward, was visited by the members of the Convention, and a description of this institution appears later in this report. Prof. Sanborn, of the Missouri Agricultural College, of Columbia, addressed the Convention, and the following is a synopsis of his address:

#### LABOR AND STATISTICAL PROBLEMS OF THE FARM.

Accurate statistical facts are to become the measure of the development of individual industries and of the world's progress. The children of the thinking few, industrial statistics are not appreciated by the masses, whom they are intended to benefit. They are positive industrial forces, teaching the time, direction, and method of action. Accurate information gives not only a skillful but a bold, energetic policy.

The products of agriculture are the supporters of life, and the parents of all of the arts; hence agricultural statistics are the most important of all statistics. They inform the producer, as well as the speculator, of crop prospects, and leave the fruits or profits of labor in the producers' hands, where they are of the most good to civilization. As nations in the world's commercial system are no longer isolated units, statistics should be gathered on an international scheme. Your organizations are concerned with the labor and with the productive industries of the State. In the amplitude of your field I propose to discuss the labor problems of the farm in their relation to the social and material development of husbandry,

#### THE WAGE LABORER.

The industrial revolution of this century, which has created new social and material systems, has assisted less the farm laborer than it has the wage laborer of any other important industry. The farm itself, in its relation to labor, has suffered a positive loss. Labor-saving machinery, in its division of labor into piece work, and railroads have necessitated centers. Mechanism has shortened the hours of labor, and in its centers has created a social life attractive to labor. But expansion of labor-saving machinery on the farm has forced the laborer to seek other employment. The more spirited farm laborer has sought the schools, libraries, and social opportunities of the town. The barshare plow, requiring three to four men per acre a day of plowing, has given place to the sulky plow, asking for but one man per day for three acres of plowing. The corn planter has replaced ten men;



the mower, four to five; the reaper, ten men; and so on for other field operations. The Titan strides of agriculture are revealed in the annual productions of farm mechanism, amounting to \$68,940,486 for 1880. Corn planters numbered 68,991; grain drills, 43,222; grain sowers, 20,289; cultivators and harrows, 446,054; plows, 1,326,123; harvesters, 25,737; reapers, 35,327; reapers and mowers combined, 54,920; mowers, 72,090; rakes, 95,625; potato diggers, 33,453; and corn huskers, 44,370.

All farm machinery and implements are covered by 35,960 patents, marking a movement unparalleled by any age, or by any other industry. Our exports mark the increased power of the laborer on the farm. Those of agriculture are 77 per cent of our entire exports, and amounted to \$619,269,499 for 1883. Within a half century they have gone up from little over \$4,000,000 annually. The remark of Socrates that "agriculture is the mother and nurse of all the industries," is no mere sentiment for American application.

When our population numbered 80 per cent of farmers we exported little. In 1860 it was 51 per cent only engaged in agriculture; in 1870, 47.35 per cent; and in 1880 but 44.1 per cent of all workers were farmers. But with the decrease of the ratio of farms and farm laborers in ratio to population has come an increase of products for exportation. Sir, agriculture has been no laggard, but challenges our admiration. It has measured the advance of social and industrial progress through the labor its better methods have given to the arts. Within a lifetime it has given one half its former ratio of workers to other callings. Headless and heartless, this farm mechanism has sent to the town the best farm labor to occupy positions of minor trust and to satisfy its gregarious instincts in society. This impulse has been aided by the uncertainty of the tenure of farm labor and its certain long hours of labor. Seven months of sun to sun labor, followed by five months of intermittent and uncertain labor, with its saloon companionships in hours of idleness, has been demoralizing to farm labor. Such laborer, boarded in the family of the farmer, is a burden to the wife and often a moral pest to the children. The old polity has been wrecked and a new will secure the best labor of the day; in my experience, by the cottage home for the laborer on the farm and for his family, with a garden, a cow, pig, newspaper and steady employment by the year. These bind labor to the farm and to its interests. The system of farming that distributes labor over the year is the most profitable. Landed interests are deeply concerned in securing good labor against the seductive influence of the town, and does not want the nerveless labor the latter refuses. Good homes, regular labor, and stated hours will secure it, as experience teaches. It also induces conservatism in the laborer. He is never a striker, and property finds no enemy in his person. Mechanism has rendered the barbarism of extreme long days of labor, peculiar to the farm, unnecessary. Indeed, ten hours is sufficient to exhaust the normal capacity to work, when faithfully applied.

The diversity of farm operations requires more tact and the executive faculty better developed in the farm laborer than in the labor of any other industry; hence education of the farm laborer is of more importance than the education of any other class of laborers. I have handled upon three

large farms four distinctive classes of farm labor, and must unequivocally indorse the educated farm laborer. He has clearer views of the just relations of capital and labor, and is not only a less captious but is a more perceptive workman. A comparison of northern with southern labor shows this. But Europe presents less abnormal causes and a far greater proportion unable to read and write than the United States. According to Mulhall, Europe produces 16.5 bushels of grain per capita, and the United States 48.1 bushels. Europe produces 51.1 pounds of meat per capita, and the United States 171 pounds. Europe produces 15.06 bushels of grain per acre and the United States 23.3. We till more acres per laborer here by these figures. Portugal had but one in thirty-six at school, and grew 11.64 bushels of grain per acre. Spain has 25 per cent of her population able to read and write, and grows 12.2 bushels of grain per acre. France had in 1860 58.2 per cent of her population able to read and write, and obtained 18.5 bushels. In Germany the bulk of population read and write, and her farmers gain 22.05 bushels per acre. While it is true that production follows expansion of manufactures and commerce, it must be remembered that the diffusion of knowledge is the impulse that has developed arts and commerce, and that has created the culture and wealth to enjoy their fruits. Educated farm labor has enjoyed the fruits of its own energy, and the energy of other educated labor. The Department of Agriculture finds that the manufacturing Eastern States pay for farm labor \$26.61 per month, while the Southern States pay \$15.30. Ohio pays \$24.55, and Kentucky, by its side, \$18.20. The manufacturing sections of Ohio pay \$25.96, and the non-manufacturing sections \$22.65. Vermont, manufacturing the least of the New England States, pays \$23.70 per month. She has invested in manufacturing \$28.80 per capita; while Massachusetts pays \$30.66 per month for farm labor, and has invested in manufactures per capita \$74.40. Steadily employed farm labor is as well paid as any labor. By Carey's figures in 1836, the price of farm labor had increased by 1866 72 per cent; and by Baird, English rates, from the repeal of the corn laws, had advanced 60 per cent. In the hands of the better class of farmers, his hours of labor have been much reduced. Meat twice a day, tea, sugar, tobacco, carpets, and a paper are now his to enjoy.

#### PROPRIETARY LABOR.

While a broad distinction exists between wage and proprietary labor, yet in this country the latter is a laborer even in the physical sense of the word. Here the proprietor is the tiller of the soil. The census shows 3,323,876 farm laborers and 4,346,617 farmers, most of whom own the land they till. Herein lies the success of our agriculture against European. Grand results come only from the quickened perception and energy that ownership gives. Ownership is the parent of all broad, permanent farm improvement. The history of Rome and Greece teaches it. The spiritless farming of Spain, Italy and Austria, and in fact most of Europe, rests in the entailed mischiefs of feudalism, whose influence lives on.



Two states, adjoining, were formerly typical of two systems of labor and land ownership. In 1860 Ohio farms averaged 114 acres; those of Virginia 324 acres. Ohio raised 15.1 bushels of wheat per acre, and Virginia 9; corn, Ohio, 31.3 bushels, and Virginia 19.1; oats, Ohio, 26.4 bushels, and Virginia 16.2 bushels. The war converted the owners of the soil, to large degree, into its tillers. The following figures are those of a revolution in practice. The farms in Virginia decreased in size from 1860 to 1880 from 324 to 167 acres; in South Carolina, from 438 to 143; in Louisiana, from 536 to 171; in Mississippi, from 370 to 156 acres. This colossal movement has given a new agricultural South, four of whose Atlantic States have increased their wheat yield from 7.3 bushels, from 1862 to 1875, to 7.7 bushels, in the period from 1875 to 1882, or 5 per cent in seven years. Our people love the land, in spite of the cry that young men set their faces cityward. This is displayed in the average size of the farms, which in 1850 was 203 acres, in 1860 199 acres, in 1870 153 acres, and in 1880 only 134 acres.

Statesmen are interested in land ownership by the masses. It means stability of government. Especially in democracies are a landless people more dangerous than an ignorant one. Machinery has not tended to centralization on the farm as in the shop, as expected. Mammoth enterprises have been wrecked, insuperable obstacles presenting themselves after the first fertility has been exhausted. The great estates on the plains, now gathering, will inevitably fall apart from the same causes that are reducing the average size of our farms. Ownership by the tiller of the soil may be insisted upon as the first requisite to successful labor on the farm.

#### MEDIUM SIZED FARMS

are a second favoring condition to the economy of labor on the farm. Statesmen, observing that equality of condition and land ownership among the masses, for all time, have tended to stability of government, have been pronounced advocates of "extensive farming." Lovelye says, "Modern democracies will only escape the destiny of ancient democracies by adopting laws such as shall secure the distribution of property among a large number of holders, and shall establish a very general equality of condition." Students of ancient and modern history will recall the efforts of legislators and thinkers to secure land ownership in small holdings for the masses. France has 5,550,000 properties, of which 500,000 only average over sixty acres, while 5,000,000 are under six acres. In England and Wales not one in twenty own property, and 7,000 own over four-fifths of all England. Which of the two systems choose we? England raises twenty-eight bushels of wheat per acre, and France fifteen. The six acre farmer of France is forced to live in the past. The spade and manual labor do the duty of the plow and the horse. It is the system of brute force. It creates indolence rather than thrift, for the small corn and wheat farmer cannot occupy himself one half of the time advantageously. This narrow circle breeds mental stagnation, and clothes the French peasant in wooden shoes. Britain consumes 47 per cent more meal than France. With 51 per cent of her population engaged in agriculture, France buys food, while America, with 134-acre farms, sells

heavily, with 44.1 per cent of her toilers farmers. It is the earnings, and not the savings, that constitute the true wealth and happiness of a people. The capacity to earn measures the genius of a people. Americans have understood this matter, and assert the dominance of mind over matter, and use animal and natural forces. In 1870 we had 1,321,117 farms under fifty acres. In ten years this number decreased 145,703. Machinery must have free play, and it drives small farmers remorselessly from the field. We are looked upon as the great rural nation of the world, although of a less proportion of farmers, by far, than Europe. It is the genius of mechanism that has misled the world in this view. Neither small nor large farms, then, in view of preceding statistics, favor labor best; 150 acres is large enough for machinery, and not too unwieldy for intensive methods. What co-operation may yet do, the future must answer. At present man works best by the ownership of medium sized farms.

#### CAPITAL WITH LABOR.

Thirdly, capital may be regarded as the right arm of labor, when applied to agriculture, as elsewhere. "Intensive farming" narrows efforts and divorces machinery. "Extensive farming" is broad areas, tilled with little capital and poorly. Capital and skill combine the two and give "intensive" "extensive" farming—large crops on broad areas, forty bushels of wheat in the place of our twelve bushels.

The United States, in stock and tools, uses but about \$6.60 per acre of improved land, and a small additional sum for accessory personal property. A pioneer type of farming is revealed, based upon soil robbery, and does not touch the capacity of the man or the farm. The gross income per acre is but \$6.77. A sum which, by capital, machinery, skill, rotations, etc., can be easily multiplied six fold. It is to be regretted that the plow has been sped faster than the furnace, the anvil, and the loom, robbing the bounty of ages to fatten foreign lands, selling grain at a price that the sons will pay to replace exhausted fertility. Prof. Collier has shown that the depletion in the second of two periods of nine years lost to the West, in yield per acre, \$30,000,000 for corn, while the East gained \$45,000,000. California has dropped, from 1862, from 24½ bushels of wheat to 13 bushels per acre. Missouri, in periods of five years each, has dropped from 14 to 12.4, to 11.9, and for the last five years to 11.7 bushels per acre. In corn a bushel less every five years is grown. The East is capitalizing its farming and paying for the follies of its fathers in soil replenishment.

A table from Prof. Schwertner shows the two movements. By it nineteen years are divided into four periods of five years each, save the last, of four years.



PERIOD.	Kan.	Mo.	Ia.	Neb.	Minn.	Me.	N. H.	Vt.	Mass.	Conn.
1 .....	17.2	15.1	13.7	16.0	17.0	12.9	14.2	15.1	16.5	16.5
2 .....	16.9	14.0	13.7	17.7	14.7	12.7	14.5	14.5	17.1	17.1
3 .....	14.4	13.2	11.9	12.4	15.2	13.8	15.9	15.9	17.2	17.2
4 .....	13.1	13.1	11.1	12.7	14.3	13.7	14.5	14.5	16.5	16.5

In the group of food-selling states, having but 56.5 per cent of their population engaged in agriculture, the crops are on the decline. In the food-buying states 28.1 per cent are farmers, and the soil is gaining in crop yield. The former scratch the soil and sell crops, raw products. Their's is the simplicity of farming. Look at the decline of Kansas in fifteen years. From her 1,534,350 acres of wheat, 6,280,855 bushels of wheat, worth \$4,396,584.50, are lost annually in decline per acre, or \$297 for every 100 acres. Exhaustion has spared no section of America, and leaves but day wages for labor at its low ebb for most sections. Kansas loses more than named. Selling 15,000,000 bushels of wheat carries away 18,920,000 pounds of nitrogen, 71,000,000 pounds of phosphoric acid, and 4,620,000 pounds of potash, soil ingredients of crops, most of which might have been retained by a rational system of farming, and which the East is now buying at the rate of \$4,820,800 annually. The loss to the United States is enormous, and is our shame, rather than our pride, as statisticians and statesmen feel it to be. Are the sale of raw products a country's glory?

I have arranged from Mulhall data showing the relation of commerce and the manufacturing of raw products to good farming:

COUNTRIES.	Earnings of commerce and manufactures in shillings per head.	Yield of bushels of grain per acre.
Great Britain .....	838	36.40
Holland .....	780	28.80
United States .....	475	23.30
Belgium .....	684	32.72
France .....	439	18.50
Austria .....	137	15.04
Spain .....	153	20.20
Italy .....	151	13.80
Portugal .....	110	11.84
Germany .....	359	20.05
Russia .....	109	10.25
Europe .....	290	15.06

The exceptions to the rule that the products of agriculture follow the earnings of commerce and manufactures are easily explained.

#### INDUSTRIAL EDUCATION

is a fourth aid to agriculture. As this section was a condensation of a broad subject in its original scope, the writer will merely say in this synopsis that all the reasons urged in favor of professional education for the lawyer, civil engineer, etc., and more, may be presented in favor of industrial education for the farmer. His products are "the materials of art"; he sets the price of food. His industry involves the laws of the natural sciences. No art is so complex, and until this century none so poor in known facts. To-day the 150 private and public experiment stations, with nearly 1,000 trained original investigators, are massing the richest industrial literature of this or any other age. These facts are so extensive and scattered as to require systematic organization and schools to impart them to the young. The industrial value of those facts only the sheerest ignorance or narrow prejudice can question. Grasping the principles of his business, broadens farm labor in the farmer, divorces him from the costly and painful acquisitions of experience, and emboldens policy. It makes the aggressive farmer, as well as the skillful one. It lays the foundation of his system of farming broad and deep, and builds it for the ages. All civilization rests upon the plow; let reason be its guide.

#### BEARINGS OF STATISTICS UPON OUR FUTURE DEVELOPMENT.

In 1860 we raised 46.0 bushels of cereals per capita; in 1870, 50.8 bushels; in 1880, 53.7 bushels per capita. Ten years ago we exported \$497,760,867 worth of farm products; last year \$619,269,632 worth. Fifty years ago our exports in round numbers were \$4,000,000 worth annually. Mathematicians have figured this ratio of gain into the future to the wealth and glory of our country. I neither desire nor expect this gain. Rapid commercial changes are bringing our competitors to the front in grain and meat products. Our own good and cheap lands are overrun. Beyond the one hundredth meridian the rain-fall varies from three to twenty inches to the base of the mountains. This meridian cuts off one third of Kansas, nearly one half of Texas, Nebraska and Dakota. Seventeen counties of Western Kansas actually fell off in population last year. Texas, settled largely by enterprising men within fifteen years, grows 8.5 bushels of wheat and 17.5 bushels of corn per acre. Its great area is best fitted for grazing, requiring twenty acres to a steer. The number of farms increased from 1870 to 1880 50.7 per cent, while the increase of improved acres was but 31.5 per cent, showing that the settling up of land overspread is going rapidly forward.

In 1860 we grew of all animals 2.9 per capita; in 1870, 2.2; in 1880, 2.7, and in 1884, 2.5 per capita. The "babies" are increasing faster than domestic animals. The increased size of animals, however, keeps our meat supply good. Our dairy products per capita are about what they were in 1850. We have \$200,000,000 worth of sugar yet to produce, \$160,000,000 worth of which



we now buy. We have more wool to grow, all our fibres nearly, tropical fruits and other farm products, and shall have, by the year 1900, 35,000,000 more of people to feed. This 35,000,000 will more than ever settle in centers of industry, or become consumers. What good lands have we? From 1870 to 1880 the acres of land in farms increased 12,834,679 yearly; 1,016,697 of those acres only were taken in States and Territories west of those crossed by the one hundredth meridian; and, liberally estimated, 1,000,000 in those States thus crossed west of this line; 11,000,000 acres, or 84 per cent of land occupied, was, then, taken east of this meridian. New Mexico actually decreased the area of her farms. One third of the country lies west of the one hundredth meridian. The land east of the one hundredth meridian is 968,391,039 acres. In farms, 494,475,095 acres; improved acres, 256,334,955. West of the above line only 23,436,039 acres are found. What of the half area east of the one hundredth meridian not in farms? The original thirteen States, all but four of which are Northern and manufacturing States, have 210,539,520 acres in total. Of this, 136,955,946 acres are unimproved, and 71,489,236 acres are not in farms. One third of the area of those States is not inclosed, and only 34.9 per cent is improved. Lands thus passed by will come slowly into use—much, never.

At the same rate of settlement, only 337,968,472 acres would be improved under the present order of events, and seven years from 1880 would suffice to absorb those unoccupied. But they are not representative States, and we strike her unimproved 136,955,946 acres out as of little moment. Michigan, Wisconsin and Minnesota form the next group, with 124,099,840 acres of land, with only 24,506,084 acres improved; 100,000,000 acres, or 80 per cent, in these semi-old, northern, cold, forest States is unimproved. Indeed, some counties have gone back in rural population; their sons seeking in other States for better lands. Ohio, Illinois and Indiana are the best settled States, and have 76,623,854 acres of improved lands out of a total of 82,677,120 acres, including wastes, rivers, etc. It is idle to look here for land. Iowa even in 1880 had 24,752,700 acres in farms, out of 38,228,000 acres. We have stated the depopulation of Western Kansas. In brief, it is in seven Southern States that the great reserve of land is found. Texas, east of the one hundredth meridian, Louisiana, Mississippi, Alabama, Arkansas, Florida and Georgia contain 250,471,021 acres, of which but 94,416,465 acres are in farms, and only 35,080,580 acres are improved. They will make cotton, and perhaps our sugar, and fibres, and tropical fruits, but they do not feed themselves, and will not soon swell our commerce. The wheat crop of last year varied in these States from 5.1 to 8.5 bushels per acre. Will dollars, labor and six bushels of wheat per acre on impoverished lands, none too good, and in an unfavorable climate for energy and grain, secure the markets of Europe against cheaper labor and favoring climates? One half of this southern area is Texas and Florida lands, poor, very much of it. Theoretically, I am among the first to recognize the fact that our resources are almost untouched, but, practically, lands rejected will be occupied only under a new order of events.

At the present rate of increase, in less than one hundred years our popu-

lation will number 400,000,000. It will not likely reach 200,000,000 100 years hence. But in any event, the year 1900 will open with less exportation of produce, and will soon see our own expanding centers pressing our farmers into better methods to supply their wants, while our centers will better supply our own country with all the works of art or industrial products. I confidently expect to see American agriculture take on more of the methods of a settled country, becoming more intensive and less extensive in its characteristics. The nomad farmer has nearly had his day and has about completed his work. Henceforth we are to see more of the genius of farming in this favored country. The gleam of the American "coultter" in the fat soil it cuts, shall reflect in the future typical lord of the soil, qualities of the mind, like the coultter and the soil, polished and fertile.

#### THE CENSUS.

A committee was appointed, and the following memorial was drafted and sent to Hon. S. S. Cox, M. C., to be presented to the Congress of the United States.

#### MEMORIAL OF THE NATIONAL CONVENTION OF CHIEFS AND COMMISSIONERS OF STATE BUREAUS OF STATISTICS OF LABOR.

*To the Honorable Senators and Representatives in Congress assembled:*

Your memorialists respectfully represent that at a session of the above Convention, held at St. Louis, Missouri, on the tenth day of June, 1884, it was unanimously voted that said Convention should respectfully urge your honorable bodies to pass at the present session of Congress a bill (H. R. 4843) introduced by the Hon. Samuel S. Cox, in the House of Representatives, February 11, 1884, and entitled, "A bill to further carry out an act entitled 'An act to provide for the taking of the tenth and subsequent census', approved March 3d, 1879."

Your memorialists further respectfully represent that the provisions of said act of March 3d, 1879, cannot be carried out in such a way as to secure the results sought by said act, but that the provisions of said bill now pending, if they should become law, would enable various States taking a census in 1885 to comply with the requirements of the general government, and secure all that was intended to be secured by the law of March, 1879.

The undersigned, as a committee appointed by said Convention to present this memorial, respectfully urge on behalf of said Convention the passage of said bill at the present session, for the reason that if the contemplated legislation be deferred until the next session of Congress, there will be no time in which to make proper preparations for well conducted State censuses.

CARROLL D. WRIGHT,

*Chief of Massachusetts Bureau of Statistics of Labor.*

CHAS. F. PECK,

*Commissioner of Bureau of Labor Statistics for the State of New York.*

JOHN S. LORD,

*Secretary of the Bureau of Labor Statistics of Illinois.*



## ADVANTAGES OF THE MEETING.

A Convention of this character, composed of men of experience in such work as the law establishing the Iowa Bureau contemplated, was exceedingly opportune for its Commissioner, and from that gathering, coming, as already suggested, so soon after his appointment, was of decided advantage in the work detailed in this report.

The object sought by these meetings is being rapidly attained, namely: to bring the work of the various Bureaus into harmony, and by consultation and comparison of methods secure the utmost efficiency in the administration of the various offices represented. This attained, there can be no doubt of their being productive of vast good to the statistical service of the States involved, and to the country at large. As will be seen by one of the propositions advanced by the Convention—and very ably advocated by Commissioners of experience—the method of securing data from individual working men especially, by the means of blanks sent through the mails, was discouraged, not from their unreliability, but from the paucity of the returns made. Most of the Commissioners depend largely upon work done by agents employed, or by personal visitations made by themselves. Unquestionably this would be the best plan if suitable appropriation is made to carry it into effect. I was desirous of executing the law as economically as possible and at the same time obtain good results from labor performed, and believing that the intelligence and good judgment of Iowa's wage workers would warrant such action, I have almost exclusively depended upon blanks sent through the mails for information. This entailed the necessity of a large amount of postage, as in each blank was placed a return stamp. Though not more than fifteen to twenty per cent of those sent were returned, yet I am satisfied that my idea of the wage worker of Iowa was correct. It is hoped that in the future such an amount of money may be appropriated by the general assembly as a contingent fund, so that personal visitations may be made, especially to those localities where large bodies of wage workers are congregated, and a very much greater collection of statistics can thus be gathered. The third Convention was held in Boston, Mass., June 29th, 1885, the report of which is not yet published. It was by far the most important Convention of this character held. If the report is ready so that it may be published in full in this volume it will be, otherwise a synopsis will be given.

## BLANKS.

The following are copies of blanks which have been sent out from this office:

STATE OF IOWA,  
OFFICE OF COMMISSIONER OF LABOR STATISTICS, }  
DES MOINES, .....

DEAR SIR—The Twentieth General Assembly created a Bureau of Labor Statistics, and defined the duties of the Commissioner thereof. Among these duties, he is required “to collect, assort, systematize and present in biennial reports to the Governor, statistical details relating to all departments of labor in this State, especially in its relation to the commercial, social, educational and sanitary conditions of the laboring classes, and to the permanent prosperity of the mechanical, manufacturing and productive industries of the State, and as fully as practicable collect such information and reliable reports from each county in the State, the amount and condition of the mechanical and manufacturing interests, the value and location of the various manufacturing and coal productions of the State, also sites offering natural or acquired advantages for the profitable location and operation of different branches of industry.” That the Bureau may be of real advantage to the State the co-operation of its people is essential.

I enclose a blank which you are requested to fill and return to me in enclosed stamped envelope.

In filling first column it is suggested that you select a few of the more prominent working-men, including if possible some who belong to trade unions or similar organizations.

Any remarks or suggestions, pointing to the objects of the law as suggested above, will be gladly received. A prompt reply is requested.

Respectfully yours,

E. R. HUTCHINS,  
*Commissioner.*

NAMES OF WORKING-MEN.	POST-OFFICE.	TRADE.
.....	.....	.....
.....	.....	.....
.....	.....	.....
Names of a few prominent farmers.		
.....	.....	.....
.....	.....	.....



NAMES OF MANUFACTURING INDUSTRIES.	NAME OF FIRM OR OPERATOR.	POST-OFFICE.
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

These blanks were sent to township assessors, a very large number of whom kindly filled them and returned the same to this office.

The following blank was used more generally than any other, as it was sent to working people over the State:

The last General Assembly created a Bureau of Labor Statistics and provided that the Commissioner should "collect, assort, systematize and present in biennial reports, statistical details relating to all departments of labor in the State, especially in its relations to the commercial, social, educational and sanitary conditions of the laboring classes, and to the permanent prosperity of the mechanical, manufacturing and productive industries of the State."

It will be seen that the law is broad in character, and it will be the aim of the Commissioner to present to the next General Assembly such data as will be productive of great good to the State. To succeed in this the co-operation of the people is essential. This is especially true of the working classes—the wage-workers. This office will always be open to this class of citizens, and the desire of the Commissioner is that they may feel perfectly free to make known to this office any facts, information or suggestions, assuring them that they shall receive the most careful consideration and attention.

I have prepared the accompanying blank which I desire you to fill. The desired data can only be furnished by individual working-men and working-women from their actual experience and is accordingly sought from themselves in this way.

In addition to answering the questions contained in the blank form, any suggestions or remarks you may deem proper to make upon the educational, financial, social or sanitary conditions of the people in your vicinity, will be thankfully received, and regarded as confidential, so far as your name is concerned.

There has been an impression among some of the wage workers that their names will be made public, and hence they may decline to answer questions. The Commissioner desires it understood that upon no consideration will this be done, and those to whom blanks are sent may fully express their views without fear of the authors being made known.

Your co-operation is asked to this extent, and at your earliest convenience I trust you will return the enclosed blank filled out, as best you can.

A stamp is enclosed.

Respectfully yours,

E. R. HUTCHINS,  
Commissioner.

1. Name in full (not to be made public).....
2. Age.....
3. Where born.....
4. Residence—post-office address.....
5. By whom and where employed.....
6. Occupation.....
7. Subdivision of trade in which engaged.....
8. Number of hours employed daily.....
9. Earnings: Per day..... Per week..... Per month.....
10. Total earnings, i. e. actual income, for year ending this date.....
11. Number of days lost during the year—not including legal holidays:  
Total..... From sickness.....  
From inability to obtain work..... From other causes.....
12. Earnings of all others in your family, for same year.....
13. Cost of living during the year for self and family: Total cost.....  
Do you own a home?..... If not, how many rooms do you rent?..... What rent do you pay?.....
14. Total number in your family.....
15. Number engaged in working for wages.....
16. Are wages paid in cash, or otherwise?.....
17. Are you expected to trade at the company store?.....
18. If so, do you find prices higher than at other stores?.....
19. How often are you paid?.....
20. Are any wages withheld under certain rules?.....
21. Are there any apprentices employed in your trade?.....
22. How many, and upon what conditions?.....
23. Do you belong to a trade union?.....
24. Do you belong to any beneficiary association?.....
25. Have you life, fire, or accident insurance?.....
26. What increase or reduction have you had in wages this year?.....
27. What increase or reduction has there been in cost of living?.....
28. Have you accumulated any savings during former years?.....  
During past year?.....
29. Have you run into debt during the year?.....
30. How many families live in the same house in which you reside?.....
31. What are the diseases peculiar to your occupation?.....
32. Remarks on any subject of interest to workmen or workingwomen, trades unions, the apprentice system, labor laws and especially regarding the condition of wage workers and their families, and what in your opinion would improve it. Has the recent immigration of foreign laborers, either under the contract system or otherwise, had any effect upon your trade?.....



## MANUFACTURERS.

1. Name of firm or company.....
2. Location in city or town of.....
3. County of.....
4. Articles manufactured .....
5. How much capital have you invested in your business.....
6. Number of weeks in operation from June 30, 1883, to June 30, 1884\*....
7. Please give average wages, etc., of the various callings of labor at which persons are employed about your establishment as classified below:

## OFFICE HELP.

	NUMBER EMPLOYED.	AVERAGE MONTHLY SALARIES.
Managers.....	.....	.....
Salesmen.....	.....	.....
Bookkeepers.....	.....	.....
Clerks.....	.....	.....

8. Total number of hands employed.....
9. Number of men.....How employed.....No.....
10. Number of women.....How employed.....No.....
11. How employed.....
12. Number of boys.....
13. Number of girls.....
14. Number of apprentices.....  
Upon what conditions employed?.....
15. Number of piece workers.....
16. Number of time workers.....
17. When working in teams, the number in a team.....
18. Highest wages paid to men per week.....
19. Lowest wages paid to men per week.....
20. Average wages paid to men per week.....
21. Average annual earnings of men from June 30, 1883, to June 30, 1884....
22. Highest wages paid to women per week.....
23. Lowest wages paid to women per week.....
24. Average wages paid to women per week .....
25. Average annual earnings of women from June 30, 1883, to June 30, 1884.
26. Wages paid to boys and girls per week..... Boys..... Girls.....
27. Number hours worked per day.....
28. Have wages been increased or reduced from June 30, 1883, to June 30, 1884.....How much? .....

\*The dates on these blanks and all others were changed from time to time, but in all cases to include one year.

29. Number of days lost during the year—not including holidays .....
30. Have men employed in any of the different branches of your establishment engaged in any strike since June 30, 1883? .....
- If so, will you name trade or calling and number engaged in strike?..
31. What class of employes do you have the most trouble in getting?.....
32. For what employment do you have the most applicants? .....
33. Did you have any accidents in your establishments during the year ending June 30, 1884, and if so, state number, extent of injuries, and cause of same.....

## REMARKS.

.....

.....

## AGRICULTURISTS.

STATE OF IOWA,  
OFFICE OF COMMISSIONER OF LABOR STATISTICS,  
DES MOINES,.....

DEAR SIR: The last General Assembly created a Bureau of Labor Statistics and provided that the Commissioner should "collect, assort, systematize and present in biennial reports, statistical details relating to all departments of labor in the State, especially in its relations to the commercial, social, educational and sanitary conditions of the laboring classes, and to the permanent prosperity of the mechanical, manufacturing and productive industries of the State."

Your attention is respectfully asked to the blank accompanying this circular. A liberal response will demonstrate a creditable public spirit and render much valuable information to the State. This will be sent to gentlemen whose names have been given me as active and public spirited, and likely to respond to questions of interest to agriculture. Your assistance is asked.

The object of this work is to obtain reliable information regarding the resources of the State and sundry matters of interest to our industries, to enable the Commissioner to place such information before the many enquirers from other sections, and to aid in developing the agricultural as well as other interests of Iowa.

Please fill out the blank and forward same to this office as soon as possible.

Respectfully yours,

E. R. HUTCHINS,

Commissioner.



1. Sites in your county offering natural or acquired advantages for the profitable location and operation of different branches of industry.....

Ans.....

2. What wages are paid to farm laborers in your locality when employed for the year? Monthly, \$.....; yearly, \$.....
3. What wages are paid during haying season? Monthly, \$.....; daily, \$.....
4. During harvest? Monthly, \$.....; daily, \$.....
5. What are paid at other times than during these seasons and when not employed for the year? Monthly, \$.....; daily, \$.....
6. What length of time is usually occupied in haying and harvesting? (I suppose that the wages paid usually include board, but when they do not, please refer to question by number in the margin below and say without board.)
7. Are there any rented farms in your locality? If so, give particulars as to one or more cases.

Value, \$.....; number of acres, .....; acres improved, annual rental, \$.....

Value, \$.....; number of acres, .....; acres improved, annual rental, \$.....

Value, \$.....; number of acres, .....; acres improved, annual rental, \$.....

8. Charging the farmer's time to the farm at one dollar per day, what rate of interest will the average farmer's investment in the farm pay? ....

Ans..... per cent.

#### REMARKS.

(Glad to receive any information or suggestions relative to any industry.)

#### COAL OPERATORS.

1. Name of mine.....
2. Name of operator.....
3. Location of mine.....
4. Number of days in operation from September 1, 1883, to September 1, 1884.....
5. Average number of employes for the year ending September 1, 1884.....
6. Number of employes at date of making this return.....

7. Please give average weekly wages, etc., of the different trades and callings of labor, at which persons are employed in and about your mine as named below:

EMPLOYES.	AVERAGE WEEKLY WAGES WHEN FULLY EMPLOYED.	HOURS OF LABOR WEEKLY WHEN FULLY EMPLOYED.
Mining boss.....	.....	.....
Miners.....	.....	.....
Inside day laborers.....	.....	.....
Outside day laborers.....	.....	.....
Mule drivers.....	.....	.....
Engineers.....	.....	.....
Blacksmiths.....	.....	.....
Carpenters.....	.....	.....
Weigh-masters.....	.....	.....
Dumpers.....	.....	.....
Boys.....	.....	.....

8. Has the price of labor advanced or decreased the present year compared with last year?..... Will you state how much per cent.....
9. Have men employed in and about your mine engaged in any strike since September 1, 1883?..... If so, will you give date strikes began and number of men engaged in the same..... State briefly the origin, duration and results of such strike.....
10. Give date of any advance in wages, per ton, bushel or day, made from September 1, 1883..... How much was the advance? .....

#### REMARKS.

#### CONTRACTORS.

1. Name of firm or company.....
2. Located in city or town of.....
3. Kind of work contracted for.....
4. If house building, do you contract for putting up buildings entire or part only?.....
5. If doing the wood work, do you purchase the manufactured articles necessary for house building, or do you operate planing mills in connection with the same?.....
6. Give average number of employes (inside) from June 30, 1883, to June 30, 1884.....



7. Give average number of employes (outside) from June 30, 1883, to June 30, 1884.....
8. Number of employment weeks for employes (inside) from June 30, 1883, to June 30, 1884.....
9. Number of employment weeks for employes (outside) from June 30, 1883, to June 30, 1884.....
10. As to the amount of work done—how will above years compare with preceding? .....
11. Have the prices of building materials advanced or decreased the present year as compared with last? Give items as follows:

MATERIALS.	INCREASED PER CENT.	DECREASED PER CENT.
Lumber.....		
Brick.....		
Stone.....		
Sand.....		
Lime.....		
Finished iron materials.....		
Finished wood materials.....		

12. Give number of persons employed at date of making this return .....
13. Has the price of labor increased or decreased the present year as compared with last?.....  
State how much per cent. ....
14. Give present average earnings, etc., of workmen in your employ, as classified below:

## BUILDING TRADES—WOOD WORK (OUTSIDE WORKMEN).

EMPLOYES.	NUMBER EMPLOYED.	AVERAGE DAILY WAGES.	NO. OF HOURS EMPLOYED DAILY.
Foremen.....			
Carpenters, first class.....			
Carpenters, second class.....			
Stair-builders.....			
Apprentices.....			
Laborers.....			

## PLANING MILLS OR SHOPS (INSIDE WORKMEN).

Foremen.....			
Carpenters, first class.....			
Carpenters, second class.....			
Apprentices.....			
Sawyers.....			
Machine hands.....			
Bench hands.....			
Engineers.....			
Teamsters.....			
Laborers.....			

## MASONRY.

Foremen.....			
Brick-masons.....			
Stone-cutters.....			
Stone-masons.....			
Hod-carriers.....			
Mortar-makers.....			
Apprentices.....			
Engineers.....			
Laborers.....			

## PLASTERING, PAINTING AND PLUMBING.

Plasterers.....			
Mortar-makers.....			
Painters.....			
Plumbers.....			
Apprentices.....			
Laborers.....			

## LABOR ORGANIZATIONS.

- Name of organization .....
- Located at.....
- County of.....
- Date of organization....., 188...
- Trade .....
- Meet when? .....
- Number of members .....
- Name of M. W. or President .....
- Post-office address.....
- Is your organization connected with any State, National or International organization? If so, give name of same.....
- Give name and post-office address of some officer or person connected with each of such organizations as far as possible.....
- Does your organization include life insurance among its advantages and if so to what extent?.....
- Please inclose copy of your Constitution and By-Laws, if not in conflict with your rules.....



## FLOUR AND FEED MILLS.

1. Name of firm or company.....
2. Location in city or town of.....
3. County of.....
4. Articles manufactured.....
5. Average number of employes from June 30, 1883, to June 30, 1884.....
6. Number of weeks in operation from June 30, 1883, to June 30, 1884.....
7. Total number of employes at date of making this return.....
8. Please give average wages, etc., of the various callings of labor at which persons are employed about your establishment as classified below:

## OFFICE HELP.

	NUMBER EMPLOYED.	AVERAGE MONTHLY SALARIES.
Managers.....		
Salesmen.....		
Book-keepers.....		
Clerks.....		

EMPLOYES.	NUMBER EMPLOYED.	AVERAGE DAILY WAGES.	HOURS OF LABOR DAILY.
Foremen.....			
First millers.....			
Second millers.....			
Millwrights.....			
Engineers.....			
Teamsters.....			
Apprentices.....			
Laborers.....			

9. Has the price of labor advanced or decreased during the year from June 30, 1883, to June 30, 1884, as compared with same period from 1882 to 1883?.....

Will you state how much per cent?.....

10 Have men employed in any of the different branches of your establishment engaged in any strike since June 30, 1883?.....

If so, will you name trade or calling and number engaged in strike?.....

Date strike began.....

State briefly the origin, duration and result of such strike.....

## STORES, INSURANCE COMPANIES, ETC.

1. Name of firm or company.....
2. Location in city or town of.....
3. County of.....
4. Kind of business.....
5. Please give average wages, etc., of the various callings of labor at which persons are employed about your establishment as classified below:

	NUMBER EMPLOYED.	AVERAGE MONTHLY SALARIES.
Managers.....		
Salesmen.....		
Book-keepers.....		
Clerks.....		

Total number of employes.....

Number of men .....How employed.....

Number of women.....How employed.....

.....

Number of boys.....

Number of girls.....

Highest wages paid to men per week.....

Lowest wages paid to men per week.....

Average wages paid to men per week.....

Highest wages paid to women per week.....

Lowest wages paid to women per week.....

Average wages paid to women per week.....

Wages paid to boys and girls per week.....

Number hours worked per day.....

Have wages been increased or reduced from June 30, 1883, to June 30, 1884.....How much?.....

## REMARKS.



## COUNTY AUDITORS.

Return from.....County.....  
 Amount of mechanical interests in the County.....  
 .....  
 Condition of same. Increasing or decreasing.....  
 .....  
 Amount of manufacturing interests in the County.....  
 .....  
 Condition of same. Increasing or decreasing.....  
 .....  
 Location of manufacturing interests in the County. Specify kind as fully  
 as possible.....  
 .....  
 Value of productions of same.....  
 .....  
 Location of coal interests in the County.....  
 .....  
 Value of productions of same.....  
 .....  
 Sites offering natural or acquired advantages for the profitable location and  
 operation of different branches of industry. Specify kind.....  
 .....  
 .....

## REMARKS.

## BRICK AND TILE WORKS.

1. Name of firm or company.....
2. Location in city or town of.....
3. County of.....
4. Articles manufactured.....
5. Average number of employes from June 30, 1883, to June 30, 1884. ...
6. Number of weeks in operation in same period.....
7. Total number of employes at date of making this return.....
8. Please give average wages, etc., of the various callings of labor at  
 which persons are employed about your establishment as classified below:

## OFFICE HELP.

	NUMBER EMPLOYED.	AVERAGE MONTHLY SALARIES.
Managers.....		
Salesmen.....		
Bookkeepers.....		
Clerks.....		

EMPLOYES.	NUMBER EMPLOYED.	AVERAGE DAILY WAGES.	HOURS OF LABOR DAILY.
Foremen.....			
Moulders.....			
Pressmen.....			
Burners.....			
Engineers.....			
Firemen.....			
Off-bearers.....			
Miners.....			
Teamsters.....			
Laborers.....			

9. Has the price of labor advanced or decreased during the year mentioned as compared with preceding one.....  
 Will you state how much per cent.....
10. Have men employed in any of the different branches of your establishment engaged in any strike since June 30, 1883.....  
 If so, will you name trade or calling and number engaged in strike...

## REMARKS.



## AVERAGE EARNINGS AND EMPLOYMENT HOURS

Of Street Railway Employees in the city of ....., County of .....

EMPLOYEES.	WEEKLY WAGES.	DAILY EMPLOYMENT HOURS.	NO. OF DAYS EMPLOYED IN THE WEEK.
Foremen.....			
Conductors.....			
Drivers.....			
Hostlers.....			
Blacksmiths.....			
Trackmen.....			
Other mechanics.....			
Car-housemen.....			
Watchmen.....			
Starters.....			
Laborers.....			
Boys.....			

Total number of hands.....

Amount of capital invested in the railway.....

How many stockholders.....

Miles of road.....

Have men employed in any of the different branches of your road engaged in any strike since June 30, 1883?.....

If so, will you name trade or calling and number engaged in strike?.....

Did you have any accidents on your road during the year ending June 30, 1884, and if so, state number, extent of injuries, and cause of same.....

## REMARKS.

## SCHOOL TEACHERS.

1. Name in full (not to be made public).....
2. Age.....
3. Where born.....
4. Residence—post-office address.....
5. In what department of instruction engaged?.....
6. Position—Whether principal, assistant, superintendent or otherwise.....

7. Number of hours employed daily.....
8. Number of terms taught.....
9. What studies besides the common school branches have you pursued?.....
10. Earnings: Per month.....
11. Total earning, i. e. actual income, from September 1, 1883, to September 1, 1884.....
12. Cost of living during the year..... Do you own a home?.....
13. If you have boarded, what has been the average monthly cost?.....
14. Total number wholly or partially dependent on you for support.....
15. How often are you paid?.....
16. Do you belong to any beneficiary association?.....
17. Have you any life, fire, or accident insurance?.....
18. What increase or reduction have you had in wages this year?.....
19. What increase or reduction has there been in cost of living?.....
20. Have you accumulated any savings during former years?.....
21. Have you run into debt during the year?.....
22. How many families live in the same house in which you reside?.....
23. What are the diseases peculiar to your occupation?.....
24. What influence, if any, are brought to bear upon the teachers in your county, to induce them to attend county institutes?.....
25. What do you regard as the chief obstacles or drawbacks to your work?.....
26. Do you favor or oppose a State uniformity in text-books?.....  
Give reasons.....
27. What legislation or change in the school laws would be advantageous to your interests?.....
28. Remarks on any subject of interest to teachers, especially regarding their condition and that of their families, and what in your opinion would improve such conditions.....



## RAILWAYS.

1. Name of company.....
2. Miles of road in this State.....
3. Average number of employes from June 30, 1883, to June 30, 1884 .....
4. Total number of employes at date of making this return.....
5. Please give average wages, etc., of the various callings of labor at which persons are employed in connection with your road in Iowa, as classified below:

## OFFICE HELP.

	NUMBER EMPLOYED.	AVERAGE MONTHLY SALARIES.
Secretary.....	.....	.....
Clerks.....	.....	.....
Train dispatchers.....	.....	.....
Operators.....	.....	.....
Ticket agents.....	.....	.....

## OTHER EMPLOYES.

	NUMBER EMPLOYED.	AVERAGE DAILY WAGES.	HOURS OF LABOR DAILY.
Locomotive engineers.....	.....	.....	.....
Locomotive firemen.....	.....	.....	.....
Passenger conductors.....	.....	.....	.....
Freight conductors.....	.....	.....	.....
Brakemen.....	.....	.....	.....
Machinists in shop.....	.....	.....	.....
Watchmen.....	.....	.....	.....
Section hands.....	.....	.....	.....
Telegraph operators.....	.....	.....	.....

## ACCIDENTS.

Please state the number of persons killed or injured by accident on your road in Iowa, from June 30, 1883, to June 30, 1884 .....

	KILLED.	INJURED.
Passengers.....	.....	.....
Employes.....	.....	.....
Others.....	.....	.....

## REMARKS.

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## PART III.

## LABOR ORGANIZATIONS.

There are probably some organizations of this character within the State that have not reported, but the following have been received, and are submitted, together with brief synopses of their aims, objects and methods of work. The largest of these organizations is

## THE KNIGHTS OF LABOR,

founded in 1873, in Philadelphia, by Uriah S. Stephens—a tailor. At first it was purely a secret order—not even its name being made public; but in 1881 this was modified and the change has very largely accelerated its growth. The following is the preamble and declaration of its principles as revised and adopted in September, 1884, at Philadelphia:

## PREAMBLE.

The alarming development and aggressiveness of great capitalists and corporations, unless checked, will inevitably lead to the pauperization and hopeless degradation of the toiling masses.

It is imperative, if we desire to enjoy the full blessings of life, that a check be placed upon unjust accumulation, and the power for evil of aggregated wealth.

This much-desired object can be accomplished only by the united efforts of those who obey the divine injunction, "In the sweat of thy face shalt thou eat bread."

Therefore we have formed the Order of Knights of Labor, for the purpose of organizing and directing the power of the industrial masses, not as a political party, for it is more—in it are crystalized sentiments and measures for the benefit of the whole people; but it should be borne in mind, when exercising the right of suffrage, that most of the objects herein set forth can only be obtained through legislation, and that it is the duty of all to assist in nominating and supporting with their votes only such candidates



as will pledge their support to those measures, regardless of party. But no one shall, however, be compelled to vote with the majority, and calling upon all who believe in securing "the greatest good to the greatest number," to join and assist us, we declare to the world that our aims are:

I. To make industrial and moral worth, not wealth, the true standard of individual and National greatness.

II. To secure to the workers the full enjoyment of the wealth they create, sufficient leisure in which to develop their intellectual, moral and social faculties; all of the benefits, recreation and pleasures of association; in a word, to enable them to share in the gains and honors of advancing civilization.

In order to secure these results, we demand at the hands of the STATE:

III. The establishment of Bureaus of Labor Statistics, that we may arrive at a correct knowledge of the educational, moral and financial condition of the laboring masses.

IV. That the public lands, the heritage of the people, be reserved for actual settlers; not another acre for railroads or speculators, and that all lands now held for speculative purposes be taxed to their full value.

V. The abrogation of all laws that do not bear equally upon capital and labor, and the removal of unjust technicalities, delays and discriminations in the administration of justice.

VI. The adoption of measures providing for the health and safety of those engaged in mining, manufacturing and building industries, and for indemnification to those engaged therein for injuries received through lack of necessary safeguards.

VII. The recognition by incorporation, of trades' unions, orders, and such other associations as may be organized by the working masses to improve their condition and protect their rights.

VIII. The enactment of laws to compel corporations to pay their employees weekly, in lawful money, for the labor of the preceding week, and giving mechanics and laborers a first lien upon the product of their labor to the full extent of their wages.

IX. The abolition of the contract system on National, State and municipal works.

X. The enactment of laws providing for arbitration between employers and employed, and to enforce the decision of the arbitrators.

XI. the prohibition by law of the employment of children under 15 years of age in workshops, mines and factories.

XII. To prohibit the hiring out of convict labor.

XIII. That a gradual income tax be levied.

And we demand at the hands of CONGRESS:

XIV. The establishment of a National monetary system, in which a circulating medium in necessary quantity shall issue direct to the people, without the intervention of banks; that all the National issue shall be full legal tender in payment of all debts, public and private; and that the government shall not guarantee or recognize any private banks, or create any banking corporations.

XV. That interest-bearing bonds, bills of credit or notes shall never be issued by the government, but that, when need arises, the emergency shall be met by issue of legal tender, non-interest bearing money.

XVI. That the importation of foreign labor under contract be prohibited.

XVII. That, in connection with the post-office, the government shall organize financial exchanges, safe deposits, and facilities for deposit of the savings of the people in small sums.

XVIII. That the government shall obtain possession, by purchase, under the right of eminent domain, of all telegraphs, telephones and railroads, and that hereafter no charter or license be issued to any corporation for construction or operation of any means of transporting intelligence, passengers or freight.

And while making the foregoing demands upon the State and National government, we will endeavor to associate our own labors:

XIX. To establish co-operative institutions such as will tend to supersede the wage system, by the introduction of a co-operative industrial system.

XX. To secure for both sexes equal pay for equal work.

XXI. To shorten the hours of labor by a general refusal to work more than eight hours.

XXII. To persuade employers to agree to arbitrate all differences which may arise between them and their employes, in order that the bonds of sympathy between them may be strengthened, and that strikes may be rendered unnecessary.

## LOCAL ASSEMBLIES.

### PREAMBLE.

The local assembly is not a mere trade union, or beneficial society; it is more and higher. It gathers into one fold all branches of honorable toil, without regard to nationality, sex, creed or color. It is not founded simply to protect *one* interest or to discharge *one* duty, be it ever so great. While it retains and fosters all the fraternal characteristics and protection of the single trade union, it also, by the multiplied power of union, protects and assists *all*. It aims to assist members to better their condition morally, socially and financially. It is a business firm, every member an equal partner, as much so as a commercial house or a manufacturing establishment. All members are in duty bound to put in their equal share of *time and money*. The officers elected must not be expected to "run it" and the rest of the partners do nothing, as in the case of mere societies. While acknowledging that it is sometimes necessary to enjoin an oppressor, yet strikes should be avoided whenever possible. Strikes, at best, only afford temporary relief, and members should be educated to depend upon thorough organization, co-operation and political action, and through these, the abolishment of the wage system. Our mission cannot be accomplished in a day or generation. Agitation, education and organization are all necessary. Among the higher



duties that should be taught in every local assembly are man's inalienable inheritance and right to a share, for use, of the soil, and that the right to life carries with it the right to the *means* of living, and that all statutes that obstruct or deny these rights are wrong, unjust, and must give way. Every member who has the right to vote is a part of the government in the country, and has a duty to perform, and the proper education necessary to intelligently exercise this right, free from corrupting influences, is another of the higher duties of the local assembly. In short, any action that will advance the cause of humanity, lighten the burden of toil, or elevate the moral and social condition of mankind, whether incorporated in the constitution or not, is the proper scope and field of operation of a local assembly.

Grand Master Powderly has lately issued the following address, which shows in few words the absurdity of the idea that this organization sympathizes with socialists or dynamiters:

Our order is an army of workers. Our mission is to educate the heads and hearts, and not the hands or feet of our members. The torch of the incendiary, the dagger of the assassin and the bomb of the dynamiter, are not the weapons of the order of the Knights of Labor, and the member who advocates a resort to such methods in the Assembly violates his obligation as a Knight. If each Assembly will perform its duty as an educator, each member will have in his possession a light that will shine with tenfold more brilliancy than the torch of the incendiary. The God-given intellect of man, illuminated by a knowledge of his true condition in life, will prove a more dangerous torch to the enemy of man than the torch of the incendiary.

A complete organization and unification of the workers and their friends, and an abandonment of the mean, little, petty spites and jealousies which continually rise up between men and their duty to each other, will prove a far more powerful weapon than the dagger of the assassin.

With men and women organized and taught by experience, discussion and association what their rights are, their united voices, when they speak out as one man in defense of a principle, will make more noise in the world than the exploding bomb of the dynamiter.

#### INTERNATIONAL BROTHERHOOD OF LOCOMOTIVE ENGINEERS.

Grand International Brotherhood of Locomotive Engineers; an Association of Locomotive Engineers to elevate their standing as such, and their character as men. Instituted at Detroit, Michigan, August 17, 1863, as the Brotherhood of the Footboard. Reorganized at Indianapolis, Aug. 17, 1864, under present name and title.

#### BROTHERHOOD OF LOCOMOTIVE FIREMEN OF THE UNITED STATES AND CANADAS. ORGANIZED DEC. 1, 1873.

##### PREAMBLE.

For the purpose of effecting a unity of the Locomotive Firemen of the United States and Canadas, and elevating them to a higher social, moral and intellectual standard, and for the promotion of their general welfare and the protection of their families, the Brotherhood of Locomotive Firemen has been organized.

We recognize an identity of interests between our members and their employers, and it is made a special object of the Brotherhood to bring them into perfect harmony with each other.

Benevolence is the principal object of our existence, and, in our hazardous calling, it is almost daily brought into requisition by the husbandless and fatherless, whose protectors have gone down at the post of duty.

With these aims and purposes in view, the Brotherhood of Locomotive Firemen consecrates itself to the elevation of mankind.

#### BRICKLAYERS' INTERNATIONAL UNION.

Constitution, By-Laws, and Rules of Order of the Bricklayers' International Union.

##### PREAMBLE.

At no period of the world's history has the necessity of combination on the part of labor become so apparent to every thinking mind as at the present time; and perhaps in no country have the working classes been so forgetful of their own interests as in this great Republic; all other questions seem to attract the attention of the workingman more than that which is most vital to his existence.

*Whereas*, Capital has assumed to itself the right to own and control labor for the accomplishment of its own greedy and selfish ends, regardless of the laws of nature and of nature's God; and

*Whereas*, Experience has demonstrated the utility of concentrated efforts in arriving at specific ends, and it is an evident fact that if the dignity of labor is to be preserved, it must be done by our united action; and

*Whereas*, Believing the truth of the following maxims that they who would be free themselves must strike the first blow, that in union there is strength, and self-preservation is the first law of nature, we hold the justice and truth of the principle that merit makes the man, and we firmly believe that industry, sobriety and a proper regard for the welfare of our fellow-man, form the basis upon which the principle rests; we therefore recognize no rule of action or principle that would elevate wealth above industry, or the professional man above the working man; we recognize no distinctions



in society, except those based upon worth, usefulness and good order, and no superiority except that granted by the Great Architect of our existence; and calling upon God to witness the rectitude of our intentions, we, the delegates here assembled, do ordain and establish the following constitution.

#### TYPOGRAPHICAL UNION. ORGANIZED 1852.

##### PREAMBLE.

To establish and maintain an equitable scale of wages, and protect ourselves from sudden or unreasonable fluctuations in the rate of compensation for our labor; to defend our rights and advance our interests as workingmen; to create an authority whose seal shall constitute a certificate of character, intelligence and skill; to build up an organization where all worthy members of our craft can participate in the discussion of those practical problems upon the solution of which depend their welfare and prosperity as workers; to foster fellowship; to aid the destitute and unfortunate, and provide for the decent burial of deceased members; to encourage the principle and practice of conciliation and arbitration in the settlement of differences between labor and capital; to incite all honorable efforts for the attainment of increased skill in workmanship and the betterment of our condition.

#### CIGAR MAKERS' INTERNATIONAL UNION OF AMERICA. ORGANIZED 1864.

##### PREAMBLE.

Labor has no protection—the weak are devoured by the strong. All wealth and power center in the hands of the few, and the many are their victims and bondsmen. In all countries and at all times capital has been used to monopolize particular branches of business until the vast and various industrial pursuits of the world are rapidly coming under the immediate control of a comparatively small portion of mankind, tending, if not checked by the toiling millions, to enslave and impoverish them.

Labor is the creator of all wealth, and as such the laborer is at least entitled to a remuneration sufficient to enable himself and family to enjoy more of the leisure that rightfully belongs to him, more social advantages, more of the benefits, privileges and emoluments of the world; in a word, all those rights and privileges necessary to make him capable of enjoying, appreciating, defending and perpetuating the blessings of modern civilization. Past experience teaches us that labor has so far been unable to arrest the encroachments of capital, neither has it been able to obtain justice from the

law-making power. This is due to a lack of practical organization and unity of action. "In union there is strength." Organization and united action are the only means by which the laboring classes can gain any advantages for themselves. Good and strong labor organizations are enabled to defend and preserve the interests of the working people. By organization we are able to assist each other in case of strikes and lock-outs, sickness and death. And through organization only the workers as a class are able to gain legislative advantages.

No one will dispute the beneficial results attendant upon harmonious and intelligent action, and it is imperatively the duty of man to do all in his power to secure thorough organization and unity of action. In the performance of that duty we have formed the Cigar Makers' International Union of America, with a view to securing the organization of every cigar maker, for the purpose of elevating the material, moral and intellectual welfare of the craft by the following means:

1. By gratuitously furnishing employment.
2. By mutual pecuniary aid in cases of strikes and lock-outs, sickness and death.
3. By advancing money for traveling.
4. By defending members involved in legal difficulties consequent upon the discharge of their official duties to the union.
5. By the issuing of a trade journal defending the interests of the union of the trade.
6. By using all honorable means to effect a National Federation of Trades Unions.
7. By prevailing upon the legislatures to secure, first, the prohibition of child-labor under fourteen years of age; the establishment of a normal day's labor to consist of not more than eight hours per day for all classes; the abolition of the truck system, tenement-house cigar manufacture, and the system of letting out by contract the convict labor in prisons and reformatory institutions; the legalization of trades unions and the establishment of bureaus of labor statistics.

#### ORDER OF RAILWAY CONDUCTORS.

##### PREAMBLE.

WHEREAS, The Association known as the Conductors' Brotherhood, was instituted at Mendota, Ill., on the 6th day of July, A. D. 1868, by conductors from various railroads in the United States; and,

WHEREAS, A reorganization was effected at Columbus, Ohio, on the 15th day of December, A. D. 1868, and the Grand Division thereof organized, a Constitution and By-Laws adopted and Grand Officers elected by representatives from the five original Divisions, and the several railroads in the United States; and,



WHEREAS, Said Constitution and By-Laws conferred upon the Grand Division, which was to be composed of the Grand Officers, and representatives from the *five* original and all subsequently organized Divisions, so long as they remained in good standing, authority to alter or amend existing laws and make new laws and regulations for their government; and,

WHEREAS, At the eleventh annual session of the aforesaid Grand Division, the name of the Association was changed from Conductor's Brotherhood to the Order of Railway Conductors.

Therefore, The Order of Railway Conductors, by their Grand Officers and representatives in Grand Division assembled at the fourteenth regular session thereof, in accordance with existing constitution and laws, do enact, ordain and establish the following Constitution and Statutes which shall take effect and be in force on and after the first day of January, 1882, and all former constitutions, laws and regulations are hereby repealed.

The grand body has an insurance organization connected therewith, to which each local division forms a part on the assessment plan, and the whole organization amounts to 1,700 members, paying for death or "total disability," each member being assessed \$1.00 for each death or disability.

In most of these associations herein enumerated, there is an insurance feature, the amounts ranging from \$500 to \$3,000. This is to be said to their credit.

#### ORGANIZATIONS IN DETAIL.

as returned to this Bureau.

#### KNIGHTS OF LABOR.

District Assembly No 28 was organized at Des Moines, Iowa, May 7, 1879, and is attached to the General Assembly of North America. Those L. As. marked \* are attached direct to the G. A.

No.	LOCATION.	Members reported, 1884.	No.	LOCATION.	Members reported, 1884.
312	Des Moines (West)..	100	2336	Oskaloosa*.....	75
885	Cedar Rapids ...	112	2409	Kalo.....	75
1020	Centerville.....	150	2571	Mt. Ayr.....	40
1403	Oskaloosa.....	100	2589	Muscatine*.....	180
1474	What Cheer.....	65	2641	Plano.....	50
1596	Angus.....	50	2710	Dunreath.....	35
1613	Lehigh.....	50	2721	Maquoketa.....	80
1626	Ottumwa.....	150	2744	Davenport.....	139
1643	Murray.....	35	2862	Brooklyn.....	35
1668	Council Bluffs*.....	100	2895	St. Charles*.....	50
2064	Unionville.....	50	2939	Vinton.....	50
2116	Atlantic.....	64	3084	Thayer.....	35
2127	Creston.....	74	3085	Osceola.....	75
2174	Marshalltown*.....	80	3135	Burlington*.....	65
2184	Mt. Pleasant.....	91	3143	Seymour.....	40
2209	Iowa City*.....	25	3145	Sioux City.....	40
2219	Des Moines (West) ..	100	3335	Brazil.....	75
2242	Carroll.....	50	.....	Des Moines (East)*.....	.....
2244	Grand Junction.....	75	.....	Red Oak.....	.....
2250	Afton.....	45	.....	Stuart.....	.....
2390	Webster City*.....	500			

NOTE.—Several of these Assemblies have largely increased since the above report was furnished this office.

#### TYPOGRAPHICAL UNIONS.

No.	LOCATION.	WHEN ORGANIZED.	MEMBERS.
22	Dubuque.....	December, 1854.....	40
68	Keokuk.....	March, 1882.....	30
73	Ottumwa.....	March, 1884.....	.....
118	Des Moines.....	1881.....	85
192	Cedar Rapids.....	January, 1882.....	24



## \* CIGAR-MAKERS' UNION.

LOCATION.	WHEN ORGANIZED.	MEMBERS.
Sioux City.....	1881.....	24
Council Bluffs.....	1882.....	15
Dubuque.....	1883.....	20
Muscatine.....	1883.....	15
Keokuk.....	1880.....	42
Des Moines.....		

\* This organization has what is known as a "sick benefit fund" and a "funeral fund."

## † BROTHERHOOD OF LOCOMOTIVE FIREMEN.

No.	LOCATION.	WHEN ORGANIZED.	MEMBERS.
124	Pilot Lodge, Perry.....	December 1, 1873 ..	50
29	Cerro Gordo Lodge, Mason City ..	October 9, 1880.....	55
27	Hawkeye Lodge, Cedar Rapids .....	1873.....	103
102	Confidence Lodge, Des Moines .....	February 19, 1882 ..	50
20	Stuart Lodge, Stuart .....	December 22, 1878 ..	
106	Key City Lodge, Dubuque.....	April 2, 1882.....	25
125	Guide Lodge, Marshalltown .....	October 20, 1882 ..	58
137	Protection Lodge, Eldon .....	December 31, 1882 ..	30
222	Webster Lodge, Ft. Dodge .....	June 18, 1884.....	37

† Has an insurance department giving \$3,000 insurance.

## † BROTHERHOOD OF LOCOMOTIVE ENGINEERS.

No.	LOCATION.	WHEN ORGANIZED.	MEMBERS.
203	Perry.....	September, 1882.....	33
56	Keokuk.....	April 16, 1865.....	80
125	Clinton.....	December 26, 1870.....	47
146	Marshalltown .....	June 1, 1872.....	56
181	Eldon.....	1863.....	37
.....	Boone.....	June 13, 1867.....	63

† Has same insurance features as Firemen.

## ‡ ORDER OF RAILWAY CONDUCTORS.

LOCATION.	WHEN ORGANIZED.	MEMBERS.
Cedar Rapids.....	July 6, 1868.....	
Burlington .....	November 8, 1874.....	75
Clinton.....	July 16, 1882.....	33
Marshalltown .....	1877.....	40
Dubuque.....	April 8, 1883.....	40
Creston.....	September, 1878.....	80

‡ Insurance.

## BRICKLAYERS AND MASONS INTERNATIONAL UNION.

LOCATION.	WHEN ORGANIZED.	MEMBERS.
Des Moines.....	February 1, 1882.....	115
Oskaloosa.....	May, 1884.....	16
Council Bluffs.....	February 4, 1882.....	27

The above places are the only ones in Iowa in which this Union exists.



## PART IV.

## CO-OPERATIVE SOCIETIES.

In England, France, Germany and Switzerland these associations have been formed among working classes for business purposes, and their benefits have been so decided that they are rapidly increasing and have found their way to this country. They have brought the wage-workers very closely together in these localities and have taught them that by handling the necessities of life, the engaging in business, etc., that the profits arising therefrom do not go into the pockets of the few, but are distributed among themselves, and as a result the few do not become the rich aristocrats; the middleman (who is never a wealth producer) is done away with; the adulteration of food and merchandise is guarded against, and the workingman finds himself becoming each year more independent, and his home being gradually filled with the comforts and even with many of the luxuries of life.

The most notable of these societies is in England, and known as the "Co-operative Wholesale Society (Limited)," the main office of which is in Manchester.

Through the kindness of the Hon. James Russell Lowell, United States minister to England, I have been furnished with a copy of this Society's Annual for 1885, a large volume of 600 pages, and from it the magnitude of the work in England can be readily seen. The following condensed statement is taken therefrom:

Number of members belonging to shareholders, June, 1884.....	446,184
CAPITAL.	
Shares.....	\$ 978,090
Loans and deposits.....	2,413,695
Trade and bank reserve funds.....	116,390
Insurance funds.....	114,055
Reserved expenses.....	23,435
Total.....	\$ 3,645,665

Net sales.....	10,986,400
Distributive expenses.....	176,503
Net profit.....	117,310

The following letter from the Secretary of this Association gives additional information:

CO-OPERATIVE WHOLESALE SOCIETY. LIMITED. }  
CENTRAL OFFICES, 1 BALLOON STREET, }  
MANCHESTER, Feb. 5, 1885. }

E. R. HUTCHINS, Esq.,

*Commissioner of Labor Statistics, State of Iowa, Des Moines:*

DEAR SIR—Your letter was received, from which we learn that you are in possession of a copy of our Annual for 1884, we presume which you have got from the Hon. James Russell Lowell.

Your question, "Does this benefit the working man?" we presume refers to co-operation. Our answer is that it does, inasmuch as it inculcates habits of thrift and self-help.

We can also answer in the affirmative your other question, as to whether he can reap the benefits of the reduction in prices. This he can do through his co-operative store, as the goods are bought from the producer in all cases where possible, by the Wholesale Co-operative Society, and through this medium are sent to the retail stores throughout the country. Members purchasing from these retail co-operative stores, being members of them, buy at the ordinary trade prices; the accounts are made up once in each quarter in nearly every case, and after providing for the expenses of management and paying five per cent interest on capital (this rate prevails with few exceptions), the balance, after providing for contingencies in the shape of a reserve fund, etc., is given back to the members in the shape of dividend, which they may either withdraw at the time or allow to remain in the funds of the society to their credit. The dividend ranges from 1-6 to 3-6 per £ of sales.

We enclose tracts and pamphlets, which will explain matters in detail, and any other questions that may arise from your reading of them we shall have pleasure in answering.

You have no doubt, in connection with your office, many papers or statistics relating to the working of the industrial classes in your country, and we would esteem it a favor if you would kindly send us any of these which you consider would be interesting.

Yours, truly, for Society.

TITUS HALL, *Secretary.*

The tracts and pamphlets referred to in the above, were received and are among the collection of books in this office. They are interesting, giving light upon every phase of this great enterprise. To Mr. Hall this office is much indebted for the uniform kindness and courtesy shown by him in our correspondence.



DEAR SIR—In answer to your favor of Dec. 31, 1884: The Amana Society is a community of about 1,800 persons. It was founded in Germany about



65 years ago. The co-operative system was founded in 1842 near Buffalo, New York, and in 1855 we commenced to emigrate to Iowa, and bought about 25,000 acres of land. It is founded on religious principles and brotherly love. It is managed by a board of trustees, which convene once each month. We are farming, raising stock, manufacturing woolen goods, etc. We pay no interest and no dividends. Each member or each head of family is allowed so much, as he and family require for support, which amount is stipulated by the board of trustees in the beginning of each year, according to the necessities and requirements of member or family. We have invested \$200,000 to \$300,000 in manufactories, stores, etc. The object of the community plan is as stated, founded more on a religious plan than for the purpose of making money. We have nothing in common, and do not indorse the teachings of so-called communists, nihilists, etc.

Yours respectfully,

AMANA SOCIETY.

GEORGE HANIMANNY.

In Monroe county the manufacture of cheese is carried on extensively under this system, as is seen from the following letter:

E. R. HUTCHINS, ESQ.,

SELECTION, Iowa, Dec. 16, 1884.

*Commissioner of Labor Statistics, Des Moines:*

DEAR SIR—Your letter of inquiry at hand, and contents noted. There are quite a number of cheese factories in this county, and I believe nearly all are run on the co-operative plan. The factory and fixtures are owned by a joint stock company, who employ their cheese manufacturer to convert the milk into cheese and that into money. As soon as one month's cheese has been sold and money collected therefor, he makes a dividend (stockholders and non-stockholders alike) in proportion to amount of milk furnished by each one, retaining a small per cent on the whole to keep up repairs and pay stockholders a reasonable interest on capital invested.

Notice that expenses for the month, such as manufacturing, boxing, selling, etc., are taken out of each month's sales before dividends are made, thus keeping expenses up with each month as nearly as possible.

We usually commence operations about May 1st, continuing until about December 1st—governed by weather, somewhat. After May cheese is sold and money collected (the notorious credit system is so firmly established that we are obliged to sell on 30 to 60 days' time), being about August 1st before we make a dividend, and after that dividends are made monthly.

We still have quite a stock of cheese on hand, and do not expect to close out before February or March, owing to dull market, just now, and unfavorable time to ship.

If you want the amount of our cheese products in the county, I may be able to give you an estimate later. I think this county has turned out this year, about 500,000 pounds of cheese, worth about \$50,000.

Respectfully,

A. G. ARNOLD.

## CO-OPERATIVE GUILD.

The latest movement in labor circles in Washington, D. C., is the Co-operative Guild, the new order authorized by the General Assembly of the Knights of Labor last September. Its object is integral co-operation based on mutualism. Its funds are created by capitalizing one half of all profits on the purchases by its members from stores of their own, and they propose in time to manufacture and produce all the demands of their consumers by the use of such capitalized profits, which is to be forever the common property of all. Each separate enterprise is self-acting, although part of a general whole, and is so segregated that each acts as a check upon the other in one continuous round, so that individualism is lost in a general system of agents for the whole. So thoroughly is this system carried out that fraud or defalcation seems next to impossible. Section 2 (Washington) has already been formed, notwithstanding the intense activity on the eight-hour and other labor movements, and it is generally believed by those best posted in the methods of the Guild that it will ere long be a most powerful association.

In April last they opened a store on the "regular" plan, under very flattering circumstances. For a while it will be confined exclusively to its members. Its mode of work is somewhat unique, being organized, true to the Guild idea, in the form of four distinct branches—buying, selling, auditing and price-fixing, and supervising—each rendering a separate monthly, quarterly and semi-annual report to headquarters in such a manner, and by a regular prescribed form, that any errors in one branch can readily be detected by comparison with the others. The treasurer, buyer and seller are each separately bonded. They are chartered under a peculiar incorporation act of the State of New York for mutual benefit and economic purposes. The Legislative Assembly have just passed a law giving a death and permanent disability benefit of \$500, and a sick benefit of \$5 per week for twelve weeks without increase of dues or any assessment, these benefits to commence at a certain period. After that period initiation fees and dues to be largely increased to new members. The Guild proposes to grasp the whole labor question, and in time to meet all the demands in the establishment of equity by mutualism from the point of consumption.

This question of co-operation is one well worth the careful study



of the wage-worker. The supposition now generally entertained by them that poverty, or rather want of capital, precludes the success of the enterprise is not tenable. Undoubtedly it is the obstacle now barring the more general undertaking of such societies. Let them remember that one of the most successful co-operative stores ever known was that of the Rochdale pioneers, which was organized by a very few English workingmen with scarcely any means at all. These men put forth their strongest energies and showed some of the very best elements of moral and intellectual nature, and absolute success crowned their efforts.

Among no class of our citizens would such stores be productive of more good than among our miners. Connected with a number of our large coal banks are company stores at which the miner is virtually compelled to trade. If he is not absolutely compelled, it is generally understood that if he does not, he will soon be told that he can find work elsewhere. This system is wrong in principle and unjust in practice. (This subject is discussed at length under head of mines and miners.) If these co-operative stores could take the place of these company stores, as well as be planted where neither now exist, the benefit to the wage-worker would be very great.

John Stuart Mill said: "Of all the agencies which are at work to elevate those who labor with their hands, there is none so promising as the present co-operative movement."

G. J. Holyoke says:

"Co-operation supplements political economy by organizing the distribution of wealth. It touches no man's fortune, it seeks no plunder, it causes no disturbance in society, it gives no trouble to statesmen, it enters into no secret associations; it contemplates no violence, it subverts no order; it envies no dignity; it asks no favor; it keeps no terms with the idle, and it will break no faith with the industrious; it means self-help, self-dependence, and such share of the common competence as labor shall earn or thought can win, and this it intends to have."

The plan is a logical plan. When the individual policy places two masters where one had all the profit before, that is an improvement. There is one poor man less in the world. When it forms a joint stock company that is better still—for if a number of men are enabled to rise in the world it teaches all others the way. When it takes workmen into the confederation of profit-sharers, it does a still better thing—because it delivers a still greater number from servitude and want. A terse and interesting account of this co-operative plan is

furnished in the life of Leclaire, and Miss Mary Hart has written a charming little pamphlet entitled "A Brief Sketch of the Maison Leclaire." Her opening paragraph is as follows:

"*Biographie d'un Homme Utile*" is the modest title given by M. Chas. Robert to his interesting memoir of one of the greatest Frenchmen of this century; the greatest—because he rendered the highest service to humanity; for, at a period when disquietude reigned in France, and M. Louis Blanc was scheming 'the organization of labor,' by means of legislation and State intervention, this 'useful' man was unobtrusively setting himself to accomplish that end by his own individual effort—exercised too, in the simple discharge of daily duty. Both desired to benefit mankind; both sought to redress real evils; the theoretical Socialist failed, because he tried to force reform from without, by doing for men what could only be accomplished by men: the practical benefactor triumphed, because he was content to sow the good seed, to watch and guard the development of the living principle, and steadily to work on until it reached maturity."

The life of this remarkable man may be briefly summed up thus:

The son of a poor village shoemaker, in the department of the Ionne, M. Leclaire went to the capital as a mere lad, engaged himself as apprentice to a house painter, and soon became an excellent workman. Much grieved to observe the antagonism existing between masters and men, he came to the conclusion that the true solution of the difficulty was the participation of the latter in the profits of the former; and, consequently, in 1838, he established a Mutual Aid Society, which, in 1842, divided amongst forty-four men the profits of the previous year, amounting to £475; during the last five years, in addition to interest on capital, the bonuses divided, in exact proportion to wages earned, have averaged eighteen per cent. When M. Leclaire died he left a fortune of £48,000, and had divided amongst his men, individually and collectively, £44,000, and the whole amount paid over to the workers since 1842 now reached the considerable sum of £118,600. This has all been the doing of one humble man, who had a noble feeling heart; and the authoress of the pamphlet suitably ends it with the lines—

What one is  
Why may not millions be?

Hon. Stephen B. Elkins, in a recent address in Missouri, upon labor and capital, in speaking upon this subject of co-operation, said:

In this country, as in all the countries named, co-operation has been retarded by lack of intelligence on the part of laborers. Men without education have been unable to combine, or have lacked the ability, training and discipline to manage large or even moderate business enterprises. Educate the worker, furnish him the opportunities for training and discipline, and co-operation will be a success.



Incorporated co operation has been suggested, as one means of uniting the interests of labor and capitalist, with the provision that the shares may be paid for in money and in labor. There are many excellent features in this plan.

Profit sharing, based upon industrial co-partnership, seems to furnish the best means of uniting the interests of employer and employed in agricultural, manufacturing and other large business enterprises. Profit sharing is not new in this or other countries; it has been adopted in agricultural industry in portions of some of the Southern and Western States, and is growing in favor. The two forces employed in transacting business and producing wealth are labor and capital. The question is to unite these forces in a way that the interests of those controlling them shall be the same, and not hostile, as now. Constant war between employer and employe has brought great loss to both. Such war can be and ought to be superseded by their becoming partners, so that both shall have an interest in the business in hand. The interest need not be equal at first. As a basis it has been suggested the capitalist should have for the use of his capital a percentage of the amount he contributes, and as against this, the worker fair wages. Then, after paying all expenses, the profits should be divided between the capitalist on one side, and the body of workers, according to their earnings, on the other. In addition, each worker should have the right, by leaving with the working capital of the concern such part of his earnings or shares as he may choose, to become a partner in the ownership.

Such words ought to find reciprocal attention and thought, among America's wage-workers.

Rev. Dr. Newton in his testimony before the Blair committee of the U. S. Senate, stated: "There are in the savings banks of many manufacturing centers in our country, amounts which if capitalized would place the working men of those towns in industrial independence; moneys which in some instances, are actually furnishing the borrowed capital for their own employers. In such towns our working men have saved enough to capitalize labor, but for lack of the power of combination, let the advantage of their own thrift inure to the benefit of men already rich. They save money, and then loan it to rich men to use in hiring them to work on wages, while the profits go to the borrowers of labors' savings."

It will be a masterly gain for Iowa's wage-workers when the educating power, mental and moral, from co-operation shall be a success among them.

## PART V.

### TECHNICAL EDUCATION: MANUAL TRAINING SCHOOLS.

For the laborer of Iowa or of America, no matter to what class he belongs, such radical changes have occurred during the last half century, that a far better education is needed to give him success. By "better education" is meant *one to be of better service to him in life's battle*. This necessity is imperative and arises from various causes, chiefly from the following:

*First.* Competition is no longer local but universal.

*Second.* Manufactories are no longer few and rude, but in almost endless variety and of most improved character.

*Third.* Decay of apprenticeships.

*Fourth.* Land once new and fertile is now old and impoverished.

There are very few kinds of labor which require only the rude strength of the workman. "The more skill in labor the better" is true, and without a popular education, having skill as a primary object, there can be no diffusion of a general character among laborers. How shall this end be attained? "Education in which head-work and hand-work go together is the only rational education—the only one which can develop the whole man"—is the only answer. In an interesting article in one of last year's North American Reviews, from the pen of that facile writer, E. E. Hale of Boston, is found the following language:

"Fifty years ago it was understood that a boy or girl had many things to learn besides reading, writing and arithmetic. Thus it was understood that a boy must know the use of his hands and feet. He must know what a bushel of wheat was when he saw it, and how a blacksmith shod a horse. He must know the methods of a town



meeting. He must know how to milk, how to plow, how to cradle oats, how to drive, how to harness a horse, how to take off a wheel and how to grease an axle. There were ten thousand other things that he must know, of no less importance, not one of which is ever well taught in school. For a girl it was understood that in average life, she must know how to make and mend her clothes and her brother's and her father's; how to knead, to bake, to stew, to boil and to roast; how to wash, how to iron and how to clear starch; how to tear a bandage and how to put one on. There were many regions where she was expected to know how to cut up a hog and salt his members; how to smoke them for hams; how to preserve fruits and vegetables. \* \* \*

"What follows from the new system is the discovery, at the end of a generation, that the children educated under the new system have no experience with tools and no ability with their hands, and but very little knowledge of practical life. \* \* \*

"Mr. Stanley Halls' curious investigation proved that a considerable number of pupils in a good Boston school *thought that a cow was less than three inches long*. Such is the result of using a primer in which the picture of a cow is as small as the picture of a gimlet."

Mr. H. K. Oliver, of Mass., said ten years ago: "Our system of education trains our boys not to become better craftsmen, but to be unwilling to be put to any kind of craft." Hon Edward Pierce says "Our high schools are multiplying the number of young men and women who turn from farm, mechanical and domestic work and seek employment as clerks and scribes. As a result there is a dearth of men fitted for surveying, mining, road-making, bridge-building and farming."

Among the many interesting features of the convention of Chiefs and Commissioners of the Bureaus of Labor Statistics at St. Louis, none pleased the writer more than our visit to the Washington Manual Training School of that city. On the evening prior to that visit, the gentleman in charge of the school, Prof. Woodward, was present at our meeting, and upon invitation delivered an interesting address. It is to be regretted that this address was not stenographically reported so that the public might enjoy it, as those who listened to it did. He said he had appeared before us to "state a few general principles and answer such questions as members of the Convention might see fit to ask him. Education was one of the most important things that could be called into requisition to

help the laboring man. If education left out any class it was defective. Even educators who had built up systems of education agreed that these systems were inadequate to meet all the demands made upon them. It was with a small outfit that I began to teach members of the Manual Training School the rudiments of mechanics eleven years ago." He then gave an extended history of the birth and development of the School. He found that a boy's experience in handling tools should keep pace with his knowledge of books. The feeling of dissatisfaction regarding education was not confined to the West, but to the European countries. A great writer had said that our systems of education were growing narrower and narrower. That the field was growing larger while education was not meeting the increased demand being made upon it.

#### THE TRAINING SCHOOL MOTTO.

The motto of the training school was "The cultured mind; the skillful hand." Many men came to him and said their boys had had enough of books. He did not encourage any boys to neglect their books, neither did he desire to choose for a boy the sphere he was to fill in life. When he was a boy he had an ambition to run a saw-mill. Had he lived near an artist he would probably have had a desire to become an artist. We all of us had in us the germs of greatness we had no idea we possessed. Every boy was entitled to be developed; he was entitled to a good, sound education. He objected to testing boys to see whether they had any mechanical genius. He would simply give them a generous education. Every boy who was properly taught would make a good mechanical draughtsman.

#### DON'T KNOW WHAT BOYS CAN DO.

We did not know what boys could do till they were given a fair education. It should never be against a man that he had skill. If he had skill that was a point in his favor. The average age of the boys who entered the Manual Training School was fifteen years. The course of study was three years, during which they were educated in three different lines simultaneously. They taught the parent industries at the Manual Training School. All the tools that could be found at any hardware store were either modifications of a plane or chisel. They did not aim to teach any particular trade, and it could



not be said that they taught any particular trade. They simply desired to give a boy an education that would fit him for *any* trade. Special attention was paid to teaching the boy how to master machinery. In addition to learning how to use tools, boys were given an opportunity to obtain a knowledge of mathematics, grammar, etc. Mr. Wm. Wather of England reported that the best workmen in America were those who desired to turn to some new improvement. That was why mechanics had made such progress in America.

There were 3,000,000 people engaged in mining, etc., against 6,000,000 engaged in agricultural pursuits. There were 6,000,000 farmers who had had no manual training, and who could not mend their own machinery.

#### WOULD BE A MECHANIC.

If a boy would see a bright future before him he would be a mechanic. Many of the graduates of the school were working in machine shops and doing well. Even if the boys did become mechanics, he rejoiced in their spirit. Why should they not become mechanics? He had received two pages of printed questions from an Eastern college. One question was, "How does the manual training affect the social standing of students?" Boston people were beginning to recognize that there was more dignity in manual training than they at first imagined. He stated that he examined eighty-two applicants for admission to the Manual Training School yesterday—a much larger number than had ever been examined by him at any previous time.

In answer to the question as to whether the boys in the training school were the sons of rich or poor men, the Professor answered that they were as a rule young men in good circumstances.

On the morning after the address we visited this school. It was at the close of a term and in the midst of examination exercises. The rooms were filled with interested spectators, among whom were many parents of the pupils—justly proud of their sons' work. On the walls of the rooms hung drawings of endless variety, fresh from the hands of the pupils. None were seriously faulty; all excellent, and many perfect. Some were simple, many very difficult and complex. In the wood-room, at the benches and at the lathes, stood the boys at work, and beside them lay all sorts of specimens of their handiwork. In the iron and steel rooms equally busy were they at the forges and

lathes, anvils and engine. I talked with eleven of these boys, and ten of them told me when they started out to do life's work, they would follow the trades at which they were now at work. Personal observation convinced us of the splendid utility of this school, and those of us from other States having no such institutions, went away with deep regret at the fact, and as deep desire that they should soon be planted.

When the bill creating this Bureau was offered in the last General Assembly, the Senator from Pottawattamie (Carson) offered an amendment (which was adopted) relative to this subject; and while the dearth of such schools in Iowa renders it impossible for the Commissioner to offer much of local interest, yet it has been a source of great pleasure to have found what a strong foothold these enterprises already have in this country, how rapidly they are growing, and how earnest the desire is among intelligent wage-workers of our State, that such schools should be organized within our borders. With no less gratification I present in this report, somewhat fully, the features of some of these schools, earnestly hoping that they may awaken an interest among our people, and especially among our law-makers, on this matter.

#### THE ST. LOUIS MANUAL TRAINING SCHOOL.

On September 6, 1880, the school opened with a single class of about 50 pupils. The whole number enrolled the *first year* was 67.

The *fourth year* of the school opened September 10, 1883.

The present enrollment (January, 1884) is 196. There are vacant seats only in the First-Year Class.

Three Articles from the Ordinance establishing the school are here given:

#### ARTICLE II.

"Its object shall be instruction in mathematics, drawing, and the English branches of a high-school course, and instruction and practice in the use of tools. The tool-instruction, as at present contemplated, shall include carpentry, wood-turning, pattern-making, iron clipping and filing, forge-work, brazing and soldering, the use of Machine-Shop Tools, and such other instruction of a similar character as it may be deemed advisable to add to the foregoing from time to time.

"The students shall divide their working hours, as nearly as possible, equally between mental and manual exercises.

"They shall be admitted, on examination, at not less than fourteen years of age, and the course shall continue three years."



## ARTICLE IV.

"The expenses of said school shall be provided for, so far as possible, by gifts and endowments specially contributed for the purpose, and all such gifts and endowments shall be held sacred and apart, and shall be used only for the direct purpose for which they have been given, unless by consent of the respective donors or their legal representatives."

## ARTICLE V.

"For every sum of \$1,500 contributed for the establishment or permanent endowment of said school, the donor shall be entitled to a certificate of scholarship, under which he shall have the right to send one scholar to said Manual Training School, free of tuition charges, so long as said school shall exist."

## THE COURSE OF INSTRUCTION

covers three years, and the school time of the pupils is about equally divided between mental and manual exercises. The daily session begins at 9 A. M. and closes at 3:20 P. M., ample allowance being made for lunch. Each pupil has three recitations per day, one hour of drawing and two hours of shop-practice.

The course of study embraces five parallel lines—three intellectual, and two manual, as follows:

*First.* A course of Pure Mathematics, including Arithmetic, Algebra, Geometry, and Plane Trigonometry.

*Second.* A course in Science and Applied Mathematics, including Physical Geography, Natural Philosophy, Chemistry, Mechanics, Mensuration, and Book-keeping.

*Third.* A course in Language and Literature, including English Grammar, Spelling, Composition, Literature, History, and the elements of Political Science and Economy. Latin and French are introduced as electives with English.

*Fourth.* A course in Penmanship, Free-Hand and Mechanical Drawing,

*Fifth.* A course of Tool instruction, including Carpentry, Wood-turning, Blacksmithing, and Bench and Machine Work in Metals.

The course in Drawing embraces three general divisions:—

1. *Free Hand Drawing*, designed to educate the sense of form and proportion; to teach the eye to observe accurately, and to train the hand to rapidly delineate the forms either of existing objects or of ideals in the mind.

2. *Mechanical Drawing*, including the use of instruments; geometric constructions; the arrangement of projections, elevations, plans and sections; also the various methods of producing shades and shadows with pen and brush.

3. *Technical Drawing or Draughting*, illustrating conventional colors and signs; systems of architectural or shop drawings; and at the same time fa-

miliarizing the pupil with the proportions and details of various classes of machines and structures.

*Students have no option or election as to particular studies, except in the case of Latin and French; each must conform to the course as laid down and take every branch in its order.*

The arrangement of studies and shop-work by years is substantially as follows:

## FIRST-YEAR CLASS.

*Arithmetic*, completed. *Algebra*, to equations.

*English Language*, its structure and use. *History* of the United States.

*Latin* may be taken in place of *English*.

*Physical Geography*. *Natural History*. *Natural Philosophy*, begun.

*Drawing*, Mechanical and Free-hand. *Penmanship*.

*Carpentry and Joinery*. *Wood Carving*. *Wood-Turning*. *Pattern-Making*.

## SECOND-YEAR CLASS.

*Algebra*, through Quadratics. *Geometry* begun.

*Natural Philosophy*. *Principles of Mechanics*.

*English Composition and Literature*. *English History*.

*Latin* may be taken in place of *English* and *History* if desired by enough to form a section. *Cesar and Grammar*.

*Drawing*, Line Shading and Tinting, Machines. *Free-hand detail Drawing*. *Penmanship*.

*Blacksmithing*.—*Drawing*, Upsetting, Bending, Punching, Welding, Tempering, Soldering and Brazing.

## THIRD-YEAR CLASS.

*Geometry*, finished. *Plane Trigonometry and Mensuration*.

*English Composition and Literature*. *History*. *Ethics and Political Economy*.

*French or Latin* may be taken in place of *English* and *History*.

*Elements of Chemistry*.

*Book-keeping*.

*Drawing*, Machine and Architectural.

*Work in the Machine Shop*. Bench Work and Fitting, Turning, Drilling, Planing, Screw-cutting, etc. *Study of the Steam Engine*.

*Execution of Project*.

## LITERARY AND DEBATING SOCIETY.

Students of the second and third-year classes have formed a debating society, their object being "mutual improvement in Elocution, Composition, and Debate."

The society meets one evening each week in a room assigned for that purpose.



## DETAILS OF SHOP INSTRUCTION.

The shop instruction is given similarly to laboratory lectures. The instructor at the bench, machine, or anvil, executes in the presence of the whole class the day's lesson, giving all needed information, and at times using the blackboard. When necessary the pupils make notes and sketches (working drawings), and questions are asked and answered, that all obscurities may be removed. The class then proceeds to the execution of the task, leaving the instructor to give additional help to such as need it. At a specified time the lesson ceases, and the work is brought in, commented on and marked. It is not necessary that all the work assigned should be finished; the essential thing is that it should be well begun and carried on with reasonable speed and accuracy.

## SPECIAL TRADES ARE NOT TAUGHT.

All the shop work is disciplinary; special trades are not taught, nor are articles manufactured for sale.

The scope of a single trade is too narrow for educational purposes. Manual education should be as broad and liberal as intellectual.

## THE ORIGIN AND PURPOSE OF THE SCHOOL.

The Manual Training School is not an asylum for dull or lazy boys. It clearly recognizes the pre-eminent value and necessity of intellectual development and discipline. In presenting some novel features in its course of instruction, the managers do not assume that in other schools there is too much intellectual and moral training, but that there is too little manual training for ordinary American boys. This school exacts close and thoughtful study with books as well as with tools. It proposes, by lengthening the usual school day a [full hour, and by abridging somewhat the number of daily recitations, to find time for drawing and tool-work, and thus to secure a more liberal intellectual and physical development—a more symmetrical education.

One great object of the school is to foster a proper appreciation of the value and dignity of intelligent labor, and the worth and respectability of laboring men. A boy who sees nothing in manual labor but mere brute force, despises both the labor and the laborer. With the acquisition of skill in himself, comes the ability and willingness to recognize skill in his fellows. When once he appreciates skill in handicraft, he regards the skillful workman with sympathy and respect.

## THE GENERAL VALUE OF MANUAL TRAINING.

It is not assumed that every boy who enters this school is to be a mechanic. Some will find that they have no taste for manual arts, and will turn into other paths—law, medicine, or literature. Some who develop both natural skill and strong intellectual powers will push on through the Polytechnic School into the realms of professional life as engineers and scientists.

Others will find their greatest usefulness as well as highest happiness in some branch of mechanical work into which they will readily step when they leave school. All will gain intellectually and morally by their experience in contact with *things*. The grand result will be an increasing interest in manufacturing pursuits, more intelligent mechanics, more successful manufacturers, better lawyers, more skillful physicians, and more useful citizens.

I have noticed this school at length because it has come under my personal observation and I have seen its practical methods and its happy results.

## MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

Of this school its President, Francis A. Walker, says in reference to its general course:

"The idle student is hardly known here. The painful task of harassing and menacing scholars, who are such only in name, who have, as scholars, neither ambition nor self-respect, is one from which the Faculty are almost entirely relieved. What with the variety of courses here presented to the student for his own free election, what with the interest which the youthful mind always finds in one or another kind of laboratory practice or field work, it is seldom that a student fails to give, without compulsion, even without admonition, all the time and effort to his own chosen course which his instructors deem right and proper. Differences, and great differences, indeed, exist as to the degree of success attained by our scholars. Yet it is surprising to observe how far the opportunity to make choice of the kind of work which shall be done, goes to make up for the deficiencies which appear when a large body of students are subjected to one and the same test of scholarly ability or performance. Young men who exhibit no inclination or aptitude whatever for linguistic or philosophic studies, are often found to take the deepest interest in natural history, in chemistry, or in mechanics; to have remarkable aptitude for manipulation, and to possess excellent powers of perception, discrimination, and judgment.

"Not infrequently one who, if compelled to pass through long courses of classical, rhetorical, and dialectical exercises, would have had a thoroughly unhappy career, finding nothing in his daily tasks to interest his mind or call out his powers, feeling himself continually at a disadvantage in comparison with others, and soon, probably, sinking into that most unfortunate condition for a young man, of accepting a low standard of performance, is found among our brightest, most apprehensive, most enthusiastic, and most successful scholars."

In the department of Industrial Science of this Institute mechanical laboratories have been provided, and furnished with the more important hand and machine tools, so that the student may acquire a



direct knowledge of the nature of metals and woods, and some manual skill in the use of tools. Some idea of their extent may be gathered from the fact that they are equipped as follows:

"The carpenter, wood-turning, and pattern making department contains forty carpenter's benches, two circular-saw benches, a swing saw, two jig saws, a buzz planer, a boring machine, thirty-six wood lathes, a large pattern-maker's lathe, and thirty-six pattern-maker's benches. The foundry will contain a cupola furnace for melting iron, two brass furnaces, and thirty-two moulder's benches. The smith's shop contains thirty-two forges, seven blacksmith's vises, and two blacksmith's hand-drills. The machine shop contains twenty-two engine lathes and fifteen hand-lathes of recent approved patterns, a machine drill, two planers, a shaping machine, a universal milling machine, and thirty-two vise benches arranged for instruction in vise-work."

The students of mechanical engineering also receive instruction in carpentry, wood-turning, foundry work, forging, chipping, filing, and in machine tool in the Mechanical Laboratories.

This laboratory is situated in the basement of the Rogers Building, and will contain the following as a portion of its equipment: An eighty-horse power Porter-Allen engine in constant use for driving a fan for the heating and ventilation of the new building; a sixteen-horse power Harris-Corliss engine, provided with a condenser, and other apparatus, rendering it suitable for a variety of steam experiments, and to be used either with a friction brake or to supply power; a calorimeter; a vacuum pump; machinery for testing the transmission of power by belting; transmission dynamometers; a mule; a drawing frame; and apparatus for hydraulic experiments. There are also available for work, in connection with this department, five steam boilers; a forty-horse power engine, used for running the lathes, planers, etc., in the mechanical laboratories; and a number of looms.

#### THE SCHOOL OF MECHANIC ARTS.

For the benefit of those who are unable, for want of time or means, to go through one of the regular courses of the School of Industrial Science, and yet desire a good preparation for industrial pursuits, a subordinate School of Mechanic Arts has been established by the Corporation of the Institute, in which special prominence is given to hand work in connection with high-school studies, affording an opportunity to such students as have completed the ordinary grammar-school course to continue the elementary scientific and literary studies, together with mechanical drawing, while receiving instruction in the use of the typical hand and machine tools for working iron and wood.

The general plan of the school is similar to that of the Imperial Technical School of Moscow, the Royal Mechanic Art School of Komotau in Bohemia, the Ecole Municipale d'Apprentis of Paris, or that of the Ambachtsschoolen of the principal cities of Holland, but has been specially adapted to the

somewhat different conditions existing in our own country. The object is not to fit the pupil for a particular trade, but to develop the bodily and mental powers in harmony with each other, and with reference to the actual wants of life. The hand work is done without regard to pecuniary profit, but is calculated to give the student good judgment, self-reliance, and executive power. Its exact and systematic method affords the direct advantage of training the hand and eye for accurate and efficient service with the greatest economy of time, and the instruction in the use of tools and materials has also proved a valuable aid in intellectual development.

The instruction in the mechanic arts given to each regular student at present embraces:

I. Carpentry and Joinery; II. Wood-turning; III. Pattern-making; IV. Foundry Work; V. Iron Forging; VI. Vise Work; VII. Machine Tool Work.

The regular course also includes two years of study. Special students are received for shorter terms or for particular parts of the course.

The present regular course is as follows:

#### REGULAR COURSE.

##### FIRST YEAR.

###### *First term.*

Shop Work—Carpentry.  
Algebra begun.  
Geometry begun.  
English composition.  
Mechanical and Free-hand Drawing.

###### *Second term.*

Shop Work—Wood-turning, Pattern-making, Foundry Work.  
Algebra.  
Plane Geometry.  
English Composition.  
Mechanical and Free-hand Drawing.

##### SECOND YEAR.

###### *First term.*

Shop Work—Forging.  
Algebra completed.  
Elementary Physics.  
English Composition.  
Mechanical Drawing.  
French.

###### *Second term.*

Shop Work—Vise Work, Machine Tool Work.  
Geometry.  
Physics.  
English Composition.  
Mechanical Drawing.  
French.

Still another department of great usefulness is maintained in connection with this Institute. It is known as the

#### LOWELL SCHOOL OF PRACTICAL DESIGN.

This school was established in 1872, by the Trustees of the Lowell Institute, for the purpose of promoting Industrial Art in the United



States. The Corporation of the Massachusetts Institute of Technology, having approved the purpose and general plan of the School as proposed by the Trustees of the Lowell Institute, assumed the responsibility of conducting it, and in the same year the first pupils were admitted.

The expenses of this school are borne by the Lowell Institute, and *tuition is free to all pupils.*

The school occupies a drawing-room and a weaving-room in the new building of the Institute. The weaving room affords students an opportunity of working their designs into actual fabrics of commercial sizes and of every variety of material and of texture. The room is supplied with two fancy chain looms for fancy dress goods, three fancy chain looms for fancy woolen cassimeres, one gingham loom, and one Jacquard loom. The school is constantly provided with samples of all the novelties in textile fabrics from Paris, such as brocaded silks, ribbons, alpacas, armures, and fancy woolen goods.

#### COURSE OF STUDY.

Students are taught the art of making patterns for prints, gingham, delaines, silks, laces, paper-hangings, carpets, oil cloths, etc. The course is of three years' duration, and embraces:

1. Technical manipulations; 2. Copying and variations of designs;
3. Original designs or composition of patterns; 4. The making of working drawings, and finishing of designs.

Perhaps the best idea of the practical results of this school (and similar ones), can best be reached by solving the question, "What becomes of the graduates?"

This is done by reference to the catalogue of the above. Notice one year only. Without giving names, I note the following occupations of some of the graduates in that year.

With Holyoke Water Power Company.  
Office of Proprietors of Locks and Canals.  
Employed in the Manchester Mills.  
Mechanical Engineer.  
Assistant in Applied Mechanics, Massachusetts Institute of Technology.  
With Deane Steam Pump Company.  
Assistant Engineer, Track, Bridges, and Buildings, N. P. R. R.  
With N. E. Weston Electric Light Company.  
With Vapor Fuel Company.  
Tehuantepec Inter-Ocean R. R.  
Student, Massachusetts Institute of Technology.

Chemist, Common Sense Fertilizer Company, 42 Congress Street, Boston.  
With Southwark Foundry and Machine Company.  
With Tahanto Manufacturing Company, Electroplaters, Boston.  
With Pennsylvania Steel Company.  
Assistant Engineer, Survey of Canal for Irrigation.  
Assistant in Chemical Analysis, Massachusetts Institute of Technology.  
Private Assistant to Prof. W. R. Nichols, Massachusetts Institute of Technology.

Here are some from the list of graduates from the School of Mechanic Arts:

Instructor in the Mechanic Arts, Purdue University.  
Professor of Mechanics and Drawing in State Agricultural College.  
Graduate of School of Industrial Science, in the class of 1883.  
Clerk in store of Pennsylvania Steel Company.  
In charge of Iron Works in the School of Mechanic Arts.  
With Howell Smelting and Mining Company.  
Worked with N. E. Weston Electric Light Company till he injured his eyes.  
In a Brass Foundry.  
Milling.  
With his father, manufacturing Fancy Cassimeres.  
On the Survey of the Wisconsin Central R. R.

And these from that of the graduates from the School of Design.

Lowell Carpet Company, Boston.  
American Print Works, Boston.  
Lowell Carpet Company, Boston.  
Putnam Woolen Company, Putnam, Conn.  
Lovering Cotton Mills, Taunton.  
Mystic Carpet Mills, Medford.  
Forbes Lithographic Company.  
Merrimac Print Works.  
Lowell Carpet Mills.  
Manchester Print Works.  
Pacific Mills.  
Arlington Mills, Lawrence.  
Methuen Woolen Mills.  
Glasgow Gingham Mills, South Hadley Falls.  
Assistant in Weaving Department, Massachusetts Institute of Technology.  
Arnold Print Works.  
Arnold Print Works.  
Embroidery. C. N. Carter, Boston.  
Wall Paper. C. W. Robinson.



Arnold Constable & Co., New York.  
 Monson Woolen Mills.  
 Springfield Woolen Mills.  
 Pacific Mills. Print Designer.  
 Silk Designer. H. C. Davis, Boston.  
 At home. Print Designer.  
 Silk Designer. H. C. Davis, Boston.  
 At home. Carpet Designer.  
 Embroidery Designer. Clapp, Boston.  
 McDonald Glass Company.  
 Wall Paper Designer. Corse & Smith.  
 At home. Carpet Designer.

In speaking of this institution, Mr. Edward Atkinson said on commencement day: "It gives me pleasure to stand here and say that a lady has taken the valedictory, and that *the thesis which she gave on the chemistry of the cotton plant, has alone secured her a fortune.*"

At New Haven, Conn., this system of instruction has also been successfully carried out, as may be seen from the report of the Board of Education for 1884 of that city. One has been kindly furnished me by Mr. L. L. Camp, Superintendent of the Dwight School:

#### MANUAL TRAINING.

The experiments which have been tried in the Dwight and Skinner Schools during the past year, and the good degree of success that has attended them, naturally suggest the question whether manual training cannot become more distinctly a feature of public school education in this city. The question is a difficult one, as all have found who have ventured to speculate upon it. It cannot be handled successfully from a narrow or simply utilitarian point of view. It is easy to deny the expediency of such training, and to ridicule the idea of dividing the interest of school boys between the three R's and the hammer, the saw, and the jack plane. On the other hand, some make haste to clamor for manual training in schools who do not weigh sufficiently the difficulties which such an enterprise presents, neither do they seem to comprehend its true purpose. They join in the popular cry for something practical in the schools, and would seem to imply that the knowledge of a few tools will at once open to a boy the highway to success. To ask for any considerable appropriation of public money for the support of a new feature in our schools to please a few chroniclers who are always complaining of the old and clamoring for the new, or to furnish gymnastics for a few boys, would certainly be indefensible. It will readily be agreed that if these industrial experiments are to be encouraged, and further expense is to be incurred, the case must be pleaded on the broadest educational grounds.

It must be seen that something is actually wanting in the present curri-

culum, to call out all the latent energies of a boy, and give him the most symmetrical development of mind and body. To undertake the teaching of trades in the school room, or to emphasize the importance of any of the manual arts, to that extent which would give a bias to the tastes of a boy, or turn his attention to any particular vocation, would do violence to well-accepted educational principles. Those Technical Schools of Europe which are supported for the avowed purpose of fostering certain industries, or branches of skilled labor, as for example the Technical School of Manchester, Eng., opened the past year, or those institutions run in the interest of guilds, or great manufacturing interests, like that one supported in New York City by the Carriage Builders' Association,—all these will prove of great value to the industries which they foster, and will be a mighty factor in strengthening the productive resources of a nation. But as educational institutions, they are necessarily narrow in scope, and afford but little help in the solution of the problem before us. One principle is generally agreed upon by all who would urge manual training in schools, and that is, that *no trade can be taught*. This dictum, although negative in form, when considered in the light of pedagogics, is positive and full of meaning. It points to a broad and harmonious development, rather than to the narrowing of faculty. It rests upon the supreme fact that body and mind act and react upon each other, that any act is a thought expressed, that the application of the hand and eye to systematic and artistic pursuits produces a reflex benefit to the mind of the worker; that hand work joined with brain work awakens spontaneity of feeling, strengthens the will, and insures a maximum of power.

Now, giving up all idea of teaching trades, and regarding the facility in using a few tools as a rather common-place accomplishment, is there enough of disciplinary value in such training to warrant its continuance or extension in our schools? Instead of affirming positively that such is the case, let us see what results the experiments made have yielded. In each of the Dwight and Skinner Schools a large basement room was fitted up with benches and supplied with tools sufficient for a dozen boys to work at once. Each boy attended twice per week for an hour. At the Dwight School sixty different boys selected for superior scholarship received training, and at Skinner about thirty were thus fortunate. Messrs. Judd and Loper, the respective janitors of these schools, gave the needed instruction, and did much to make the enterprise a success by their interest and zeal. A thorough course in plain carpentry was given, and many useful and ornamental articles were manufactured. More important than these visible results, is the effect upon the bearing and scholarship of the boys thus trained. The principals of both schools are emphatic in saying that the effect was salutary both upon their mental life and manly bearing. Several parents testify to the same result, and are, without exception, anxious to have such training continued. It is said that those receiving the training, being the older and more influential boys of the school, exhibited a positive interest in their daily work, and a propriety of conduct which was helpful in elevating the standard of tone



in the whole school. Thus, for a maximum expense of \$200 for each class, one half of which sum was appropriated from school funds, we have these definite and most desirable results, to say nothing of skill acquired in carpentry.

In view of these telling facts, and since this form of education is fairly in the stage of experiment, it would seem proper for the Board to consider seriously the wisdom of providing for a still broader application of the plan, so that a still larger number of teachers and parents can judge of its practicability. Without arguing the case, or going far into details the following scheme is suggested: To let a group of twelve or fifteen boys from each of the grammar schools of the city, spend one afternoon per week in the manual training school. The room and appointments at the Dwight and Skinner schools are ample for the purpose, and the plan would simply require that the boys from other schools travel the longer distance once each week. The groups from the several schools would of course be assigned to the schools nearest their own. It could not be asked nor expected that the instruction could be given for so small compensation as last year. The janitors should receive from \$200 to \$300 each in order to enable them to employ extra assistance which they would be obliged to do. An allowance of \$100 should be made for each school for lumber and tools, so that, at the outside, \$800 would cover all expense and fairly compensate the instructors. The legal difficulty, which has hitherto been a convenient bar to such a project, has fortunately been removed. The statute which designated the studies to be taught in the common schools of this State, was, at the last session of the legislature, so amended, at the instance of Hon. J. D. Plunkett, as to include "Manual Arts." This difficulty being removed, I believe public sentiment will sustain the Board in taking this step in advance. Some will say that the plan is faulty, as only a few will reap the benefit of it. But one hundred boys from different parts of the city, selected by their several principals on the ground of good scholarship, will be a good basis for the experiment, and close students are often persons of highly wrought nervous temperament, who especially need relaxation and physical training. Those whose surplus energies are spent in out-door sports, or who have active duties out of school, have less need of manual training. The fact that the dignity of labor may thus be popularized, and that many boys not members of these classes will be inspired "to do something," is a strong argument in favor of the plan. It is the industrial and industrious spirit that we want in our schools, and in the community as well, so that honest labor may be not only respectable but honorable.

It must be counted a misfortune that popular intelligence does not yet grasp the principles which underlie an education which begins in the Kindergarten, and carries the industrial and productive idea through all grades.

There may be some truth in the charge, that only half the child has been educated, that the other half, which is character founded on a body trained to action, and a will invincible against wrong, has been neglected. Is it not possible that the time has come to broaden the foundations of our edu-

cational structure, so as to make the school training do in part for boys in the city what is done for boys in the country by the nature of things?

In the city of New York Prof. Felix Adler's Workingmens' school, with over one hundred and fifty pupils from six to fourteen years of age, each of whom works four hours a week in clay, wood or zinc, pursuing at the same time the ordinary school branches, is developing pupils into self-respecting and self-supporting members of society. Culture training and work training are brought into complete harmony in primary education. The salient feature of this experiment (absolutely so far successful as to be located in its own substantial yet modest building in America's metropolis) is, that it introduces what many be called the *creative method* into school education. The system of teaching by object lessons has long been familiar to educators. It is here proposed to improve upon this system by giving lessons in the *production* of objects. Some words from Prof. Adler himself will be read with interest here:

He says:

It may be proper to add that in the school whose method we have described, seeing that the total humanity of the children is the aim, we have found it necessary to extend our influence beyond the school into the homes. A close connection between the parents and the teachers of the school has been established. Every month a so-called parents' meeting takes place, at which the progress or deficiencies of the pupils are brought to the notice of their parents. At these meetings, moreover, some special features of the method of the school are always discussed, so that the parents may gain an insight into our plans, and give us their assistance in carrying them out. The result has thus far been most satisfactory. The parents have, of their own accord, organized a committee to support the managers of the school, and a feeling of mutual confidence and good-will prevails.

A second measure was found necessary to facilitate the working of the system. In teaching natural history it became evident that many of our pupils, taken as they were from the tenement-houses of New York, did not possess those elementary impressions of nature upon which, as a foundation, the instructor must build. We arranged, therefore, to send out a vacation-colony into some picturesque district of country, and selected the little town of Sherman, in Pennsylvania, for this purpose. Thither, for several years in succession, almost the entire school has gone in charge of the principal. And there in the woods, and among the hills, and along the streams, they have gained not only new health and vigor, but also that more vivid realization of natural objects which will contribute greatly to enhance the value of their winter's study.



The following is submitted as a plan of co-operative drawing and work instruction for the eight classes of the workingman's school:

This plan consists of a series of exercises so arranged that the different tools and materials of construction employed are successively introduced according to the ages and abilities of the pupils, so that the actual practice necessary for the skillful manipulation of the tools may be given simultaneously with an education of the mind.

The exercises planned for the five lowest classes involve the rudiments and most important principles of geometry, and also introduce such study of mathematics found to be necessary for making measurements and for the calculation of areas and volumes.

For the latter part of the course exercises have been arranged in which the pupil will make drawings and construct the apparatus necessary for making simple experiments illustrating the elementary principles and most useful laws of mechanics and physics. Throughout the scheme the exercises in the work-instruction course will be constructed from the pupil's own drawings. By this means the work of both the drawing and the work-instruction departments will be pursued at a greater advantage than they would be if entirely independent of each other; but besides this, the pupil will be taught to appreciate the true relation between the plan and the construction. The habit of working from a definite plan will be inculcated, which will be of great value and an important factor to the pupil's success in whatever he may undertake later in life.

To illustrate definitely the connection that exists between the drawing and the work-instruction courses, an example of an exercise designed for the fourth class is taken. In the drawing room the pupil will be given a model of a cone from which he will take measurements and then make a complete working drawing. In the workshop, with the drawing, proper material, and tools, the pupil will turn in his lathe a cone according to his drawing, which when completed will be a copy of the original model used in the drawing-room.

The following is a very brief summary of the plan for each class:

The exercises planned for the eighth and seventh classes introduce the use of paper, pencils, triangles, compasses, and rulers in the drawing-room. In the work-room small toy squares and chisels are employed for carving geometrical forms from pieces of clay. Only plane figures are involved in the exercises for the eighth and seventh classes, from which the pupil will acquire a knowledge of the names and properties of lines, angles, polygons, circles parts of the circle, and also the methods of construction of many geometrical forms.

In order that the exercises may have greater interest to the pupil than could be elicited from the study of abstract geometrical figures, the pupil will first be shown a model of some familiar object composed of pieces representing different geometrical forms. For example, a model of a house will be taken at first, and then the different geometrical figures, as the square, the rectangle, and the triangle, which enter into the structure of the model will be taken as the subjects of different exercises.

The exercises designed for the sixth class introduce the use of the drawing-board and "T-square." In the work-instruction course the knife is employed in cutting the developments of geometrical solids from paste-board. By means of the exercises arranged for this class the pupil will be given a conception of the relation between the development and the finished solid, and will also acquire a more thorough knowledge of the properties of the plane figures which have been subjects of exercises during the two preceding years.

The exercises arranged for the fifth class introduce the use of the hand-bracket or scroll saw in the workshop.

In connection with the exercises, methods will be given for calculating the area of different plane figures and for the construction of ovals and ellipses.

The exercises planned for the fourth class introduce in the drawing-course the drawing of solids, and in the workshop a series of parallel exercises in which the hand-saw is introduced and practice given in wood-turning. The aim of the exercises prepared for this class is to teach the methods of draughting solid bodies, and methods for calculating the volumes of many of the solids which are subjects of the exercises.

In the exercises planned for the third class the drawing of objects composed of several parts is introduced. In the workshop a carpentry course will be taken up in which a large part of the apparatus used for the experiments in mechanics and physics will be constructed. By the construction of different types of joints used in framing, and applying them in the simple form of bridge or roof truss, the pupil will be taught the form that should be given joints, to illustrate special varieties of strain.

The exercises planned for the second class introduce drawing, from "free-hand sketches," parts of the machinery used in the shop. In the workshop a series of exercises will be given in moulding, in which a general knowledge of the principles of moulding will be taught. The moulds will be set up as they would be in any iron-foundry, but, as a substitute for molten iron, liquid plaster of Paris will be poured in casting. Many of the patterns used in making the moulds will be the results of preceding exercises.

The exercises designed for the first class give a continuation of drawing parts and combinations of parts of machinery used in the shop. In the workshop, practice will be given in the chipping and filing of metals and the hand-turning of brass. Many of the exercises in drawing will be the representation of parts of the steam-engine; and as a culminating exercise in the shop the pupil will construct a small and simple form of a steam-engine. In connection with this last exercise the pupil will become familiar with the operations and functions of the parts of a steam-engine.

The exercises intended to illustrate many elementary principles and laws of mechanics and physics have been chosen so that the pupil, with the knowledge of the use of tools acquired in the workshop, will be able to construct most of the apparatus necessary for the experiments, as well as to afford him the opportunity of taking part in their performance.



In mechanics experiments will be made illustrating the action of force, inertia, gravity, laws of the pendulum, laws of falling bodies, moments, centrifugal force, etc.

In physics a number of exercises have been planned to illustrate the most important facts with regard to hydrostatics, hydraulics, pneumatics, sound, light, heat, and electricity.

The foregoing is a general outline of the detailed plan which is submitted as provisional, and will be modified at any time as experience may dictate to be necessary for the fulfillment of its object.

Similar schools have been established in Baltimore, Philadelphia, Chicago, and elsewhere. In Europe much greater advancement has been made. The South Kensington Museum of England has established industrial art schools in almost every business center, and technical schools are flourishing in Leicester, Middleborough, Belfast, Bradford, Nottingham, and Manchester.

In Germany the great success attendant upon this system is chiefly due to Herr Clausen Von Kaas, who instituted a normal course at Emden in 1880, which was attended by sixty-two pupils.

In Sweden efforts are being successfully made to diffuse this education as generally as possible throughout the country. Over three hundred schools give instruction in the manual arts.

In France there are a very large number of schools in which industrial training is combined with elementary instruction, there being nearly fifty in Paris alone. In one of these—the *Ecole Communale*, or public school of the Rue Tournefort—each pupil spends from one to four hours daily in the shop during a three years' course, the pupils being from twelve to fifteen years old. This has become so popular in that country, that in the new French code of education the use of tools is *required* to be taught to all pupils in schools of the grade of our grammar schools.

M. Laubier, the director of the Rue Tournefort school: "You ask me if the manual work harmonizes with the ordinary work? Far from interfering with the ordinary work, I can assure you it offers valuable opportunities to teachers in vivifying, so to speak, their instruction; and it is also a most important aid in training pupils to comprehend what is explained to them. There are now forty-two schools in Paris where manual instruction is combined with pedagogic instruction. All the teachers agree in saying that they obtain good results, and that they have gained much under the new *regime* in order, care, and accuracy in work. I could quote a goodly number of our pupils who have distinguished themselves in the careers which they have chosen. What is really remarkable is that not a single one

of them has changed his occupation; while changes are frequent among apprentices who have not been guided in their choice by school training." He also says that a course of industrial training for girls is being prepared.

Now while this method of instruction has already proven so practicable in the old as well as in this country, and while in our eastern cities the idea is rapidly crystallizing into practical realities, Superintendent Seaver, of Boston, reported only in April last that the experiment of industrial training schools in that city had made interesting progress. He says: "The experiment has already gone far enough to prove that work of this kind can be joined to the ordinary grammar school work with good effect."

Surely Iowa, with its splendid record upon educational interests, ought not to be behind in this *practical education*. True, in our Agricultural College at Ames we have a fine laboratory and excellent workshop for students, but how limited these advantages in proportion to the vast army of Iowa's young men and women to be educated! How few, comparatively, can avail themselves of the advantages of this institution! The same is true of the University at Iowa City, whose course in Civil Engineering is very superior. The Kindergartens, private, and happily now in a manner public (as connected with some of our public schools), are accomplishing splendid results among the very young, but something more is needed—something broader—schools in which the masses may find an education that shall dignify labor and be the means of making for them in after life a suitable income. Allied to this general education is the plan adopted by Professor Hunt (recently elected to the Presidency of the Iowa Agricultural College). This system is generally known as

#### HUNT'S SYSTEM OF SCHOOL BANKING.

An excellent account of this appeared in the daily *Register* of this city last year, as an interview between its reporter and Professor Hunt. It is so terse and yet so plain, that it is given below:

"Mr. Hunt, tell us something more about your system of school banking."

"I can tell you that from that term school banking comes my only trouble in its introduction elsewhere. Schoolmen get the impression that it is a system of school banks like that which has been tried in Europe, which confines the work to the school-room, making more work for the teacher; and a system which lacks the vitality which actual business gives to children in any line of industrial work."



"Then you think the secret of your system's success is in connecting the schools with the business world?"

"I do, most assuredly."

"How goes your work here in your own schools, in this particular?"

"That inquiry can be better satisfied by the parents and teachers, hence, if you ask them the answer will doubtless be more satisfactory."

"Well, do you have the hearty support of teachers and parents?"

"I do. If my teachers were not interested and cheerful workers it could not succeed, for you must understand that all depends upon the teacher. Whatever is done in schools is done by the teachers. They do the work, they influence, they direct, and they give the good cheer."

"You say the parents give their support to this new work?"

"They do, and we depend very much upon their cheerful interest and careful judgment."

"Judging from the general comments of the press, the system is being adopted quite extensively in other States?"

"It has already been introduced in a great number of schools, and each day's post brings news of new recruits; and now we quite confidently expect to see it started in almost every State by the close of the school year."

"How do the leading educators of the country seem to regard this work?"

"Truly, I would much prefer that they answer your question—they are very clever in kind words and free to criticize. They almost universally hold, however, that the best thing that should be said in its favor is its influence upon industrial tyranny. Many have insisted that its influence in growing habits of economy deserved first consideration. Others held that the business training and accumulation of money are its best features; while the ecclesiastical press has assured us that the guards which it will build to protect against the abuse of money is its strongest point."

"What have you considered its strongest point?"

"I have felt that in its general influence upon the school, the best results were discernible, for thrift, you know, begets self-respect, and self-respect goes hand in hand with a general prosperity, and children are influenced not unlike adults."

"Do you believe this work will lead to enough industrial training?"

"I don't know, sir. I received a letter recently from an eastern gentleman, who said that he had hitched it on to the car of industrial education, and now saw no necessity for a \$50,000 workshop; 'for,' said he 'we now utilize the opportunities which our city affords—our children working cheerfully, because it is profitable, and our people aiding as they never did before, because their attention has been called to it, and they see the necessity as they never realized it before.'"

"What is the most desirable thing to be obtained in the course of industrial work?"

"Well, that is a discussable question. I should say to educate, to honor skilled artisans—teach the boy to appreciate that to make a neat fitting boot, to bridge a mighty river, to shoe a horse well, etc., are accomplishments no less worthy and creditable than the best efforts of the professions."

The following resume of his work in this direction appeared as an editorial in the same paper and having examined the work with no little care and finding the results coincided so perfectly with the views of the editor I give it below:

#### SCHOOL INDUSTRIAL AND FINANCIAL TRAINING.

The plan of Prof. Leigh Hunt, the superintendent of the public schools of East Des Moines, for teaching the children in the schools to save money, and at the same time prudently stimulating them to earn money, is developing new and very decided merit the more it is tested. A few weeks ago we gave quite an extended sketch of the plan and progress of its work; so we need not recite it here. Since that time the system has come into adoption in many more cities, East and West, Brooklyn and other large places being among them. It is now on trial in over a hundred cities, and the demands from other cities are coming even faster than Prof. Hunt, with his regular and official duties, is well able to attend to them. The proof of its practical worth follow so soon after trial in any place, that it quickly spreads from such a local center to the better towns adjacent. In another place to-day we give an interview with the Professor as to its practical workings in schools under his own charge.

We stated in a previous issue that the economy it taught in inducing children to save their money, the business rules and knowledge it taught them in depositing their money in bank, and the industry it encouraged in the natural ambition that the most of the children would have by way of earning money with their own hands to increase their deposits, were all admirable. We especially liked the feature that it led boys to seek out things to do—chores at home and errands for others—garden-making in summer, and sidewalk cleaning in winter, and so on—and so taught them a knowledge of industry as well as habits of thrift. We find now, to our great pleasure—since we have always taken so much interest in making the public schools teach industrial education and practical sense as well as theories—that this plan is going to help greatly, if indeed it does not largely settle the question of how to gain such industrial education. For we learn that under the elastic or expansive capacity of this method, and the practical direction that Prof. Hunt gives to it, the boys are gradually being directed, in their desire to earn money and increase their deposits, to go to the workshops and factories to learn the use of tools and the practical methods of making things, and the girls are directed to the practical work of learning at home to sew, knit, and the other domestic arts. From the first Prof. Hunt contemplated directing the boys into practical things, and more lasting, than the scope or work of boot-blacks or news boys. For these are the things of a short time. He strove rather to lead the boys into taking up work which would educate at least toward permanent employment, and thus make at once the temporary wages and a capacity for support in later years. He has sought to teach them from the first that labor is



the manliest, most self-respecting of employments when it is done with honest purpose and sincere liking for it—which is the best thing for the public school to teach, while the tendency is to educate too much for the professions and too little for practical life. Then he taught them that, while any labor should be sought, yielding an honest way, it was wise to select that labor the practical knowledge of which would last the longest.

In opening this good way a logical result has been that the boys have all been tending toward learning a trade, and in doing so gaining a knowledge as to which of the trades they are best adapted for, and which they will like the best. The result has proved that the boys who are hunting something to do to make money and to add to their deposits are gradually drifting more and more to the workshop, the factory or some large employing agency, to find labor the quickest. He also finds that the work he does is educative. It is a beginning—the boy starting toward being a mechanic.

Does not the solution of industrial education lie in this way? The lame place and the stumbling block so far, in attempting industrial teaching in the schools, has been how to do it—how to provide tools, workshops, practical teachers. It will cost too much to have an industrial factory for every school or even in every town, and even if that were practical the instruction would fall short of being practical. Can there not be a connection made between the schools, and the children in them desiring to have practical trade, and the larger workshops, either for one or two days in the week, or for an hour or two each day? Then the children would get the practical instruction, and also get the spirit and life and inspiration which go with the real shop and the actual factory.

Has not Prof. Hunt at least opened one good way to the settlement of this part of the problem of industrial education, if he has not opened the one sufficient way?

I learn that the pupils under Prof. Hunt's charge at this writing have over \$6,000 to their credit in the bank and loaned out upon well secured paper, the pupils holding the notes.

The same editor says, later, in speaking of this system:

Such practical education gives men and women a knowledge of the everyday world that nothing else can, calls out their sense of justice and fair play for the working classes, and is a foundation of an actual something practical for them to build their lives upon. If all men thus knew for themselves what labor is, and wage earning is, they would know what the lot and the wages of labor should be, and the question of labor and the rights of laborers would soon be settled. It would broaden every man, make him practical, give him larger sympathy for his fellow men, and stand him in good service against any downfall in business.

In this plan of Prof. Hunt, he calls the pupil's attention early to the fact that education is for the two purposes of mental improvement and material support, and that the latter is as necessary in this

practical world as the other, if not more so. He teaches the value of money, and to do this takes the good old-fashioned way, so long forgotten, of letting the child earn money itself, to see how slowly it grows, and how hard it is to make. He teaches it next that it may, when it is needed, help in the support of its parents, without exposing itself in the least to be made old and avaricious early in life. He points out to it that quite a small child may do certain errands, and find pleasure in doing them, and earn a little money at the same time—with which it can lighten the lot of an over-taxed mother or an over-worked father. He teaches the children of rich and poor alike that there is an actual pleasure in work rather than in constant idleness, that there are many things which can be done with pleasure, which will be good for exercise and also yield a little money.

His methods make labor inviting, and teach children that it is pleasurable and honorable, and not at all degrading. They illustrate the pleasure of a little bank account, how it can be used to help parents, to help pay for clothing or books for a poor school-mate, and how to be charitable and generous as well as thrifty and useful. They teach that a girl may, with her nimble and skillful hand, fashion things, which it will be a pleasure to make, and a profit to sell, that even a small boy may earn a little money and have as good a time in doing it as though he were at play.

The Professor crossed the water to England last year, by request, and placed his banking system in some of the schools of London.

The following are the forms of checks, etc., used under this plan:

DES MOINES, IOWA, ....., 188..

M<sup>r</sup> A. W. NAYLOR, *President Capital City Bank:*

I *ar* Sir—Admit to the privileges of your bank the bearer, ....., who is a member of our Schools, and desires to become a depositor under the Public School regulations.

Respectfully,

.....,  
*Superintendent East Des Moines Schools.*

CREDIT.	HUNT'S SCHOOL BANKING SYSTEM.	No. ....
	\$.....	

DEBIT.	HUNT'S SCHOOL BANKING SYSTEM.	No. ....
	\$.....	



Each little depositor is supplied with a book, as the older one is, and before me lies one from which I copy the following deposit account:

DR.		CAPITAL CITY BANK, in account with ROBT.	
1—20.	Dep.	.....	.15
2— 8.	"	.....	.10
12.	"	.....	.50
19.	"	.....	.50
21.	"	.....	.25
27.	"	.....	.50
3— 1.	"	.....	.20
2.	"	.....	.05
12.	"	.....	1.00
24.	"	.....	.25

In Sweden the children are taught to save, in a somewhat similar way, but there, these pupils have no control over their money as to investment or otherwise. In this plan of Prof. Hunt, they have complete control, he or the teacher in charge of the school simply acting as adviser. The plan of Sweden may do well for them, but the characteristic independence of our American boys and girls would preclude such an one here.

The following correspondence relative to this subject occurred between this office and the President of the Capital City Bank, in which bank, as has been said, the accounts of the pupils in the East Des Moines schools are kept:

OFFICE OF COMMISSIONER OF LABOR STATISTICS, }  
DES MOINES, IOWA, February 27th, 1885.

MR. NAYLOR:

Dear Sir—In my report I am desirous, under the head of Industrial Education, of noting somewhat at length Prof. Hunt's Banking System. That I may do this more intelligently will you please answer the following questions, and oblige.

Yours truly,

E. R. HUTCHINS,  
Commissioner.

1. How long has the system been used in connection with your bank?

Ans. Two years.

2. During that time what is the total of deposits?

Ans. \$10,100.

3. Amount of deposits at present date?

Ans. \$440.01.

4. Average rate of interest paid?

Ans. None.

5. Highest amount to the credit of one pupil at any one time?

Ans. About \$60.

6. What is your opinion as a Banker regarding the system. Have you seen real benefits to depositors arising from it?

Ans. I think the system a wise one, and have seen much of the result. Children have worn new clothes that never had them before; children of wealthy parents have learned to earn money and how to use it.

It is true, however, that any system, however wise, is only a skeleton, and depends for its success upon the soul that is breathed into it by him who uses it.

Truly, etc.,

A. W. NAYLOR.

The system is in use in many of the schools in this State, and so far as I have been able to ascertain, it is giving the best of satisfaction. In this connection I desire to present a letter from a gentleman who has been engaged in a most excellent work in our State, and though not exactly in unison with the topic under consideration in this chapter, yet it meets the wants of a class of pupils who might be greatly helped by an industrial school. The letter is so original, and yet has in it so much of real merit, the permission of the author was received to publish it:

CLINTON, IA., November 25, 1884.

E. R. HUTCHINS, Esq., *Des Moines, Iowa*:

DEAR SIR—Yours of the 24th inst. is at hand this A. M. The Winter School, so called, was opened for the benefit of boys who are unable to attend during the entire term. It has been in operation intermittently for ten years and regularly for the last five. Most of the attendance is drawn from those who are employed in the saw mills during the summer. Their impatience under restraint and lack of respect for all in authority make it desirable to herd them off in a separate building, rather than imperil the good order of the schools by admitting them with other pupils; besides, they cannot be placed in any particular grade, owing to the limited time they are able to attend. Usually about forty are enrolled of all ages between ten and eighteen, the average being about sixteen. The percentage of attendance is a little better than ninety. The three R's take a prominent place in the curriculum in obedience to necessity and the popular demand. Lectures on various scientific subjects, history, the biography of prominent Americans, and current events are given in a manner easily comprehended, the intention being to excite interest and inquiry, and renew their flagging zeal. Book-keeping and composition were not neglected. By making myself personally responsible for the return of books, I secured the privileges of the Public School Library for them, and many availed themselves of the opportunity. I was compelled to confiscate quite a quantity of yellow backed literature, and I was anxious to place a better class of reading in



their hands, Cooper, Dickens, etc., and thus lead them to such histories as Prescott's and Parkman's, and biographies of soldiers and sailors, and to satisfy their demands for [the marvelous, in a legitimate way. Mrs. Henry Sabin, the Librarian, has a high standard of duty, and is absorbed in her work. Much was left to her guidance.

Those who attended the school with a real desire to learn, made considerable progress, considering the disadvantages of an ungraded school, dissimilarity in text-books, and the interest others took in ascertaining the force of various small projectiles, the detonating power of matches, etc., etc.

It was not considered expedient to attempt to maintain the highest standard of order. The regularity of hours and employment has not fitted the most of them for strict discipline, as might be expected. Their home government is a large factor. One or two fighters were accommodated early in the term, and there was no further difficulty. A different teacher has been employed each term, generally a law student. The school was familiarly called the "horse thief" school, but is outgrowing its evil name, and in time will become quite an aid in making better citizens of those who otherwise would be almost as uncouth as the Indians of the prairie.

Very truly yours,

ROBT. R. BALDWIN.

I think it may be safely said that all evidence goes to show that it is not only possible but thoroughly feasible and practicable to harmonize the elements of industrial education (manual training included) in our system of public education. The great need of to-day is the dignifying and ennobling of manual labor. This can best be done by making it subservient to thought as expressed by skill. It will be seen, in future pages, under the head of Manufactures especially, what a great demand there is for clerical positions, and how few really skilled mechanics are idle. Everywhere the demand comes for skilled mechanics, and from the same sources comes the complaint that there are multitudes of unskilled, half-taught workmen.

"The trouble with so many departments of industry at the present moment is, that there are too few skilled artisans to put into form the ideas of the designers, that labor and thought are too far apart from each other. One reason why there is so much unrest among the working classes is, that our public education does not give them all the help they need to enable them to pursue their work successfully and happily."\*

Any one who has had experience in business, knows how easy it is to get persons capable of doing almost any kind of clerical work.

\*Mr. Jas. McAllister, at the Convention of Educators at Saratoga, 1882.

Not long since a legal firm in Boston advertised for a copying clerk, and within a week over three hundred applications from men and women were received, nearly all well written, and some of them pitious in their appeals for wages far below what women receive in many branches of industry.

This is equally true in the West—in Iowa—as in New England or Massachusetts.

The editor of the Boston *Herald*, much interested in this question of practical education, had submitted to the pupils in various schools as the subject of a composition, this question: "What is my school doing for me?" Thirty-one of the compositions were printed, and the striking fact in regard to them was, that the writers were all looking to the mercantile and professional employments for their future occupations; and they told with perfect unconsciousness how well their schools were fitting them for those occupations. Although many of the pupils were children of the wage-earning class, only one, and this a girl, so much as alluded to the possibility of getting a living by a trade; while one Irish boy admitted with complete frankness that, as the result of his school training, he hoped to be lecturer, orator, "representator," and perhaps President of the United States.

At the meeting of the American Institute of Instruction, held in 1882 at Saratoga, Mr. James McAllister, Superintendent of Schools in Milwaukee, in speaking of this subject, said.

We must not close our eyes to the fact that by far the larger number of men in every civilized community are workers, to whom a skilled hand is quite as important as a well-filled head. Is it not within the strictest bounds of justice and right to ask that the schools should undertake to do something for the practical necessities of these millions of men and women? [Applause.] I repeat, that, so far as public education is concerned, it is the interests of the many, and not of the privileged few, that must be provided for.

Take the public schools of my own city as an example. The first (that is the lowest) grade contains nearly forty per cent of the total enrollment. In the eighth or highest grade there is only about two per cent of all the pupils in the schools. The high school has about the same percentage as the eighth grade. In the Eastern States I presume the proportion of the advanced, which is the same thing as saying the older, pupils is considerably larger; but these figures will stand as a fair representation of the larger cities of the West. How is this marked difference in the attendance of the pupils to be accounted for? What has become of the children? The answer is very simple. Before the middle grades have been finished the



greater number of these young people have been taken from school and put to work. If you should stand at the business center of Milwaukee at six o'clock in the evening, you would see thousands of boys and girls of tender age, hurrying, dinner-basket in hand, from a hard day's work to the homes which they had left in the early morning. The school door has closed upon them forever, and they must find their way through the world with such scanty intellectual equipment as has been crowded into five or six years of their childhood.

With such facts as these staring us in the face, is it not a duty to pause and inquire whether the character of the education given to these masses of children is just what it ought to be; whether it would not be possible, by adapting it more fully to their actual necessities, to give them a better start in life? It is useless to talk about compelling a longer attendance at school, unless some compensations of a practical kind are offered. Doubtless many of these children are the victims of parental cupidity, of the efforts of manufacturers to cheapen commercial products by the employment of juvenile labor; but in the larger number of cases their withdrawal from school is a dire necessity. But we cannot stop to inquire into these causes. Our immediate duty is to remodel our elementary courses of instruction in such a way as shall make them tell more directly upon the interests of those for whose benefit they are intended. \* \* \* \*

The demand is simply that the primary schools shall be made to conform to the existing necessities of the people, and that side by side with the higher institutions of learning there shall be established schools where the sciences, in their relations to the arts and industries, shall be made specific branches of instruction and training. \* \* \* \*

Manual training, as I understand it, aims at general results. Its purpose is, as has been shown in the paper, to develop human beings on the executive side of their nature as well as the receptive. Its aim is to so equip a boy that when he gets into the world he will be able to *do*, as well as to *think*. [Applause.] The training is to be so generalized in character that it will prove an accomplishment which will stand its possessor in good stead wherever manual skill can be made available. \* \* \* \*

The conviction grows upon me every day that it must be squarely met by the educators of this country, and that it will have to be settled in the interest of the millions of men and women whose happiness should be a paramount consideration in our social arrangements. The intelligence of the masses is the absolute condition of our political security; and the more completely we can make the schools minister to their practical needs, the more certain will be the assurance of peace and prosperity for the whole people.

At this meeting Prof. Woodward, who has already been quoted, said:

The methods by which we approach mechanical pursuits and occupations are such that they deeply interest a bright and healthy boy, and the culti-

vation of *intelligent* workmanship throws a charm about industrial processes which is largely smothered in an ordinary school. It never seems to enter the heads of these innocent boys who delight equally in geometry and blacksmithing, in draughting and in the "Deserted Village," that a foot-rule is not as honorable as a yard-stick, and that the position of a master mechanic is not as high-toned as that of a book-keeper.

Charles C. Coffin, Esq., of Boston, said:

Now it is all very delightful to go back to Plato and Aristotle. The world needs them to-day, as it has needed them in all the past. But the world needs to-day, as it has never needed before, the principles which underlie all human progress and which the Almighty has given to us in the forces of nature. And therefore when we come down to this question of industrial training and manual labor schools, the training of the hand, the training of the eye, the training of the intellect in connection with them, you come to what lies at the base of all the progress of this country, especially in the future.

From a paper read at this meeting by John S. Clark, Esq., also of Boston, we find the following:

We have to observe that in almost every city when the interests of the schools come up for consideration, particularly the high schools, two classes are usually in opposition: the laboring class, with their children in the primary schools only; and the wealthy, tax-paying class, with their children in private schools. This should not be; and, if I may be permitted to make a suggestion, I should say to you, as educators, that you could not take a wiser step than to attach heartily to your public schools the great mass of the working population of this country. Let these people see by your educational provisions that it is not the purpose of the schools to give a literary training merely for the benefit of clerks, merchants, book-keepers, etc., but that, combined with this literary training, going hand in hand with it, are generous provisions for industrial training, provisions for expressing thought in labor. Let them behold their children coming out of your schools possessed of skillful fingers and a love for work, as well as nimble brains, prepared to become wage earners with tools, as well as with the pen, and you will have secured for your schools a support that cannot be overthrown—a support that will aid you in all reasonable demands for a higher and better intellectual culture for all classes. In the presence of this vast labor insurrection now spreading over the country, it is not creditable to our public schools that they are virtually ignored as a remedial agency by both parties to the controversy. The public school should be society's strongest bulwark against all social heresies. It should be, in fact, the means of clarifying, as it were, the minds of future citizens into a respect for law and order.

In conclusion, I wish to disclaim all idea of class education in our schools. It is to break up the class education of the past and the present that indus-



trial education is now urged. We owe it to those of our citizens who are to live by industrial labor, that they shall be as well considered in our educational provisions as those who are engaged in trade; and above all it should be one of the primal functions of the school to teach the true nobility of citizenship through labor, so that every workman acquainted only with toil, crowded down in the struggle for existence by the stern competition between machinery and the unskilled work of the human hand, can believe, as he looks into the faces of his children, that the public school is the means by which they can be lifted to better conditions than he has known.

The manual exercises of the shop "train mental power rather than load the memory; they fill the mind with the solid merchandise of knowledge and not with its empty packing cases."

Prof. Henry W. Farnam, of New Haven, in a valuable article in the *New Englander* for June, 1884, on "manual training for boys in the public schools," says:

It develops a fondness for work; it leads children to create, rather than to simply assimilate; it strengthens the instinct of co-operation; it brings out, in a more concrete and distinct manner than the dry maxims of abstract ethics, the difference between right and wrong; and in doing this it incidentally gives to the boys in our public schools educational elements which will be of especial use to them in the careers which they will necessarily follow. Let not this argument be misunderstood; it is not claimed that the public schools ought to make carpenters or blacksmiths or farmers out of the boys; on the contrary, they ought to preserve an absolute neutrality on the subject of the different trades and to carefully avoid being in any sense technical preparatory schools. But neither ought they to give a mental outfit, out of harmony with these pursuits. If it is known that the majority of the children will necessarily engage in pursuits involving the use of their hands and their eyes as much as their brains, then the public school ought to train these organs as well as the mind; for, if it fails to do this, it is practically weakening the very means upon which the child will have to rely principally for his support. The fault cannot be considered merely a negative fault of omission; it is a positive fault, since too much attention given to one set of faculties weakens, not only relatively but absolutely, the other faculties. \* \* \*

The fact is that, though Christian civilization may strive toward heaven, the boys and girls who study in our schools usually live on the earth, and success in life on the earth is promoted much more by an ability and a willingness to grapple with the physical, concrete facts of our environment than by any attempt to soar above them through the magic of "directive intelligence." We already have as much "directive intelligence" as we can stand; the number of speculators, organizers of schemes for making money out of government contracts, and other people who live

by their wits, is quite large enough, and their careers are quite brilliant enough to excite the emulation of our boys. There is no lack of incentive in this direction; let us rather look for the antidote.

Speaking of the great host of children who leave our schools he says:

These children, in most cases, are obliged to do whatever offers itself first. They have, as a rule, no particular aptitudes beyond those that they have acquired at school, consequently they naturally go into occupations in which their school education is of most value, that is to say, those which do not require manual skill but simply an elementary education; they become factory hands, office boys, etc., while the more fortunate ones who can stay longer at school, become clerks, book-keepers, salesmen, etc. The consequence is that these occupations are glutted and wages in them low, while the market for skilled mechanics is often barely supplied and wages comparatively high, in spite of the large annual immigration from Europe.

It cannot, of course, be claimed that the public schools are alone responsible for this state of things. Social forces, without doubt, act very powerfully. Most people prefer an occupation which is clean and quiet, which involves no great muscular exertion, and which enables them to wear good clothes, to one which is sooty and unpleasant and hard. But, if a given cause tends to produce a certain effect, and if in any place we find both the cause and the effect present, it is only fair to assume that the effect is due, in part at least, to the cause, even though other causes may also have contributed to produce it; and even though but a small proportion of the pupils of the public schools may be influenced in their choice of a pursuit by the training of the schools, yet the number of persons in the aggregate who are influenced thereby is very large.

To one of the numbers of the *Iowa Review* of 1884, Mr. H. L. Chaffee, one of the leading hardware dealers of this city, and a practical mechanic, contributed an article on this subject, and coming as it does from one who is personally identified with the working men, and knows whereof he speaks, a portion of it by his permission is here presented. He says:

The active interest which is now being taken in developing and encouraging technical education, especially in our larger cities, would indicate that the public is waking up to the importance and advantages of manual training. It would require little effort to prove that the professions are overcrowded and that the tendency of the young is toward a professional life, rather than the mechanics. This may be attributed in part to the present school system. The graduate is expected to choose between law, medicine, theology, or business. His education has developed him in that line, and it is not strange that he thus chooses.

This overcrowding is especially noticed in law, and medicine. For in-



stance, here in Des Moines we have about one hundred and twenty physicians, and any one of them will tell you that the number is too large by half. In law it is equally as bad, and the fact that one half of the disciples of Blackstone make their living in the real estate, insurance, or coal business, is sufficient proof of the statement. What we need is more industrial schools, and not so many medical and law schools.

Iowa has a score of law and medical colleges which are annually turning out their hundreds of graduates into professions already full; and not a single manual training school. The cry everywhere is for skilled mechanics and artisans. The work of a skilled laborer is worth to a community double that of an unskilled laborer. It should be more honor to become a successful mechanic than a professional failure. The present apprentice system is also greatly at fault in this matter. A young man dislikes to spend two years of his life in most menial and disagreeable work that he may learn what could easily be acquired in a few months, with proper instruction. The time of the apprentice is only too frequently consumed in doing drudgery around the shop or store, and at the end of three years he may know but little of the trade which he had hoped to learn. It has already been demonstrated that in a manual training school, with proper instructors, the youth will make as much progress in a single month as the, average apprentice will in twelve months.

Another obstacle to acquiring some of the trades, is the restriction which the trade unions frequently demand. In many shops and foundries only one apprentice is allowed for every eight or ten workmen. And so for various reasons we have too many professional men, and too few skilled mechanics.

The present remedy in part seems to lie in the establishing of technical institutes. The movement seems to have traveled across the water in its westward course.

Thus we note the rapid progress which is being made in this line of education. What shall we do in Iowa? An Eastern manufacturer recently said that the greatest drawback to manufacturing in the West, was the lack of skilled labor. If law, medicine, theology, and mercantile pursuits are enough, we find no fault with the present school system.

In June, 1884, Hon. Sam. Clark—a writer and a citizen of whom Iowa is justly proud—in a commencement address before the law and collegiate graduates of the State University at Iowa City, said:

The primary law and need is industry. In the sweat of thy face shalt thou eat bread. Here, in America, is a continent broad and fertile enough to lift the primal curse from work, and leave not Curse but Contentment. This new world should be so full of fields and factories that it should have no need or place for a poor-house. Hands busy in it and upon it can make such plenty that over it need not be held the begging hands of want.

\* \* \* \*

The problem now is that of "Progress and Poverty." From all parts of the civilized world come complaints of industrial

depression; of labor condemned to involuntary idleness; of capital massed and wasting; of pecuniary distress among business men; of want and suffering and anxiety among the working classes. All the dull, deadening pain, all the keen maddening anguish, that to great masses of men are involved in the words "hard times" afflict the world to-day. \* \* \*

The long lists of suicides and insanities in our morning papers are the echo in civilization of that pathetic moan of the savage, and are the responsive touch of the nature that makes the whole world kin. On land and sea, by field and flood, we have harnessed the capabilities for production and wealth of this new world to the muscles of men and women, and to the busy wheels and mighty arms of multiplied steam engines; and yet they can not draw us out from the shadows where want sits as a guest at the spare table of many homes, and the lips of childhood are pinched and crisp with the fever of hunger.

The American people had hard work to make it so that the types of American society should not be John C. Calhoun and the slave. Now it is going to be just as hard to make it so that the types of American society shall not be Jay Gould and the tramp.

If this University is not here to do its part in dealing with this industrial question, then this University has no right to be here at all. \* \* \*

Henry George complains that because of faults of law and government "in the very heart of our civilization to-day women faint and little children moan."

If this University is not here to deal with this mighty problem of what government and laws should do and be, then this University has no right to be here at all. \* \* \*

I do not care whether this University does or does not teach Greek. That seems to me a matter of small moment. Whatever your method—whatever the tools you use—the languages you teach—the supreme need is that you should send your students out with brains trained keen and strong to mastery of these factors of Labor, Government, Art, Religion, Science or Philosophy, which are the warp and woof of their lives and of the people, community and civilization about them. \* \* \*

I want the University in this collective and corporate way to touch public thought and conduct more directly than it does now. I want it so that whenever the mind of the people of the commonwealth is vexed and darkened with problems of public conduct that the people will turn, with Jessie Wilson's prophetic confidence in the coming of the Highlanders, to this University—confident that it will come to the front with its guidance—and justify the University maxim: "Out of Letters—Light."

In the Orphans' Home at Davenport there are about 250 children. A large proportion of these are upward of ten years of age, and the industries of this institution are summed up in the following words of the Superintendent:

The several industries of the Home are under the direct supervision of



the Superintendent and Matron, aided by all of the employees in charge of the different departments. Each child old enough to be useful is regularly employed at some work suited to its strength and ability. The boys aid in the general duties about their cottages, such as sweeping, making beds, making fires, etc. They also work at gardening, and taking care of the roads and lawns. The girls do the general housework, the ironing, mending, and much of the making of the clothing for the boys and girls. A few each year are taught to cook.

It is said that a gentleman of this city took a boy some years ago from this Home—a boy fourteen years old—and sent him to his barn to harness a horse, and he was totally ignorant how he should proceed. It is not to be inferred that fault is here found with the management of this State Institution, for on the contrary, it deserves special praise, for all that can be done under the appropriations made by the State is done, but is this condition of affairs creditable for a State like Iowa so abundantly able to do better? Is it not a humiliating fact that these boys and girls—the former especially—are allowed to attain the age of fourteen or fifteen years and be utterly deficient in practical education? Is it beneficial for the boys?

In the report of the Trustees of the Reform School at Eldora, this same need is made apparent in the following words:

The trustees are painfully conscious of the fact that there are persons discharged from the School whose life is regarded as reformed, and who doubtless would continue in well-doing, but for the fact they have no means of support. They have never had sufficient means at command to employ good mechanics to teach the boys trades. There has been a good instructor in the shoe-shop, and some of the boys have become fair workmen, but aside from this there has been almost nothing accomplished by way of trades.

There should be means appropriated sufficient to employ a good tailor to train a certain number of boys in that branch of business. There are near three hundred persons now connected with the School; the clothing of this number would afford ample opportunity to learn that trade.

There should be an instructor in wood-work, carpentry, wagon-making, etc. The repairing of the simpler kind of farm implements, as well as making them, should be done in the School.

Their report of the girls' department gives a little more satisfactory view. They say:

The girls are carefully taught in all the various branches of house-keeping, and are trained in needle-work, so that they both make and mend their own clothing, and in addition are taught various kinds of fancy work.

In the Institution for the Blind, believing that work, whether profitable or unprofitable, is conducive to happiness, the trustees aim to establish every trade practicable for the inmates. Bead work, cane-seating, crocheting, fancy work, hand sewing, machine sewing, mattress making, broom making, carpet weaving, hammock netting, horse netting, and door-mat weaving are in present operation. Many former pupils are earning good livings through one or more of these occupations.

The pupils of the Iowa Institution for Deaf and Dumb are provided with means to acquire a trade. Shoemaking, carpentering, printing and dressmaking are taught by instructors well posted in these branches, and the pupils who improve their advantages can leave the school possessed of a means of earning their living.

So, too, in the Institution for Feeble-Minded Children there is also in successful operation a broom shop, and a shoe shop, in both of which the boys are making very satisfactory progress. It is certain that each year, as the managers of the State Institutions become more acquainted with the results of manual instruction, this department, all of them will form an important part in their make-up.

In this connection, the following extract from the report of the Commissioner of the Bureau of Labor Statistics of Wisconsin, will be read with interest:

#### WISCONSIN STATE INDUSTRIAL SCHOOL FOR BOYS.

In 1856, John W. Hinton began a series of articles in the Milwaukee *Sentinel* favoring the establishment of a reform school for youths. The agitation was continued by the *Sentinel* and the *Free Democrat* until, on March 7, 1857, a law was enacted providing for "a house of refuge for juvenile delinquents in the State of Wisconsin." The school was formally dedicated and opened on July 23, 1860.

The Industrial School is not a penal, but a reformatory and educational institution. Those committed to its care are given a rudimentary education, and, as far as practicable, are trained in the use of tools and various forms of manual labor.

The school farm consists of 223 acres of good land, on which are raised all kinds of vegetables, grains and cereals common to the climate, except wheat; also cows, poultry, horses and pigs. A perfect system of labor is therefore necessary on the farm as well as in the shops. A shoe shop was started in September, 1860, and during the following month a tailoring shop. Both are still in operation, turning out all the boots, shoes, socks, mittens, suspenders, pantaloons, coats, caps, and other wearing apparel required by inmates. The carpenter shop, repairing rooms, kitchen and laundry are



necessary adjuncts, which make money for the State by saving it, at the same time affording practical instruction to the boys connected with them.

For several years brooms and chairs were manufactured, but at no profit. The manufacture of boots, shoes, suspenders, socks and mittens—all by hand—is a constant source of profit to the State and the means of teaching the boys useful trades. The goods are of superior quality and the demand for them always exceeds the product, at good prices.

The factory product of the Industrial School from October 1, 1883, to October 1, 1884, was as follows:

1442 doz. pairs boots.....	\$48,176.00
97 doz. pair shoes.....	1,455.00
551 doz. machine made cotton socks.....	551.00
86 doz. machine made wool socks.....	301.00
16 doz. hand knit wool socks.....	64.00
17 doz. hand knit wool mits.....	68.00
213 pairs suspenders strapped.....	21.30
286 jackets.....	643.50
307 pairs cassimere pants.....	767.50
195 pairs cottonade pants.....	175.50
209 pairs overalls.....	125.40
44 cottonade jackets.....	22.00
123 cassimere vests.....	92.25
30 cassimere caps.....	9.00
32 aprons.....	9.60
Total value.....	\$52,481.05

Backed by the laws and the power of the State, the Industrial School is able to accomplish for delinquent and unfortunate boys what could be done by no other means. Its silent influences upon the industrial people of each generation are wholesome and far reaching.

I have devoted considerable space to this subject because personally I am deeply interested in it, believing its need apparent, its demands strong, and its usefulness beyond cavil, and also for the reason that Iowa, standing as she does in the forefront in educational interests, is yet in this feature manifestly deficient.

I believe the General Assembly could do no greater good than to place under its fostering care and strong protection, some plan by which Industrial Education and Manual Training Schools should find a home within her limits.

## PART VI.

### THE CITY OF PULLMAN, ILLINOIS.

In the early part of this report, allusion was made to a meeting of the Commissioners at the above city, for the purpose of investigation. The result of that meeting will be found in the following pages.

This report gives an impartial and full account of this interesting place, and appears in the reports of the various Commissioners to their respective Legislatures.

#### PULLMAN.

At the annual convention of the Chiefs and Commissioners of the various Bureaus of Statistics of Labor in the United States, held in St. Louis in June, 1884, it was determined to make a full and exhaustive investigation of the economic experiment conducted by Pullman's Palace Car Company, on the plan projected by Mr. George M. Pullman, the president.

In carrying out this determination the Convention met at Pullman, Ill., in September following, and for three days studied all the economic, sanitary, industrial, moral, and social conditions of the city.

Every facility was afforded for the closest scrutiny of every feature and phase of any and all the affairs the members of the Convention saw fit to examine. The results of their investigations are embodied in this report, which is presented as a joint report through the various annual reports of the Bureaus represented.

We have availed ourselves of material furnished the press by Duane Doty, Esq., a gentleman connected with the educational work of Pullman, and by other writers, but chiefly our report is the result of our own observations of things and conditions as we found them.

Our object in making the investigation was to give to the manufacturers and capitalists of our respective States, official information relative to one of the most attractive experiments of the age seeking to harmonize the interests of labor and capital. It is no part of our duty to eulogize individuals; we have endeavored to learn results.



The enterprise of Herr Krupp at Essen; the philanthropy of M. Godin in the establishment of the Familistere at Guise, France; the humanity of Sir Titus Salt, that brought into existence the industrial town of Saltaire, in Yorkshire, England; and the broad Christian inspiration which resulted in the founding of Pullman have given the world, in the four greatest manufacturing countries, four magnificent schemes for the uplifting of a large portion of the people seeking a living through wages.

In all the countries named there have been many other experiments worth a careful study of all interested in social advancement. This is thoroughly true of our own country, and we might call attention with justice to the success at Peace Dale, R. I., at St. Johnsbury, Vt., at Willimantic, and Manchester, Conn., and at other points. But, for comprehensive plan, for careful recognition of all the strong points, and the fullest anticipation of all weak features, for the beauty of the executed plan, for the financial and social success thereof, Pullman city, as the outgrowth of the newest of the great manufacturing nations, stands at the head.

#### HISTORY.

The Commissioners had no opportunity to consult Mr. Pullman personally, he being away at the time of our investigation, and we have, therefore, taken such statements of fact as appear in our report, from documents already before the public.

Pullman's Palace Car Company was founded in 1867 with a capital of \$1,000,000; its extended operations have been conducted on the strictest business principles, and have, from time to time, necessitated increases in its capital stock, until now its capital represents nearly \$16,000,000, and \$2,000,000 in debenture bonds; its palace cars are operated on upward of 70,000 miles of railway in America and Europe. Its capital stock has been paid in dollar for dollar, and no watering processes have ever entered into the financial operations of the company. Its dividends have been regular and ample, and its affairs conducted on the same scientific basis that has characterized the construction of the works.

Four or five years ago Mr. Pullman determined to bring the greater portion of the works of the company into one locality. To accomplish this he must leave the great cities for many reasons, and yet it was essential that a site should be selected where communication could be had with the whole country, and near some metropolitan place like Chicago. He wished above all things to remove his workmen from the close quarters of a great city, and give them the healthful benefits of good air, good drainage, and good water, and where they would be free, so far as it would lie in the power of management to keep them free, from the many seductive influences of a great town.

He was fortunate in securing about 4,000 acres of land on the Illinois Central Road, a dozen miles to the south of Chicago. This land was located in the town of Hyde Park, and here he built his city.

#### THE SITE.

The city is situated upon the west shore of Lake Calumet, which is a shallow body of water three and a half miles long by a mile and a half in width. This lake drains into Lake Michigan through the Calumet river, Lake Michigan being not more than three miles distant. The site of that portion of the city now fully covered with buildings is from eight to fourteen feet above the level of Lake Calumet. The soil is a drift deposit of tough blue clay ninety feet in depth, resting upon lime rock. The land gradually rises to the north and west to an elevation of twenty-five feet above Lake Calumet, this lake being usually from three to five inches higher than Lake Michigan. There is no land of a marshy character in this neighborhood. The bottom of Lake Calumet is of hard blue clay, from which the best cream-colored brick are made. It was deemed unwise to permit any sewage to flow into Lake Calumet, so the system of drainage adopted is what is known as the *separate* one.

On the 25th of May, 1880, ground was first broken for the building of the Palace Car Works, and the City of Pullman. The land was an open and not over-promising prairie.

The first efforts were directed toward the scientific drainage of the future town. In old cities drainage follows construction, for the average village or city is but the haphazard conglomeration of odds and ends in the way of buildings, whose inartistic forms, defective construction, and inconvenient arrangements are supplemented by such drainage and sewerage systems as can be utilized. It is rare, of course, in the nature of things that drainage is thought of at the outset. It comes after a lapse of time when the soil has become charged with the accumulated filth of years, and all attempts at sewerage are more or less unsatisfactory.

The City of Pullman, on the other hand, has been built scientifically in every part, and is exceptional in respect to drainage and sewerage if in no other regard. For here the drainage preceded the population, and the soil is now as free from organic contamination as when it formed a portion of the open prairie. Every house has been constructed from approved plans, and under the supervision of competent builders and engineers.

The perfection of the site selected was accomplished through surface drainage, and the construction of deep sewers.

These should be described as a matter of logical order before anything is said of the buildings of the town.

#### SURFACE DRAINAGE.

The atmospheric water goes from roofs and streets through one system of pipes and sewers directly into Lake Calumet. Brick mains from three to six feet in diameter are built in alternate streets running east and west, the intermediate streets being summits from which the surface water flows into the main sewers. The fall is sufficient to secure good cellars for all the dwellings in the city, the drain pipes leading from cellars being at least eighteen inches below the cellar bottoms. A two-foot cobble-stone gutter borders



either side of every street, leading at short intervals of 150 feet into catch-basins, these basins connecting either with the lateral or the main sewers. This system of surface drainage is calculated to carry easily an amount of water that would cover to the depth of one and one-half inches the entire area drained. For the drainage from lots six inch pipe is used, while for block drainage and for laterals pipe varying from nine to eighteen inches in diameter is used. The parks and play grounds are all thoroughly drained. The amount of vitrified pipe already laid in the town is as follows:

Of 18 inch pipe.....	4,500 feet.
Of 15 inch pipe.....	6,500 feet
Of 12 inch pipe.....	6,600 feet.
Of 9 inch pipe.....	16,000 feet.

There are also several miles of six inch pipe. In addition to the piping of diameters from six to eighteen inches, the necessary quantity of four inch tile has been used to carry water from cellars and down-spouts to the laterals from brick houses for 1,476 families. The lands surrounding the town are well-drained by ditches.

#### DEEP SEWERS.

In every other street running east and west, and lying between the streets having brick mains for surface drainage, there are sewers made with vitrified pipe which lead to a large reservoir under the water tower, entering it at sixteen feet below the surface of the ground. These glazed pipe sewers are from six to eighteen inches in diameter and constitute another and separate system of drains which carries the sewage proper, by gravity, from houses to the reservoir. This reservoir has a capacity of 300,000 gallons, and the sewage is pumped from it as fast as received and before sufficient time elapses for fermentation to take place. The ventilation of this reservoir is perfect. Flues run from it to the top of the tower above it, and a flue leads from it to the large chimney which takes off the smoke from the fires under the boilers of the Corliss engine. The sewage is sent to the model farm through a twenty inch iron main, and, at the farm end of this pipe, it goes into a receiving tank, which contains a screen placed in a vertical position through which substances that are more than half an inch in diameter cannot pass. The pressure of the sewage upon the tile piping in the farm seldom, if ever, exceeds ten pounds to the square inch, provision being made at the pumping station and at the farm to relieve the pipes from greater pressure. About 100 gallons of sewage are now pumped daily for each person of the population. This seems a large amount, but when it is remembered that every tenement is provided with the best of closets and sinks, and that the water taps are all inside the houses, it will be seen that a large amount of sewage per capita is unavoidable.

#### THE MODEL FARM.

About 140 acres of land have been thoroughly underdrained and piped for the reception of sewage with which these acres are irrigated by means of

hose. Hydrants are placed at proper intervals so that the distribution can be easily effected. There is nothing offensive about this work, nor can one detect noxious odors at the pumping station or at the farm. All organic matter in the sewage is at once taken up by the soil and the growing vegetation, and the water, making from 100 to 500 parts of the sewage, runs off through the under-drains to ditches, which carry the filtered waters into Lake Calumet. Where the sewage water leaves the drains it is as clear and sparkling as spring water, and laborers often drink it. One acre of land will take care of the sewage made by 100 persons. The population is now only 8,500, but there is land enough already prepared to receive the sewage made by a population of 15,000. The pumps now at the pumping station can handle 5,000,000 gallons a day if necessary, and the main to the farm could carry the sewage for a population of 50,000. These pumps are now required to handle about a million gallons a day, coming from shops, homes, and public buildings. All waste products at Pullman are carefully utilized, being transformed by vital chemistry into luxuriant vegetable forms.

This farm is now a source of profit, and its products are sold in the markets of the country from Boston to New Orleans.

#### THE BUILDINGS.

With the scientific drainage and sewage system, in the construction of which nearly one million dollars (\$1,000,000) were expended underneath the ground before anything appeared on its surface, came the erection of the works and the dwellings of the town. It is sufficient to say that the same care exercised in guarding the future health of the place has been bestowed in the erection of works and dwellings.

In the center stands the water tower which takes a supply of water from Lake Michigan and distributes it through the town. Underneath this immense tower is the reservoir into which flows the sub-sewage of the place as described. Around the tower are located the principal works; to the south and north of the works, chiefly to the south, are the dwellings.

The appearance from the railroad as one approaches from Chicago is effective. The neat station; the water tower and the works in front; the park and artificial lakes intervening; to the right a picturesque hotel backed by pretty dwellings; the arcade containing stores, library, theatre, offices, etc.; still further to the right, and beyond, a church which fits into the landscape with artistic effect.

The laying out of the whole town has been under the guidance of skilled architects aided by civil engineers and landscape gardeners.

The dwellings present a great variety of architecture, yet give harmonious effects. They are not built like the tenement houses of ordinary manufacturing towns where sameness kills beauty and makes the surroundings tame, but a successful effort has been made to give diversity to architectural design.

The streets are wide, well built, and wherever possible parked. The



lawns are kept in order by the company; the shade trees are cared for, and all the police work is done under competent supervision.

Every care has been taken to secure convenience inside as well as outside the dwellings. The cheapest tenement is supplied with gas and water and garbage outlets. The housekeeper throws the garbage into a specified receptacle and has no more care of it.

The testimony of every woman we met was that housekeeping was rendered far more easy in Pullman than in any other place. In fact the women were in love with the place; its purity of air, cleanliness of houses and streets, and lessened household burdens, are advantages over their former residences which brought out the heartiest expressions of approval. The women of the comparatively poor bear most of the drudgery of life, enjoy the least of pleasures, and are most narrowly circumscribed, with little change in cares, scenes, or social surroundings. Pullman has really wrought a greater change for the women than for any other class of its dwellers.

All the works and shops are kept in the neatest possible order. The planning rooms are as free from dust as the street, blowers and exhaust fans taking away all shavings, dust, and debris, as fast as it accumulates. One notices everywhere, the endeavor to save time and pace in the construction of goods. As an illustration of the science which enters into manufacture we need only cite the shops where freight cars are built. All the timber is taken in in lengths at one end and is never turned around until it finds its proper place in a completed freight car, being carried constantly from one process to another in a direct line from its reception at one end, to its utilization at the other.

There are 1,520 brick tenements in houses and flats. The frontage of all the buildings extends along five miles of solid paved streets, and there are fourteen miles of railroad track laid for the use of those in the shops and the town. The buildings are of brick or stone.

#### INDUSTRIES.

The industries carried on, and for which the city was built comprise the manufacture of Pullman Palace cars, and all classes of passenger and freight cars.

The Pullman car-wheel works, the Chicago Drop Forge Company's works, the Spanish-American curled hair factory, the Pullman Iron and Steel Company for the manufacture of iron and steel and of railroad spikes, and other works which are collateral to the principal business of the place, are located here.

The Allen paper car-wheel works, and the Union Foundry for making car wheels, car castings and architectural and general castings, have been conveniently located at Pullman.

Among the manufacturers of the place should be mentioned that of brick. The Pullman Company's yards turned out the past year about twenty millions of brick. The ice industry is also growing in importance. There is

also an extensive carpenter shop, by means of which the erection of dwellings, public buildings, etc., here and in other places may contribute to the industries of Pullman.

Gradually the manufacture of all the parts necessary to the construction of cars in every condition is being added to the enterprise of the town. A laundry is being established for cleansing the vast quantities of linen used in the palace car service, which will give employment to women; it is the policy of the company to encourage the employment of women and young persons.

#### POPULATION.

The rapid growth of Pullman is exhibited in the following tabular statement of the several enumerations of the population that have been made:

TABLE OF NINE ENUMERATIONS.

DATES OF TAKING THE CENSUS.	Families and Households.	Number of men.	Number of women.	Number of children.	Total population.
January 1, 1881 .....	1 family .....	1	2	1	4
March 1, 1881 .....	8 families.....	31	14	12	57
June 1, 1881 .....	102 families.....	357	119	178	654
February 1, 1882 .....	321 households .....	1,168	445	471	2,084
March 8, 1883 .....	705 households .....	1,956	984	1,572	4,512
August 15, 1883 .....	910 households .....	2,878	1,939	1,906	5,823
November 20, 1883 .....	1,048 households .....	3,128	1,388	2,169	6,685
September 4, 1884 .....	1,295 households .....	3,817	1,773	2,613	8,203
September 30, 1884 .....	1,361 households .....	3,945	1,845	2,723	8,513

Of the population on September 30, 1884, 4,205 were born in the United States, 527 in the Canadas, 425 in England, 596 in Ireland, 170 in Scotland, 85 in France, 953 in Germany, 297 in Norway, 851 in Sweden, 212 in Denmark, 55 in Italy, 137 in other countries, such as Holland, Greece, and in Asia and Africa.

Omitting fractions, the religious preferences of the population may be expressed as follows:

Presbyterian.....	8 per cent.
Congregational .....	2 per cent.
Baptist .....	4 per cent.
Methodist .....	8 per cent.
Lutheran .....	24 per cent.
Episcopalian.....	11 per cent.
Catholic .....	27 per cent.
Dutch Reformed.....	2 per cent.
Universalist.....	1 per cent.
Swedenborgian .....	1 per cent.



The remaining 12 per cent of the population includes those of other beliefs but who expressed no religious preferences.

There are 75 pianos in the city, and the private libraries contain 30,000 volumes, while newspapers and magazines are freely taken in Pullman.

Of the 3,945 men here only about 900 are registered as voters (October 29, 1884), and this is probably three fourths of the voters residing in this city.

Nearly all the men accounted for on the population statistics are employed in the works of the company. Of course there are a few tradesmen and others. The total number employed in the works is about 4,000. But this includes some who live in surrounding villages or who come down from Chicago.

#### WAGES, RENTS, AND LIVING EXPENSES.

The wages paid in the works at Pullman are somewhat higher than those paid for like work in other places. They have been adjusted on the hour basis, and from such basis piece wages have been arranged. The attempt to justly equalize and adjust wages has sometimes caused complaint amongst the workmen, and in one instance a strike of small moment. The strike took place among the freight-car builders, who formerly received \$18 for the construction of a car. Through a readjustment of the forces necessary to the preparation of the material of which the car was built, the price per car was reduced to \$12; four men being able to build a car in eight hours, the result being the wage of \$3 per man for eight hours work. Under this arrangement there was no cessation, no breaks in time; in the old arrangement, when \$18 per car was paid, the men made long waits for material and did not earn any more, and often not as much, as at the present price per car and with steady employment. But the first effect of the rearrangement of forces and consequent readjustment of prices was a strike of short duration. With this exception no strikes have occurred at Pullman city, and so far as we could learn there was no complaint regarding wages paid.

In the early days of the city, more men naturally were borne on the rolls than were actually necessary. In bringing the force employed to an economic basis, under which one man should be paid for one man's work, and only one man employed where only one was necessary, discharges or transfers took place, and this caused some complaint, but as the motto of Pullman is "work for all, and all to work," that sentiment soon found lodgment and complaint ceased.

It costs quite as much to live in Pullman as in any other locality with which it can be reasonably compared. A two-room tenement in a second-story flat, but having all the conveniences of water and gas, and for sewage and garbage, rents for \$4 per month, and a three-room tenement, similarly situated, for \$4.50 per month. Two-room flats in small houses, large enough to accommodate five families, rent all the way from \$5 to \$8.50 per month, while two, three, and four-room tenements in large blocks rent from \$6.50 to \$10 per month. Four-room tenements on the first, second, and third floors of three-story flats, rent from \$11 to \$13.50 per month, while four and

five-room tenements in two-story flats may be had for \$14 and \$15 per month. Single five-room cottages rent for from \$16 to \$19 per month, while single houses of from six to nine rooms vary from \$22 to \$100 per month.

The average monthly rental per room in the whole city of 1,520 houses, having 6,485 rooms, is \$3.30. In the manufacturing towns of Massachusetts, the average rental per room is \$2.86 per month.

The rentals at Pullman are a little higher for the same number of rooms than in Chicago, but in Chicago the tenement would be in a narrow street or alley, while in Pullman it is on a broad avenue where no garbage is allowed to collect, where all houses have a back street entrance, where the sewage arrives at a farm in three hours' time from its being deposited, and where beauty, order, and cleanliness prevail, and fresh air abounds.

There are no taxes to be paid other than personal, and, when all the advantages which a tenant has at Pullman are taken into consideration as compared with his disadvantages in other places, the rents are in reality much lower.

The tenant is under no restrictions beyond those ordinarily contained in a lease, except that he must leave his tenement at ten days' notice, or he can give the same notice and quit. This short limitation has been established in order that no liquor saloons, objectionable houses, or anything likely to disturb the morale of the place, can become fastened on the community.

All the houses in Pullman city are owned by the company. This policy has been considered the best in the early years of the city in order that a foundation may be securely laid for a community of good habits and good order.

The men are employed without restriction. There are no conditions laid upon their freedom; they are paid fortnightly, and they expend their wages when and where they see fit, their rent being charged against their wages. This, at first, caused some complaint, but the system is now generally liked, for when wages are paid there is no bother about rent bills, and the wife and the children know that the home is secure. Repairs, if due to the carelessness or negligence of the tenant, are made by the company at the lowest possible expense, and charged against the tenant. Of course the company, like all landlords, expects to keep the houses in tenantable condition.

There has been some friction in this matter, but as the policy of the company becomes more generally and better understood, the complaint ceases.

#### SCHOOLS, CHURCHES, AMUSEMENTS, ETC.

The company has erected a very fine school building having fourteen commodious rooms, which now contain about 900 pupils. The schools are under the charge of the school authorities of Hyde Park. They are in a prosperous condition and will accommodate the school population.

There are two or three religious societies, and the beautiful church which has been built by the company, while occupied by any sect or by anybody



that wishes to hold meetings there, is awaiting the occupancy of some society that chooses to lease it at a fair rental.

In the arcade is to be found a library handsomely fitted and well stocked with books.

The company have also provided a gymnasium, an amphitheatre for games, base ball grounds, and in the arcade is one of the most æsthetic theatres in the country.

All these influences are gradually elevating the society of Pullman city, and their influence is largely felt.

There is but little crime or drunkenness in Pullman, and one policeman an officer appointed by the authorities of Hyde Park, constitutes the police force for 8,500 people. In two years but 15 arrests have been made; there is no general beer drinking, for there are no liquor saloons in the town. The hotels provides its guests with liquors, but under orderly restrictions.

There is no pauperism; two or three families, where the head has been taken away, or where some accident or misfortune had rendered it necessary, have been aided; but pauperism, as such, does not exist at Pullman.

#### HEALTH, ACCIDENTS, ETC.

In a paper entitled "Pullman From a State Medicine Point of View," by Oscar C. De Wolf, M. D., Commissioner of Health, Chicago, read before the American Public Health Association at Detroit, at the session of November, 1883, we find the following significant statements:

"The town has now 7,500 inhabitants, and its average annual population has been 5,000. During the two years of its existence 69 persons died, its death-rate being therefore 6.9 per 1,000. The death-rate of Hyde Park (a village of which Pullman is legally a part, and which includes much rural territory) is 15 per 1,000. The causes of death were:

Zymotic diseases.....	23
Constitutional diseases.....	3
Local diseases.....	22
Development diseases.....	3
Violence.....	17
Unknown.....	1
	<hr/> 69

The large percentage of deaths by violence is due to the fact that Pullman is the center of numerous railroads, and to the casualties attendant on its manufactures. The deaths under five years of age were thirty. Of these there died from zymotic diseases twelve, of which there died from

Cholera infantum.....	6
Diphtheria.....	3
Scarlatina.....	2
(Toy pistol) Septicæmia.....	1
	<hr/> 12

This favorable showing speaks for itself."

Dr. De Wolf's statement had reference to the two earlier years of the existence of Pullman. The last year presents as good a record.

From Nov. 1st, 1883, to Nov. 1st, 1884, there were 53 deaths in Pullman. Hence there was an average of 7.599 deaths per year for every 1,000 population. For three years Pullman has had this low death-rate. The average for American cities is over three times this number, and the average annual death-rate of the world is 32 out of every 1,000 of population. The average death-rate in the City of Mexico is 56 per thousand, or eight times the rate in Pullman. Of these 53 deaths, 2 were of persons over 50 years of age, 2 of persons between 40 and 50, 2 of persons between 30 and 40, 4 of persons between 20 and 30, 3 of persons between 10 and 20, none of persons between 5 and 10. Eleven were of children over, and under 5, while 28, or more than one half the deaths were children under one year of age. The healthful conditions here are unequalled by those in any city of the world. The lowness of the death-rate is remarkable. With one quarter of the physicians that ordinarily administer to a population of this size, Pullman has only a little more than one quarter of the deaths usual in the same number of people.

The company has adopted a very broad and liberal policy relative to compensation for accidents received during or by means of work in the shops. At present it is contemplated to secure the insurance of all the employes of the company against accidents by the men taking out policies in worthy companies, from which insurance, in case of disability, they would receive \$1 per day, Pullman's Palace Car Company guaranteeing to pay an additional \$1 per day. This arrangement is perfectly just and must result in putting the men on the best possible basis as regards compensation for accidents. It is generous on the part of the company employing them because it is not by law liable for damages in case of accident.

#### MORAL INFLUENCE.

Dr. De Wolf in the report already cited, in speaking of the influence of Pullman city on its inhabitants says:

The change in population from emigration amounts to one per cent *per annum*. These emigrants go forth educated in a way that entitles them to be called sanitary missionaries. There are no special requirements to induce change in the habits of people taking up residence in Pullman, but it is a matter of common observation that insanitary habits—such as making yard cesspools, etc.—soon vanish under the silent but powerful influence of public opinion as shown in the habits of the neighbors. Families with dirty, broken furniture soon find it convenient to obtain furniture more in accord with their surroundings. Men who are accustomed to lounge on their front stoops, smoking pipes, and in dirty shirt-sleeves, soon dress and act more in accordance with the requirements of society. All this is accomplished by the silent educational influence of their surroundings. There are no saloons in the town, and one great element of debasement is thus avoided.



Dr. De Wolf has spoken the truth, and another year's experience at Pullman has intensified the force of all he has said.

When Pullman City was first founded, many families came there who had been in the habit of living in a filthy, shiftless way. They came from tenements that were not neat, and that had no pleasant surroundings. Their presence in the new city was like a rubbish heap in a garden—out of place, and unseemly. One may contemplate the feelings of Mr. Pullman on witnessing these evidences of unappreciation of all the beauty he brought into existence, and it would have been natural for him and for his coadjutors to have indulged in some fault-finding.

On the other hand, the untidy families were left to themselves. As they walked about the streets of Pullman city and witnessed everywhere orderly ways, well kept lawns, tidy dwellings, clean workshops, and could turn nowhere without meeting order, they naturally began to make comparisons, and such comparisons have resulted in setting their own houses to rights. This is the influence of order and cleanliness everywhere. So the moral influence of Pullman city is an ever present lesson to every family that takes up its abode there. This perfect order and the cleanliness which comes of it is often felt as a restraint upon those who have been brought up under disorder and in uncleanness, and sometimes causes a sigh for the looser ways and the consequent looser morals of other communities. Such people do not find the air of Pullman City congenial, and no obstacle is thrown in their way should they desire to leave.

These considerations make it easy to see how the company secures the best mechanics.

#### GENERAL CONSIDERATIONS.

We have given the history and the facts relating to Pullman city. There is a deeper side which requires a closer study.

The principle on which Pullman city is founded, and on which its success largely depends, is that in all industrial enterprises business should be so conducted and arranged as to be profitable to both classes, labor and capital.

Mr. Pullman does not believe that a great manufacturing concern can meet with the highest economic and moral success where the profit is unduly large to capital, with no corresponding benefit to labor. The mutual benefit which comes from well adjusted forces is to his mind what brings the best success.

On the other hand, he has made no claim to being a philanthropist; the sentiment prevails in his city that true philanthropy is based on business principles and should net a fair return for efforts made.

Promiscuous charity has no place in the establishment of Pullman. Personally, the president of the company makes the favorable conditions, and, having made them, he then concerns himself chiefly in supplying his people with steady employment. The art interests, the moral interests, the social and the human interests, with favorable conditions supplied, take most ex-

cellent care of themselves. Incidentally his competent staff have an eye to all interests.

Mr. Pullman is no dreamer; he has studied the plans of socialists and reformers and the schemes of philosophers for the benefit of humanity.

Beginning at the bottom rung of the ladder and therefore familiar with the wants and aspirations of the workers of society he has risen by the force of his own character and genius to his present position; he does not care to leave the world and look back upon his action and see that he has only offered a glass of water to the sufferer by the wayside, but he wishes to feel that he has furnished a desert with wells of living water, that all may come and drink through all time. So he commenced with the foundation idea of furnishing his workmen with model homes, and supplying them with abundant work with good wages, feeling that simply better conditions would make better men and his city become a permanent benefaction.

He saw great amounts of money being used in speculative schemes, in stock operations, and in all the questionable ways which men take to increase their capital. He saw the energy, the enthusiasm, and the ability which entered into such operations. He could see no reason why all these elements could not be diverted into channels whereby the public should be the gainer and not the loser by great money operations. If capital could be invested in great industrial schemes like Pullman instead of in stock operations, but in such a way as to net a handsome profit to capital and thereby attract it, then not only would capital be safely, securely, and profitably invested, but it would bring even returns without the feverishness of the other method, and the great benefits which would come to the workman, and thus directly to society itself, would be a positive and absolute gain.

Mr. Pullman's plans did not stop with the founding of an industrial city, but they contemplated establishing alongside great mechanical works where all the science of mechanics is practically applied in every day labor, technical schools where the young might learn the theory and see the application of great mechanical powers. There could not be a better location in the whole country for the highest development of mechanical skill. With technical schools successfully established Mr. Pullman saw far enough in the future to contemplate a great university.

The great advantages of the geographical location of Pullman city warranted his vast plan; being the centre of the United States commercially, and not far from the centre geographically, he saw no reason why, with scientific works established and with well equipped technical schools, Pullman city should not only teach the nation the way to build up a magnificent class of workmen living under happy and moral conditions, but furnish the country with the most skillful foreman and leading mechanics. To accomplish successfully what Mr. Pullman has undertaken is to carry the world, so far as such men can reach it, to a higher level in civilization.

To do this it was necessary for him to open new avenues for the investment of capital, investments, which as we have said, not only return ample interest in the form of money dividends, but make a grander return in the form of happy homes, and happy hearts. Men must grapple with such en-



terprises in the belief that the life of the laborer should be something more than a weary round of hard toil; and in the belief that in aiding him to help himself and become a better man, a better brother, a better father, and a better citizen, they are rendering him the best possible service, and in the belief that individual charity, that is, merely giving a man something, often does more harm than good.

The general management at Pullman of course partakes of the sentiment of its founder, a broad, comprehensive humanitarian. As we have said, without restrictions upon labor, but, so far as we could see, always with justice; for instance, discharges are made with a view to being just; if one of two men must be discharged, other things being equal, the single man must leave and allow the married man to remain; or, if one of two men must be discharged, and each has a family, and one resides away from Pullman and the other at Pullman, the resident is to be preferred.

All such matters give rise to complaints through superficial consideration, but the even handed justice which prevails is shown by an examination of all sides of the question.

After very careful investigation and the study of Pullman city from the standpoint of the manager, and that of the laborer, the mechanic, the physician, the priest, and from all points of view that we could muster, the question naturally arose, as it might arise in all men's minds who examine such institutions, what are the weak points in the plan? Superficially, we could see at once that the workman had no status as an owner of his home, but we could see that in the early years of Pullman city, if he had such a status it might be the means of his ruin financially. The company owns everything, manages everything; the employes are tenants of the company. This feature will be for some time longer the chief strength of the place, but in this strength lies its weakness. This feature is its strength so long as the industries of Pullman city belong to one great branch, the manufacture of one thing, or the things auxiliary to that manufacture. Now, should the industry of car building collapse or stagnate to any degree, the tenant employe is at liberty to remove at once; he has but to give ten days' notice to vacate his tenancy. He is free to take up his abode where he chooses, without the fear or the fact of any real property going down on his hands. But Mr. Pullman and his company have contemplated this very state of affairs, and are doing all in their power to bring in a diversity of manufactures so that if one kind of goods are not produced another will be.

The industrial operations of the place, through Mr. Pullman's exertions, are being extended to the erection of houses, public works, and public buildings. The manufacture of brick, the capacity of all the works to turn out finish, and all the wood materials of buildings, and the other features mentioned under "Industries," have given the place a diversity of employment and of industry, which is leading it into strong and permanent industrial conditions. The result of these conditions, should the railroads of the country operate their own palace cars, will preserve the industrial integrity of Pullman city.

With these advantages, or, when these advantages come, the tenant employe at Pullman may become the owner of his home. For this purpose a large tract of land has been set aside, and when the time comes will be sold in small lots to the workman, his house built at cost, and he allowed to pay for it on easy terms; then, what would now be a weakness at Pullman will become its strength, and the plan of the city which has been projected on the basis of a population of 100,000 will meet its great success, and these two weak points, the lack of diversified industry and the lack of home ownership, will no longer exist.

To enable this feature of the purchase of homes to be carried out, a savings bank has been established, having now deposits to the amount of about \$100,000. This money is held subject to immediate call whenever the plans are perfected for the purchase of homes, and will be used in loans to the workingman. It is invested on call so as to be perfectly available whenever wanted. These deposits are entirely the savings of the workmen of Pullman, and made during the period in which the bank has existed.

The Pullman establishment must, we think, impress the most casual observer as rare enough to be remarkable, and good enough to be commendable. Even superficially it presents a novelty and attractiveness which in themselves command approbation, but the closer scrutiny which we were permitted to give it developed the fact that its excellence was by no means superficial, that it is not only as good as it looks, but better, and that every promise has been made more than good.

Physically, it is better for the reason that its underground system is as complete and costly as the improvements upon the surface, so that there is not only a justification for the fair exterior, but a guarantee of its permanence, and of the welfare of the workers and dwellers in the town.

We found the *morale* of the place even better than we expected. Merely external appearances may not clearly indicate social conditions nor the motives and the policy of the management in such an establishment, yet, if the Commissioners did not find that the whole plan was conceived and executed in a spirit of broad and unostentatious philanthropy, our observations and conclusions were at fault throughout. We must regard our investigation as having generously confirmed the good impressions of all those who are predisposed in favor of the Pullman enterprise, and it must disarm those who may have felt some degree of prejudice against it.

In order to arrive at any just estimate of the credit due the projectors of the industrial community under investigation, we were in duty bound to recognize the fact that the company merely proposed to manufacture railway cars for profit; no obligation rested upon them to enter upon any scheme of general beneficence or to jeopardize their financial interests by a costly experiment in the interests of their employes. For the initial disposition in this latter direction, however, they and all men like them deserve praise and encouragement. Having determined that such an experiment might justify itself in a commercial sense as well as on humanitarian grounds, it was still in their option to provide merely comfortable tenements for their men, plain structures for shops, and ordinary facilities for



cleanliness and sanitation, and for these even they would have deserved well, and yet they go much broader and deeper, and decide upon the most perfect methods of drainage for which their site afforded no facilities, and for system of gas and water distribution to every house and apartment. They construct permanent streets and an elaborate system of drainage. Not content with plain buildings they exhaust the architect's skill in designing the greatest variety of form for dwellings suited in size and apertures to all grades of employes; they erect costly and beautiful buildings for public uses, the church, library, and market house, public halls, theatre, savings bank, and stores; they furnish a park for field sports, amphitheatre for games, and every facility for recreation, physical and mental; and the place is neatly and attractively ornamented with lawns, shade trees, artificial lakes, fountains and flowers. In brief, they stop at nothing short of a model establishment constructed upon plans which are the result of the widest experience, and the best observation for which modern life affords opportunities.

While all this is done at a considerable outlay of money, which, to the ordinary manufacturer, might seem reckless, and, commercially, at least, unjustifiable, the conviction grew upon us, as the details of this magnificent work became understood, that although no such motive has ever been proclaimed there was really a noble and broad inspiration in the original conception of the undertaking beyond that of merely making the greatest possible amount of money, beyond that of mere personal glorification; an inspiration looking to an actual elevation of the standard of life among the working people who might be fortunate enough to be identified with it. Nothing could be more laudable from our point of view than this, and the Pullman company deserves well of their employes and of all men, not only for what they have accomplished for themselves and their own, but for the conspicuous example they have given the world of the nobler uses of great wealth. It is our view of the case moreover that even if they had attempted and accomplished much less, or even had made great mistakes, they would still deserve commendation for their manifest disposition to recognize the welfare of their employes as of the first concern to themselves. To the growth of such a sentiment among employers, and the practice of it in whatever degree circumstances may permit in smaller establishments, must we look for the real alleviation of the burdens which labor imposes upon those who live by it.

As to the question of earnings in the various grades of employment, and the cost of living within as compared with that outside the community, we are not, as we have already indicated, disposed to insist that the one be greater, and the other less, than elsewhere in order to demonstrate the advantage of the place. We should rather say that were there to be an actual money balance, or not, at the end of the year in favor of the average workman at Pullman, there must be a balance in his favor in all those things which go to make up comfortable and healthful living, in opportunities for the education of children, and their protection from dangerous influences;

in the incentives to self-respect and self-culture, and in all the social, moral, and sanitary influences which surround the life of every one at Pullman.

If the workman at Pullman lives in a "gilded cage," we must congratulate him on its being so handsomely gilded; the average workman does not have his cage gilded. That there is any cage or imprisonment about it is not true, save in the sense that all men are circumscribed by the conditions with which they surround themselves, and imprisoned by the daily duties of life.

It is quite possible that the Pullman community has been organized and developed thus far on a plan as comprehensive as commercial prudence permits, but when the experiment as now outlined shall have become an established success, it would be gratifying to see certain additional features considered, and if feasible introduced for practical test.

To make Pullman the ideal establishment of the theorists, in addition to the option of purchasing homes and the strength which must come from diversified industry, one would naturally expect that when this enterprise shall have survived adversity as well as prosperity, and the wise and beneficent policy now being tested shall have borne its fruit in a permanent community of intelligent and prosperous workingmen, it may then be found possible to advance them to a share of the profits of the business itself. However this may be, we think we are justified in the belief that, as long as the present management or the spirit of the present management exists, the beneficent features of this most progressive industrial establishment will be extended as rapidly as circumstances may ripen for them.

Let the model manufactory and the industrial community of Pullman city be commended as they deserve for whatever they are or what they promise to be. Let them be held up to the manufacturers and employers of men throughout the country as worthy of their emulation. Let Mr. Pullman and his coadjutors be assured of the good wishes of all those who seek the advancement of their kind.

CARROLL D. WRIGHT,

*Chief, Massachusetts Bureau of Statistics of Labor.*

JOEL B. McCAMANT,

*Chief, Pennsylvania Bureau of Industrial Statistics.*

HENRY LUSKEY,

*Commissioner, Ohio Bureau of Labor Statistics.*

JAMES BISHOP,

*Chief, New Jersey Bureau of Statistics of Labor and Industries.*

H. A. NEWMAN,

*Commissioner, Missouri Bureau of Labor Statistics and Inspection.*

JOHN S. LORD,

*Secretary, Illinois Bureau of Statistics.*

WM. A. PEELE, JR.,

*Chief, Indiana Bureau of Statistics.*



CHAS. F. PECK,

*Commissioner, New York Bureau of Labor Statistics.*

JOHN S. ENOS,

*Commissioner, California Bureau of Labor Statistics.*

JOHN DEVLIN,

*Deputy Commissioner, Michigan Bureau of Labor and Industrial Statistics.*

FRANK A. FLOWER,

*Commissioner, Wisconsin Bureau of Statistics.*

E. R. HUTCHINS,

*Commissioner, Iowa Bureau of Labor Statistics.*

THOS. C. WEEKS,

*Chief, Maryland Bureau of Statistics of Labor.*

H. A. NEWMAN,

*President of Convention.*

HENRY LUSKEY,

*Secretary.*

## PART VII.

### CONVICT LABOR.

The employment of criminals in the Penitentiary at Ft. Madison, under contract, is a matter that is arousing very great antagonism on the part of the working men and manufacturers alike throughout the State. This feeling regarding contract convict labor is not confined to Iowa. The same sentiment prevails wherever the system exists, and in those States where once it has existed and is now abolished, such abolishment has been largely the result of this sentiment. This State has been and still is a party to three contracts, the duration of which extends to 1890 and 1891. They are as follows:

#### CONTRACT WITH FORT MADISON CHAIR COMPANY, APRIL 2, 1880.

By articles of agreement entered into this 12th day of April, A. D. 1880, between E. C. McMillan, Warden of the Iowa Penitentiary at Ft. Madison, Iowa, and acting for the State of Iowa, party of the first part, and the Fort Madison Chair Company of Fort Madison, Iowa, party of the second part.

WHEREAS, Certain proposals have been made by the party of the second part for the convict labor hereinafter mentioned, which proposals have been accepted by the party of the first part for and in the name of the State of Iowa; now, therefore, be it agreed:

*First*—That the party of the first part doth hereby let and hire to the party of the second part for the term of nine years from the first day of May, 1880, the labor and service of fifty convicts; also, for the term of ten years from the first day of May, 1880, the labor and services of fifty additional convicts, all of said one hundred convicts now or hereafter to be confined in the Iowa State Penitentiary at Fort Madison, Iowa (if so many there may be under the specifications hereinafter contained), to be employed by said party of the second part, at the following trades and occupations, viz.: manufacturing chair furniture and coffins.

*Second*—It is agreed by the party of the first part, that for the use of labor



during the term of this lease or any part thereof, the party of the second part shall use the following shops, now situated in said prison yard, viz.: numbers one, two, sixteen and fifteen, the latter containing two rooms and the addition to the south end of shop number fifteen, formerly used as a cook-room. All the ground to the width of twelve feet on the west side of shop number one, at present occupied by the said Fort Madison Chair Company, and containing two dry-kilns, and boiler-house, built and owned by them. The east half of the west dry-kiln situated north of shop number seven, one-quarter of cellar under shop number one, at south end of same, and now partly occupied by the party of the second part for foundations to engine, etc. About twenty-eight hundred square feet of the cellar under shop number fifteen, commencing at the north wall of the cellar and extending the full width of the cellar to the south wall (the already existing division wall), and grounds outside the prison walls, commencing sixty feet north of northeast corner of the grounds, leased to the Iowa Farming Tool Company, running east one hundred feet, north one hundred and thirty feet, thence west one hundred feet, thence south one hundred and thirty-five feet to place of beginning.

It is further agreed and understood that for said labor the party of the second part shall pay at the rate of forty-three (43) cents per day until October first (Oct. 1st) 1882, and at the rate of forty-five (45) cents per day after October 1, 1882, until the expiration of this contract, for each convict actually employed.

*Third*—The party of the first part further agrees that the said Fort Madison Chair Company shall have the privilege of going to and from said shops at all times to instruct said convicts in said trades, and carry in and out all materials and manufactured articles, or they may employ to do the same such person or persons as the Warden of the Penitentiary may approve; said contractors and employes being, whilst within the walls of said prison yard, subject to all the rules and regulations now or hereafter established by the proper State authorities.

*Fourth*—It is further agreed that the party of the second part shall have assigned to it, as far as practicable, convicts skilled in the work to be done under this contract, and no convict whose term of service is less than one year shall be assigned on this contract.

*Fifth*—The convicts so to be employed shall be men who are capable of performing a reasonable day's work. In case of any disagreement between the Warden of the Penitentiary and the party of the second part in regard to physical ability of any convict, the same shall be conclusively determined by the physician of the Penitentiary.

*Sixth*—The convicts shall be guarded and kept in good discipline at the expense of the State, but the State of Iowa shall in no case be responsible to the party of the second part for any loss by fire or other casualties.

*Seventh*—It is further agreed that the party of the first part shall furnish water for shops and for the use of this contract, also, six runners whose duty it shall be to build fires, clean shops, and do the necessary running for

this contract, and when not engaged in necessary shop duties shall be subject to the control of the contractors.

*Eighth*—It is further agreed that said shops shall be warmed at the expense of the party of the first part, and the fixtures for heating said shops shall be made reasonably secure as to fire.

*Ninth*—In estimating the per diem as aforesaid to be paid for each convict, the usual time for estimating a day's work, viz.: Ten hours average through the year shall be computed.

*Tenth*—It is further agreed, that if at any time the number of prisoners in the Penitentiary should not be sufficient to supply the full number specified on this and other prison contracts now or hereafter let by authority of the State—also, cooking, cleaning, and other matters necessary, which, in the judgment of the Warden it may be for the interest of the State to employ them—the number of able-bodied convicts not so employed by the Warden shall be apportioned according to the number contracted, to each contractor, reference also being had to the skill and value of convicts in the several trades carried on by the different contractors.

*Eleventh*—If at any time the convicts assigned to the party of the second part (within the number herein before specified) shall remain idle for the want of any material or tools, or for any fault of the party of the second part, the party of the second part shall be liable to pay for the same as if said labor were employed.

*Twelfth*—No charge shall be made by the State for such time as a convict may be employed in learning to read and write, or does not from sickness or other cause beyond the control of the party of the second part perform his ordinary labor.

*Thirteenth*—In case of the loss of the shops hereinbefore specified, or material damage to the same by fire or other casualty, by reason of which they cannot be occupied, then the party of the second part shall not be liable to pay for any labor of the convicts during the time for which the State shall not furnish another or rebuild said shops. Nor shall the State of Iowa be liable for any damages for such unemployed labor until said shops can with reasonable diligence be rebuilt.

*Fourteenth*—It is further agreed that the State of Iowa shall not carry on any of the trades hereinbefore mentioned within the walls of said prison on contract, nor lease convict labor for the same during the continuance of this lease without the consent of the party of the second part.

*Fifteenth*—All tools and implements are to be furnished by the party of the second part for the use of the hands so employed by them.

*Sixteenth*—All manufactured articles shall be removed from the shops as soon as finished, and no articles shall be stored in the shops in a partial or unfinished condition an unreasonable length of time. The Warden shall have full power to remove, at the expense of the party of the second part, all articles stored or kept in shops in violation of this provision, and also all shavings and other rubbish that will endanger the safety of the buildings.

*Seventeenth*—The time of the convicts herein leased shall be kept by the



Warden of the prison or his deputy, and his books shall be presumptive evidence of the correctness thereof, and a written statement shall be given to the party of the second part or their foreman each day.

*Eighteenth*—The party of the second part shall account with the Warden of the Penitentiary on the second Monday of each month for the labor of the convicts under this contract for the preceding month, and shall execute their promissory note for the amount due, which shall be made payable to the State of Iowa, and the sureties shall be liable on their bond for the amount of said note or notes as upon an original undertaking by them and each of them. The said notes shall be payable three months after date and bear interest at the rate of six per cent per annum at maturity.

*Nineteenth*—It is further agreed that in case the party of the second part shall refuse to make settlement as aforesaid, or in the case any note or notes given for convict labor as aforesaid shall remain unpaid after the same shall become due, and after specific written demand thereof, the party of the second part shall, at the election of the Executive Council of the State of Iowa, forfeit all rights and privileges under this agreement, and the State of Iowa shall have the right to resume absolute control over the labor of said convicts, and re-let the same as though this contract had not been executed.

*Twentieth*—It is further agreed that no tinkering shall be permitted in the shops by officers, foremen, or convicts, nor shall any material or tool be carried from the shop to the convict's cell for said purpose.

*Twenty-first*—It is further agreed that this contract shall not be assigned by said party of the second part without the consent of the Warden with the approval of the Executive Council.

*Twenty-second*—It is hereby agreed that when this contract is signed by the Warden and approved by the Executive Council, all prior contracts with said Fort Madison Chair Company shall be void and of no effect.

In witness whereof the said parties have hereunto set their hands this 12th day of April, A. D. 1880.

E. C. McMILLAN, *Warden.*  
FORT MADISON CHAIR CO.,  
BY JOSIAH A. SMITH, *President.*  
J. M. JOHNSON, *Vice-President.*  
W. E. HARRISON, *Superintendent.*  
JOHN H. KINSLEY, *Secretary.*

The above contract to take effect on the — day of May, A. D. 1880, is approved and confirmed by the Executive Council this twenty-first day of April, 1880.

JOHN H. GEAR,  
J. A. T. HULL,  
B. R. SHERMAN,  
GEORGE W. BEMIS.

Filed in the office of Secretary of the State of Iowa, this twenty-second day of April, 1880.

J. A. T. HULL, *Secretary of State.*

# COPY OF ADDITIONAL CONTRACT FORT MADISON CHAIR COMPANY, NOVEMBER 2, 1878.

It is hereby understood and agreed by and between E. C. McMillan, Warden of the Iowa Penitentiary at Fort Madison, Iowa, and acting for the State of Iowa, party of the first part, and the Fort Madison Chair Company, of Fort Madison, Iowa, party of the second part, as follows, viz.:

*First*—The State of Iowa hereby lets and hires to the party of the second part the labor and services of twenty (20) able-bodied convicts, now or hereafter confined in the Penitentiary at Fort Madison, Iowa, in addition to the convicts already contracted for, making ninety-five (95) in all.

*Second*—The rate per day (of 10 hours) per man, and time and terms of payment for same shall be the same as under the already existing contract between the above parties and all its stipulations, provisions and conditions, shall apply to this contract, except in so far as they are herein modified.

*Third*—The party of the second part hereby agrees to resign their rights to shop number eleven (11) which they possess under the already existing contract so soon as the State shall give them in lieu thereof, on this contract, an equal number of superficial feet on the floor of the room now used as a dining-room.

*Fourth*—The State hereby agrees to furnish to the party of the second part the remainder of the present dining-room not mentioned above and in addition thereto the two rooms now used as kitchens; also, about 2,800 square feet of the cellar room below, commencing at the north wall of the cellar and extending the full width of the room; south wall, to the already existing division wall.

*Fifth*—The State hereby agrees to furnish one (1) lumper free of charge on this contract.

*Sixth*—This contract shall be in force so soon as the State shall occupy the new dining-room now in process of erection. And it shall expire four (4) years from the first day of October, 1878.

E. C. McMILLAN, *Warden.*  
FORT MADISON CHAIR CO.  
J. M. JOHNSON, *Superintendent.*  
W. E. HARRISON, *Secretary.*  
JOSIAH A. SMITH, *President.*

Fort Madison, Iowa, November 2, 1878.

Approved, December 6, 1878.

JOHN H. GEAR,  
JOSIAH T. YOUNG,  
B. R. SHERMAN  
GEORGE W. BEMIS.



## CONTRACT WITH THE IOWA FARMING TOOL CO.

By articles of agreement entered into this twenty-fourth day of July, 1880, between E. C. McMillan, Warden of the Iowa Penitentiary at Fort Madison, Iowa, and acting for the State of Iowa of the first part, and the Iowa Farming Tool Company of Fort Madison, Iowa, party of the second part.

WHEREAS, Certain proposals have been made by the party of the second part for the convict labor hereinafter mentioned, which proposals have been accepted by the party of the first part for and in the name of the State of Iowa; now, therefore, be it agreed.

*First*—That the party of the first part doth hereby let and hire to the party of the second part for the term of ten years from the first day of April, 1881, the labor and services of (75) seventy-five convicts. Also for the term of nine years and six months from the first day of April, 1881, the labor and services of (40) forty additional convicts, all of said (115) one hundred and fifteen convicts now or hereafter to be confined in the Iowa Penitentiary at Fort Madison, Iowa (if so many there may be under the specifications hereafter contained), to be employed by said party of the second part in manufacturing agricultural implements.

*Second*—It is agreed by the party of the first part that for the use of said labor during the term of this lease or any part thereof, the party of the second part shall use the following shops now situated in said prison yard, viz.: Shops number (3) three, (4) four, (5) five, (6) six, (7) seven, (8) eight, and (9) nine, together with the yard room and fixtures thereon standing north of same (except the eastern division of the west dry kiln) also the north (¾) three-fourths of cellar under shop number (1) one, also grounds outside of prison walls, commencing at the southeast corner of prison land (corner of Fourth and Olive streets) running east (100) one hundred feet, thence north (300) three hundred feet, thence west (100) one hundred feet, thence south (300) three hundred feet, to place of beginning.

It is further agreed and understood that for said labor the party of the second part shall pay at the rate of (50) fifty cents per day until the expiration of this contract for each convict actually employed.

*Third*—The party of the first part further agrees that the said Iowa Farming Tool Company shall have the privilege of going to and from said shops at all times to instruct said convicts in the manufacture of said articles, and carry in and out all materials and manufactured articles, or they may employ to do the same such person or persons as the Warden of the Penitentiary may approve, said contractors and employes being, whilst within the walls of said prison yard, subject to all the rules and regulations now or hereafter established by the proper State authorities.

*Fourth*—It is further agreed that the party of the second part shall have assigned it as far as practicable, convicts skilled in the work to be done under this contract, and shall not be bound to take under this contract any

convict whose term of service is less than one year from the time he is assigned, and no convict shall be transferred from this contract to another without the assent of the Warden and contractor.

*Fifth*—The convicts so to be employed shall be men who are capable of performing a reasonable day's work. In case of any disagreement between the Warden of the Penitentiary and the party of the second part in regard to the physical ability of any convict, the same shall be conclusively determined by the physician of the Penitentiary.

*Sixth*—The convicts shall be guarded and kept in good discipline at the expense of the State, but the State of Iowa shall in no case be liable to the party of the second part for any loss by fire or other casualties.

*Seventh*—It is further agreed that the party of the first part shall furnish water for shops and for the use of this contract, also several runners, whose duty it shall be to build fires, clean shops, and do the necessary running for this contract, and when not engaged in necessary shop duties shall be subject to the control of the contractors.

*Eighth*—It is further agreed that said shops shall be warmed at the expense of the party of the first part, and the fixtures for heating said shops shall be made reasonably secure against fire.

*Ninth*—In estimating the per diem as aforesaid to be paid for each convict, the usual time for estimating a day's work, viz.: (10) ten hours average through the year shall be computed.

*Tenth*—It is further agreed that if at any time the number of prisoners in the Penitentiary shall not be sufficient to supply the full number specified on this and other prison accounts now or hereafter let by authority of the State—also, cooking, cleaning, and other necessary matters which in the judgment of the Warden it may be for the interest of the State to employ them—the number of able-bodied convicts not so employed by the Warden shall be apportioned according to the number contracted to each contractor, reference also being had to the skill and value of convicts in the several trades carried on by the different contractors.

*Eleventh*—If at any time the convicts assigned to the party of the second part (within the number hereinbefore specified) shall remain idle for the want of any material or tools, or for any fault of the party of the second part, the party of the second part shall be liable to pay for the same as if same labor were employed.

*Twelfth*—No charge shall be made by the State for such time as a convict may be employed in learning to read or write, or does not from sickness or other cause beyond the control of the party of the second part perform his ordinary labor.

*Thirteenth*—In case of the loss of the shops hereinbefore specified, or material damage to the same by fire or other casualty, by reason of which they cannot be occupied, then the party of the second part shall not be liable to pay for any labor of the convicts during the time for which the State shall not furnish another or rebuild said shops. Nor shall the State of Iowa be



liable for any damages for such unemployed labor until said shops can with reasonable diligence be rebuilt.

*Fourteenth*—It is further agreed that the State of Iowa shall not carry on any of the trades hereinbefore mentioned within the walls of said prison, or contract, nor lease convict labor for the same during the continuance of this lease without the consent of the party of the second part.

*Fifteenth*—All tools and implements are to be furnished by the party of the second part for the use of the hands so employed by them.

*Sixteenth*—All manufactured articles shall be removed from the shops as soon as finished, and no articles shall be stored in the shops in a partial or unfinished condition an unreasonable length of time. The Warden shall have full power to remove at the expense of the party of the second part all articles stored or kept in shops in violation of this provision, and also all shavings and other rubbish that will endanger the safety of the buildings.

*Seventeenth*—The time of the convicts herein leased shall be kept by the Warden of the prison or his deputy, and his books shall be presumptive evidence of the correctness thereof, and a written statement shall be given to the party of the second part, or their foreman, each day.

*Eighteenth*—The party of the second part shall account with the Warden of the Penitentiary on the second Monday of each month for the labor of the convicts under this contract for the preceding month, and shall execute their promissory note for the amount due, which shall be made payable to the State of Iowa, and the sureties shall be liable on their bond for the amount of said note or notes as upon an original undertaking by them and each of them. The said notes shall be payable three months after date and bear interest at the rate of (6) six per cent per annum after maturity.

*Nineteenth*—It is further agreed that in case the party of the second part shall refuse to make settlement as aforesaid, or in case any note or notes given for convict labor as aforesaid shall remain unpaid after the same shall become due, and after specific written demand thereof, the party of the second part shall, at the election of the Executive Council of the State of Iowa, forfeit all rights and privileges under this agreement, and the State of Iowa shall have the right to resume absolute control over the labor of said convicts and re-let the same as though this contract had not been executed.

*Twentieth*—It is further agreed that no tinkering shall be permitted in the shops by officers, foremen or convicts, nor shall any material or tools be carried from the shops to the convicts' cells for said purpose.

*Twenty-first*—It is further agreed that this contract shall not be assigned by said party of the second part without the consent of the Warden with the approval of the Executive Council.

*Twenty-second*—It is hereby agreed that this contract may be terminated at the option of said party of the second part by giving five months' notice thereof in writing to said Warden and the Executive Council, provided that such termination shall take effect only on payment of all sums and amounts due from the party of the second part by virtue of this contract.

In witness whereof the said parties have hereunto set their hands this twenty-fourth day of July, 1880.

E. C. McMILLAN, *Warden.*

IOWA FARMING TOOL COMPANY.

By W. H. KIETSINGER, *Supt.*

Approved this December 15, 1880.

JOHN H. GEAR.

J. A. T. HULL.

GEORGE W. BEMIS.

#### SHOE CONTRACT.

By article of agreement entered into this 22d day of November, A. D. 1881, between E. C. McMillan, Warden of the Iowa Penitentiary and in behalf of the State of Iowa, of the first part, and Henry C. Huiskamp and Herman J. Huiskamp, of Keokuk, Iowa, of the second part:

WHEREAS, Certain proposals have heretofore been made by the party of the second part, for the convict labor hereinafter mentioned; which proposals have been accepted by the parties of the first part, for, and in the name of the State of Iowa. Now, therefore, it is agreed:

*First*—That the party of the first part doth hereby let and hire to the party of the second part for the term of eight and one half (8½) years from July 15, 1883, the labor and services of ninety (90) able-bodied convicts now or hereafter to be confined in the Iowa State Penitentiary, at Fort Madison, Iowa, to be employed by said party of the second part, at the following trades and occupations, to-wit:

Manufacturing all kinds of boots, shoes, boot and shoe pacs, horse collars and saddlery goods. Nothing in this agreement shall prevent the Warden from employing a limited number of convicts in shoemaking and tailoring for the use of the convicts.

*Second*—It is agreed by the party of the first part that for the use of said labor and storage of materials during the terms of this lease, the party of the second part shall use the following shops, which shall be kept in good repair by the State, to-wit: shops number ten (10), number eleven (11), number twelve (12), number thirteen (13), and number fourteen (14).

*Third*—It is agreed and understood that for said labor the party of the second part shall pay at the rate of forty-five (45) cents per day for each convict.

*Fourth*—The said party of the second part shall have the privilege of going to and from said shops, at all proper times to instruct the convicts in the manufacture of said articles, and take in and out materials and manufactured articles. Said party may also employ suitable persons to perform whatever is authorized to be done by this article, and generally to superintend the work under this contract. Said contractors and employees being



whilst within the walls of said prison yard subject to all the rules and regulations now or hereafter established by the proper State authorities.

*Fifth*—The convicts so to be employed shall be able-bodied men, by which term is meant those who are capable of performing a reasonable day's work, and in case of any disagreement between the party of the second part and the Warden of the Penitentiary in regard to the physical ability of any convict, the same shall be conclusively determined by the physician of the Penitentiary.

*Sixth*—The convicts shall be guarded and kept in good discipline at the expense of the State; but the State of Iowa shall in no case be liable to the party of the second part for any loss by fire or other casualties.

*Seventh*—It is further agreed that the shops shall be properly warmed by the party of the first part, and the fixtures thereof shall be made reasonably secure against fire.

*Eighth*—The party of the first part further agrees to furnish the party of the second part with sufficient water for the use of this contract. The party of the first part further agrees to furnish five lumpers or runners, for the purpose of cleaning shops, making and taking care of fires, bringing water and performing the necessary running for this contract; and it is hereby agreed that when said lumpers are not engaged in discharging the above mentioned duties they shall be subject to the order of the party of the second part.

*Ninth*—In estimating the per diem as aforesaid to be paid for each convict, the usual term for estimating a day's work, to-wit: ten hours average through the year shall be computed.

*Tenth*—It is further agreed that after the Warden shall have selected such number of the convicts as he may deem necessary for cooking, cleaning, sanitary and other purposes pertaining to the care of the prison, and also for shoemaking and tailoring as specified in articles, the remaining convicts shall be apportioned by the Warden among the contractors according to the number to which each is entitled, reference being had to the skill and value of convicts in the several trades carried on by the different contractors. The State shall not be liable for any deficit under this contract, provided the State shall not transfer convicts to the Additional Penitentiary so as to diminish the number actually employed under this contract below the maximum at the time of such transfer.

*Eleventh*—If at any time the convicts assigned to the party of the second part within the number hereinbefore specified shall remain idle for the want of any materials or tools, or for any fault of the party of the second part, the party of the second part shall still be liable to pay said sum of (45) forty-five cents per day for each convict so employed.

*Twelfth*—No charge is to be made for such time as a convict may be employed in learning to read and write, or when he does not, from sickness or other causes beyond the control of said party of the second part, perform his ordinary labors.

*Thirteenth*—In the case of loss of the shops hereinbefore specified, or material damaged to the same, by fire or other casualty, by reason of which

they cannot be occupied, then the party of the second part shall not be liable to pay for any of the labor of the convicts during the time for which the State shall not furnish other or rebuild said shops, nor shall the State of Iowa be liable for any damages for such unemployed labor until such shops can, within reasonable diligence, be rebuilt.

*Fourteenth*—It is further agreed that the State of Iowa shall not carry on any of the trades hereinbefore specified within the walls of said prison, nor contract or lease convict labor for the same during the continuance of this lease, without the consent of the party of the second part.

*Fifteenth*—All machinery, tools and implements are to be furnished by the party of the second part for the use of the hands employed on this contract.

*Sixteenth*—All manufactured articles shall be removed from the shops as soon as practicable when finished, and no article shall be stored in the shop in a partial or unfinished condition an unreasonable length of time. The Warden shall have full power to remove, at the expense of the party of the second part, all articles stored or kept in the shops in violation of this provision, and also all shavings or other rubbish that will endanger the safety of the buildings.

*Seventeenth*—The time of the convicts herein leased shall be kept by the Warden of the prison or his deputy, and his books shall be presumptive evidence of the correctness thereof; and a written statement shall be given to the party of the second part, or his foreman, each day.

*Eighteenth*—The party of the second part shall account to the Warden of the Penitentiary on the first Monday in each month for the labor of the convicts under this contract for the preceding month, and shall execute his promissory note for the amount due, which shall be made payable to the State of Iowa, and the sureties shall be liable on their bond for the amount of said note or notes, as upon an original undertaking by them and each of them. Said notes shall be payable three months after date, and bear interest at the rate of six per cent per annum after maturity.

*Nineteenth*—It is further agreed that in case the party of the second part shall refuse to make a settlement as aforesaid, or in case any note or notes given for convict labor as aforesaid shall remain unpaid thirty days after the same shall become due, then the party of the second part shall, at the option of the party of the first part, forfeit all rights and privileges under this agreement, and the State may resume absolute control over the labor of said convicts, and re-let the same as though this contract had not been executed.

*Twentieth*—It is further agreed that no tinkering shall be permitted in the shops by officers, foremen or convicts, nor shall any material or tools be carried from the shops to convicts' cells for said purpose.

*Twenty-first*—It is further agreed that the party of the second part shall have assigned to them so far as practicable, convicts skilled in the work to be done under this contract, and no convict shall be assigned to this contract whose term of servitude shall be less than one year when so assigned. No convict shall be transferred from this contract to another without the con-



sent of the Warden and the contractors, except as provided in Article ten (10).

*Twenty-second*—It is further agreed that this contract shall not be assigned by said party of the second part without the consent of the Warden, with the approval of the Executive Council.

*Twenty-third*—It is further agreed that this contract may be terminated at the option of the said party of the second part by giving five months' notice thereof in writing to said Warden and the Executive Council; *provided*, that such termination shall take effect only on payment of all sums and amounts due from the party of the second part, by virtue of this contract.

In witness whereof, the said parties have hereunto set their hands, this 26th day of November, 1881.

E. C. McMILLAN, *Warden*.  
HERMAN J. HUISKAMP.  
HENRY C. HUISKAMP.

Approved Dec. 27, 1881.

JNO. H. GEAR.  
J. A. T. HULL.  
E. H. CONGER.

Filed in office of Secretary of State, December 27, 1881.

J. A. T. HULL,  
*Secretary of State*.

It will be seen that these contracts run until 1890 and 1891, excepting the last which may be amended by either party giving five months' notice thereof.

Unquestionably employment should be given the inmates of our prisons. This is necessary upon sanitary as well as humanitarian grounds, but it will be seen by reference to views of individual workingmen later in this report, that very strong objections are raised against this system. It is claimed, and with great justice, that this kind of labor operates very harmfully upon skilled mechanics outside the prison walls. Manufacturers also complain that they are unable to compete with this cheap labor enjoyed by prison contractors. The chief argument in its favor—that it renders the institution nearly self-supporting—is not a logical nor a liberal one. The welfare of the honest citizen who has never been within the prison gate for crime—the industrious, hard-working man or the persevering employer, ought not, in this enlightened age, to be placed in the balance to be weighed by the economy of a State in supporting a penitentiary. I spent a day in examining this phase of prison life at Fort Madison, and the men thus employed seemed as contented—

indeed more so—than any in the prison. Their work, too, was most excellent, and seemingly the very best of materials were used in the manufactured articles. Especially was this noticeable in the boot and shoe department. In conversation with the various foremen it was learned that a large number of the men became proficient in workmanship, and that all do as well as the same number of men elsewhere, unaccustomed to such work.

It has been urged as an objection to this system, that the men only get an opportunity to learn certain parts of each trade. This is not valid, however, or if so, it is no more true in the penitentiary than in any large factory. These men (or at least many of them) are frequently changed from one department of work to another—oftener indeed than at free establishments of a like nature, and yet through this entire investigation, and in the reflection upon its results, this query thrusts itself forward and justly demands an answer. These contractors (the State, too,) are receiving the fruits of the labor of these criminals, *but what are their families receiving?* Who is giving bread, and meat, and fuel and clothes to the innocent wives and children of these criminals, many of whom are hungry and illy clad and cold, while the contractors are accumulating wealth at the hands of their husbands and fathers? The one (the families) needy and suffering; the other (the contractors) growing rich and the State indorsing the condition of the one equally with the other! Is this right? Does it comport with the fair record Iowa has written in the past? Is it keeping step with the march of progress toward something higher and better and nobler for her citizenship? These appeals which have come to this office from the working men for the abolishment of this system mean something. They are not mere sentiments. They do not come from a morbid and grumbling class of men, but on the contrary, they are the promptings of strong hearts in the breasts of men who have largely made Iowa what she is. And yet in these reflections we are stopped by the practical question: What is the remedy? If the system is abolished, what is to be done with the criminals? Fortunately at the penitentiary at Anamosa the State finds work for its inmates in the great quarries connected therewith, but what of those at Fort Madison? Perhaps the most feasible remedy lies in the employment of convicts under the prison management, the goods manufactured to be sold at market rates, and the profits to accrue partly to the prisoners upon their discharge, partly to their families during incarceration and partly to the



State. Some plan by which convicts should be employed in the manufacture of all the goods which a State might use for its own purposes, thereby throwing the results of convict labor out of the market and the State have the benefit of the immediate results from such manufacture—some such plan as this is feasible. The necessity of reforming the criminal should not be lost sight of. It ought to be the chief aim in prison life. To a certain extent under the system of convict contract labor, crime is placed at a premium. The question is by no means easily answered, the problem not of ready solution. But it is certainly not the policy of the State to hesitate or falter at difficulties in the way if the system is an unjust one. Relief is being afforded in this direction in other States. The statesmanship of Iowa should not be behind that of these States in grappling with this question, and in finding a solution which shall be just to those without the prison walls, as well as to the State and its convicts. I suggest that it is one of the measures of public policy of grave moment, and one urgently demanding the most careful attention and action at the hands of the Legislature. These contracts have yet some time to run, and while the State ought not to look to the renewal of them, it certainly ought at once take steps towards the maturing of such plans so that the convicts will be employed without harm to free workingmen and manufacturers.

To each of the firms holding these contracts with the State for convicts' work in the Ft. Madison Penitentiary the following questions were sent and replies received:

#### FORT MADISON CHAIR COMPANY.

No. 1. Please state the class or classes of goods manufactured by you in the Fort Madison Penitentiary?

*Answer.* Chairs.

No. 2. How many convicts have you under your contract in the manufacture of such goods?

*Ans.* One hundred.

No. 3. How are the hours of labor per day distributed among the different months of the year?

*Ans.* This is regulated by the deputy Warden, who aims to average ten hours per day during the year; the longest days running about ten hours and forty minutes, and the short days about forty minutes less than ten hours.

No. 4. Is the amount of labor required of convicts under your contract regulated by task, per day, or week?

*Ans.* No.

If so, please explain the amount and kind of work required of each convict for the different seasons of the year, and by whom such tasks are adjudged and regulated.

No. 5. Is the requirement of uniform tasks of all convicts under contract without regard to their physical or mental condition, just and fair; and if not, what would you suggest as a measure for their labor?

*Ans.* It is a difficult subject. A *uniform* task is unjust to the contractor and men, for the slowest man is apt to regulate or fix the amount of the task, by reason of his inability to do more, and because where the labor is involuntary no other convict is willing to do more than the slow one does. We at one time kept a large number of convicts at work caning chairs, and worked with the task system. We afterward took this work out of the prison and did it with free labor, paying for it by the piece. We found we did the work very much cheaper with free labor, mostly boys and girls, and they at the same time earned as much as \$1.00 per day. We would recommend the working industriously of each man from "bell to bell," or the rewarding of the more willing and able workers by allowing them to cease work after doing a reasonable amount, which should be regulated by skilled foremen and prison officials jointly.

No. 6. What amount of capital have you invested in your business in this prison, including machinery, raw and finished materials, and everything appertaining to, and necessary for carrying on your business at the present time?

*Ans.* One hundred thousand dollars.

No. 7. What amount of this capital is invested in machinery?

*Ans.* About \$25,000 in machinery, tools and appurtenances, besides buildings, etc.

No. 8. What is the gross value of your products manufactured in this prison last year to Dec. 1, 1883?

*Ans.* About \$100,000. We have jobbed many goods not made by us, and it is impossible to separate them in our sales; also, this output is only in part the result of convict labor. We employ about 125 free labor hands. We do all our painting and varnishing and finishing with free labor, and find we do it as cheaply as with convict labor. We once finished entirely with convict labor.

No. 9. What is the value of the raw material consumed in the manufacture of such goods?

*Ans.* It is impossible to separate the material which would properly belong to the convict labor and free labor, as it is all kept together. It is also constantly fluctuating in price, and varies continually with the kinds of goods made.

No. 10. Where are your prison products principally sold?

*Ans.* In States west of the Mississippi river, and a few east of it, in the States bordering on said river.

No. 11. Are they sold by you at wholesale or retail, or both?

*Ans.* At wholesale.



## REMARKS.

Please make any suggestions you wish on this subject of convict contract labor.

As the subject of convict labor has been agitated of late, we would call attention to the report of the Bureau of Statistics of Massachusetts in 1880. This shows that only about two per cent of convict labor to 98 per cent of skilled free labor is the proportion employed in the United States, showing clearly that the convict labor contract system, as at present employed, can be no great burden on the free labor unless the convict labor is concentrated on only a few industries. A great many claim that the convict labor concerns, demoralize prices. We know this is not the case. Where the contract system is employed, we, as contractors, pay the market value for the labor, which is regulated by location, shipping facilities, proximity of material, yard room, shop room, discipline, etc., etc. We are employing our own capital and are directly interested in obtaining the highest possible price for our goods and maintaining the tone of the market. The greatest demoralization of the market in our line, from convict labor, comes from institutions not employing the contract system, but working the convicts with paid officials employing State, county or city capital, and lacking experience as manufacturers, owing to constant changes in office. They have no direct interest in profits or losses of the business, and force their goods on the market without regard to present or future prices— anxious to realize rapidly, and with the least possible labor and anxiety.

## BOOT AND SHOE CONTRACT.

## HUTCHAMP BROTHERS.

The same questions were asked of this company and the following answers received:

No. 1. Men's heavy and medium weight boots and shoes.

No. 2. Our contract is for 90, but varies from 65 to 93.

No. 3. We pay the State at the rate of ten hours per day, all the year, working long hours in summer and from daylight till dark in winter. Averaged at ten hours.

No. 4. Partly task and partly by the day. As a rule, when we give a task it is about from one half, to two thirds of the amount of labor usually done by outside labor on the same kind and quality of work. On our contract the tasks, when they are given as tasks, are light. We prove this by the amount of extra pay we pay monthly to the convicts, the amount averaging from \$175 to \$300 per month; a great part of this money being earned during the time for which we pay the State. We have only about 30 to 35 men out of the 90 who are expected to do task work, and the tasks have been

made from time to time by the foremen and prison officials, notably, the deputy Warden.

No. 5. It would not be fair, and is not done on this contract. We would suggest that this matter be left to the discretion of the prison physician and the Warden.

No. 6. It is impossible for us to tell the amount of capital, as the goods are sent to our jobbing house in Keokuk, Iowa, and put with the products of our New York factory and eastern purchases. Owing to the nature of our product, and the fact that we must produce goods whether we need or want them or not, a definite amount cannot be named, but we should think that anybody with good credit could run it with \$50,000 capital.

No. 7. About \$9,000.

No. 8. About \$135,000.

No. 9. About \$105,000.

No. 10. In Iowa, Illinois, Missouri, Ohio, Indiana, New York, and Pennsylvania.

No. 11. At wholesale only.

## REMARKS.

We can make no suggestions without going into voluminous details, for which we have no time.

## THE IOWA FARMING TOOL CO.

E. R. HUTCHINS, *Commissioner of Labor Statistics, Des Moines, Iowa.*

DEAR SIR—In answering the various questions propounded to us, there are many points that suggest themselves to us pertinent to this subject but which we pass over. We would say, however, that among the people generally, there is held a very erroneous opinion regarding the value of convict labor. They simply compare the prices per day paid for convict labor, with those of the free laborer and especially with the skilled mechanic, and in drawing this comparison there is to their minds a wide difference; to them it appears that the prison contractor gets a great deal for a very little, and is a favored party. They do not know, or certainly do not consider that convict labor always brings its market value and sometimes more. Contracts are not let without first advertising in the paper and giving every one a fair chance regardless of their being located in the same State or out of it. They do not consider that in bidding for this labor, too much is often paid; and another fact that very many prison contractors have suffered heavy losses and failed in business because they paid too much for their labor. The proprietor of a free shop hires such men as are desirable, because of their physical and mental ability, or for the skill which they already possess when he hires them. When times are good, he can hire more men and increase his capacity; and when times are hard he can curtail his expenses by running a tight force; on the other hand, the prison con-



tractor has tendered him by the Warden, men of ignorance or of no skill whatever, men without trades, as is the case nine times out of ten, men who are both physically and mentally undesirable, because of the life they have been leading. Many of the men barely learn to do their work well, before their term of sentence expires. There is little or no opportunity for enlarging prison works in case of good times, and the prison contractor cannot discharge his men, but must continue to work and pay for them no matter how poor the times are.

Considering these points, and the fact that the convict usually does only about two-thirds of a day's work, the prison contract is not so fine a thing as many imagine. There are other points which we could have touched on had you favored us with a call when you were here in the city.

Very respectfully,

F. J. KIETSINGER,  
*Treasurer.*

The following are the answers from this firm to the same questions asked the others:

No. 1. Hand farming tools, particularly such as forks, hoes, scythe snaths, grain cradles, etc.

No. 2. About 120.

No. 3. The average day's labor is ten hours, longer of course, in summer than in winter; these are determined by the prison deputy warden.

No. 4. In a measure the work is task work, by the day, but varies with the season of the year, and with the character of work. Tasks are generally about one-half, of what is expected of free labor, hardly ever reaching two-thirds; they are adjudged and regulated in a measure by the convict.

No. 5. The physical and mental condition of the convicts are important elements and always given consideration; under like conditions we think the convict should be required to do at least three-fourths as much as a free laborer; considering that his hours while out of the shop, are passed in resting, he is able to do more than the average free laborer.

No. 6. The capital stock of this company is \$100,000.

No. 7. In round numbers, \$30,000.

No. 8. Our yearly sales are about \$150,000.

No. 9. This is difficult to answer for the reason that we employ from 40 to 60 hands (citizens) outside our prison contract, working on the raw material before it goes to our prison shops, and also on the goods partly completed by our prison labor.

No. 10. In the territory between Buffalo and Denver, and between Manitoba and Mexico.

No. 11. To the wholesale trade.

The following figures are submitted from a report from Hon. John I. Perry, of N. Y., on "Prison Labor and Tables showing the proportion of convict to citizen labor in the prisons of New York and of the United States," published in 1885:

The State prisons and State penitentiaries in the United States, in and outside of which productive labor is performed by convicts, are as follows:

19 State prisons.

29 State penitentiaries.

1 Reformatory.

49 Containing ..... 29,981 men.  
649 women.  
Total ..... 30,630

The minor penal institutions in which such labor is more or less performed in a somewhat desultory manner by tramps, drunkards, petty thieves and other short-time men, are:

	Men.	Women.	Boys.	Girls.
33 County jails, containing.....	3,428	433	33	1
9 County penitentiaries, containing....	3,655	690	....	....
10 Houses of correction, containing.....	2,580	582	765	84
10 Houses of refuge, containing.....	845	239	2,457	496
2 Houses of industry, containing.....	701	334	215	11
64	11,209	2,278	3,470	592
Total .....				17,549

The reformatory institutions in which some labor of this character is performed by women and children, in connection with farming and schooling, are:

	Women.	Boys.	Girls.
13 Reform schools, containing.....	69	3,020	146
9 Industrial schools, containing.....	...	913	425
3 Houses of reformation .....	293	453	14
25	962	4,386	585
Total.....			5,333

To recapitulate—

49 State prisons and State penitentiaries, containing.....	30,630
64 County jails and county penitentiaries, houses of correction, etc., containing.....	17,549
45 Reformatories, containing.....	5,333
138 Total .....	53,512

The number of adult males.....	41,190
The number of adult females.....	3,289
The number of male children.....	7,856
The number of female children.....	1,177
Total.....	53,512



There are few institutions in which no productive labor is performed, which are not included in this statement

Of the 30,630 prisoners before mentioned, 20,174, or 65·8-10 per cent, are under 31 years of age.

Is not the cause of this sad showing a legitimate subject for inquiry by this Legislature?

The United States Bureau of Statistics reports that during the past seven years 247,949 skilled mechanics have been added to our population from foreign countries. They have taken the place, to a large extent, of our native boys, who have been denied the privilege of American freemen to acquire trades by arbitrary rules, which are anything but democratic in their character. This is a growing and dangerous evil that statesmen cannot much longer ignore.

In the matter of education, I have only been able to get returns in regard to 24,522 convicts confined in 43 prisons. Of those confined in 36 prisons, mostly white.

74 7-10 per cent.....	can read and write.
7 5-10 per cent.....	can read only.
17 8-10 per cent.....	can do neither.

Of those confined in 7 prisons, mostly black—

18 9-10 per cent.	can read and write.
21 6-10 per cent.	can read only.
59 5-10 per cent.	can do neither.

Of the total number, white and black, confined in 43 prisons—

59	5-10 per cent.....	can read and write.
11	5-10 per cent.....	can read only.
29	per cent.....	can do neither.

The industrial habits of the convicts, previous to arrest, is a pertinent inquiry. In forty-two State prisons and penitentiaries reported under this head, we find that—

6,189, or 25 per cent. ....	had trades before arrest.
23,774, or 95.9-10 per cent. ....	} nominally, at least, had trades or other
	} honorable occupation.
1,014, or 4.1-10 per cent. ....	had no occupation.

30,977	100
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These figures are based upon the statements made by the convicts, and are published in the annual reports of the institutions. It is not probable, however, that 96 per cent were actually engaged in productive labor at the time of their arrest.

TABLE SHOWING THE SYSTEMS OF LABOR BY STATES.

[illegible]



## OCCUPATION BY GEOLOGICAL DIVISIONS.

	Prisons.	Contract.	Public ac- count.	Piece price.	Lease.	Prison duties.	Idle and at school.	Sick.	Total.
New England States.....	47	1,298	1,647	607	445	2,244	860	355	7,451
Middle States.....	33	6,287	3,213	952	.....	3,146	1,259	467	15,324
Southern States.....	20	2,110	250	160	9,594	1,405	613	347	14,479
Western States.....	38	6,888	2,982	638	199	4,110	1,101	340	16,258
	138	16,578	8,092	2,357	10,238	10,905	3,833	1,509	53,512

## PART VIII.

## STRIKES AND ARBITRATION.

Strikes may properly be divided into two classes, aggressive and defensive.

They are disputes between capital and labor, and have been part of the history of humanity.

As long as the present relations exist between the employer and the employed these conflicts will also exist.

To presume that these troubles always arise from insincerity or insufficiency of motive on the part of the wage-worker is simply absurd. The truth is that workingmen are right in believing that they ought to have a reasonable share of the benefits derived from their handiwork, and as a result of that handiwork, from the accumulated wealth of industrial enterprises.

It is also true that it is a rarity indeed that an employer advances wages in the midst of speedy wealth accumulation.

Again, it is true that workingmen as a rule are averse to strikes, rarely going into them voluntarily, for experiences—bitter ones, too—have taught them that such methods are terribly expensive in settling difficulties between them and their employers. But the intensely intricate relations between the two—capital and labor—a relationship poorly understood by both parties, render disputes of this character almost unavoidable.

Mr. Aldrich in his charming story of "Stillwater Tragedy" has aptly as well as humorously described this relationship in the following colloquy between two characters during a strike at the manufacturing berg of Stillwater:

"William," said Stevens meditatively, "do you know about the Siamese twins?"



"What about 'em—they're dead, ain't they?" replied Durgin with surprise.

"I believe so; but when they was alive if you was to pinch one of those fellows the other fellow would sing out. If you was to black the eye of the left hand chap the right hand chap wouldn't have been able to see for a week. When either of 'em fetched the other a clip he knocked himself down. Labor and capital is jined just as those two was."

And this is true, and only when the wage worker and the capitalist—the representative of labor and the representative of capital—understand perfectly that the two are "jined"—that they are reciprocal—the one absolutely depending upon the other, and vice versa—only then will strikes cease to embitter the lives of both classes.

If it is right that the capitalist shall conduct his business as to best subserve the interests of himself and his family, it is just as right that the wage worker shall conduct his with the same ends in view. He is a partner in production. He is a wealth producer as well as his employer. The ceaseless tendency to centralization of capital, to individual financial prosperity, to labor-saving machinery and improved methods of production—these are undeniably shrinking the individuality of the wage worker, and as rapidly as this occurs, combinations are being formed to counteract this tendency, and this is perfectly natural, thoroughly human, no matter how disastrous may be the results.

It is a popular belief that strikes nearly always arise from trades-unions. It is not the province of the writer to discuss the merits or demerits of these organizations. It is preferred that that the workmen should speak for themselves upon this point. (See views of workingmen). But that this is an error is true, and in justice to these unions it should be corrected. Some of the most powerful and formidable strikes of history have been simply popular outbursts. They are generally the results of an enlightened condition of labor. Workingmen are beginning to study the markets. They are familiarizing themselves with the prices of commodities which come from their hands and their brains. In many of the Assemblies of Knights of Labor, statistics relative to prices and cost of production are being carefully and systematically gathered, thus forming a basis upon which reasonable demands are made.

Bold indeed must be the man who advocates strikes, and such

boldness is not possessed by the writer, yet it is his belief that the division between labor and capital is far too wide, and that in a very large number of cases the demands made by the former are just and based upon reasonable grounds. I regard it as a happy omen that the side of the workingmen on these questions is engaging the public consideration much more closely than formerly and there is a growing disposition to deal with these strikes in a more practical and satisfactory way. This fact is established—that under the present *regime* the workingmen as individuals have but little, if any power to enforce a claim for better pay or a better condition of surrounding circumstances, other than concerted and combined acts of compulsion. As has been suggested, this is an expensive and unhappy method, and fortunately for Iowa we have had few serious disturbances of this character. By reference to the table prepared from reports from manufacturers, coal operators, etc., it will be seen that a few strikes and most of these generally of minor character and short duration, have occurred in our State.

Of those of greater magnitude and demanding special mention here, may be noticed the following: The first was that of the printers in the *State Leader* office of this city. It was of short duration, but aroused considerable bad feeling among those connected with the office. The following circular in this connection explains itself. It is the position of the Union as advanced by them:

#### TO THE PUBLIC.

DES MOINES, July 24, 1884.

Owing to the misrepresentations of the circumstances of the difficulty between the Leader and Des Moines Typographical Union No. 118, the Union feels bound, in justice to itself, to make a true statement of the controversy.

1. Some three months ago Mr. J. F. Garretty, during a difficulty with his men, entered into the following agreement: "That if you will go back to work and get out my paper I will guarantee to you that I will discharge no man connected with or having anything to do in this 'walk-out,' and will at no future time employ any non-Union man or men, and that the 'chapel' shall have entire control of the mechanical departments of my office."

2. That in violation of this agreement, he did, on the 15th of July, discharge a Union man and engage in his stead a non-Union man.

3. That the Union men refused to work and "walked out," but upon Mr. Garretty's promise, upon his honor as a man, that on the following day he would discharge the non-Union man and thereafter run a strictly Union office, the men went back to work.



4. That upon the following day, after trying in vain to secure non-Union men, he refused to comply with his promise of the preceding day, and the Union men employed by him, by a unanimous vote of the "chapel" walked out, and were by a unanimous vote of a full Union meeting assembled, sustained in their action.

5. The whole matter is the outcome of violated pledges and broken promises on the part of Mr. Garretty, and no outside influences have been brought to bear upon the Union in this matter. All reports to the contrary are false.

EXECUTIVE BOARD D. M. T. U. No. 118.

A number of the men did not participate in this strike and for this cause were expelled from the Union. Mr. Ayers, one of those expelled, has courteously replied to a letter from this office, which is perhaps all that is necessary to publish relative to this trouble:

DES MOINES, January 12, 1885.

HON. E. R. HUTCHINS, *Commissioner of Statistics*:

It would be gross want of courtesy to yourself and to the office you hold, further to delay acknowledgment of your request, repeatedly made, for a statement in regard to the strike of the compositors in the *Daily Leader* office in this city last July. Probably if I had had leisure immediately after the occurrence I would have entered somewhat fully into the matter. But the coolness of thought that comes after six months, generally leads to a more dispassionate view, and I am now convinced that no useful end can be attained, either of interest to the State or the men engaged in the disputes that succeeded the strike, by a narration of the circumstances. I think it best to say merely that the twenty men who were expelled from Des Moines Typographical Union still have the conviction that their view was correct, both as affecting their relations with the employing class and their own self respect, and that all, so far as I know, have been employed steadily ever since at wages that will undoubtedly average \$3 a day for all who were so peremptorily expelled.

I have the honor to be respectfully yours,

L. L. AYERS.

Another strike was among the miners of What Cheer. The history of this strike may be briefly summed up as follows: The date of the commencement was Oct. 15, 1884. Five hundred miners were engaged in it. These men thought the price given them was too little, it being three cents per bushel. Their demand was for three and a half cents, and at one time very serious trouble seemed imminent. Some of the militia were held in readiness to proceed to What Cheer, but after six weeks a compromise was effected by

which the miners received three and one fourth cents per bushel, and the men resumed work, since which time perfect quiet has been maintained.

The third strike of moment was among the miners at Angus, and which was by far the most serious. Below is given as accurate an account of this as it was possible to procure at that time, Dec. 15, 1884.

#### THE OPERATORS' SIDE.

##### MR. GAYLORD'S STATEMENT.

Mr. E. W. Gaylord, the manager of the Standard Coal Company, said substantially: In order to get at the real foundation of matters, we shall be obliged to go back to the 16th of August, 1883, when the second meeting of the operators and miners was held in the Exposition Building in Des Moines. At that meeting the question of arbitration was brought up, and the whole Angus field, with the exception of the Milwaukee & St. Paul Railroad Company, were in favor of arbitration. It was found that this railroad company at Excelsior, the Northwestern Railroad Company at Muchakinoek, McNeill & Durfy at Oskaloosa, the Whitebreast companies at Cleveland and Kirkville, and the Star and Cory companies would not be bound by the action of the Association, nor would they submit to the arbitration plan. This, of course, put a different aspect upon the measure, and it was a matter of considerable discussion. The miners took the position, and passed a resolution at their meeting, to the effect that the operators, or that portion of them which had taken part in the last joint convention and also participated in this one, they considered their friends, and they would aid them in their competition with outside operators, and do all in their power to make their business successful, and further, that they deprecated strikes, because it was a losing affair on both sides.

In October, 1883, the miners of Angus made a demand for an increase of wages, and the matter was carried to the board of arbitration for settlement, and the increase was allowed and paid so for the next two months. At the time the miners' resolution was spoken of, it was thrown out. It was then found that the operators could not compete with the outside companies, and the miners were asked to reduce prices, which they refused, and the matter was again taken before the board of arbitration, with the same result as before. The operators became satisfied that the miners did not intend to carry out the resolution adopted in regard to protection against outside companies, and the operators here then pulled out altogether. This was in February of the present year. During the entire winter of 1883-4 the Angus operators had paid twenty-five cents per ton more than those at What Cheer and Oskaloosa. The operators acknowledged that they should pay 12½ cents per ton more than those at the two places named, on account of the thinner veins, and at this price they did not have any



trouble to keep their mines full of men. In the spring the rate was reduced 25 cents per ton, and What Cheer and Oskaloosa reduced 12½ cents per ton, which made a fair rate and the same as before the winter prices. The operators informed the miners that they would retain and keep the price at 12½ cents per ton above Oskaloosa and What Cheer.

Last September a demand was made by the miners for an increase of 12½ cents per ton. The reply was that they would make the raise if Oskaloosa and What Cheer would do the same, and if they did so, the Angus operators would at any time increase the rate promptly without asking. No demand was made at Oskaloosa in the price of mining, and no change has yet been made at that point. On October first, the operators were informed that if the miners' demand for 12½ cents per ton more pay was not granted they would go out, and did so. At What Cheer, on October first, a demand was made for the same increase as at Angus, and on the 15th the miners at that point went out, and remained out until the 15th of November. A compromise was then made at an increase of 6½ cents per ton, and the miners went to work. The Angus operators then made an offer to increase prices, the same as What Cheer, which the miners' committee refused.

After the increase or compromise of 6½ cents had been rejected, the operators began hiring and bringing in new men, who had offered to work at the prices offered to the strikers. Up to this time about two hundred and fifteen men had been brought in. By indirect threats and actions these new men were deterred from going to work, and large bodies of the strikers, women, etc., met them and escorted them out of town. The first escort party numbered about three hundred men and women, led by a band, with banners flying, showed fourteen men the way out of town. The second escorting party consisted of about the same number, but with more women, with their band and flag, informed the next arrival of recruits that they would not be allowed to go to work there, and forced them to leave. One hundred and two miners arrived in the next importation and they were summarily dealt with.

When the offer was made by the operators to the miners of a compromise by an increase of 6½ cents per ton, instead of 12½ cents, as asked by the miners, a printed circular was issued. Mr. Lochray, one of the executive committee of the miners, informed them that the committee was appointed by the miners to do all their business and act for them, and also gave instructions to call no meetings until their demands were acceded to, and so they could not, without being treacherous to their fellow workmen, unless the 12½ cents asked for was granted. As What Cheer had settled their strike by a compromise of 6½ cents, the Angus operators felt disposed to do the same thing. But as they had been informed that no meeting could be called on a compromise, they were obliged, in order to reach the men themselves, to make the offer by printed circular, which they had posted.

The following is the circular:

NOTICE! NOTICE!

Work having been resumed at What Cheer on the basis of 6½ cents per ton advance, the undersigned will open their pits for work on Monday morning, December 1st, and will pay 93½ cents per ton for mining coal until April 1, 1885. Such men as desire to resume work are requested to be on hand promptly at the call of the whistle Monday morning.

STANDARD COAL CO.  
CLIMAX COAL CO.  
ARMSTRONG BROS.  
KEYSTONE COAL CO.

*Angus, November 26, 1884.*

Since this circular was issued, fully two-thirds of the strikers have expressed a willingness to go to work, but they were told by the Executive Committee that it would not be safe for them to do so.

Mr. Gaylord was asked how it was that the last gang of men who arrived, and who were then at work in the Keystone mine, were not run out of town by the strikers. He replied, that in getting the last lot he took pains in selecting a foreman, instructing him to hire no men but Scandinavians, and men that he knew personally, and also ordering him to explain everything particularly to them before hiring. This last lot were hired and given the option of \$1.75 per day or 87½ cents per ton. These men signed a contract before leaving Minneapolis, of which the following is a copy:

In consideration of the Standard Coal Company furnishing transportation from Minneapolis to Angus, we the undersigned agree to go to Angus, and work in such coal mines, and at such work as their agent may direct, and continue working for not less than one month at the rate of \$1.75 per day or 87½ cents per ton, as each of us may select. If at \$1.75 per day, the employer to furnish all tools excepting miners' lamps and oils. We also fully understand that there is a strike in that field. We also agree to deposit our baggage with the foreman as further security for transportation furnished.

The Eagle mine at Angus is controlled by the Milwaukee & St. Paul Railroad Company, and is engaged in getting out coal for the use of that road only, and is paying ninety cents per ton for mining. They do not allow their miners to affiliate with the others and they will discharge any one found doing so. Their men were informed that if they did not take the ninety cents offered, the company would close up the Eagle mine and take all their coal from their other mines in the Oskaloosa field. Twice have the strikers succeeded in getting the men at this mine to leave it, but each time they returned on the next day and went to work.



## THE MINERS' SIDE.

W. H. THOMAS,

one of the principal members of the Striking Miners' Executive Committee, was next seen, and his statement is condensed. He said: The trouble commenced in November, 1883, when we asked for a raise of 12½ cents per ton for mining. The operators objected, and the matter was left to the arbitration committee and a decision was rendered in favor of the miners, and this rate was to continue until the 1st of April, 1884. In February the operators withdrew the 12½ cents raise and the matter was again submitted to the arbitration committee. The following is their finding in this case:

The undersigned to whom was submitted the demand of the operators of Angus for a reduction of one-half cent per bushel, for mining coal, have considered the statements of the respective parties, and are of the opinion, that upon the facts submitted the said price shall remain as it is until the 1st day of April, 1884, that is, 4½ cents per bushel.

Signed:

S. A. FLAGLER,  
THOMAS BECK,  
JOHN SNEDDON,  
JOHN BOULGER.

Approved: C. B. ROUNDS.

When the committee returned to Angus the operators said they could not possibly pay the price, although they were the parties who solicited the arbitration. The miners accepted the terms of \$1 per ton instead of \$1.12½, as awarded them. On April 1st of the present year the miners again submitted to another reduction of 12½ cents per ton, making the price 87½ cents. This price held good until October 1st last, with the mines running from four to eight days per month during the summer. On the 1st day of October the miners asked for an increase of 12½ cents, thus making a concession of 12½ cents from the winter prices of the previous year. The operators peremptorily refused and the strike was immediately inaugurated. On the 29th day of November, the operators offered a compromise of 6½ cents per ton by posting notices. The miners ignored these notices, as they did not consider the offer of the operators as being made in a business-like manner. For when the strike was inaugurated an executive committee of nine was appointed by the miners to transact any and all business on behalf of the miners of this district, and notices to that effect were inserted in both the Angus papers, the *Times* and *Black Diamond*. If the miners had accepted the 6½ cents per ton compromise, for the months from December to April, they could not have earned their living. If the regular number of miners were kept at work in the mines, this compromise price might be all right; but when business is good the pits are crowded with men, and good miners can earn but \$1.65 to \$1.75 per day.

On the 11th (Thursday) the day the troops were called for, the only trouble was caused by William Morris, an itinerant Methodist minister, at

the Keystone No. 2 mine, in making some remarks to the striking miners said: That if those men who were hired to work there would not come away peaceably, he would take them away (meaning the new men that they had corralled in the boarding house).

The miners' executive committee have quelled all disturbances of any kind themselves, and the men place implicit reliance in their committee to do so. The men in no instance have violated the confidence they have placed in the committee. The committee in inducing them to leave here, have presented their side of the case to them, the operators having the same privilege, and the parties were left to decide what they would do. In all instances, except the last, (the men now at work in the Keystone mine) have the men left on their own accord. No threats have been made to any new men arriving here.

When the strike commenced there were 1,010 miners at work in the Angus field, but there is now (Dec. 15th) left here only about 500. As was suggested when these strikes occur, foreigners are imported from other places who are willing to work at low wages. This was done at Angus and the following will illustrate the plan as well as the subject of contract foreign labor. It is a copy of a ticket furnished the men brought from Minneapolis to take the place of the Angus miners:

FRONT.

No.....	Northwestern Employment Office,
	Minneapolis.....188..
Name.....	
To.....	
For.....	
Time.....	CHAS. NELSON, <i>Proprietor</i> .

BACK.

Notice:

Parties going on railroads are requested to have this ticket in sight at the depot, and be there on said time (on other side) or forfeit all claims thereof. Work guaranteed or fees refunded, provided this is properly signed by the parties to whom this should be presented.

Void after Nov. 10, 1884.

THE MILITIA CALLED.

On the 12th and 13th the Governor of the State received several telegrams from the Deputy Sheriff of Greene county, urging that



troops be sent to Angus to preserve the peace. Only in obedience to repeated and urgent demands of this character from proper officers, did His Excellency accede to the call.

On the morning of the 14th the train pulled out of the Fort Dodge depot, in this city, carrying two companies of militia, ordered by the authorities to proceed to Angus to the scene of the reported troubles in the mines there. Arriving at Angus the cars containing the troops were immediately transferred to the scenes of the disturbance—the Keystone mines—which are located about four miles from the Angus depot, in Greene county. The whole line of six miles of side track was traversed without seeing a person.

After a short consultation between Adjutant General Alexander and the peace officers, on the ground, it was decided to leave the Stuart company (one company being from that city), at the mine and return the Governor's Guards at once. This was accordingly done, and thirty of the company from Stuart remained six days, and ten of them fourteen days.

On the morning of the 16th, the following protest was presented to the Governor:

*To the Honorable Governor of the State of Iowa, BUREN R. SHERMAN:*

WHEREAS, It has been falsely reported to you by the deputy sheriff of Greene county, Iowa, that there is a riot in progress at Angus, and that he is overpowered by a mob; and

WHEREAS, State troops have this day been shipped in here; and

WHEREAS, There is no lawlessness on the part of miners or other citizens of Angus, and we believe the troops are brought here for the purpose of unlawful intimidation of the citizens of Angus; and

WHEREAS, Nothing has been done to excite a riot except such acts by the operators as calling for troops, we, the undersigned citizens of Angus, beg hereby to enter our protest against the disgrace thus forced upon peaceable and lawabiding citizens, and ask that the said troops be at once withdrawn.

Sixty-seven signatures were appended to the protest, and among them were the mayor of the city, postmaster, and all of the leading citizens of the place.

During this time the following injunction was served upon a number of miners:

# WRIT OF INJUNCTION.

Keystone Coal Company, plaintiff, vs. William J. Davis and others, defendants. In the Circuit Court of Boone county, Iowa. To the defendant Henry Whitney:

WHEREAS, The plaintiff, the Keystone Coal Company, has filed its petition in the office of the Clerk of the Circuit Court of the State of Iowa, in and for Boone county, duly sworn to, making Henry Whitney *et al.* defendants therein, and praying that they be restrained from coming upon the following described lands of plaintiff's, to-wit: The northwest quarter of section 25 and the northwest quarter of section 26, in township 82, range 29, in Greene county, Iowa, and from in any manner whatever interfering with the employes of plaintiff's, or any such that they may hereafter employ, in their labors in the coal mines located on said premises, *and from in any manner persuading, or attempting to persuade, any such employes by threats, or violence, or otherwise, to not perform labor for plaintiff in said mines; and*

WHEREAS, the said injunction has been ordered and allowed by Hon. D. D. Miracle, Judge of the Circuit Court of Boone county, Iowa, on the filing of bond, with sureties, pursuant to said order, which has been done; and

WHEREAS, Said order has been complied with, and such bond filed and sureties approved; now, therefore, you, the said Henry Whitney, defendant aforesaid, your agents and servants are hereby strictly enjoined from coming upon the northwest quarter of section 25, and northwest quarter of section 26, in township 82, range 29, in Greene county, Iowa, and from in any manner whatever interfering with the employes of plaintiff's or any such that they may hereafter employ, in their labor in the coal mines, located upon said premises; and from in any manner persuading, or attempting to persuade, any such employes by threats or violence, or otherwise, to not perform labor for plaintiff in said mines, until the further order of our Circuit Court in the premises. And this injunction you will observe under the penalty of the law.

Witness, J. Judson Snell, Clerk of said court, with the seal thereof hereto affixed, at Boonesborough, in said county of Boone, State of Iowa, this 8th day of December, 1884.

J. JUDSON SNELL, Clerk.

The language contained in the words italicised above seems rather singular. That men shall not be allowed "to persuade or attempt to persuade" their fellow men, in proper ways, seems far from liberty.

There were twenty-five men arrested and taken to the justice's court at Jefferson. A change of venue was had, and at Grand Junction they were dismissed. They returned home and were at once re-arrested, and again taken to Jefferson. Again a change of venue



was taken to a justice living four miles in the country. As the case could not be tried at once, their attorney asked that the men be released, to which the justice assented, provided Mr. Foster (an operator) did not object. Mr. Foster said they could be released at Jefferson, but he would not transport them back to Angus. The men refused, and they were placed in a boarding house in Jefferson, at the expense of Greene county. Upon their second trial they were again acquitted.

On the 25th, thirty-six men were at work at Keystone Mine No. 2, nineteen at Standard, and eight at Climax.

Matters remained in this condition for days, but all the time there was a deep undercurrent of dissatisfaction. Bitter mutterings were heard, threats occasionally fell from angered lips, and on Jan. 7th, at about 5:30 o'clock, twenty-eight men, who were returning from work at the Standard mine, escorted by John McKay, superintendent of that mine, were intercepted by a mob variously estimated at from fifty to one hundred men. The mob came in from opposite sides, overpowering the miners, whom they began cuffing and kicking and dragging by the arms, and otherwise hustling them out of town. One man was knocked down and left, with his face badly bleeding, lying on the track. He was helped up and hurried along with his fellows, who were being driven from town in an easterly direction, as fast as a man holding each arm and one or two kicking and cuffing could take them. They were taken a distance of about two miles in this manner, where they were left by the mob, who started for Snake Creek.

The mob attacked a house at Snake Creek where eight of the working miners were lodging. They received word by telephone from the mayor that the mob was coming, and were well armed, and when the mob made the assault on the building and began breaking in the doors, firing began from the inside, and a regular battle ensued, the firing being kept up rapidly for some minutes by both parties. One man inside, named Munson, was shot through the left lung and instantly killed, and two were badly wounded. The remaining five left the building on the run, firing back at the mob. As they went the mob then started back to the town, carrying several of their own number, who were killed or badly wounded.

The mayor of the city became thoroughly alarmed, and sent the following dispatch:

1885.]

## COMMISSIONER OF LABOR STATISTICS.

157

*Sheriff Eagleson, Jefferson*:—Riot at Keystone No. 2. One man killed. Come and bring a posse.

[Signed]

D. J. MORRIS.

On January 9th, an inquest was held on the body of Munson, and the jury brought in a verdict that he was "killed by a gunshot wound at the hands of the mob." A legal body's confession of a disgraceful and disastrous proceeding, with a terrible ending.\*

Part of the Lincoln Guards were taken by the sheriff of Boone county, and conveyed to the above scene and remained several days, perhaps thus preventing a repetition of mob violence.

## A SETTLEMENT.

In April last an arrangement was reached by operators and miners in part of the mining camps at Angus, by which harmonious work it is hoped may be prosecuted. This is published below. It will be noticed that the language in the latter part of the proposition looks to some legislative action this winter, and such action undoubtedly means that in relation to the screen.

April 1st the smaller banks shut down for a week to await a settlement. The Armstrong mine posted notice that work would continue at 87½ cents (last summer's price) until further notice. Mr. Gaylord, of the Standard, called a meeting of his men, and the matter was discussed in a friendly way. The result was the following proposition for

## A SLIDING SCALE.

*To the Miners employed by the Standard Coal Company:*

GENTLEMEN—We propose the following scale of prices for the ensuing year, ending April 1, 1886:

*First.* That the prices paid by the Company for mining shall be based on the average net price received at the pit for all lump coal sold during the month. That is, that the average selling price for each month shall determine the price of mining for each month.

*Second.* The minimum price will be 85 cents per net ton.

*Third.* If the selling price average \$1.65, and not over \$1.75 per ton, lump coal, the price of mining shall be 87½ cents per ton, and if over \$1.75 per ton, 40 per cent of the amount over the \$1.75 shall go to the miner until a maximum price of \$1.25 per net ton shall be reached.

This proposition is made with the understanding that you agree and pledge your word of honor that if you accept it you will work for one year under its rules, unless some act of legislation should make it illegal. Then, and in that case only, this agreement shall be void to the parties.

\* Parties were arrested for this murder, and are in jail awaiting trial.



It is also understood and requested that you shall select one or two good, honest men who are employed by the company to examine our books and determine what the net selling price is, and their decision, with my approval, shall be final, and all payments made on that basis.

E. W. GAYLORD,  
*Manager Standard Coal Co.*

The Standard men refused to bind themselves until a meeting of the district had indorsed the contract. A mass meeting was accordingly called, which, after some discussion, approved the contract, providing the forty per cent advance should begin at \$1.70 instead of \$1.75. The contract was returned to Mr. Gaylord with the request for this modification, which was agreed upon.

The Climax men continued work at  $87\frac{1}{2}$ , last summer's price; as this company mines exclusively for the railway company by which it is owned, no scale can be fixed.

#### STRIKE AT CENTERVILLE.

In former years it has been the custom with the operators at this point to reduce wages on March 1st from \$1 to  $87\frac{1}{2}$  cents per ton and to thus continue till October succeeding. This has generally been satisfactory, and few strikes have marred the lives of workingmen in Appanoose county. This year (1885) they notified the miners that the wages would be reduced from April 1st to 80 cents per ton instead of  $87\frac{1}{2}$  cents, as heretofore. The men, to the number of 325, at once (April 1st) ceased working, and although one operator made a partial concession and the prospects seemed at one time good for a settlement, it fell through, and the miners did not resume work. This unfortunate condition continued for several weeks, when work was resumed at 80 cents per ton.

A similar strike occurred at Brazil, in the same county, the particulars of which are not in possession of this office.

#### COSTS.

The cost of these strikes in dollars and cents can hardly be estimated. Take the one at Angus for instance. The cost to the city, county, State and operators alike was very great. What was all this to the regiment (a thousand strong) of miners and their families? Hon. Carroll D. Wright in one of his reports of the labor statistics of Massachusetts says:

"Dr. Watt in his little book 'Work and Pay,' has made a calcula-

tion showing how long a striker, if successful, must work at the advanced wages to recover the sum lost while idle. Suppose he strikes for five per cent increase. Assuming the weekly wages to be two per cent of that of a working year it will take 1 3-5 years to make up for one month's wages lost; 3 1-5 years for two months lost; 4 1-5 years for three months lost, and so on."

Apply this calculation to the Angus strikers—to their loss of work. This was against  $12\frac{1}{2}$  cents reduction and the miners lost 97 days' wages.

How does the advantage gained compare with such a loss? This is the view all sides should look at. It is the one practical view to take. Look at the deplorable strike among the coal miners of the Hocking Valley, Ohio, for example. The losses sustained by the strike in that Valley since June 27, 1884, was as follows; The loss of trade to the members of the Board of Trade and coal companies was \$1,630,000; loss to business men outside the Board, \$350,000; loss of freight to railroads centering at Columbus, \$1,100,000; loss to furnaces in the valley, \$225,000; the aggregate losses are \$4,011,000. Of this it is estimated that the loss to the city of Columbus amounted to \$3,511,000.

It is not within the province of the Commissioner to decide as to the right or wrong of this Angus strike, nor could he after careful examination and no little personal knowledge. As a class, the miners at that place have always been regarded as among the most frugal, industrious and temperate in the State. Twice did they submit to arbitration and each time did the arbitrators decide in their favor, and both times did the operators retreat from those decisions.

Was this right? A thousand working men, a large part of them with families—some of them with little homes but partially paid for, mortgaged to the company—agreeing that the matter of dispute should be settled by arbitration, upon which board their opponents were represented equally with them, and then because that case was decided in their favor, to be shut out from work, with capital standing by bolting the doors to their very means of sustenance! "It does not take the wolf long to reach the poor man's door when it is left ajar."

The Commissioner had heard much regarding the absence of strikes among the coal miners at Streator, Illinois, and the proprietor of the mines there was written to, and herewith is presented his reply:



STREATOR, ILL., January 26, 1885.

E. R. HUTCHINS, Esq., *Des Moines, Iowa:*

DEAR SIR—In reply to yours of the 8th inst. will say that this coal field was opened up in 1868 and 1869 by a railroad being built for an outlet for the coal. There was three or four hundred acres platted for a town. The company being owners of the same, attached an improvement, or as was afterward termed a building contract, to each lot that was sold. Said building to be not less than 16x24, frame, set on stone foundation, with shingle roof, and to be built within a year from date of contract.

The price of \$75.00 was charged for a lot, on monthly payments of \$10 per month, but when purchaser would improve lot by building, and requested it, the monthly payments were deferred and he allowed to pay on the improvements. This plan insured all lots sold to be improved.

There was no coercion on the part of the company about employes buying lots, but a portion of them at first bought because they thought it would assist them to obtain work and believed they were paying the \$10 per month to obtain employment.

Our town grew rapidly, and many of the lots bought by employes advanced in price from 100 to 150 per cent in a short time. This, connected with a home of their own and not to pay rent, soon created a desire to all new comers to do likewise.

There are from three to four thousand miners employed in this field, and and three-fourths of them are owners of the houses they live in—taking interest in the municipal affairs of our town public improvements—our churches, schools and society. We think the tendency of a man owning his home is to improve him as a citizen.

Our companies at this place have always been liberal with employes regarding wages as circumstances would allow, and general harmony prevails between them and employes.

Yours truly,

M. J. LUTHER.

I submit this grave question of strikes demands most serious consideration and an impartial remedy at the hands of the law-makers of Iowa. How shall such disputes be dealt with? George Eliot wrote the truth in Felix Holt's address to the workingmen when she said, "to discriminate between the evils that energy can remove and the evils that patience must bear makes the difference between manliness and childishness, between good sense and folly. To find remedies and right methods: Here is the great function of knowledge; here the life of one man may make a fresh era straight away, in which a sort of suffering that has existed before shall exist no more."

This is not reached by labor agitation. I mean by such agitation as is carried on by a few pretended defenders of the workingmen,

who never do a day's work, but who, taking money from the hands of the honest toilers, go from place to place to create dissatisfaction and discord; not the "platform swaggerers, who bring us nothing but the ocean to make our broth with." Labor and capital are the greatest forces of civilization. If one suffers, so does the other. One injured, injury to the other necessarily follows.

Each party is apt to look at disputed questions from different standpoints. Neither party can afford to turn aside from whatever will tend to harmony and thus prepare the way for a final solution of that which mars the prosperity of both. The capitalist must learn the lesson, that it is best to be just. The laborer must learn that the way to help himself is through obedience to law. "The gradual rise and development of the working classes is the great social fact underlying the whole industrial question." Conciliatory measures ought to be exerted by both employer and employed, and with a reasonable exercise of this virtue, troubles of this character would largely cease. Unfortunately this spirit is not largely cultivated either among capitalists or laborers. In the old country, boards of Conciliation have accomplished great good. The absolute solution of these labor and capital problems can only be moral—"improved morality on the part of masters and men." These boards bring the "two in contact and developes the higher human qualities of each."

## ARBITRATION

differs from conciliation. When the latter fails the former may be used. "Arbitration implies that a cause of difference and a dispute has arisen. By it this may be settled, a compromise effected and war averted." The first established system of arbitration was in France at the commencement of this century and came from the destruction of class distinctions and from the French Revolution. Representatives of employers and employes composed the boards and they were authorized to determine disputes arising between capital and labor.

In 1860 these boards came into general operation and were placed upon a permanent basis. This happy result was brought about chiefly through the indefatigable efforts of Mr. Mundella, a manufacturer, and Mr. Kettle, a lawyer. It is of practical value to notice some of the results attained by these boards. Through the courtesy of the London, Eng., Board of Trade, I have received a copy of the



excellent work of Henry Compton on "Conciliation and Arbitration." This work came to the public in 1874, and though somewhat old yet the *facts* are still *facts*, and illustrative of this subject. In the

#### MANUFACTURED IRON TRADE

this work says: "The board has been in operation since 1869, and during the whole of the intervening period the general district wages regulations have been settled without resort to strikes or lockouts, and the employers must readily accord their opinion, that with a few local exceptions which do not effect the general principle, the operatives as a body have been loyal to the rules laid down by the board."

#### THE COAL TRADE.

In the northwestern coal region the colliery owners make a statement in the above mentioned book, a part of which is as follows:

It is satisfactory to us that gentlemen who have so interested themselves in the welfare of the working classes are to arbitrate upon this important subject, and it is with pleasure that we proceed to draw your attention to one of the most active mining districts in the kingdom, where for many years the masters and the men have been on the most friendly terms. You on your part, we feel sure, will gladly recognize that you are not called in to stand between an oppressed body of laborers and their employers, but that, on the contrary, you will find that the miners of this district form, both physically and morally, a most advanced type of mankind, from which some of our most talented and clever inventors and senators have been drawn, and from which, with great skill and judgment, some of the ablest advocates have been selected that ever represented any body of men; and the owners so far appreciate their intelligence that they meet their representatives at all times, and frankly and cordially discuss with them all matters in dispute.

The result has been, that the pits have been kept continuously going, and both masters and men have severally reaped the greatest possible advantage that could be obtained from the exceptionally good state of the trade during the last few years. This intelligence on the side of the miners has shown itself often and again in the ready way all questions of percentage, and others requiring a high mental training, have been taken up by them in the various discussions that have taken place, and leads us to hope that they will follow and comprehend the very important statement that we shall have to lay before you—a statement full of instruction, which we trust will draw the attention of the miners to most important truths, and cause them to loyally accept the decision which we feel sure will be the result of this arbitration.

In the Durham coal trade we find a similar state of things prevailing.

The district is described as one in which "reason and calm discussion have pre-eminently taken the place of force."

There have been successful arbitrations in Ashton-under-Lyne, Oldham, North Staffordshire, Cleveland, and the North of England.

There is no industry in Iowa affected so disastrously by strikes, as is that of coal. With the great fields of this treasure in our State, and with the immense number of operatives required to bring it to the surface for the market, it is desirable, indeed almost imperative, that some plan shall be found by which strikes can be avoided. Is there a better or more feasible plan than that of arbitration? I am strongly of the belief that such a plan would be endorsed by operator and operative alike.

The law of supply and demand is an important truth, but only a fraction of the whole.

In the problem of wages there is a minimum below which capital cannot safely go, and should not if it could. We are greatly in the dark on this subject. More light is a just demand.

"As harmony is restored between capital and labor, as employers and employed gradually cease to be opposed, and meet together and co-operate in mutual trust, equally animated with the conception of peaceably working out the great ends before them, the evolution of the industrial organization will go on. Its movement will reveal the laws by which it moves, and progress, from being purely empirical, will tend to become, more and more as time goes on, conscious, intentional and systematic."

Each effort upon the onward march has its effect. This question of labor and capital is the problem of Iowa, of the nation, of the age, and the world. To discern the truths upon which this problem rests, is the question of the hour. There cannot be a nobler work for humanity to undertake than this. There cannot be a more needed one for law makers to settle, and believing that a great step in this direction can be gained and many disastrous strikes averted and disputes settled by proper arbitration, I respectfully urge that measures be taken by the General Assembly, looking to the creation of a Board of this nature at an early day.

Mr. Fred. Woodrow, a laboring man of this city, has written several articles on questions of labor and capital, all of them impartial and remarkably strong. They possess more than ordinary strength for practical and emphatic usefulness, from the fact that he has faced the hardships of life and seen the dark side of a laborer's life to such an extent as not only to make his words practical, but to have surrounded himself with a history closely akin to that of



romance. Across the sea he was known as the "bold boy" among outcasts and peasants. He walked over 4,000 miles among city dens and villages, listening to the stories of the unfortunate and abandoned, and trying to help fallen humanity. On the work bench during meal hours, he wrote letters and leaflets for the soldiers, many of which were afterward found in the knapsacks of the dead soldiers in Zulu. For two years he was the almoner of Caroline of Carrow. Among those roughs, in the fore-castle, and among abandoned sailors, his heart has been beating warmly and actively to prompt his willing hands to help. After chopping all day, he established free reading in the back woods of Canada, and in our own city, during the great strike a few years since, spent his evenings attempting the work of conciliation and arbitration, and in the employ of the C., R. I. & P. R. R. in this city, the employes and employers regarded "Fred's pouch," in which lint, linen, plaster and bandages were always ready, as a saving boon, worthy of copy in every factory and railroad warehouse in the country. In all these stations he has been abundantly fitted for writing the strong, crisp, pungent articles, one or two of which he has kindly furnished this office and for which I am grateful. The following is one:

#### THE INDUSTRIAL CONFLICT.

We live in the era of labor. Civilization is rolling up its sleeves, and idleness as an art, has come down to the dude, and the tramp. The old shame of servitude is gone. Man advances, and takes his shovel with him. Education and liberty, vitalize the work and the worker, a living unit in dignity, or in dirt. It was always so in principle since Adam carried a spade, but in practice and potency never so dominant as it is to-day, and the more so, as educated labor becomes a fact. We see the fruit of the tree of knowledge spread on the poor man's plate, and intellectual attainments, once like coronets and cologne, possessed by the few, are to be found with the pick and the hod. This transition has come to pass, not by edict, nor in lump, but by a long and bitter process of struggle and heroic deed, leaving on its track such sublime wrecks as the ashes of Smithfield and the bones of Marston Moore. Every age has had its widening horizon and increasing light. Star fire has run into sun, and what was the aspiration of a baron, is now the birthright of a bootblack. In these changed conditions, the vassal becomes a man, the trampled serf a thinker. The force that once utilized ignorance, and political impotency, for private greed, or public crime, has spent its strength. The time is past for all such work as that. The old pawns on the board are no longer ivory, but men. Intelligence and the ballot box leave only the beggar and the outlaw to the crumbs of Lazarus, and the dogs of Dives. The head of the freeman is on the head of the dragon.

For all this fact of labor emancipation, what it teaches and what it predicates we see agitation and discontent; not, altogether phenomenal, nor crude, nor wicked.

Agitation is a condition of progress, when its inspiration is of truth and justice. It is true, that in some cases, it has run into blind violence and wild experiment. They, however, are mostly local and exceptional and are only spume on the tidal wave. The Pittsburg riots and the Molly Maguires were but volcanic spit. So long as education, Christianity and Saxon sense predominates, agitation can never lapse into anarchy, or a Robespierre be possible in this Republic. When the school and the ballot are free and the hot blooded races are subordinate the old methods of fire and brimstone are obsolete. The Anglo-Saxon, in the cause of labor, has been and is yet, cold and practical, but none the less progressive and sure. He is a failure on fireworks, but grand on granite. He is not subject to Gallic milk in his bones, nor has his reforms the accompaniment of lazzaroni, devotee or dagger. It is true, whether we like it or not, that the race element in all reforms fixes its status and its methods. Some of the purest and noblest types of the agitator have been evoked from the labor classes of Great Britain. Grand old forms of intellect and courage! Calm, patient, gifted men, such as Ernest Jones and Thomas Cooper, who, in sacrifice and devotedness served the cause of the poor. They were the diamond dust of the shoeshop and the forum; a type in advance of educated labor and prophets of the time, when the difference between a peer and a ploughman will be whittled down to true blood and a cheque. Such men are the need of the hour. A squad of millionaires could not replace them. These antique figures of justice and sense, let us hope are not extinct. Their work is but beginning. The conflict between labor and capital enters on new phases. The masses are no more of a mob but a series of combinations. Men are not in file, but in column. The telegraph, the press and the postal service make organizations, separated by States and seas, a unit. Distance can no longer decimate. An office on a third floor, and a man with warts on his knuckles may nowadays represent a combination, the momentum of which can scarcely be rated. For good or for evil this Hercules stands guard over his bread basket and babies. It is not the Roman against the Hun, but the corporation as against the union. They disagree and antagonize. One reduces, the other strikes. Time, trade and money are lost; cobwebs are on the loom, and hungry mothers by the cradle, and yet as between capital and labor, there is no difference not logically removable. *Primarily they are a unit.* There is no need of antagonism. If relationships are strained, it is by the force of perverted functions. Hostility and reprisal are in some cases criminal; in most unnecessary. It is often but the matter of a brute and a brickbat. To harmonize the two divisions in the industrial world, is a matter of grave and increasing importance. *The nearest approach to success, is in the principle of arbitration and boards of conciliation* as established in Great Britain. The principle is clear, the reason strong. The recognition of mutual rights, makes them co-operative. The adoption of this plan in these days of socialism, strikes and dynamite, *if not to-day must be to-*



morae. Humanity may discount the necessity, but fails to annul it. Harmony or rupture are the alternatives. It will yet come to one of the two. The image of God is shining out of coal dust and black board dust. The mental spark once quenched and the complaining lip once choked, shake off the incubus as an Arabian lion the sand from its mane. Labor is at the school, the library and the poll, the coming force. Its harmony with capital is the momentous question of the age. It will not do to disregard history in the matter because the people who made it are unfortunately located on the other hemisphere. We have no immunization from the laws of justice, or the stomach because of our lag or our latitude. Our liberties may be great, and we may be pardoned for thinking them exclusively our own, but let us not forget, that in their continuance, justice and right are inexorable, and care as little for our bunting as death will for our necktie.

The issues of this matter are already *set*. They are amongst the predetermined verities of economy and government. Industrial interests already *profile the cost of coming politics*, and intelligent labor discarding the brick-bat, will utilize the ballot. The strikes that paralyze business, and the contacts that sometimes produce them, will yet be amenable to public judgment. *Justice will polarize on equal rights*. Statesmanship already in the field to protect the trades traffic and the farmer's corn from railway extortion, will in the domain of practical politics, utilize such agencies as *boards of arbitration* in the adjustment of industrial difficulties. As between master and man, individual relationship ceases to be purely personal, when it involves an outrage on commercial interests. Here the need of interference and hence the cry for justice.

In an interesting article lately appearing from his pen, entitled, "CAROLINE OR CARRROW. A HEROINE OF TRUE SOCIALISM." After most graphically describing this heroine's work in East Anglia among men and women with whom misfortune, social wrongs and poverty "were making biographies in smoke, corduroy, and calico," he says: "Humanity, after all, is the basis fact of the only possible socialism. The disease lies in the breast-bone. The world made into a communistic free lunch would not make a rogue the less, or keep greed from putting its fork in the biggest potato or the fattest sardine. Judas sold his master with his stomach full of lamb."

Coming closer to this question of co-operation, the same writer, in an open letter on "The Missing Coupling," says: "Capital and labor are to-day in open rupture. Money and muscle for a time are antagonists. This attitude of the two indispensable conditions of industrial life is abnormal, disastrous and pregnant with peril. Capital and labor are dependent one on the other—the wages and the wheels must go together. \* \* \* \* \* The force at the end of this gigantic movement is not to be snubbed, un-

derated, or left unnoticed. \* \* \*

The evil lies

in a disturbed relationship, and must be intelligently, boldly, and manfully readjusted. There is but one square, fair and peaceful remedy. It settled the Alabama claims. It can settle the claims between Capital and Labor. *Arbitration is the missing coupling*. It has been evoked to theorize the fires of countless labor strikes in Great Britain, and to these broad, grand types of English Liberalism, such as John Bright, Frank Crossley, Brassey and Mandella, the laboring masses of England, and the capitalists too, are indebted for a fair and bloodless way of settling all differences between the man that has money and the man that works for it. \* \* \* \* \* This is fair. It is above-board. There is no back office business about it. No man can say aught against it. It treats labor as a brain force as well as a hand power. It makes the operative the confidential servant of the manufacturer. He stands on a higher plane than when he thought himself but a churr, out of which his master churned his butter. It is as fair for the capitalist. It puts him above the suspicion of reducing the poor man's wages to fill his own pocket, and it ensures the loyalty and good service of all his employees. Let such a programme of peace as this be carried out now. \* \* \* A board of arbitrators would settle this matter sooner than a brigade of regulars."

Certainly, arbitration, as a method of settling differences between nations and individuals, has already made great triumph, and secured the best results. The State of Pennsylvania has passed a law providing regulations to govern arbitration of disputes between employer and employed. It has already prevented some strikes and violence, and promises much for the future. Mr. Elkins, in the address before referred to, said:

"When employer and employed can lay down their irritations and grievances sufficiently to meet as equals, and discuss frankly and candidly the disputed issues before a board of arbitration selected by both parties, it is a great step gained. The best fruits of arbitration and conciliation will only be gathered after education and intelligence become more general. It has been hindered by the want of these, and in the future, as progress is made in both, it is not too much to hope that arbitration and conciliation will be the means adopted, alike by nations and by individuals, to adjust all differences.

Among miners two causes of the troubles existing between them and the operators, deserve special attention. These are, first,



## THE TRUCK SYSTEM, OR COMPANY STORES.

Happily this system is not in extensive practice in Iowa, yet at several of the mines it exists; and whether here or in other States, it has always proved a source of discord and trouble. Several of the States have, by law, done away with this system, to the good of all concerned. Unquestionably, most of these stores are managed honestly, and yet they compel a credit system which is always unfortunate to the wage-worker. If the rule of any company *compels* the employe to trade at that company's store, that rule is tyrannical and unjust, and the law should do away with it. No company ought to be allowed to be so arbitrary as to make the sustenance of a man's family—gained by hard work—dependent upon his trade at a certain store. While a company should have the right to conduct a store if it so chooses, it surely is a piece of selfish injustice to *compel* an employe, upon peril of losing his situation, to trade there. Outwardly perhaps this compulsion is not apparent, yet after the most thorough investigation, I am convinced that with nearly all companies that own stores of this character, if an employe declines to trade at such store he is soon notified that his labor is needed no longer. This is equivalent to compulsion, and indeed much worse, as it is hidden under the garb of cowardice. A miner should be allowed to buy his tools, powder, lamps, oil and groceries where he chooses. He earns his money by honest labor. It is his to do with as he likes, and the greed of an employer should not be allowed to stand in his way for the exercise of this—his right.

An idea of this truck system may be gathered from the following specimens of checks. They are in shape and size like the old postal currency of the Government, and of all denominations:

[FRONT.]

(1) This is not intended to be used as money. Western Supply Co. Pay the bearer on demand in Merchandise Five Cents. Ottumwa, Iowa, March 31st, 1883. No. G5012. Whitebreast Company.

T. C. MAINS, Sec'y.

[BACK.]

Accepted. Redeemable in Merchandise on demand. 5 cents.

D. A. TELFER, Sec.

[FRONT.]

(2) This is not intended to be used as money. This writing witnesseth, That the Chariton Coal Co., of Chariton, Iowa, agrees to furnish the bearer on demand Merchandise in the value of Five Cents at its Store in Lucas, Iowa. Five Cents. Chariton Coal Co. No. G152. Nov. 1st, 1884.

S. S. KING, Sec'y &amp; Treas.

[BACK.]

5

Allusion has been made in this discussion of company stores to the necessity of acceding to the wishes or demands of operators in relation to the trade of miners, and the results of failing thus to do. That the miners to a very great extent are not permitted to freely express their opinions on this and kindred matters, there can be no question. Regarding as I do the operator's position as one of very great value and responsibility, and realizing to a full extent the unreasonableness of very many demands made upon them by the miners, yet I am convinced that a full expression of views should be allowed these men, and am sure such is not always the case. Take the work in this office for an illustration.

As already suggested, it failed to get as large a number of blanks returned by miners as the Commissioner had hoped, and a less number in proportion to those sent them than from other wage-workers. The reason assigned was fear of publicity, and that this publicity would deprive them of their situations. Investigation proved this to be true, as much as it is to be regretted.

I found by personal examination in no less than five mining camps, that miners felt that if they responded to the requests from this office, they would be deprived of their situations, and this fear was based upon good grounds. This is unjust,—unjust to the operator as well as to the miner. If these strikes are brought about through a wrong, or even unreasonableness on the part of either the employed or the employer, the sooner that wrong or unreasonableness is brought to light, the sooner it will be done away with and harmony prevail. I have endeavored, as Commissioner, to simply obtain facts. I have



sought them from one side as eagerly as from the other, and any one,—be he capitalist through avarice, or wage-worker through ignorance or bigotry—who attempts to hinder the collection of these facts, is unjust to capital and labor both, and forgets manliness.

There are 250,000 manufacturers in the United States, a great number of whom insist upon a policy the effect of which is to limit the number of operators, and make pools and combinations all powerful. There are 2,500,000 manufacturers' employes (and these miners are typical of such a class of our citizenship), who are associating themselves together for mutual protection. Has the former any greater right to carry out their ideas than the latter theirs? It isn't a question of the right or wrong of strikes, but rather how can we avoid the conditions which produce strikes. Both sides deserve censure, and as long as there are unreasonable wage-workers, or unjust wage-payers, there will be strikes. Injustice practiced by either side will bring about threats, intimidation and force. The great problem is how to avoid that which produces this discord. In other words, *to be just*.

The other great cause of this difficulty is much more serious, as well as more general. It is the

#### COAL SCREENS.

It will be remembered that in the Twentieth General Assembly, before the Committee on Mines and Mining, this question was fully discussed. Great interest was felt by miners and operators, and both sides were represented before this committee. Several bills were prepared, discussed and rejected, and the Legislature adjourned without reaching any result in the matter. To the outside observer it seemed that some plan ought to have been adopted which would have been satisfactory to both parties, yet to the same observer it seemed as if neither party knew exactly what they wanted. The same difficulty has been met with in other States. Iowa is by no means alone in this respect. There are very serious obstacles standing in the way of a solution of this problem—obstacles which affect the operator as well as the miner. These obstacles seem to be overlooked by these two parties, as they look at the matter from their respective standpoints. For example: it may be that a screen that will suit one mining camp, will be totally unfit for another in a different locality. So, also, nut and chestnut coal, and slack may find a ready market at one place, and

none at another. Again, Iowa is not the master of the coal market. Already strong and vigorous competitors have entered the field, and Missouri, Illinois, and even Colorado, are now bidding for this trade. An Iowa operator, unable to compete favorably with these rivals, must withdraw from the field, and with his withdrawal, comes the idleness of the miner. Then, upon the other side, to take nut coal, or chestnut coal, or slack from the mine requires just as much labor, powder and oil, on the miner's part, as to take lump coal, and in localities where it finds a market, it brings a retail price of from \$1.00 to \$2.75 per ton, and the pockets of the operators grow plethoric with this money, while the miner is not enriched to the extent of one cent. These facts are also to be studied. In attempting the solution of this knotty question, these are the facts to be looked into by both operator and miner.

It is not within the province of this office to recommend a definite screen, even if its incumbent was competent, but it is not only hoped, but urged by him, that the Twenty-first General Assembly shall adopt a screen which shall be, so far as possible, a uniform screen, and that such an one may do justice to the miner without wronging his employer. It is believed that this can be done, and if so, a very decided improvement will have been reached. If it cannot, it seems possible that some plan may be adopted by which, whether with or without screens, the miner should be paid for labor actually performed—coal actually mined—and this without detriment to the operator. In Ohio, ten years ago, this difficulty had reached huge proportions, and His Excellency, Gov. Foster, appointed a committee, with extended privileges, to examine into the question, not only of screens, but the "truck system," and majority and minority reports were submitted. This committee have so thoroughly examined the matter, and reached such tangible results, that the attention of the Twenty-first General Assembly is respectfully called thereto.

The object of that committee was four-fold viz.:

1. To inquire into the various systems of screening coal as between the miners and operators of the State.
2. To inquire into the operation and results of the law to prevent the payment of wages in scrip.
3. To inquire into "all other grievances," presumably of the miners of the State; and
4. To report the facts in the premises, with such recommendations as they shall deem necessary, to the Governor, for the use of the General Assembly.

This commission "counted the questions pertaining to the screen-



ing of coal as the main object of the commission," and to this subject, therefore, they gave first attention, and their report covered two subjects, viz.:

1. Methods of screening coal.
2. Modes of payment of wages.

The facts elicited by these gentlemen were many and strong, and in the consideration by the Iowa legislators will be of value, but its length precluded its publication in this report. There was a majority and a minority report. The majority presented the following

#### CONCLUSIONS:

##### I. PAYMENT ON WEIGHT BEFORE SCREENING.

From as fair and unprejudiced study of the testimony and the facts of the case as they were able to give, the Commissioners agree in the conclusion that the payment of wages for mining on the weight of the coal sent out by the miner, without consideration of its quality as to size, would certainly prove, for a time, at least prejudicial to the interest of both parties, to the operator, by putting him at an inevitable disadvantage in market, and to the miner by reducing or cutting off his work.

The claim that good miners would make the best possible grades of coal, because it is easiest for them to make such grades, we do not find to be well founded. The weight of, at least, the indirect testimony, is strongly opposed to this view.

The claim that, as a body, they would mine their coal as large as possible from a motive of pride in doing their work well, or, as one witness expressed it, that the operators "could safely trust to the conscience and pride of the miner" in this respect, we find to be of still less weight. It seems to us to be negated by experience and invalidated by the laws of human nature. Against the steady pressure of self-interest, in the way of relief from hard work, such motives do not hold their ground, except in a small minority of cases.

Furthermore, the testimony of a considerable number of witnesses on the part of the miners themselves, recognized a measure of deterioration in the quality of the coal as likely to result from the adoption of this scheme.

The extreme view of the operators that the coal would be ruined under such a system, and that they could find no possible means to protecting it, we do not see reason to adopt, but lowering of quality appears to us inevitable.

Applying the four general principles that have been laid down to this system, we find it defective in every point but the second.

It would fall short under the first head, because it would antagonize, to some extent, the interest of miner and operator in the condition of the coal.

It would violate the third principle, because it would fail to discriminate properly in favor of skill in the miner.

It would transgress the fourth, because, having set at variance the interests of miner and operator, it would give rise to a constant succession of petty conflicts which would be likely to grow to large ones.

At first sight, it would seem to meet the second requirement, which demands that the whole product of the mine should be made available. Under its operation, there is certainly no reason to doubt that all of the coal would be sent out by the miner, and more, but there is a question whether a larger amount of it would not be made into worthless slack.

##### II. PAYMENT ON THE SEVERAL GRADES OF SCREENING COAL ACCORDING TO THEIR VALUES.

In view of all the facts, the Commissioners further agree in the conclusion that if it were practicable, a payment for the two chief grades produced, viz.: *lump and nut*, involving a redistribution without an increase of existing rates, would be, on the whole, a more satisfactory system than the screen system as at present established. By it the quality of the coal and the skill of the miner would be, in a measure, protected, while the inequalities of condition would be partially compensated, the miner would recognize his direct interest in the entire product of his labor, and would be under no inducement to withhold from the operator any part of the coal.

Up to this point the report of the Commission is unanimous, but as to what follows, certain differences of judgment were found, and Mr. Williams' dissent is expressed in a minority report.

To the majority, the objections to this scheme seem to more than counterbalance its advantages.

It would involve a harrassing inquisition as to the prices of the several grades, and it would furnish opportunities to change normal rates in such a way as to give occasion for trouble.

It would seriously disturb and complicate existing leases, as to the coal on which royalty would fall.

At every change of mining rates, two prices would need to be settled instead of one—troublesome comparisons between the several fields would be certain to arise, the nut coal of certain fields having much greater intrinsic value than that of others.

It would open up the whole question of wages, which would not be likely to be settled without much loss on one side and distress on the other, and years might elapse before as good relations as now exist could be re-established.

Finally, the change would not satisfy the miners themselves, as a body. The testimony shows that with a decided majority of the witnesses who were questioned upon this point, the demand for a change of system on the part of the miners is coupled with an expectation of an increase of wages for mining. Some of the witnesses frankly avow that their interest in a change is dependent on such advance. A redistribution of wages without an increase seemed to the most of those to whom it was proposed "a barren idealism," and not worth the trouble it would cost.



Some, it is true, were willing to forego immediate advantage in the expectation of ultimate gain from the change, but what the majority ask, is a higher price for their labor.

It is a matter of serious concern that the monthly and yearly wages of the miners in nearly all of the districts run as low as they at present do, but the testimony shows that it is not the daily earnings that are at fault. It is even true that where the conditions of the coal and the rates of mining render possible the largest daily earnings, the yearly wages may run lowest. Where a miner makes, for a day's work, from \$3.50 to \$5.00, for example, the scale of daily wages can scarcely be considered too low. If he still has but a scanty living, the reason must be found in the fact that he has not enough working days.

The state of things referred to above has but one explanation. The mines are overcrowded. Too many men are trying to live by mining Ohio coal. To increase the amount of the day's earnings would bring no permanent relief. It would probably aggregate the evils that it was designed to cure, by increasing the price of the coal and thus further restricting its market, and also by attracting still more miners to the field.

For this overcrowding of the mines, both operators and miners are to blame.

Every mine owner gathers about him enough miners to bring out the maximum output of the mine on any day when his markets call for it. He counts it necessary to carry a surplus of miners above the number required for the average output in any case, on account of the irregularity and uncertainty of mining labor. This surplus is rendered necessary, it is also claimed, on account of the policy of the railroads in the distribution of cars. All the cars that are sent into the mine on any day must be filled at once or the capacity of the mine will be rated at a lower figure, and the operator considers that he will thus be left at further disadvantage. A large part of the responsibility for this policy is thus charged over to the railroads, by the operators. What the defense of the railroads is we did not learn; but this whole system, so far as it is a distinct policy, is a cruel one, that makes more account of rapid gains than it does of the comfort and lives of human beings.

On the other hand, the miners are themselves largely responsible for this surplus of mining labor. Let alone the natural and justifiable tendency on their part to take their sons with them into the mines, many of them importune the operators to give places to new men, in their own rooms, from whose labor while learning the art of mining, they are to receive a percentage. So, also, if they are even moderately prosperous, they have friends, far or near, whom they call in, and to whom they almost oblige the operators to give room.

Once introduced, by whatever means, the tenure of the miner's stay is in his own hands. Orders may be slow, or the operator may choose to reduce his output, but he is not allowed to reduce his mining force. He cannot, in a dull time, direct the work that is to be done into the hands of those that have families to support, leaving the unmarried men to look out for

themselves, but whatever work there is must be divided among the whole force. In the most overcrowded mine, the miners will not allow a man to be discharged for the sake of reducing numbers. There is an element of generosity in this policy on their part that commands our respect, but a policy that produces such results is certainly a mistaken one.

The greatest surplus of miners prevails in those districts where most money is earned for a day's work. To remedy this condition of affairs, the most unwise thing would be as before stated, to increase the price of mining per ton. The only permanent relief will be found in getting more days' work, or in having fewer miners to do the work, or in both courses.

To adopt any policy by which present markets would be lost or weakened would doubtless increase the evils of the situation, for the cause of the present trouble clearly is, not that not enough is paid for mining a ton of coal, but that there are not tons enough to mine.

Of the various districts visited by the Commission, the condition of the mining population was unquestionably best in those in which work was steady while the daily earnings were moderate. There is no difficulty in explaining this result.

The rates paid for mining in Ohio to-day would in every instance give a decent living to the miner if steady work could be furnished to him. In some districts, steady work at present rates would give to the coal miner as high wages as any branch of skilled labor in the State now commands. Taking the miner's daily earnings only into the account, he is without question the best paid laborer of his grade in the State.

Returning to the system that is before us, viz., payment for mining on the several grades of screened coal, according to their respective values, and applying to this system the four principles already laid down, we find that it meets all of the requirements, in fair degree, except the last.

It unites the interest of miner and mine-owner in the product of the mine, as the first proposition requires, and in the *entire* product, as the second demands. It also complies with the third requirement, in discriminating in favor of the skilled miner, but the majority of the Commission find it falls so far short under the fourth head, that, in their judgment, it must be ruled out of present account. It seems to them that it would prove troublesome, if not impracticable, in execution.

### III. PAYMENT ON A SINGLE GRADE OF SCREENED COAL.

The Commissioners have already expressed their belief, at least by implication, under the previous head, that a screen system can be made just and fair to both parties in interest, and by a screen system they designate the plan of discriminating in favor of the highest grade of coal in the payment of wages for mining. They are satisfied that in present markets the operator's highest interest is in large coal, and they see no better way of securing large coal than by making it to the miner's interest to produce it, by paying him at least *more* for it than for other grades.

The Commissioners further hold the opinion, Mr. Williams dissenting,



that it is possible to make a fair return to the miner for his labor while placing the entire pay for mining on the highest grade of coal. They believe that there is such a thing as a fair day's wages for the miner of coal. It is not necessary to decide just what such wages would be, but when the time and expense of learning the business, the powers of body and mind brought into use in prosecuting it, and the severity and hazard of the labors attending it, are all taken into account, it will still be possible to find what would be a fair return to the miner as a member of the wage-earning class in any community.

It can easily be determined by trial what proportion of well-mined coal from any seam will, upon the the average, pass over a screen of any practicable size, and to this average amount of clean coal the price of mining can be easily and fairly adjusted, whatever the proper wages should be found to be. A scale could be fixed for screens of any size and for coals of any kind.

It is found, however, in practice that in placing the entire wages on one grade, an element of trouble is introduced. The miner finds it hard to realize that anything is paid for except the favored grade. Though he may be forced to acknowledge, when pressed with the obvious facts of the case, that his wages do cover, at least in some sense, all of the output, the moment that the pressure is withdrawn he relapses into the old view, as our records abundantly show. All of his labor that is represented in the nut coal and slack is, in his favorite phrase, "given to the operator for nothing," so long as he sees these grades going to market without being directly accounted for to him. The stubbornness of this misconception it is hard to overstate. The miner shuts his eyes to the fact that the nut coal and slack are the necessary results of his labor in getting out the large coal, like the chips that the wood-chopper makes in cutting cord wood. The chips may make good fuel and may take the place in market of some of the cord wood, but the wood-chopper when cutting by the cord will scarcely claim that he is entitled to a part of the proceeds of the sale of the chips, even though they are made by his labor. His labor has been already paid for.

If the price paid on the lump coal does not make a fair return to the miner for the entire labor of mining the coal, he has a just ground of complaint, but the complaint would fall under the head of insufficient wages and would not be against the system.

It is also evident that there is a measure of inequality connected with this system. We find the complaints of the miners as to the varying condition of the coal to be, at least in part, well founded, but we recognize the fact that such inequalities are inherent in work of this character, done in the large way, and that they cannot be entirely obviated by any system.

The confusion and varying standards as to screens in the State, seem to the Commission to be evils, and probably remediable evils. A part of the wrongs complained of and feared by the miners in the use of screens would be done away with by the establishment of a standard screen.

Finally, applying to this system the four tests already made use of in connection with the previously considered schemes, we find that payment

fixed upon the highest grade of screened coal can be made to meet the demands of the first principle, viz., that it shall unite the interest of both parties and prove just and fair to both, but we are obliged to recognize the further fact that a large majority of the miners of the State claim that in their view it is unequal and unjust. On this side, therefore, the screen system is, in practice, weak.

For the same reason it fails to meet the second demand. It is a fact that a large amount of nut coal is lost to the operator and to the State through the feeling of the miners in regard to the effect of the screens. Though their withholding the small coal is a palpable breach of contract, and indefensible on moral grounds, it is still a fact.

Under the third and fourth heads, however, the screen system fully sustains itself. It gives all due advantage to the skilled miner, and it proves itself, in operation, a thoroughly practicable and working scheme. It is simple and intelligible, and easy of execution.

The fact that it has won its way against all competing systems to its present pre-eminence goes far to show that the miners are not suffering great injustice from its operation. A system essentially and innately unjust would not have been allowed by them to grow to its present proportions.

A number of experienced miners testified that though the general sentiment of their body was opposed, they themselves considered the system a fair and satisfactory one.

On these grounds the Commissioners, Mr. Williams dissenting, count it to the common interest that the screen system be maintained, at least until a better system is proposed.

This majority report concludes as follows:

#### RECOMMENDATIONS.

I. The majority of the Board of Commissioners do hereby recommend that, by due course of legislation, a screen of given pattern and dimensions shall be established as the legal standard for the coal mines of the State.

That the legal screen shall be constructed of flat or round-topped bars, not less than  $\frac{1}{2}$  inch wide, of steel or iron.

That the spaces between the bars shall not exceed one and one fourth (1 $\frac{1}{4}$ ) inches, and that they shall be of uniform width.

That the screening surface shall not exceed seventy-two square feet outside measure.

That the screens shall be free from all gates or devices that tend in any way to reduce the size of the coal.

We have made these recommendations, believing that so large and sensitive an interest as the coal mining interest of the State should be freed from all needless sources of irritation and misunderstanding; but in framing them, we have not felt called upon to consider questions of constitutional limitation, and with all of them, therefore, a qualifying clause is to be understood to the effect that they shall be found to be in harmony with the Constitution and laws of Ohio.



We have recommended a screen of 1½ inches between the bars, because it is in such general use in the State at the present time; but we are of the opinion that, were it not for opening up questions of mining rates that are now settled; a screen of 1½ inches between the bars would prove more advantageous to our coal interests. It would give to the operator a better standing in the market against the competition that he is obliged to meet. In other words, the operator would sell more Ohio coal, and, therefore, the miner would be called upon to produce more.

II. We recommend that existing legislation relating to the use of scrip, orders and checks, in the payment of wages, be re-enforced so as to be made operative.

EDWARD ORTON,  
JOHN BRASHEARS.

*Columbus, Ohio, December 26, 1883.*

Mr. Williams, of the minority, reports as follows:

#### THE SCREEN QUESTION.

With regard to the screen question, I find in the testimony taken that there is general dissatisfaction among the miners with the system now in use. It was very observable throughout the course of our investigation, in every district in the State, that a great majority of the witnesses appearing before us, both miners and operators, expressed their dissatisfaction with the looseness of the present diversified manner in which coal is screened and weighed, as between miner and operator, and at those mines where the system of weighing the coal before screening is in use, or where the bushel system holds sway, none could be found recommending the adoption of the screen system; in fact, where these systems are in use, the operators and their employes evidently get along with a greater degree of satisfaction than can be found elsewhere. It is also a very noticeable fact that the miners throughout the State generally join in their disapproval of the paying on one grade of coal for all grades produced; and, after a careful examination of this point, I myself feel that their objections in point of validity are justly set, as it is very plain that there is a temptation for violation of the standard by reason of the inducement to diminish the quantity of coal of the grade on which the price is fixed, and increase the amount of those grades with no price attached. This could be done through a disordered condition of the screen, or by appliances to the screen. Thus I express my disapproval of this system, because in point of equity it is found wanting.

Though a large majority express dissatisfaction with the present mode of screening, and many give their opinions as to what would be a remedy in the case, the suggestions of a large number, miners and operators, I have reason to find fault with, as they do not cover the ground, so that a law passed relative to this question would be equally fair to all, and discriminate against no district to the advantage of another; but, from the dissatisfaction that prevails so strongly, it is very evident it would be wise to recom-

mend a system that would have the effect of allaying the difficulties that now exist between these two interests.

According to my views, the remedy has very generally been suggested, though in the appliance of the same many differ, for there lies the delicacy of the question.

All have conceded, both miners and operators, that all merchantable coal should be paid for; the operators claiming that in price paid for the lump all grades were paid for, and the miners claiming that it discriminated against many of their number, inasmuch as that those working in rooms where the coal is of inferior quality sustained a greater loss through the coal being screened than those working in coal of a stronger nature, etc. Many of both parties interested have expressed themselves favorable to the adoption of a system through which all merchantable coal would be paid for in proportion to quantity and quality of each produced. From this I am forced to what I deem a fair and reasonable conclusion, namely, that all marketable coal should be paid for, whether before or after screening. Should this meet with approval, it would then rest with the Commission to decide as to what would be the most feasible and satisfactory plan to produce this result.

In my estimation, there are two ways in which this could be brought about, after screening or before screening.

In the face of the fact that in all coal districts of the State, coal passing over a screen with one half of an inch space between the bars is considered merchantable coal, and all going through this screen is considered unmerchantable coal, I feel from this evidence, that the standard screen, as dividing the merchantable and unmerchantable coal, should not be over 12 feet in length, and not over 6 feet in width, with no more than one half an inch of space between the bars. I mention the lower screen first, as I consider that the standard should begin at the screen dividing the merchantable and unmerchantable coal. As to the upper or lump coal screen, I am not in favor of the limit as to the space between the bars being over 1½ inches, the length and width to be inside of that of the lower or nut coal screen. This limit, I think, should be established as governing and defining the extent of the size to which the screens can be enlarged in districts where they are wont to go beyond this, producing dissatisfaction and trouble generally between miners and operators, and to check the abuse of the screening of coal influenced by insane competition, which is the cause of so much extravagance and waste of the mineral wealth of the State. I also favor the weighing of all merchantable coal in the hopper scales immediately after passing over the screen, as this system would be less liable to infringements upon just weights.

As to weighing the coal before screening and paying for all that is merchantable, where this system is in vogue it seems to give satisfaction. By trial it is found how much coal that is merchantable is contained in a number of cars containing raked coal, and the amount of unmerchantable coal detected is averaged, and the number of pounds that each car contains of impure coal is thus found, and the miners must then send out these addi-



tional pounds to the ton to obtain pay for a ton of merchantable coal. This system, so far as I have investigated, has worked admirably. True, there are some objections given, but they are of such slight proportions as to form no serious impediment to the adoption of this method. As to docking, which is the most objectionable feature of this system, provisions could be made that would dispense with the trouble arising from it.

It would seem the most reasonable way to solve this difficult problem to have to the coal weighed before screening, as between miner and operator, leaving it to them as to the manner in which it should be done. There appears to be more reason attached to this than dictating to operators the size they shall screen their coal, and I think it would meet with less objections than the screening system, and would, I think, give greater satisfaction. Many of the operators called before us have expressed themselves as doubting the dictation as to the size of screens that shall be used in screening the coal being a point for legislation, deeming it a question governed by the demands of the market, and it must be admitted that there is a great deal of reason attached to this view of the matter, for it is evident that even a limit to the size of screens would also limit the demand for the product, according to the discretion of men outside of the State who are engaged in the same business, and instead of encouraging this industry in our own State, there would be a decided restraint placed upon it, which is undoubtedly to be regretted.

To the system of weighing the coal before screening, as between miner and operator, there are no such objectionable features attached, and I cannot see but that it would recommend itself to all fair-minded and candid men of both or all sides.

It would do away with the troubles and dissatisfaction that continually arise from the unfair appliances to the screens, which are placed there, as claimed by the operators who use them, to clean the coal. I have reference to what is known as the screen-devil and the gates, which aid it in its nefarious work of crushing the coal as well as cleaning it, taking more from the car than was contained in it of fine coal when sent from the miner. As to the gross injustice of the stop-gates and screen-devils placed in the screen, I leave the testimony contained in the record to bear witness to. All this trouble could be avoided and the present friction allayed by the adoption of a system, or law, that would compel the weighing of coal as between miners and operators before screening.

This would leave it between the miner and operator to agree, with equal advantage, as to question of price in accordance with the condition of the coal as it is delivered from the miner. Much more could be said in favor of such a law, but believing that its fairness is sufficiently observant, I respectfully submit it to you.

I have deemed these remarks deserving of space in this report. They are exhaustive and give conclusions advantageous to both sides of the question. They are presumably impartial and fair, and will

doubtless be of value in the future discussion of the question in Iowa. Under the head of remarks of individual workmen may be found many expressions regarding screens from miners, and I have also submitted several letters from leading coal operators upon the same subject.

In both these reports from the Ohio legislative committees, the "truck system" is ably discussed, and will furnish valuable light upon this subject.



## PART IX.

## IMMIGRATION.

The Hon. Secretary of State is in receipt of the following communication from the Association of Medical Superintendents of American Institutions for the Insane:

WHEREAS, By a comparison of the statistics of the "Defective Classes" of our population, as shown by the eighth, ninth and tenth census, it appears:

*First.* That the proportion of insane to total population in the United States is rapidly increasing; and,

*Second.* That a prominent factor in this increase is the large defective element found among the "foreign-born" who have emigrated to us since 1847 and 1848—an element which now constitutes one-eighth of our total population, but which furnishes one-third of its paupers, one-third of its criminals, and one-third of its insane; and

WHEREAS, While the cost of buildings to suitably keep, and the amount of tax to properly maintain these classes, fall wholly and heavily on the several States and Territories, they are inhibited by national law from enacting and enforcing effective measures to prevent or to mitigate these evils, so far as they are caused by emigration; now, therefore,

*Resolved,* That the Association of Medical Superintendents of American Institutions for the insane, respectfully urges the Congress of the United States to give early and earnest attention to this important subject, to the end that emigration laws may be enacted by it, which, while they do not unreasonably obstruct the immigration of healthy and self-dependent persons, will effectively prevent the emigration and the exportation to our ports of the so-called defective classes of Europe and Asia.

*Resolved,* That in furtherance of this object a copy of these resolutions and preamble be forwarded by the President and Secretary of this Association \* \* \* \* \* to the governor and the presiding officers of the Legislature of each State of the Union, that they and the people they severally represent, who are most affected by the pecuniary burdens, and by the vital and moral evils caused by an unrestricted and unregulated immigration, may be moved to take such action as they

deem best to secure early and efficient action by Congress (with whom alone is the power) to abate the great and growing evils to which public attention is hereby called.

The census of 1880 showed that the defective, dependent and delinquent classes were alarmingly growing in our midst. Half a million of our population were then classified as prisoners, paupers, insane persons, idiots, and deaf, dumb and blind people. *Of these about one hundred thousand were foreign-born immigrants.*

It also says: "We cannot begin too soon nor prosecute too vigorously the inquiry into the causes of the prevalence of these evils, which are like a canker at the heart of all our prosperity."

Statistics prove too that our foreign population has a greater tendency to blindness, deafness, insanity and pauperism than the native Americans have. The Charity Organization Society of the city of New York has the names and histories of forty-five thousand families, mostly of foreign birth or foreign patronage, comprising not less than 180,000 persons, who have received charitable relief within the last three years in that city alone.

"These figures appear incredible to those who are unacquainted with the alarming extent of poverty in the chief city of the United States."

Immigration each month is increasing this army of paupers.

About forty per cent of emigrants reaching Canada from Europe cross over into this country. These swell the army of the unemployed and unfortunate.

In this vast tide of immigration Iowa falls in for her share. She, like all our States, has ever been ready to welcome to her soil the frugal, industrious, healthful family; but with all her advantages, her unoccupied acres, her soil capable of yielding abundantly all kinds of cereals, her vast sources of coal—with all these, Iowa has no room for the shiftless and indolent pauper. It cannot be doubted that some of our States maintain agents or commissioners in Europe, to present the wonderful advantages of their respective localities to the almost helpless in European countries, and fascinated with these agents' stories, and encouraged by the almost fabulously low rates of transportation, caused by rate wars among the Atlantic steamship companies, and the great railroad trunk lines of this continent, the immigration is simply immense, and unquestionably pregnant with serious consequences.



"When an adult European emigrant can be transported from Liverpool to New York for \$8 or \$10, and again carried from New York to Chicago for a dollar, the natural and inevitable tendency of such low charges is to impart a powerful impetus to emigration. The result is daily visible in the throngs of hungry, despairing men that besiege the Labor Bureau at Castle Garden, piteously but vainly clamoring for work."

## IMMIGRATION STATISTICS.

John E. Moore, the Castle Garden landing agent, has prepared the following table, showing the number of passengers landed at the port of New York, both cabin and steerage, during the year 1884, by all the steamship lines:

NAME OF COMPANY.	Where from.	Cabin.	Steerage.
North German Lloyd	Bremen	8,389	65,558
Hamburg Amer. Packet Co.	Hamburg	3,385	56,181
Red Star Line	Antwerp	2,303	22,542
White Star Line	Liverpool	4,926	22,287
Inman Steamship Co.	Liverpool	5,033	20,162
General Transatlantic Co.	Havre	3,735	17,154
Carr Line	Hamburg		14,508
Anchor Line	Glasgow	3,651	14,325
Liv. & G. West S. S. Co.	Liverpool	6,435	13,890
National Steamship Co.	Liverpool	1,886	12,726
Cunard Line	Liverpool	10,788	11,909
State Steamship Co.	Glasgow	1,397	9,215
Thingvall Line	Copenhagen	653	7,498
Netherlands Amer. Steam Nav'n Co.	Rotterdam	302	5,153
Netherlands Amer. Steam Nav'n Co.	Amsterdam	197	5,065
Anchor Line	Liverpool	3,744	5,082
Monarch Line	London	1,301	3,450
National Steamship Co.	London	734	2,790
I. & V. Florio S. S. Co.	Mediterranean	292	2,710
Fabre Line	Mediterranean	21	2,695
Anchor Line	Mediterranean	14	2,458
Bordeaux Steam Nav'n Co.	Bordeaux	109	1,010
White Cross Line	Antwerp	16	551
Great Western S. S. Co.	Bristol	66	320
Miscellaneous		126	1,618
Totals		59,503	320,807

Upon whom does this burden fall most heavily? Unquestionably upon American workingmen.

With so many failures of crops, with the great number of mills, factories, workshops and mines closed, and as a result, with an enormous army of unemployed upon our shores, is it not time that a halt be called to this importation of foreigners. Our workingmen of Iowa are feeling this burden. Hundreds of every phase of the wage-workers life, have written this office of the inroads this system is

making upon their prosperity and comfort. Some of these will be noticed under head of "remarks by employes," but these are but a very few of the great number received. The New York *Graphic*, in an editorial upon this question, in February last, said:

It is not the number of persons we import, but the number we can employ in productive occupations; that augments our national wealth. With so many skilled and unskilled workmen idle among us, it is cruel and fatuous to swell their ranks from abroad. Of course the potent principle of supply and demand will ultimately bring about an adjustment, but only after much needless friction and suffering.

Perhaps Iowa has been as fortunate in this regard as almost any State in the Union, yet, it is felt, and felt in many localities seriously, and it is hoped that her population, as in the past, may grow not with foreigners imported under false pretenses of "work for all under contract," but with the industrious, healthful strong ones like those who have already found happy homes among us, and who have largely contributed to make Iowa what she is to-day. Recently, advertisements were plentifully scattered over the city of Minneapolis promising transportation from Europe to that city at twenty-five dollars for each adult, five dollars of which should be paid in cash, the balance to be worked out on arrival. Such a system should be condemned. The class of labor that would yield to this offer is not the class Iowa possesses or desires. It is undesirable in any community. Let us protect American labor—Iowa labor—against such competition, and countenance no such deceitful plans within our border.

In this connection I desire to call attention to the following letters in reply to queries sent from this office:

IOWA HOSPITAL FOR THE INSANE,  
INDEPENDENCE, Feb. 21, 1885.

E. R. HUTCHINS:

DEAR SIR—Your request is before me. On the 1st of February, 1885, there were in this hospital:

Male patients	355
Female patients	290
Total patients	645
Foreign born, male patients	173
Foreign born, female patients	112
Foreign born, total patients	285



I have no data from which to determine what natives among my patients had parents who were foreign born.

Very respectfully yours,

GERSHOM H. HILL,  
*Superintendent.*

IOWA HOSPITAL FOR THE INSANE, }  
MOUNT PLEASANT, February 23, 1885. }

E. R. HUTCHINS, *Commissioner, Des Moines, Iowa:*

DEAR SIR—On February 1, 1885, there were in this hospital 254 male and 211 female patients. Of this number, 77 male and 59 female patients were foreign born.

I am unable to report the number here of foreign parentage. It is small however; I judge not more than two and a-half to three per cent.

Since the opening of the hospital in 1861, in a total of 6,700 admissions, to date, the per cent of foreign born has not varied much from thirty.

I am glad that you are looking up this matter, as it is of vital importance in an economic and social point of view. If some effort could be made to stop the importation of the defective classes as well as to provide for all now in our midst, a double duty would be performed, and not only the tremendous increase in the number of insane stopped, but the elimination of an immense amount of "bad blood" from our social system, and the general up-building of the physical well-being of our people would gradually follow. Let these mental and physical wrecks, sent sometimes by ship loads, to our shores, be quarantined like yellow fever or cholera. I see no other way to eradicate this evil and ward off impending danger to our State and nation.

Very sincerely yours,

H. A. GILMAN,  
*Superintendent.*

## PART X.

### FARM LABOR, VALUE, ACREAGE, AND RENTALS.

The following information relative to wages paid to farm laborers is tabulated from reports made to this office by prominent farmers in the counties named. The whole number of returns made was four hundred and ninety-one, which includes several from each county in the State, from which the averages are made. Coming, as they do, from gentlemen prominently identified with the agricultural interests, and thoroughly informed thereupon, they form a valuable feature of this report.



TABLE OF WAGES OF FARM LABORERS—BY COUNTIES.

NOTE.—In all cases board is given in addition to wages specified.

COUNTIES.	AVERAGE WAGES WHEN EMPLOYED BY THE YEAR.		DURING HAYING SEASON.		DURING HARVEST SEASON.		AT OTHER TIMES BUT NOT BY THE YEAR.		Average length haying and harvesting period—days.
	Monthly.	Yearly.	Monthly.	Daily.	Monthly.	Daily.	Monthly.	Daily.	
Adair.....	\$ 16.00	\$ 190.00	\$ 20.00	\$ 1.25	\$ 1.50	\$ 1.50	\$ 18.00	\$ 1.00	40
Adams.....	20.00	225.00	22.00	1.12½	25.00	1.25	18.00	.87½	60
Allamakee.....	18.00	187.00	25.00	1.25	25.00	1.75	22.50	1.12½	28
Appanoose.....	19.00	216.00	30.00	1.37½	28.00	1.50	17.50	1.00	35
Audubon.....	20.00	200.00	25.00	1.25	30.00	1.50	18.00	1.00	35
Benton.....	19.00	200.00	22.00	1.25	31.00	1.87	19.00	1.00	26
Black Hawk.....	20.00	200.00	30.00	1.50	30.00	1.75	17.50	1.00	28
Boone.....	18.00	180.00	26.00	1.50	30.00	1.50	18.00	1.00	28
Bremer.....	20.00	180.00	26.00	1.50	30.00	1.50	18.00	1.50	42
Buchanan.....	16.50	195.00	35.00	1.50	40.00	1.87	20.50	1.00	30
Buena Vista.....	20.00	240.00	25.00	1.25	25.00	1.25	20.00	1.00	30
Butler.....	20.00	200.00	25.00	1.50	2.00	2.00	20.00	1.00	35
Calhoun.....	20.00	192.00	25.00	1.25	30.00	1.75	20.00	1.00	45
Carroll.....	19.12	206.00	23.75	1.25	25.15	1.37½	17.00	1.00	30
Cass.....	18.00	200.00	22.50	1.12½	27.50	1.37½	19.00	1.00	45
Cedar.....	20.00	217.15	30.00	1.57	30.00	1.72	19.00	1.10	33
Cerro Gordo.....	19.00	200.00	22.50	1.12½	30.00	2.00	20.00	1.00	30
Cherokee.....	20.00	220.00	28.00	1.30	30.00	1.87	22.00	1.00	42
Chickasaw.....	18.53	206.00	27.85	1.30	40.00	2.03	17.00	1.08	30
Clarke.....	16.50	206.00	23.75	1.25	23.45	1.37	17.00	1.00	30
Clay.....	20.00	212.50	25.00	1.25	27.50	1.50	22.25	1.00	40
Clayton.....	20.00	240.00	28.00	1.50	2.00	2.00	20.00	1.00	45
Clinton.....	19.13	194.00	25.00	1.25	32.50	1.67	19.67	1.08	42
Crawford.....	18.00	200.00	23.00	1.25	30.00	2.00	20.00	1.00	45
Dallas.....	16.67	200.00	23.00	1.12½	25.00	1.50	18.00	1.00	35
Davis.....	18.67	200.00	30.00	1.25	1.50	1.50	19.00	1.00	30
Decatur.....	18.00	185.00	20.00	1.00	20.00	1.37½	15.50	.75	30
Delaware.....	18.00	216.00	25.00	1.25	30.00	1.50	20.00	1.00	30
Des Moines.....	19.00	207.00	30.00	1.67	30.00	1.67	19.00	1.12½	28
Dickinson.....	19.00	200.00	25.00	1.12½	30.00	1.75	19.00	.87½	51
Dubuque.....	21.00	210.00	37.50	1.50	40.00	2.12	15.00	.75	42
Emmet.....	20.00	197.00	26.25	1.25	30.33	1.50	18.25	.97	45
Fayette.....	19.33	204.00	25.25	1.25	26.30	1.75	17.15	.94	40
Floyd.....	20.00	212.00	27.50	1.50	45.00	1.75	25.00	1.00	30
Franklin.....	20.00	250.00	26.67	1.53	32.50	2.15	21.25	1.06	40
Fremont.....	20.00	240.00	27.50	1.50	45.00	2.00	20.00	1.00	42
Greene.....	18.67	193.33	23.33	1.16	23.00	1.63	17.69	1.00	42
Grundy.....	18.00	160.00	40.00	1.63	2.50	2.50	18.00	1.25	25
Guthrie.....	18.50	202.00	23.55	1.12½	25.00	1.50	17.75	.85	60
Hamilton.....	17.00	204.00	22.00	1.25	30.00	2.00	20.00	1.00	35
Hancock.....	17.00	200.00	25.50	1.12½	30.00	2.00	18.00	1.00	50
Hardin.....	18.05	210.00	30.00	1.75	30.00	2.00	18.00	1.00	35
Harrison.....	19.00	212.00	23.75	1.15	25.08	1.67	18.50	.83	40
Henry.....	18.00	160.00	23.00	1.20	1.50	1.50	17.50	.87½	50
Howard.....	21.00	235.00	25.00	1.25	40.00	2.50	19.00	1.00	50
Humboldt.....	19.50	190.00	22.50	1.20	27.15	1.52	17.60	.90	60
Ia.....	20.00	210.00	30.00	1.50	30.00	1.50	25.00	1.25	28
Iowa.....	19.50	195.75	26.67	1.37½	35.66	2.11	20.00	.98	38
Jackson.....	18.00	220.00	30.00	1.50	35.00	2.00	20.00	1.12	35
Jasper.....	17.50	200.00	20.00	1.12½	25.00	1.37½	19.17	.96	38
Jefferson.....	20.00	228.00	27.50	1.25	30.00	1.50	19.00	.90	40
Johnson.....	19.00	200.00	27.50	1.25	33.00	1.75	15.00	1.00	35
Jones.....	19.00	225.00	25.00	1.50	29.50	1.75	18.00	1.00	40
Keokuk.....	18.00	189.50	23.00	1.32	30.83	1.52	18.70	.97	45
Kossuth.....	18.00	200.00	25.00	1.00	30.00	1.50	13.50	.87	70
Lee.....	17.67	200.00	30.00	1.16	32.50	1.59	17.00	.87	42
Linn.....	20.00	213.33	28.00	1.42	28.00	1.62	20.81	1.00	35
Louisia.....	22.20	192.25	23.33	1.20	28.00	1.83	16.20	.87	35
Lucas.....	17.73	206.00	22.56	1.28	26.40	1.53	18.00	.97	40
Lyon.....	20.00	228.00	25.00	1.25	25.00	1.50	19.00	1.37	60
Madison.....	18.33	190.00	23.33	1.16	30.00	1.46	20.00	.87½	50

TABLE OF WAGES OF FARM LABORERS—CONTINUED.

COUNTIES.	AVERAGE WAGES WHEN EMPLOYED BY THE YEAR.		DURING HAYING SEASON.		DURING HARVEST SEASON.		AT OTHER TIMES BUT NOT BY THE YEAR.		Average length of haying and harvesting period—days.
	Monthly.	Yearly.	Monthly.	Daily.	Monthly.	Daily.	Monthly.	Daily.	
	Av'ge.	Av'ge.	Av'ge.	Av'ge.	Av'ge.	Av'ge.	Av'ge.	Av'ge.	
Malaska.....	\$ 20.00	\$ 180.00	\$ 30.00	\$ 1.25	\$ 21.00	\$ 1.75	\$ 20.00	\$ 1.00	40
Marion.....	20.00	208.00	25.00	1.25	30.00	1.30	19.00	.87½	42
Marshall.....	20.00	200.00	27.50	1.37	25.00	1.25	18.00	1.00	60
Mills.....	18.00	216.00	25.00	1.25	30.00	1.50	19.00	1.00	40
Monroe.....	18.00	200.00	27.50	1.37	40.00	2.50	18.00	.87½	28
Muscatine.....	20.00	240.00	20.00	1.00	25.00	1.50	26.00	1.00	42
O'Brien.....	20.00	200.00	22.50	1.12½	1.50	.....	1.00	.....	60
Osceola.....	18.00	216.00	27.00	1.12½	1.62½	.....	18.00	1.00	60
Page.....	22.50	267.50	35.00	1.50	35.00	1.75	23.50	1.12½	32
Palo Alto.....	20.00	180.00	25.00	1.50	30.00	2.50	1.00	.....	60
Pocahontas.....	20.00	211.00	25.00	1.37	30.00	1.75	16.00	1.00	21
Plymouth.....	22.00	216.00	33.00	1.62	33.00	1.87	29.00	1.25	60
Polk.....	20.00	200.00	29.00	1.80	37.50	2.00	23.00	1.12½	30
Pottawattomie.....	15.00	180.00	17.00	1.00	25.00	1.00	13.00	.50	30
Poweshiek.....	18.50	187.00	22.50	1.27½	25.00	1.50	16.50	1.00	35
Ringgold.....	21.00	200.00	30.00	1.25	22.00	1.75	19.00	.87	35
Sac.....	18.00	190.00	20.00	1.37	25.00	1.25	18.00	1.12½	42
Schubert.....	20.00	225.00	29.37	1.42	31.50	1.75	21.33	1.00	42
Scott.....	20.00	200.00	25.00	1.50	25.00	2.00	20.00	1.25	.....
Shelby.....	18.00	180.00	25.00	1.25	25.00	1.50	20.00	1.00	.....
Sioux.....	18.00	200.00	25.00	1.25	30.00	2.00	20.00	1.25	30
Story.....	18.00	.....	20.00	1.00	1.50	.....	23.00	1.00	.....
Tama.....	19.00	220.00	30.00	1.50	30.00	1.50	23.00	1.00	42
Taylor.....	16.00	200.00	26.00	1.25	1.25	.....	14.00	.75	35
Union.....	15.00	180.00	26.00	1.25	26.00	1.50	18.00	1.00	40
Van Buren.....	23.33	187.00	21.00	1.25	20.25	1.91	17.50	.88	35
Wapello.....	20.00	200.00	20.00	1.25	23.00	1.37	18.00	1.00	30
Warren.....	20.00	180.00	25.00	1.00	1.50	.....	19.00	.87	60
Washington.....	18.00	190.00	28.75	1.33	31.67	1.80	18.50	1.00	38
Wayne.....	17.70	200.00	23.70	1.14	23.20	1.38	18.26	.86	40
Webster.....	18.50	206.00	21.80	1.08	28.00	1.73	16.12	.83	37
Winnebago.....	17.00	200.00	25.00	1.25	37.50	2.00	18.00	1.00	50
Winnebuck.....	18.37	190.00	25.87	1.25	39.00	2.00	16.33	.84	35
Woodbury.....	16.00	187.00	25.00	1.37	25.00	1.50	19.00	1.00	45
Worth.....	15.00	200.00	22.50	1.12½	40.00	2.25	18.00	.87	60
Wright.....	20.00	225.00	23.00	1.00	23.00	1.75	20.00	1.00	45

## RECAPITULATION.

AVERAGE WAGES WHEN EMPLOYED BY THE YEAR.		DURING HAYING SEASON.		DURING HARVEST SEASON.		AT OTHER TIMES BUT NOT BY THE YEAR.		Average length of haying and harvesting season—days.
Monthly.	Yearly.	Monthly.	Daily.	Monthly.	Daily.	Monthly.	Daily.	
Av'ge.	Av'ge.	Av'ge.	Av'ge.	Av'ge.	Av'ge.	Av'ge.	Av'ge.	
\$ 19.23½	\$ 204.29	\$ 25.79	\$ 1.29½	\$ 29.18	\$ 1.70	\$ 18.82½	\$ .96½	41 & 1 h. 10 m.

The County paying the highest average wages, is Sac.  
The County paying the lowest average wages, is Pocahontas.

In this connection, I present the following statistics on this subject taken from a publication of the State Department at Washington, from U. S. Consular Reports:



## AGRICULTURAL WAGES.

*Wages paid per week to agricultural laborers in the west of England, with or without board and lodging.*

DESCRIPTION OF EMPLOYMENT,	Average wages.
<b>GLOUCESTERSHIRE.</b>	
In summer, without food and lodging.....	\$ 3.65
In winter, without food and lodging.....	2.91
Females, ordinary.....	1.14
Females, harvest hands.....	2.13
<b>SOMERSETSHIRE.</b>	
Males, food sometimes supplied at harvest.....	3.65
Women, field labor, elder and sometimes food.....	1.46
<b>WILTSHIRE AND DORSETSHIRE.</b>	
Males in summer.....	2.91
Males in winter.....	2.67
Women field laborers.....	1.46

Of agricultural labor in the above districts, Consul Lathrop, of Bristol, cannot speak favorably. Wages are lower in the west than in any other part of England.

The following is a description of the appearance of agricultural laborers, as seen by the Consul at a "hiring fair," at Chippen Sodbury, in Gloucestershire:

Worn out, their years gone, their muscles stiff, they are useless to the employer, and cannot get a place. They are literally turned out to die, and their only refuge is the workhouse; for it was impossible for them to save anything for their old age. When a pair of boots costs half a week's wages, a Sunday suit three weeks wages, a pound of the cheapest meat two and a half hours' work, how could they save?

*Agricultural wages in the Hull district, county of York, and Liverpool and London districts.*

DESCRIPTION OF EMPLOYMENT.	Average wages.
<b>HULL DISTRICT.</b>	
Farm laborers, with board and lodging, per year.....	\$ 29.00 to \$72.00
Housemaids, with board and lodging, per year.....	58.00 to 67.00
Wagoner, with board and lodging, per year.....	67.00 to 96.00
<b>COUNTY OF YORK.</b>	
Laborer:	
First man, with cottage, per week.....	4.06
Second man, no cottage, no board, per week.....	3.70
Foreman of farm per year.....	120.00 to 160.00
Second man, with board and lodging, per year.....	82.00 to 97.00
Third plowman, with board and lodging, per year.....	68.00 to 78.00
Plowboy, with board and lodging, per year.....	48.00 to 68.00
Blacksmith, two pints of beer, per day.....	.96
Joiner, two pints of beer, per day.....	.96
Herdman, cottage, per week.....	4.06 to 4.40
<b>LIVERPOOL DISTRICT.</b>	
Teamster, with board, per year.....	73.00
Herd, with board, per year.....	68.00
Herdsmen, without board, per week.....	3.89
Laborer, without board, per week.....	4.01
Boys, without board, per week.....	1.70
<b>LONDON DISTRICT.</b>	
Laborers in Kent, without board, per week.....	4.13
Laborers in Middlesex, without board, per week.....	4.13
Laborers in Surrey, without board, per week.....	4.28
Laborers in Essex, without board, per week.....	3.65
Laborers in Hereford, without board, per week.....	3.89

*Wages paid to agricultural laborers and household (country) servants in Germany.*

DESCRIPTION OF EMPLOYMENT.	Average wages.
<b>ALSACE-LORRAINE.</b>	
Farm laborers, with board and lodging, per year.....	\$ 67.30
Servant girls, with board and lodging, per year.....	30.00
Laborers, with board and lodging, per day.....	.40
Laborers (during harvest), with board, per day.....	.50
Laborers (during harvest), without board, per day.....	.80
<b>SAXONY.</b>	
Male laborers, with board and lodging, per year.....	44.26
Female laborers, with board and lodging, per year.....	22.84
Male laborers:	
In summer, per day.....	.40
In winter, per day.....	.28
Female laborers:	
In summer, per day.....	.20
In winter, per day.....	.12
<b>GRAND DUCHY OF OLDENBURG.</b>	
Plowman, with food, per day.....	.65
Laborers, with food and rent free, per year.....	31.25
Laborers, with food without rent free, per year.....	54.75
Laborers, with board and lodging, per day.....	.50
Laborers, without board, per day.....	.80
Harvesters, with board and lodging, per day.....	.55
<b>STUTTGART DISTRICT.</b>	
Stable hands, with board, per year.....	57.12
Day laborers (male), with board, per week.....	1.90
Day laborers (female), with board, per week.....	1.43
Dairymen, with board, per week.....	1.90
Dairymaids, with board, per year.....	30.94
<b>BARMEN DISTRICT.</b>	
Gardeners, with board and lodging per year.....	76.16
Coachmen, with board and lodging, per year.....	76.16
Farm hands (male), with board and lodging, per year.....	49.98
Farm hands (female), with board and lodging, per year.....	29.75
Day laborers, with board and lodging, per year.....	60.81
Carpenters, with board and lodging, per year.....	76.16
Blacksmiths, with board and lodging, per year.....	76.16
<b>THURINGIA.</b>	
Servants, with food and lodging, per year.....	14.00
Laborers, male (summer), with two meals, per day.....	.30
Laborers, female (summer), with two meals, per day.....	.14
<b>CRELFELD DISTRICT.</b>	
First laborer, per week of 84 hours in winter and 87 hours in summer, with board and lodging.....	1.66
Second laborer, per week of 84 hours in winter and 87 hours in summer, with board and lodging.....	1.19
Third laborer, per week of 84 hours in winter and 87 hours in summer, with board and lodging.....	.95
Herder (in charge of cattle), per week of 84 hours in winter and 87 hours in summer, with board and lodging.....	1.90
Transient laborers:	
Male, board without lodging, per week.....	3.14
Female, board without lodging, per week.....	2.32
Male, without board or lodging, per week.....	4.43
Female, without board or lodging, per week.....	3.32
<b>SILESIA.</b>	
Male laborers, with board and lodging, per week.....	1.45
Female laborers, with board and lodging, per week.....	1.07

## AGRICULTURAL LABOR IN THE BERLIN DISTRICT.

The number of persons employed in agricultural labor in the consular district of Berlin is estimated at 450,000, and it can be safely said that fully one half, if not two thirds thereof, are women. The able-bodied men, when not in the army, generally seek more remunerative employment than agricultural labor. The common farm laborers receive from 20 to 35 cents per day.



## VALUE, RENTALS, AND ACREAGE OF FARMS, BY COUNTIES.

COUNTIES.	Average value of farms.	Average rental of farms, (cash.)	Average No. of acres of farms.	Charging farmer's time at \$1 per day, rate of interest of farmer's investment.
Adair	\$ 3,000.00	\$ 250.00	100	5
Adams	2,250.00	300.00	120	5
Allamakee			120	
Appanoose (See note A.)	3,500.00	175.00	100	5
Audubon	2,500.00	200.00	180	8
Benton	7,100.00	525.00	245	3½
Black Hawk	6,400.00	480.00	160	8
Boone	5,000.00	160.00	300	
Bremer	6,000.00	390.00	157½	
Buchanan	4,200.00	266.00	144	
Buena Vista	11,300.00	800.00	365	10
Butler	3,300.00	160.00	160	7
Calhoun	7,400.00	625.00	370	
Carroll	4,837.00	291.66	140	13
Cass	9,050.00	500.00	265	5
Cedar	4,528.00	325.00	114½	6
Cerro Gordo	8,600.00	600.00	320	
Cherokee	6,400.00	560.00	160	6
Chickasaw	3,750.00	312.00	160	10
Clarke	2,929.00	225.00	133	1½
Clay	2,567.00	115.00	120	5
Clayton	3,870.00	420.00	192	8
Clinton	5,800.00	446.00	148	5
Crawford	4,000.00	197.50	180	3
Dallas	3,000.00	200.00	65	6
Davis	4,000.00	400.00	160	8
Decatur	3,750.00	275.00	280	
Delaware	4,373.00	375.00	133	9
Des Moines	2,434.00	307.00	80	
Dickinson	4,800.00	213.00	160	7
Dubuque, (See note O.)	4,550.00	110.00	245	7
Emmet	2,675.00	250.00	196	10
Fayette	4,275.00	351.00	177	3
Floyd	4,600.00	400.00	163	6
Franklin	2,950.00	300.00	157½	10
Fremont	5,177.00	325.00	142	
Greene	3,850.00	271.25	140	3½
Grundy	5,600.00	160.00	350	
Guthrie	3,366.00	229.00	142	5½
Hamilton	3,000.00	180.00	140	
Hancock	1,400.00	150.00	350	
Hardin	4,325.00	338.00	213	6
Harrison	6,873.00	589.00	261½	
Henry	2,541.00	176.00	65	3
Howard	2,700.00	137.50	140	5
Humboldt	2,470.00	174.00	236	4½
Ida				
Iowa	3,890.00	318.75	133	4
Jackson	4,650.00	493.00	144	5
Jasper	4,400.00	375.00	129	3½
Jefferson	4,900.00	370.00	150	6
Johnson				
Jones	3,633.00	394.00	115	
Keokuk	4,900.00	430.00	194	7½
Kossuth (See note B)	2,400.00	200.00	160	6
Lee	7,000.00	394.00	115	5½
Linn	5,725.00	417.33	130	5
Louis	4,776.00	323.00	183½	4
Lucas	5,742.00	278.00	204	5
Lyon	2,167.00	313.00	160	6
Madison	3,000.00	254.00	128	5
Mahaska	6,170.00	450.00	275	6
Marion	3,500.00	280.00	140	5
Marshall	4,800.00	360.00	160	6
Mills	4,800.00	480.00	160	6½

## VALUE, ETC., OF FARMS—CONTINUED.

COUNTIES.	Average value of farms.	Average rental of farms, (cash.)	Average No. of acres of farms.	Charging farmer's time at \$1 per day, rate of interest of farmer's investment.
Mitchell	\$3,433.00	\$500.00	153	
Monona	3,000.00	240.00	80	6
Monroe	2,750.00		90	10
Montgomery	7,220.00	720.00	360	3
Muscatine	4,475.00	367.50	100	7
O'Brien	2,917.00	275.00	354	4
Osceola	3,200.00	400.00	160	
Page	4,700.00	430.00	107	
Palo Alto	3,500.00	160.00		
Plymouth	3,000.00	300.00	120	
Pocahontas	5,520.00	240.00	240	4
Polk	3,875.00	357.00	142	5½
Pottawattamie	5,669.00	360.00	184 2-7	7
Poweshiek	4,875.00	405.00	205	6
Ringgold	4,135.00	370.00	184	5
Sac	4,800.00	160.00	400	6
Scott	11,608.00	758.00	159	
Shelby	4,006.00	554.00	138	8
Sioux				10
Story	8,733.00		360	8
Tama	3,600.00	120.00	300	
Taylor	2,733.00	283.00	133	
Union	3,200.00	200.00	80	
Van Buren	6,720.00	480.00	308	3½
Wapello	4,965.00	319.00	162½	4
Warren	3,533.00	247.00	120	6
Washington	4,984.00	385.00	138½	
Wayne	3,213.50	329.33	158½	9
Webster	2,934.00	190.00	144	
Winnebago	1,722.00	163.00	108	
Winneshiek	5,400.00		180	6
Woodbury	5,867.00	587.00	213	8
Worth	1,680.00	131.00	128	7
Wright	2,860.00	160.00	225	

\*Very few farms are rented for cash, but good plowed land brings \$3.00 per acre readily. Stock farms are rented by renter purchasing an interest in all personal property, and doing all the work and keeping up the fences, the owner furnishing material, and products divided equally, even to the cream sold to creameries, the renter paying for half the cream, pork, etc., used by him.

+The Iowa Land Co., owned by an English Co., have a large number of farms in our county, which they rent at one-half of the crop, the Co. furnishing seed, or one-third of crop, and renter furnishing the seed. The land is in the market and selling fast at from \$8.00 to \$22.50 per acre.

A. "There is but little land occupied by tenants in our township. The two first I have mentioned as rented are good land, but poorly furnished with buildings; the third is rather poor land, and only moderately comfortable fixtures. The hired help problem is becoming a serious one to farmers who are obliged to have help. The present generation of hired help seem to want to spend too much time in social pastime, and leave the farmer in the pinch of the game to do the best he can. Farmers who have farms large enough would prefer to employ a man with a family and furnish him a house, but very few laboring men seem to like the plan."

B. During the summer season there is generally a scarcity of farm help, which our farmers feel quite severely.

+ "Modern machinery has made personal development a necessity (brains) in farming. Multiplied by four, he must *mind* his business (*manage it by mind*) or get distanced. Large areas, *understocked*, twenty-five per cent less animals, more feed, twenty-five per cent more fat—"all flesh is grass;" no grass, no fat flesh—*poor* cattle, *poor* farmer. Iowa is a great state for grass if it be allowed to grow, but the most of all her pasture lots are *bare all summer*. To restore worn soils we must seed down to grass, and feed on the ground to retain manures, liquid and solid, rather than cart to the barnyard and back. The dear man is too valuable to have such cheap stuff. While land is sold at \$30 per acre, better buy four acres and watch the cows feed, than two acres and work himself too hard. The new sod can be turned again as new land, producing one-third more crop with same outlay for hired help. Thus we manage 1,000 acres, with four men living in tenant houses rent free, some fruit free, boarding themselves and families, Wages cash on demand, \$1.25 per day.



## PART XI.

### SITES.

FARMERS' AND OTHERS' SUGGESTIONS AS TO "SITES OFFERING NATURAL OR ACQUIRED ADVANTAGES FOR THE PROFITABLE LOCATION AND OPERATION OF DIFFERENT BRANCHES OF INDUSTRY," ETC., ARRANGED BY COUNTIES.

ALLAMAKEE—Waukon, Postville, Lansing, Dorchester, and Harper's Ferry.

Much attention paid to drainage and to improvement of live stock. Several engaged in importing domestic animals direct from Europe. Beautiful and extensive veins of (coral) marble are found, and a large establishment is fitted up for preparing it for market.

APPANOOSE—We have a great quantity of coal and timber, and fine stone for building purposes, thus affording strong inducements for manufacturers.

The creamery and cheese business seems to offer the best opening for investment of almost any pursuit.

AUDUBON—Creamery is needed at Audubon, Exira or Viola Center.

BENTON—Vinton.

BUENA VISTA—Storm Lake, Alta.

CARROLL—Manning. Arcadia would be an excellent place for a flouring mill.

CEDAR—Massillon; Clarence. The latter would be an excellent point for a canning factory. Small fruit in abundance, and the soil adapted to raising nearly everything required for the successful operation of such a business.

CERRO GORDO—Mason City. Good location for manufacturing purposes.

CLAY—Good water power at Spencer, on the Little Sioux river, for almost any industry needing power. Also at Gillett's Grove, on same stream.

CLINTON—Lyons; Clinton. Rents about, and in Clinton are low, and the facilities for shipping of products by rail excellent. The main industry in this city and adjoining is manufacturing lumber. Consequently we have a large surplus of cheap fuel. Any industry that could utilize this fuel would

do well here. Slab wood can be bought at mill for 25 cents per load; dry strips, tied in bundles, 75 cents per cord; green strips 40 cents. Common laborers this season have been paid \$1.40 per day in mill yards—they boarding themselves. This is against \$1.50 the season before.

CRAWFORD—Denison, the county seat, is a fine site for a pork packing house and flouring mill.

DAVIS—Fine grass country; better adapted for grazing than anything else.

DECATUR—Creamery or cheese factory between Lineville and Garden Grove. Grass fine. Sheep do well here. We have plenty of timber and some stone.

DELAWARE—Excellent opportunity for flouring mills. Fine water-power.

DES MOINES—Burlington is a profitable location for all branches of industry, having within a circuit of one hundred miles thousands of tons of coal. The price of coal for the last four years ranging from \$1.40 to \$1.90 per ton. Iron and material for manufacturing purposes are not far distant. Ore and pig iron can be transported at reasonable rates. The Missouri ore and pig iron can be brought from St. Louis by barges and from Lake Superior by rail. There is here gathered a large quantity of scrap iron, which would form a large part of the supply for foundries and rolling mills. Our location presents an excellent opening for all kinds of manufactures, especially stove foundries, nail and rolling mills, pork houses, rope, oatmeal, drain tile, and sorghum establishments. We have many advantages for all kinds of industries to develop our resources; congenial climate, schools of the highest standard; timber in abundance and stone plenty; cheap and rapid transportation. The extent and character of the territory in which the goods manufactured are to be distributed, our vast system of railroads eastward with Chicago, Cleveland, Cincinnati and seaboard cities; south to St. Louis, Memphis and the entire south; north to St. Paul and the new northwest; western, reaching Kansas, Missouri, Nebraska, Colorado and Texas and adjacent territory; with ten lines of railroads, embracing within its ramifications a scope of territory unsurpassed in fruitfulness, Burlington enjoys every facility for extending and developing her trade.

DICKINSON—Milford, Okoboji and Spirit Lake.

DUBUQUE—Dubuque, Dyersville, New Vienna. These places offer advantages in water-power. Mining has been profitable years ago, but latterly not as much so. Farming is the leading branch of industry. Cascade township has a natural dam of rock in the Maquoketa river but little used as yet. Hard wood timber plenty in the vicinity.

EMMET—Stock-growing and dairying. Estherville is a good site for water-power mill. Would draw custom from twenty to twenty-five miles. On west branch of Des Moines river a cheese factory is needed. On east side of river is easy access to railroad. Direct connection by rail is now had with Watertown, Dak.

FAYETTE—Hay press badly needed. Good brick, lime, building stone and timber.



**FLOYD**—The water-power is not well improved. Woolen mill and a No. 1 grist mill is needed, but enterprise seems to be lacking. Splendid water-power at Charles City, also at Floyd on the Cedar river, and in Miles township on the Little Sioux.

**FRANKLIN**—Fine chance for stock raising. Fine mill privilege at Sheffield and a mill badly needed. Hampton, Hansell and Chapin.

**GREENE**—Splendid coal and water privileges and fine opportunity for canning factory in Washington township. A creamery is needed.

**GUTHRIE**—A canning factory would pay well at Guthrie Center. I believe that our county seat—Guthrie Center—possesses superior advantages for the establishment of a pork packing center, and that a plant of that industry would be remunerative.

**HAMILTON**—The coal resource of the county is immense and with our railroad facilities good opportunities are offered for almost any kind of manufacture.

**HANCOCK**—Garner, Britt and Corwith. Two railroads at Garner and Britt. Coal and wood very reasonable. A flouring mill is needed very much at Lime creek or Upper Grove. A man who will build a steam flouring mill will do well.

**HARDIN**—In Eldora my opinion is that a fruit canning factory could do a profitable business. So, also, a broom or tile factory—the latter being much needed. Coal, timber and fire-clay are here in abundance. The State must offer some inducement for capital to invest in manufactures—making them exempt from taxation for a number of years.

**HARRISON**—Logan good for grist-mill. Near Woodbine a grist-mill is wanted, also a packing-house. Plenty of hogs but transportation costs too much. There is an excellent chance for a wagon and repair shop at Logan. A great deal of sorghum is made here. Plenty of good sites for mills. Missouri Valley would be a good place for a pork-house or canning factory.

**HENRY**—At Salem—flouring mill, canning factory and sugar (sorghum) factory would do well.

The stone quarries at Mt. Pleasant are as fine as are in the State. Plenty of coal, wood, stone, clay and good water. Tile factory would do well. We especially need factories to consume our products nearer home. For instance, a canning factory and paper mill. We need here (New London) a competing line of railroad going north and south.

**HOWARD**—Stock raising and dairying on the increase, and found to be very profitable. Good sites for an oil, meal mill and creameries.

**HUMBOLDT**—Humboldt for making furnishing lime. Rutland, Livermore.

**IDA**—There is a good opening for a pork packing house at Ida Grove as there is an immense number of hogs raised here. Also a good place for a corn canning factory.

**IOWA**—Amana, Marengo, Williams, North English.

**JACKSON**—Good site for pork packing at Maquoketa. Good water-power and oak timber. We have the best lime-stone in the State, located in the

Maquoketa valley and several lime kilns in operation. Lime is shipped to Kansas, Nebraska, Dakota and all over Iowa.

**JASPER**—A factory for making agricultural implements would do well at Newton, also a cheese factory. Flouring mill at Lynnville. The county has twenty or thirty coal banks with best of coal.

**JEFFERSON**—This county presents many natural advantages for all kinds of manufacturing, and as a grazing country is not excelled by any portion of the United States. Horse raising is rapidly becoming a principal industry. Not less than fifteen hundred horses are annually shipped from Fairfield alone, at prices ranging from \$100 to \$250 per horse.

**KEOKUK**—What Cheer, Hedrick, Martinsburg.

**KOSSUTH**—If a pork packing establishment was located at Algona it would find plenty of business and encouragement. So too with a canning establishment, or foundry and machine shop. The latter our people greatly need and would substantially encourage. We have a very large acreage of flax in Kossuth county, and it has always been a profitable crop. Now if we had some way to utilize the whole crop it would be very desirable and there is enough raised in the county to run a very large establishment. Our hogs in great abundance, are shipped to Milwaukee, Chicago or Cedar Rapids. The county is given over largely to dairying and stock raising. Grain raised here is all consumed at home.

**LEE**—Fort Madison offers extraordinary inducements for a canning factory. Denmark, Montrose, Keokuk.

**LINN**—The establishment at Cedar Rapids of a paper mill, canning factories of every description, threshing machines, plows, etc., and in fact all classes of manufactories, that would supply the demands of the people of a vast territory in the West and Northwest, for which this city is daily becoming more of a trade center, with the cloths, implements, tools, furniture, and we might say the general necessities as well as the luxuries, all such institutions would meet with a warm reception and positive success.

**LOUISA**—Lettsville, an excellent site for a flouring mill, which is much needed. The poultry industry is very large and rapidly increasing, as is also the honey industry, which is already immense in this county. Columbus Junction.

**LUCAS**—Chariton, Lucas, Russell, Derby. Canning factory at Chariton. We very much need cheese factories and creameries. Chariton has good buildings now unoccupied and partially equipped, that could be utilized cheaply for the manufacture of any articles of tools or machinery used in Iowa. Fuel abundant and cheap, and our south railroad reaches good timber districts that would supply cheap material. Five or six hundred hands mining coal.

**LYON**—A good site here for an oil mill and paper mill.

**MADISON**—A cheese factory here would do well. Winterset, Earlham, Patterson. A good tile factory or two would pay well, for our farmers are rapidly seeing the benefits arising from draining the land.

**MAHASKA**—Oskaloosa, Beacon, and Given all afford an abundance of coal which would give cheap fuel for manufacturing purposes.



**MARSHALL**—The ten lines of railways leading into the State, with fine building stone and superior agricultural facilities, make this county superior.

**MARION**—Flagler has a very fine article of fire clay; has been tested and found good for fire brick and fine pottery. Good quality of coal in abundance.

**MITCHELL**—A number of mill sites on Cedar river, within ten miles of Osage. A good machine shop and foundry is needed and would do well at St. Ansgar.

**MONONA**—Our part of this county is particularly adapted to stock raising; pasture and hay are cheap, and corn is nearly always a heavy crop. There are thousands of acres of grass and pasturage. There is but little coal used in our part of the county. Wood is cheap. Four-foot wood in the timber is worth \$1.75 per cord. Cottonwood lumber, \$12 to \$14 per thousand feet. Hay is seldom worth more than \$2 a ton. A large number of the farms in this county are under mortgage, most of them to eastern loan companies. The renters don't make enough to keep a Winnebago Indian comfortable.

**MONROE**—The mining business is carried on extensively here. The Hickory mines, on the Central railroad; the Chisholm mines, on the C., B. & Q.; and the Avery mines, on the C., R. I. & P. Stock raising, especially cattle and sheep, is principally engaged in, in this county. Short-horned cattle and Merino sheep lead. Please send us a wool merchant. There are at least 3,000 fleeces in this neighborhood, not sold yet. Albia has five railroads. Is a good site for machine shops of any kind. Plenty of clay for pottery and tiling.

**MONTGOMERY**—We need a tile factory very much. We have plenty of good clay, and an abundance of wood.

**MUSCATINE**—Muscatine, West Liberty, and Vinton. West Liberty and vicinity for breeding-farms of Holstein, Hereford, and Polled cattle and draft horses.

**O'BRIEN**—Creamery or cheese factory would do well here. No better place in the country for a pork packing-house, linseed oil mill, tow factory, on account of quantities produced in country tributary to Sheldon.

**PAGE**—Pork packing-house.

**PALO ALTO**—We have the finest of rich black loam soil, producing the best crops of wheat, oats, barley, corn, flax, timothy, clover, and blue grass, and vegetables. The natural grasses are very luxuriant, and are as good for pasture as timothy, and nearly as good for hay. These wild grasses are a great source of wealth to our people; immense herds of cattle are raised upon these grasses alone. All of the hardy varieties of apples do well here, as do plums, cherries, and small fruits generally.

**PLYMOUTH**—Lemars, Kingsley, Seney, Remsen, Akron.

**POLK**—The city of Des Moines presents features for the location of manufacturing industries surpassing, perhaps, any other city in Iowa. With fourteen railroads centering therein, with an agricultural surrounding country unsurpassed, fine water power privileges, a population of fully 40,000 people, reasonable rents, abundance of coal within less than two miles

on almost every side—from the city limits—almost any manufacturing enterprise would succeed. Especially is there desired a canning factory, paper mill, carriage factory, and agricultural implement factory. The best quality of siliceous sand, for the manufacture of flint glass, is found in the immediate vicinity of Des Moines.

**POTTAWATTAMIE**—A packing-house at Carson, would obtain material in great abundance. Freight is far too high to ship hogs. Oakland would be a fine place for a canning factory for fruit, corn, and tomatoes.

**POWESHIEK**—The canning of vegetables and milk has always seemed to me to offer strong inducements, and I know of no better point in Iowa for this purpose than Grinnell. Small fruit business is a rapidly growing industry in this section. Our county is becoming rapidly stocked with improved breeds of horses and cattle.

**RINGGOLD**—A good opening for creamery and cheese factory.

**SAC**—Odebolt, Sac City. Manufacturing industries of various kinds could be made profitable in our county. Agriculture and manufacture need to be more closely connected in Iowa. We need some creameries.

**SHELBY**—Creamery at Defiance. We need some thorough-bred horses. Harlan.

**STORY**—Sheldahl for a creamery or cheese factory.

**TAMA**—Tama City has very fine water power. Flour mill at Traer, where there is fine water power.

**TAYLOR**—Canning factory for sweet corn and fruits at Bedford or Lenox. Coal company is wanted to go to the third vein; first vein 30 feet deep and 18 inches thick. We are now highly taxed for coal.

**UNION**—Grist mill at Thayer.

**VAN BUREN**—A tile factory is badly needed at Milton, where there are abundant advantages for one.

**WAPELLO**—Ottumwa.

**WARREN**—In Indianola a foundry and machine shop would do finely, and the place offers excellent advantages. Coal abundant in southern half of county. We need a starch factory to work up our great surplus of potatoes and corn. A factory for refining and making sugar is needed, and would do well.

**WASHINGTON**—Washington would be a good place for a packing house, as we ship a great number of hogs to Chicago, when we don't want to. Great abundance of limestone rock in this county. A woolen mill would do splendidly in this county—at Washington, for example.

**WAYNE**—Corydon. Fine opportunities for large sorghum factory and two or three creameries and cheese factories. Stock raising is most profitable here, as blue grass is the natural production of the soil; it is heavy, rich and plenty. A good deal of coal here, which, for want of capital, is not utilized. For a grass country this can't be beaten this side of Kentucky.

**WEBSTER**—Fort Dodge. Great quantities of the best coal all over the county.

**WINNEBAGO**—There is an excellent opening at Leland for a general store,



also for another grain elevator. A good blacksmith and wagon-maker, and a good harness-maker are wanted here.

WINNESHIEK—Fine water power privileges and points for flouring mills. Would say we have some of the finest water powers situated along the Little Sioux and its tributaries, some of which are partially improved and others not. Also, the finest limestone quarries in the west. Add to these, a very rich soil, well watered by springs, and plenty of timber, and you have our natural resources. With capital to improve these abundant advantages, Winneshiek county may be made one of the richest manufacturing counties in the State.

WOODBURY—This county, I think, offers superior advantages for feeding cattle and hogs. Fine stock country.

WORTH—Goldfield. Creameries and a flouring mill needed, and would pay well. A cheese factory would be a good and profitable business at Kensett, or near there.

WRIGHT—Wall Lake. There are quite a number of never-failing springs situated on White Fox creek, the water of which is medicinal.

#### SITES SUGGESTED BY COUNTY AUDITORS.

The reports from auditors were far from full, both as to numbers and suggestions. It is a fact that these officers are called upon frequently to give information, and often their routine duties are interfered with. This may account for the few replies obtained for this office:

APPANOOSE COUNTY—Centerville would be a good location for a large woolen mill, or any manufacturing enterprise, as timber, stone and coal are in abundance. Moulton offers a splendid location for a creamery, as also Moravia, Plano and Cincinnati. We have fine locations for canning factories. Our taxes are reasonably low and our people enterprising and industrious. Our coal mines give employment to a large part of our population, and they make a liberal class of consumers, having ready cash or equivalent. Garden produce finds a splendid market in our midst.

BENTON COUNTY—I think that splendid water power may be developed near Vinton. I know of no better site in the interior of the State for heavy power. I think donations of land, and even money, would be given to responsible parties wishing to locate factories in that city.

BUCHANAN COUNTY—Water power good. Good location for canning establishment.

BUENA VISTA COUNTY—There is a fine water privilege at Sioux Rapids or at Storm Lake. We have a very fine body of water, five miles in length and one and one half wide.

CEDAR COUNTY—Cedar Bluffs, on Cedar river, affords excellent water power. The coal mines of What Cheer and Illinois are near us, and on direct railroad line.

CERRO GORDO COUNTY—Lime creek and the Shell Rock river run through portions of the county, and afford very desirable water power. The stone quarries at Mason City are practically inexhaustible. I think a paper mill would be profitable, also a foundry, or factory for agricultural implements.

CHEROKEE COUNTY—Two or three good sites for water power grist mills. Several branches of manufacturing would find encouragement in Cherokee; such as iron foundry, steam grist mill of large capacity, oil mill and canning factory.

CLARKE COUNTY—I think a canning factory would be profitable in this county.

CLATTON COUNTY—The Volga and Turkey rivers which flow through the county afford unrivaled water power. No woolen or flax mill is in the county. Tendency to dairying and hog raising.

CRAWFORD COUNTY—Pork house would do well at Denison.

DECATUR COUNTY—Davis City offers the greatest natural advantages for manufacturing interest of any town in the county, having water power, wood, sand and stone in endless quantities, and very fine prospect for coal.

FLOYD COUNTY—Charles City.

GRUNDY COUNTY—Beaman in the south part of the county, has a fine bed of clay, which I think can be utilized with a good profit on investment. The clay is of quite a dark red color.

HAMILTON COUNTY—Webster City. Pork packing, creamery, wagon and machine shop; also Jewell. Both have the best R. R. facilities, plenty of good water.

HANCOCK COUNTY—Garner and Britt for steam flouring mill. Also creamery at latter place.

HOWARD COUNTY—Water power good.

HUMBOLDT COUNTY—Excellent water power can be had at Humboldt from that now improved. Still another good one lies a half mile below. Excellent potters' clay, and clay suitable for tile is abundant; also for brick. Lime stone of superior quality is inexhaustible. Building stone easy of access and abundant.

IDA COUNTY—Pork packing.

IOWA COUNTY—Marengo. Water power for several mills. Canning factory.

JACKSON COUNTY—Maquoketa and Canton. Water power excellent. Timber abundant.

JASPER COUNTY—Plenty of water and an abundance of coal in most parts of county. Newton is favorably located for all kinds of business as is Prairie City, Monroe, Colfax, Kellogg and Lynnville. All excellent sites.

JOHNSON COUNTY—At Coralville, ten miles west of Iowa City, there is a splendid water power adapted and suitable for all branches of manufactures.



KEOKUK COUNTY—Wagon factory at Sigourney.

KOSSUTH COUNTY—We have a great acreage of flax and a large establishment here to utilize this product would be remunerative. Also pork packing house.

LYON COUNTY—Rock Rapids excellent mill power. Good site for flax and oil mill.

OSCEOLA COUNTY—Grist mill water power on the Ocheydan. Oil mill at Sibley.

PLYMOUTH COUNTY—Pork packing.

POLK COUNTY—Des Moines, the largest city in the State, with the best railroad facilities, coal in great abundance, splendid water power, offers strong inducements for the investment of capital with as sure a prospect of speedy and large returns as any place in the west. A large canning factory, agricultural implement factory, wagon factory and paper mill would all do well here.

SAC COUNTY—Flax tow mill at Early or some other convenient point, as there is a large amount of flax straw wasted annually. Our county is mainly agricultural, and of necessity must remain so.

SCOTT COUNTY—Unlimited water power, if only developed for all kinds of manufacturing enterprises.

UNION COUNTY—This county has superior facilities for dairy business. Fuel is scarce and high for general manufactures.

WAPELLO COUNTY—Ottumwa. Water power, 3,000 horse. Inducements offered to all manufacturing interests requiring power. Also cheap coal, 80 cents to \$1.50 per ton. Excellent distributing point for manufacturing and wholesale trade. Railroads in seven different directions. Twenty-four wholesale houses, embracing all lines of business. Amount of sales last year, \$3,000,000, exclusive of all manufacturing interests.

WARREN COUNTY—Indianola offers many fine advantages for manufacturing enterprises; has fine facilities for any kind of machinery which may be desired to be run by steam. Carlisle possesses ample water power, and the same may be said of Summersett. Our county is mainly agricultural. The population is very largely made up of people of American birth. Of our foreign population, we have a good thrifty class of German and Irish farmers.

WASHINGTON COUNTY—This county is exclusively an agricultural one. It raises fine crops of corn, oats, rye, barley, etc., but the people are turning their attention particularly to grazing and dairying, as the land cannot be excelled for pasture. A large amount of tiling is being laid with most encouraging results.

WEBSTER COUNTY—The gypsum quarries of this county, in the vicinity of Fort Dodge are being worked by first-class mills and the value of their products in stucco, etc., will not fall short of \$100,000.

WINNEBAGO COUNTY—Dairying interests.

WINNESHIEK COUNTY—The power in our streams (all of them being rapid) if utilized, would be sufficient to run to an almost unlimited extent.

Decorah has a vast amount of this water power, and is nicely situated for manufacturing purposes.

WOODBURY COUNTY—Sioux City offers good inducements for many manufacturing purposes, among which are soap factory, pork packing and stove foundry.

WRIGHT COUNTY—Goldfield offers excellent advantages for tile factory, and also for milling; Clarion or Belmond for foundry.



## PART XII.

## VIEWS OF WORKINGMEN.

REMARKS AND SUGGESTIONS BY INDIVIDUAL WORKMEN,  
RELATING TO THE GENERAL CONDITION OF EMPLOYEES  
IN VARIOUS INDUSTRIAL CALLINGS.

For the purpose of bringing the views of workingmen to the knowledge of the General Assembly and to the public interested in them, the following statements are given in exactly the language made to this office. In some cases the suggestions are impractical, in others they are very practical. No one knows the needs of these persons as well as themselves, hence these statements are of much value. They are arranged by subjects as a matter of convenience to the reader, but in addition to this the vocations of the writers are stated.

It must be remembered that these statements are all voluntary on the part of those making them. In many cases there is no little repetition, and the first thought of the Commissioner was to publish all sent to the office, but latterly they have come in, in so great numbers as to preclude this plan. Many therefore are in this office of the same tenor as those herein published, and this is to be remembered as giving additional force to wishes herein expressed. This is especially true of miners in relation to screens, company stores, ventilation, child labor and weekly or semi-monthly payment of wages.

## SKILLED LABOR—APPRENTICE SYSTEM, LEARNING A TRADE.

If some system of graded wages could be adopted by which an apprentice would be encouraged to learn a trade instead of working for nothing a few months, and then starting out as a workman of an inferior quality to reduce the wages of good mechanics, as well as the quality of the work done, it

would be a great deal toward making both better work and better workmen.

—*Stone-mason.*

I think there should be a law enacted to regulate apprentices and compel them to serve under experienced mechanics for two or three years, thereby protecting the interests of the people and insuring them security from imposters and botch workmen, who impose upon the credulity of the masses to a very great extent.—*Plasterer.*

There is a great improvement needed in my trade, and that will never come until there is a State Inspector of boilers, whose duty shall not only be to examine the boilers, but to examine engineers also, and allow no one to run an engine until licensed by him, after thorough examination. It would help wages and make better engineers.—*Engineer.*

Almost any one who can turn on steam is now hired because he is cheap. A law ought to pass the legislature and also Congress, compelling an applicant for the position of engineer to undergo an examination, and punishing a man who employs one who cannot satisfactorily pass said examination. There then would be fewer losses of property and lives by explosions, and a good engineer could get something for what he does.—*Engineer.*

Three days firemen from the old country are taking the place of regular engineers and at inferior wages. In my opinion the legislature should pass a law compelling all engineers handling stationary or winding engines, to pass an examination, and if competent, grant them a license to run the same. Men are running engines in this State who don't even know what steam is, and we who have learned the trade are often compelled to work at something else, because they will underbid us. A case to the point —'s engineers get \$65 a month. I applied for an engine at R—. A man from England, who had been in this country but four months, offered to take the place for \$40 and got it, and he told me that he had everything about an engine yet to learn. License the engineers and there will be fewer accidents.—*Engineer.*

The only thing that hurts our trade is that the people don't stop to think if a man has learned his trade. If he has two or three tools and can handle them, he can get as good wages as the one who has learned his trade. There ought to be a law that a man should work under instruction a certain length of time before he should be allowed to contract any work. Such a law would be a help to the laboring classes.—*Carpenter.*

Pass a law requiring individuals to produce a diploma or certificate of qualification, before allowing them to contract for buildings.—*Carpenter.*

I am not favorable to the apprentice system; it's more profitable to employ experienced workmen, producing a better quality and larger quantity of work in the same amount of time.—*Blacksmith.*

I don't think there is enough interest taken by the people in general in having boys or young men learn a trade of some kind. I think the great trouble lies in keeping the boy's nose to the grindstone just as long as possible. They are not made to feel as though their labor was of any benefit, and the consequence is their task is a dog's life. They feel like doing no more than they have to. All they long for is for their apprenticeship to be



at an end. Let us make the boy feel that he is of some account; help him in his attempts to do or make something, and in nine cases out of ten, you will be well repaid.—*Blacksmith.*

There is one ruinous practice which I wish to refer to: botch mechanics, who claim to be skilled, and who take work and contracts because they don't want to shovel dirt or work on a farm. Men ought to be made to show credentials that they are efficient workmen.—*Painter.*

The apprentice system is conducted by the laws of our Union, and we have no trouble from that source in this part of the country.—*Cigar-maker.*

What the trades need is skilled labor. Cheap labor is hired without reference to skill, but simply with a view of paying out small wages.—*Wagon-maker.*

My father was a brick-layer and contractor. I have often heard him say that during forty years of experience he never had an application from a graduate of an high school to learn the trade.—*Carpenter.*

We suffer most, perhaps, from competition among ourselves, and from factories East running out low-priced work, and selling it as first-class work. Our workmen are not skilled enough; they don't properly learn the trade.—*Wagon-maker.*

In this county (Tama) I don't think laboring men have any cause to complain. We get our meat and vegetables very cheap and of good quality, direct from the farmers. Farm hands get from twenty to thirty dollars a month, including board and washing.—*Carpenter.*

Here (Buena Vista county) any one who is handy with tools, seems to consider himself capable of contracting, and as a consequence, injury is done to the trade.—*Carpenter.*

In regard to apprentices: such a thing is unknown here (Clay county). If a man can saw a board and drive a nail, he will go to contracting, and the people look for such men because they are cheap. I think if carpenters who have served apprenticeship, could be protected from such an evil, it would be but just. There should be a law, that every man had to be examined and get a certificate according to his ability for work.—*Carpenter.*

We have lots of carpenters here (Adams county) that never learned the trade, and hence know no more about framing, than a hog does of preaching; but men hire them.—*Carpenter.*

The reason there are no more apprentices employed in our trade, is that it is impossible to hold them but a short time, which makes so many poor workmen.—*Blacksmith.*

There should be a law passed compelling apprentices to serve a term of so many years. At the time he becomes a finished mechanic, he should receive a certificate in accordance with his acquirements. Some such method as this, in my opinion, would raise the standard of workingmen far above its present one. I do not see why it would not operate as well with mechanics as with doctors, lawyers, etc. The greatest oppression to good tradesmen is not so much foreign immigration; the fault is right here at home. There are hundreds of mechanics of all trades who are no more fit or capable of performing the duties which devolve upon them in the callings they have

chosen, than they are of managing the affairs at the head of the government at Washington.—*Wagon-makers.*

In this part of the State (Floyd county) there are no apprentices; boys don't like to stay long enough to learn trades.—*Shoemaker.*

The apprentice system is a dead letter in this part of the State (Floyd county). For instance, I hire a man to mix mortar for me; in a few months he gets an idea of how the work ought to be done, and then takes the jobs himself, for half price, of course; and there are many men who are willing to give him work, because of the low price. This class of men are encouraged to such an extent that I don't know of one apprentice in this section of the State. This, in my opinion, has a very serious effect on skilled labor.—*Plasterer.*

This city (Dubuque) is run over with poor mechanics, mostly Bohemians and Norwegians, who hurt us very much by working for low wages, and knowing but little or nothing about the trade.—*Brick-layer.*

The apprentice system as carried on to-day is not good. The law should be so that the boy would serve five years, he would then be of good to the trade and to the public. The boy of to-day thinks if he can get in his young head at once, what it has taken men in the trade, say twenty years, to learn, he is all right. A plumber ought to know especially about sanitary laws.—*Plumber.*

#### CONVICT LABOR.

The system of letting out by contract, the labor of convicts in our prisons and reformatories is very injurious to the working-man, and should be abolished.—*Shoemaker.*

The prison contract system is injurious to the laboring man.—*Local Editor.*

Abolish the convict contract labor if you want to help the American free working-man.—*Drayman.*

The present convict labor system in our penitentiaries and reformatory institutions hurts us very seriously.—*Wagon-maker.*

Stop convict labor. It deprives mechanics of a great deal of labor that belongs to them, and throws the profits into the hands of a few rich men.—*Carpenter.*

The penitentiary convict contract system hurts my trade more than anything else in Iowa.—*Blacksmith.*

The contract system of prisons hurts us badly, perhaps even more than pauper labor of the old country. For instance, convict labor will make a log chain, and put it on the market for less than half I can, and in fact every species of mechanical work. This, of course, compels me to work to sell the same article at competing prices, which I cannot afford to do; consequently the markets are flooded with an inferior quality of goods, which are dearer to the consumer after all. Besides, it is unjust to the convict.—*Blacksmith.*

I think that the penitentiary convict system of labor is detrimental to the



journeyman harness-maker, and also injurious to a manufacturer having to compete with this kind of system.—*Harness-maker.*

I am opposed to placing our working-men in competition with convict labor, such as is in our prisons. It is equal to the pauper labor of England. *Laborer.*

The abolition of convict labor would better the condition (twenty-five to forty per cent) of laboring men. The Illinois prison is furnishing fifty per cent of the cooperage, harness, boots and shoes, etc., in this section of Iowa at present. Thirty-five coopers were thrown out of employment in this city (Sioux City) by the reduction of wages from 40 cents per tierce to 20 and 25 cents in the last two years. The Illinois prisoner make a tierce for a contractor for about six cents, and makes five each day. If you can help to abolish this convict labor in Iowa, the working men will bless you.—*Cooper.*

The worst thing mechanics have to contend with is criminal labor. The country is flooded with all kinds of implements made in the State prisons, and they are sold for less than can be made by honest laborers. There is no inducement to learn the trade, from this fact.—*Wagon-maker.*

#### EDUCATION.

The school system would be greatly helped if it could be changed in some way, so that a practical education would be given, instead of so much that does no good. I think, also, that the State ought to pass a law that the same kind of books could be used in the schools.—*Saw repairer.*

There seems to be a great deal of looseness in the public schools. I think that the "Pickler bill" should have been passed.—*Wagon-maker.*

Children should be required to go to school until fourteen years old, instead of twelve.—*Miner.*

I think we ought to have a uniformity of school-books, printed by the State.—*Miner.*

More schools should be open in the summer time. Many parents are too poor to clothe their children properly to send them to school these cold winters. These boys and girls grow up and find themselves ignorant. I think whenever any community has forty scholars of this kind, that want to attend a night school, the State ought to appropriate one-fourth of the amount necessary for expenses. There are far too many changes in text-books; I can't afford it.—*Miner.*

School books are quite a tax; and it is an outrage on the people, the price that publishers put on these books.—*Carpenter.*

A great wrong is perpetrated upon us working people, not to have a law so that the same series of school-books can be used in Iowa. Now, with so many changes all the time, it is very hard indeed for the poor people to send all their children to school, as we would like to do.—*Blacksmith.*

A uniform system of public school-books, costing less money, would benefit the laboring man with a family very greatly. In fact, it seems to me to be a necessity. With the present costly system, numbers of children have

to be kept from school for want of *required* books, the parent being totally unable to supply them.—*Laborer.*

Give us compulsory education.—*Painter.*

The school books cost too much for a poor man to buy, if he keeps his children warmly clothed in winter.—*Cigar-maker.*

#### FOREIGN LABOR—IMMIGRATION.

The immigration of foreign labor under contract system should be abolished.—*Shoe-maker.*

Am opposed to the contract system of foreign labor, and think it ought not to be tolerated. I think that the laboring classes ought to combine against it at the ballot-box.—*Shoe-maker.*

Foreign cheap labor has affected my work, and working men generally, to a serious extent.—*R. R. Employee.*

Every foreign pauper who comes to this country at the dictation of some agent here is a direct tax upon the workingmen, for he increases the number and reduces the wages.—*Moulder.*

The foreign contract system has had a very great tendency to reduce wages in my trade, and to deprive native and skilled mechanics of work.—*Wagon-maker.*

Foreigners are picked up because they are cheap workmen, and their coming here under contract has hurt us very much.—*Brick-mason.*

Foreigners are sent here under contract, and work for less wages than we can, and hurt us badly.—*Miner.*

Foreign contract labor is not good for us, because the parties that hire them do it to bring down the price of labor and injure the workingmen. While this ought to be stopped, we ought to let the foreigner come of his own accord, if they want to abide by our customs and our laws. If they are producers they are also consumers, so let the country and the State be free to the down trodden.—*Miner.*

The immigration of foreign labor into this country has a most degenerating and hurtful influence upon the interests and welfare of the American mechanics. The average pay of our mechanics is less than it was but a few years ago, and one principal cause of it is the labor market being overstocked by the immigration of foreign labor into this country.—*Machinist.*

I don't know as foreign labor hurts us any more than American blockheads.—*Carpenter.*

The foreign immigration has damaged my trade to some extent. They work cheaper than Americans can. At my trade they work for \$1.00 a day and board themselves, and other work in proportion, largely done under contract.—*Carpenter.*

I wish more foreigners would come in, as we consider them when naturalized some of our best people and citizens.—*Blacksmith.*

As regards foreign labor and immigration in my opinion it is a great curse. The pauper laborer comes here under flattering promises. He is poor and ignorant. He accepts the first offer, whether it is the established



or current wages or not. He never stops to consider. The American intelligent laborer cannot and will not compete with him, and in this way our boys are barred from honest and honorable employment.—*Blacksmith.*

I think if stronger laws were passed against the importation of contract labor, it would be a great benefit to our American laborers.—*Laborer.*

We complain of the importation of foreign laborers, who come unskilled in trade, and who will readily yield to the honest reduction for work on the part of an employe, and thereby cut competition to so low a rate that it is impossible to make contract labor pay its investment and sustain a family.—*Painter.*

Do something to prevent foreign labor coming here under contract.—*Cigar-maker.*

The importation of contract labor, though it does not affect my business, is injurious to the laboring man, forcing them to produce protection-priced goods for pauper wages.—*Local Editor.*

Foreign labor under contract is hurting us. We want protection to American labor and American laborers.—*Mason.*

To a large extent cheap foreign labor is employed by all the large manufacturing in the West. Small shops or individual workers cannot compete with these factories, with their capital, mechanical appliances and cheap labor combined. Result: centralization in the production of all new work, and a consequent narrowing in the range of profitable work. Outside of the large manufacturing centers in my opinion a majority of the iron workers in this country, unless highly skilled in their trade, had better take Horace Greeley's advice and "go West." The trade is overstocked with ordinary workmen, and is made ten times worse by the importation of foreign labor.—*Blacksmith.*

The imported miner brings with him all the monarchical ideas of their native land, and being born to poverty and oppression of the most abject nature, which finally induced them to seek a home in a foreign land, they are only too glad to accept anything that places them a step above their native condition. Hence, the unscrupulous capitalist finds in them a ready tool to aid him in making the cost of living the line to which wages must tend, and even bring that down to a minimum. Many operators keep these employes as a standing menace to the American miners not to strike, but take what they get and be thankful.—*Miner.*

The immigration of foreign labor, as shipped in by coal companies, is a detriment to honest labor. They are the outpourings of pauper Europe and are not versed in the different branches in which they are placed; therefore must be a detriment to skilled employes in that calling. They never offer their labor in a legitimate manner, but through labor Bureau agencies, and always at ruinous prices. Companies never want them only when they have a difficulty with their skilled employes, and then only for the purpose of subjugating the old hands. As soon as that is accomplished they are generally invited to leave, like a Benedict Arnold.—*Miner.*

Foreigners who have been enticed over here come by dozens and work for half price. Most of them can live on bread and black coffee, sour kraut

and fat pork, while we want something better. I am old now but I hope something can be done for our young laboring men so they can get a fair price for a good day's work, and not be crowded out by foreigners.—*Cabinet-maker.*

#### LABOR ORGANIZATION—TRADES UNIONS.

I think trades unions have been an injury to the trades generally.—*Shoemaker.*

I am in favor of co-operation and unions.—*Shoemaker.*

Am much in favor of labor organizations, as they bring the employe and employer to a better understanding with each other.—*Book-keeper.*

I think the unions are a curse to all concerned, not only to those that would and want to work, but to the employers.—*Tinner.*

I am not much in sympathy with trade unions, as they tend in exactly the same direction as close corporations, but certainly laboring men have as good a right to organize as capitalists have.—*Mason.*

I am not a believer in trade unions. I believe in grading a mechanic's pay by the amount and quality of labor he performs. The one price set by trades unions I believe to be unjust.—*Mason.*

Unions are good if conducted right, but as a rule they are not.—*Mason.*

I don't belong to any trade union, but I don't see why manufacturers, etc., should object to them, for they are all, or nearly all, combined together for their interests. Why should not the employe have the same privilege?—*Engineer.*

I abandoned the trades union because I would not endure their unjust demands.—*Machinist.*

I have been a member of a trades assembly, but am not now, and would like to know of what benefit they are to the working man? I never could see.—*Carpenter.*

Trades unions don't always produce good results. They are mostly composed of foreign born citizens. They dictate to employers the number of apprentices. They cause useless strikes. Out of these strikes comes mobs.—*Carpenter.*

I think unions a very good thing, and wish we had one here.—*Carpenter.*

Keep clear of trades unions, for I believe they are of no benefit to the working man.—*Carpenter.*

I think there should be trades unions established throughout the State by mechanics and working men and women generally for the protection and advancement and general welfare and co-operation of all classes, not to the detriment of any employer in any sense of the word, but as a mutual beneficiary institution.—*Carpenter.*

I do not believe in trades unions. I think they do more harm than good, as they are the seat of all strikes, and I think a laboring man is far better off if he don't belong to one. This country is big enough and good enough, and if a man don't like the wages he is getting, he can quit and go some place else and get employment, but if he belongs to a trade union the next thing



is a strike, and then if things are not settled satisfactorily there is damage done and the laboring man is left in a worse place than he was before.—*Blacksmith*.

I think trades unions are a great benefit to working classes, if they would settle their differences by arbitration and not by strikes.—*Harness-maker*.

In regard to trades unions I would say that I think, while they enable persons who belong to them to obtain employment easier, giving them preference over others, yet they encourage laziness, make people clanish, which ends in destroying what should belong to everybody—common civility.—*Painter*.

Trades unions in my opinion are detrimental to working men. They take away the independence of the workingman and rob his family of protection. If I am at work, receiving good wages, and a strike occurs, no matter what the provocation, being a member of the union I am compelled to join the strike, thereby depriving my family of the support that my labor brings them. That principle of unionism is wrong. If a set of men order me out on a strike they should pay me dollar for dollar for the time actually lost while mingling with the self-constituted dictators. If a union cannot support its members in the manner suggested, then it affords no protection to me. The persons who cry loudest against railroads pooling, are those who belong to trades unions and other labor organizations. This appears rather inconsistent. The railroads pool to keep up the freight and passenger tariff and the working men join trades unions to control the price of labor. The working man is largely to blame if he does not succeed. I often hear men complaining of their hard lot and how terribly oppressed they are. A very large number of these do nothing but work up strife among their fellow workmen; a still greater number rush for a saloon when they get a nickle, and wonder why they don't get along better; and others go through the country (for \$25 or \$50 a night) telling the dear laborers how they are wronged. The latter are the chaps who work in the sewers with kid gloves and dig coal in a broadcloth coat. There is a growing demand in my trade for good workmen, and the sober, reliable man has not much trouble in securing a situation, and at all times and at a good salary. In my opinion the only things necessary are, interest yourself in your employer's welfare, steady habits, and try to excel. This is far better than joining a trade union, and if you don't succeed then it will be from no fault of your's.—*Printer*.

I am strongly in favor of all tradesmen belonging to a union.—*Cigar-maker*.

Organization and sobriety are the only subjects of interest to the workingmen that I know of. Our men should organize into unions, that they may receive just remuneration for their work.—*Cigar-maker*.

I favor a law incorporating labor unions.—*Cigar-maker*.

Incorporate our unions, so that we can have equal rights with capital before the courts.—*Cigar-maker*.

Our trade is at present in better condition than it has been for a number

of years, owing largely to the fact that our hours of labor are fixed by our local unions, and in no case more than ten hours a day.—*Cigar-maker*.

I think trades unions would be a good thing, if by them wages could be regulated and a better apprentice system made.—*Painter*.

The unions existing among cigar-makers have undoubtedly operated to their great benefit in all respects. They are regarded by members as a system of education. They are brought to discuss questions that would not have come to their minds were it not for these organizations.—*Cigar-maker*.

I do not see any benefit in trades unions to either side. If a pool exists among operators these trades unions complain, but at once form the same thing themselves. If it is wrong for one, is it not equally wrong for the other side?—*Carpenter*.

#### PROHIBITION—TEMPERANCE.

If workingmen would keep out of the saloon they would have more money, better health, and be more respectable than they are.—*Shoemaker*.

Wages are good enough. Drive the whisky and beer out of the State, and the workingmen will have plenty of change to spare.—*Shoemaker*.

I think the prohibitory law a bad one, because it leads to violation of law.—*Bookkeeper*.

The mechanic who does not drink and chew tobacco, is the exception. Prohibit the sale of liquor.—*Tinner*.

I think the workingman would be most benefited if we had no saloons or drinking-shops.—*Saw-repairer*.

The condition of wage-workers and their families would be improved by the prohibition of alcoholic drinks.—*Plasterer*.

A strict enforcement of the prohibitory laws would help us.—*Wagon-maker*.

Shut up or close out three fourths of the drug stores in Iowa, and it would help us as much as anything I know of. Away with whisky.—*Wagon-maker*.

Wages are not what keep the mechanic and trades people poor. In my opinion it is the parties themselves, who waste their time and what they actually earn, in drinking beer and whisky. Pay day comes, and the next day one half will be off work, and after their money is spent they will return broke. And these are the men who are always complaining of hard times.—*Plasterer*.

Prohibit as far as possible the sale of all spirits as a beverage.—*Plasterer*.

I am 60 years old. I have worked at my trade 40 years. The greatest obstacles are whisky and beer.—*Plasterer*.

I believe the rigid enforcement of the prohibitory law would better the condition of many workingmen. Let us have reading-rooms instead of saloons, and our condition in every respect would be better.—*Miner*.

I don't drink, and I save money.—*Miner*.

Some of us are saving money. A greater portion are living from hand to mouth, due almost always to drinking habits.—*Miner*.



Some men's families, like themselves, are not in very good condition. Mine are all right. I save my money, instead of drinking it up, and that's the reason.—*Miner*.

Machinists and laborers could better their own condition if they would abstain from liquor.—*Machinist*.

The reason why so many carpenters are poor, is because they spend their money in saloons. Prohibit them.—*Carpenter*.

Enforce the prohibition law. This is especially needed by workingmen.—*Carpenter*.

Three months I lost from drink last year. No man need suffer as I have, who will let liquor alone. Not only have I suffered, but my family have; and had it not been for a good wife, I don't know what would have become of me. I have quit now, and hope never to touch it again. I wish to God there was none of it in the world.—*Carpenter*.

Any workingman in Iowa, who will practically believe in the prohibitory law, can get along well.—*Carpenter*.

If the towns will keep whisky and beer from the workingmen, they won't have to furnish them so much coal and food. I was not a prohibitionist, but I am for it now, or anything to lead men to save their money and keep their women from washing to feed them.—*Blacksmith*.

The amount of money spent in the State of Iowa for beer, and whisky, and tobacco, in ten years, would provide every homeless family with a comfortable habitation all their lives.—*Blacksmith*.

Abolish all liquors so men won't drink, and that will be a rich blessing to us workingmen.—*Blacksmith*.

The prohibitory law is a ridiculous one, and ought to be abolished.—*Blacksmith*.

Enforce prohibition, and you will do more for the laborer in Iowa than to increase his wages 25 per cent. This is the sentiment of a moderate drinker.—*Blacksmith*.

Our workingmen should practice temperance and help enforce the prohibitory law, and then they would be better able to save what they earn. Their lot is a hard one, but it is largely so of their own making.—*Cigar-maker*.

Poisons are dealt out to the poor man, and as he goes down, so does his family and his home. If you want the workingman helped, let prohibition be enforced. There are by far too many gateways in the present law.—*Painter*.

What we need is prohibition. In my business, workingmen are employed only about eight months in the year, and nine tenths of the mechanics spend the remaining four months in idleness and the saloon.—*Plasterer*.

There seems to be plenty of work here (Cedar Rapids), and if there is any suffering among workingmen, it is generally the result of intemperance.—*Carpenter*.

The best thing, in my opinion, would be to enforce the prohibitory law and stop the places of strong drink and time-killing. It would be the best thing for the poor man possible.—*Blacksmith*.

The greatest enemy to the working class, in my opinion, is gambling and

intoxicants, and a strict enforcement of the laws in regard to these would be of the greatest benefit to the population, and especially to the mechanic.

—*Blacksmith*.

Wage-workers' troubles largely arise through their improvidence, especially in relation to beer and whisky. A wage-worker with a family can't afford to spend his wages for these things, and the best way to help him is to discontinue their manufacture and enforce prohibition.—*Shoemaker*.

Teach men to turn their backs on saloons, and their faces toward the savings banks.—*Shoe-maker*.

The "personal liberty" people are doing the people more harm than anything I know of, with their man-traps known as saloons. These are what keep men poor, and their wives and children poorly clad and badly fed and housed. Prohibition is what we want and need.—*Laborer*.

Prohibit liquor-making and drinking, if you want to save us.—*Coal miner*.

The first and foremost enemy to the laboring man is the saloon, where the miners especially congregate, spend their money, deprive their families of their earnings, and demoralize their character. Let the saloon be abolished if you want to help the workingman and his family.—*Miner*.

The liquor traffic does more harm to the workingman than anything else. Do away with the saloons, and you do away with a great many other evils. They shatter human life, make widows and orphans. Talk about regulating them, and you talk about regulating a curse.—*Saw repairer*.

In my opinion, temperance would do more good to the workingman than anything else. Miners drink more than any class of laborers, and to them prohibition would be the greatest boon.—*Miner*.

These facts assume vast importance, when it is remembered that the use of alcoholic drinks costs annually in the United States more than nine hundred millions of dollars; a sum that exceeds the combined annual earnings of all the railroads in the United States.

At a large meeting in the East of Knights of Labor, Mr. Powderly was present. The question of making an assessment on each member for the purpose of carrying on the work and organizing new Assemblies, was raised. It met with violent opposition, and was being strongly opposed, when the meeting took a noon recess. Mr. Powderly went out with the rest, and a crowd immediately started across the street for the nearest saloon. He went, too, and with his usual systematic method, kept account of money spent there for liquor; and when the meeting reconvened, showed them, much to their astonishment, that they had spent more money thus recklessly, than would be required in the matter under discussion for the furtherance of their work.



## HOURS OF LABOR—WAGES.

I consider the eight-hour law of great importance. It would give the wage-worker more time for self-cultivation and education, which in the course of time would have a good effect on the moral condition of the State at large.—*Book-keeper.*

There ought to be a law in Iowa similar to Missouri and Illinois, to secure a workingman his wages in case the firm he works for fails.—*Moulder.*

In this State we should have a law making labor a preferred creditor to mortgagee. We have been crippled this spring at our shop from the lack of just such a law.—*Moulder.*

I would make the time longer in which a day laborer or subcontractor has a right to file a lien on property for work, and give all workingmen the same rights that a first contractor has.—*Plasterer.*

We ought to have an eight-hour law. This would give us more time to cultivate, educate and improve ourselves.—*Mason.*

Weekly payments should be made, instead of monthly.—*Miner.*

Wages should be paid weekly. It would make the working class more independent, and they would not have to go in debt between pay-days.—*Machinist.*

A think a well-enforced eight-hour law would be of benefit to workingmen. It would give men time to read, which they don't have now.—*Car-penter.*

I think there ought to be a law in the interest of the farm laborer, by which he should not be compelled to work longer than from sunrise to sunset.—*Laborer.*

Think if we could work eight hours, and be able to put in the balance of time in our gardens (if we have any—I have one), if not in reading, we could all live better. Eight hours would give more work to more men, and give us a chance to improve mentally, as well as bodily.—*Painter.*

A bill should be passed to enforce operators to pay miners every two weeks, at least.—*Miner.*

I think the wages of wage-workers in Iowa, are fully as good now as they have been at any time for thirty years.—*Engineer.*

One of the greatest injuries to laboring men and women is the credit system. For example, the laborer goes in debt to the merchant; he pays for the accommodation in various ways. First, credit involves loss; those who pay make that loss good. Second, book-keeping costs, and those who pay make that good. Third, goods can be sold cheaper for cash than credit. If the mechanics could get cash for their productions, they could pay cash for their goods and material. The system of monthly payment is wrong. Corporations and companies who pay monthly, give orders to stores (if they don't have one themselves); they levy ten per cent tax on the merchant for favoring him with their orders. The laborer pays this ten per cent. If the employer was compelled to pay cash every week, the laboring class could live cheaper and save more money.—*Blacksmith.*

No matter how small the wages are, a wage-worker ought to make it a

point to save something. As the thrifty German puts it: "If I make fifty cents, I spend him not all."—*Blacksmith.*

I think employes should in all cases be allowed a month's pay, or a hearing or thirty days' notice, and require them to give thirty days' notice. There should be some rule whereby men could not be thrown out of work on the freak of a superintendent without a hearing; and I presume thirty days' notice required would be equivalent in some cases.—*Agent.*

Two pay days in each month would give the coal miners an opportunity to buy their goods for cash and help to keep them out of debt, while long pay days tend to keep them constantly in debt.—*Miner.*

## MINING, SCREENS, COMPANY STORES, ETC.

In my opinion the truck system and the credit system are detrimental to workingmen. Under the former they are obliged to purchase goods at a high price, and the more a man will buy the better his chances in the mine will be, thus putting a premium on extravagance. The merchants often incur losses under the credit system, and doubtless as far as they can, make them good from other customers. Men ought to be paid in cash at the close of each week.—*Miner.*

Miners coal should be weighed as loaded in mine.—*Miner.*

The screens take a good part of our work for nothing, when they fill a car out of every five cars of coarse coal.—*Miner.*

The wholesale shipping of negroes into mines is ruining our work.—*Miner.*

The operators have all the nut coal free. We dig twelve bushels of coal and only get credit for ten.—*Miner.*

We want a screen law or no screen, but our products weighed in conveyance the miner loads it before going over screen.—*Miner.*

The operators shipping colored people from Virginia under contract and then giving them the best of the work I think an outrage. We cannot say so here or else we will be discharged.—*Miner.*

The miner is not protected by law as he should be. The coal he mines is run over a screen from twelve to fifteen feet long, five feet wide and the bars an inch and a half a part, and he gets paid only for the coal that goes over that screen; the coal that goes through it, is a total loss to him, as he gets nothing for it. My remedy for it, is a screen six feet long, four feet wide and bars an inch apart; that would clean the coal sufficiently. These long screens are simply a robbery. There ought to be a law to make them uniform.—*Miner.*

Company stores prices are higher than elsewhere. If a man commences to work the first of the month he don't get pay for fifty days. They keep twenty days labor back, so this allows company stores to get customers. If a man don't trade with them; they find they don't need him.—*Miner.*

A white man don't dare ask for raise of wages when colored people can be hired. If he does, he is threatened with the negro. They import them by the hundreds from Virginia. We don't say this with any disrespect to



the negro; if they would come here with their own energies it wouldn't be so bad, but we protest against having them imported here to impoverish us poor workmen.—*Miner*.

Negroes come here by train loads under contract and work for low wages, which compels us to do the same. I have no objection to their coming voluntarily, but I do object to their being shipped here to work at low wages.—*Miner*.

A bill should be introduced and passed to make operators pay miners for all merchantable coal.—*Miner*.

A bill should be passed to have a check-weighman on every tippie in the State. Attach a penalty too.—*Miner*.

I do complain of the system under which we are working. We have at these mines screens twelve feet long and one and a quarter inch between the bars. We get pay for lump coal only. Our coal is weighed on flats. For every seven cars of lump coal there is one car of nut coal, and the miner don't receive one cent for it, therefor the miner is robbed at the rate of one-seventh of his earnings. The miner loads eight cars here and only gets paid for seven. Oh how needful is legislation on this subject. You know in almost every market nut coal brings very nearly as much as lump coal at retail; then why is it that the miner don't receive some pay for that coal which he has produced? It is a shame! You will find it this way all over the State.—*Miner*.

We want a better screen system—one established by law—so that the miner can get pay for the work he does.—*Miner*.

I have never seen any good come from company stores. The goods are generally inferior, and the prices higher and in nine out of ten cases, if the workmen don't buy from them they are discharged. Men ought to get their money paid to them after it is earned, and let them trade at the company store or at any other store if they want to. It is only the selfish companies that continue these stores. In some places the men are paid in checks instead of money, for fear they will go somewhere else to trade.—*Miner*.

Blanks should be furnished to each miner monthly, as follows:

1. Number of hours in mines.
2. Number of bushels of coal per day, per week, per month.
3. Cost for tools and other expenses.

There should be one dollar fine by law if these blanks are not filled out on the 10th of the month.—*Miner*.

Our present ventilation law needs amendments at different points to render it effective. We need a law either to restrict the size of screens to a certain limit or to compel the operators to pay for all coal mined previous to its being screened.—*Miner*.

The question of weighing the coal is a serious one for the miner. You are aware that the coal is weighed after it is screened. These screenings or nut coal, the miner gets nothing for, while it is admitted to be nearly, if not quite equal in quality to the lump coal. The miner thinks he ought to be paid for this nut coal. He digs it, he pays for the powder to blast it, loads it in his room and yet gets no remuneration for it. If the legislature could

be brought as a body to see the disadvantages the miner is laboring under, they would admit their is good cause for complaint, and I am sure would enact laws to improve their condition.—*Miner*.

To improve the condition of the miner abolish the screens, give them the coal they are justly entitled to, whereas at present, when they mine a ton of coal they get 14 or 15 cwt. for it, the operator taking the balance for toll on his labor. What wonder the miner is crying out for just laws against the grip of those human leeches, that are fastening deeper and deeper every year into the producing element. Such a bill as the Missouri screen bill in my estimation, would result beneficially to the Iowa miner, and I hope you will give it your hearty support.—*Miner*.

The following letter is so complete in illustration, it is given in full:

WHAT CHEER, Iowa, April, 1885.

E. R. HUTCHINS, ESQ.,

*Commissioner, Des Moines:*

DEAR SIR—Seeing your letter in the Angus paper stating you desire to gain knowledge of the State coal miners, and you also state you have sent out blanks for this purpose, but did not receive as many replies as you wished. The reason I will give you for this is ignorance, for the blanks you sent to me I found out that in distribution that they did not know what to do with them, only to look at and take them home and light their pipes. This teaches me that we need a careful education law, so that capital will have to help to raise the children in the school, instead of in the coal mines to make them slaves and vagabonds.

In regard to screen law, I have had enough of that. What we want is a law to weigh coal as the miner loads it, 80 pounds for a bushel as it comes out of the mines, then coal companies can use any size screen they want.

I hear you are opposed to company stores? So are we. Company stores are like Frank James was to the banks. When he went through a bank he did not leave any money that he saw for the stockholders or depositors. So it don't make any difference how much money a miner makes where there is a company store. He must take it in whet-stones or sticks, or there is no work for him.

What we want in place, is one week's pay in lawful money of the United States. Then we want a law to make a fine of five to one hundred dollars for any company that employs a man under ground over eight hours.

Then we want the law amended in regard to the mine inspector, that he shall notify by mail one week before he shall visit the mines, so the miners can appoint a committee to meet him from among them. Then after he has heard this committee, and if he finds, after he has visited the places in the mining county, has notified, and if he finds as stated, shall have company to comply with the law or shut down the mines.

Will now give you a statement of mining coal for the Star Coal Company, 1884:



Number bushels of coal mined by me from Oct. 1, 1884, to March 31, 1885, 8,207½.

## CREDIT.

Cash received.....	\$ 263.28
For labor in mines.....	3.00
Total .....	\$ 266.28

## DEBIT.

Six months' board .....	\$ 90.00
Taxes .....	18.00
Seven kegs powder to mine coal .....	15.75
Tools wearing out in coal .....	5.00
Benevolent purposes .....	15.75
Repairing tools .....	2.00
Clothing .....	15.00
Sundries .....	19.79
	181.29
Balance .....	84.99
	\$ 266.28

Being a single man, the company says that I can't have work. How much money will I have by the time I get work at my occupation at the present outlook?—*Miner.*

There ought to be a law passed regulating coal screens, as some of the companies surely get the lion's share. I have worked at carpentering for coal companies and found their hands paid more at the company store than I paid in Monroe. I was under no obligations to trade with them, but their miners have to trade with them or leave. I think it would be well to have some legislation on the mode of paying laborers out of company stores. Also on coal screens; have them ascertain angle and a certain width between bars, say one inch for diamond, and one and one-fourth for round, more or less, as the case may be—*Carpenter.*

The screen should be abolished or otherwise weigh the coal before it is dumped. A law similar to that passed in Missouri lately, would be very beneficial.—*Miner.*

I was induced four years ago to come to Angus. Then I could make fair wages to support my family. Then in about a year things took a change—a new manager came—Mr.——— to the mine in which I was working. He made great alterations in the screens and underground working, which resulted in robbing us of about one-half of our earnings, and every man that would not agree with said manager was told to take his tools out. I had to buy a lot when I came here for \$100 and build a house for \$400. Just as I was comparatively comfortably fixed, another trouble arose. Because I and other miners spoke our minds freely toward adjusting our grievances, we

were cast out on the prairie. If we could get pay for all coal mined, have a uniform screen, or better—no screen at all—we could avoid these troubles.—*Miner.*

Two years ago this summer, Mr. ——, manager of this mine at Angus, made great alterations in the screens by making them longer and wider, and fixing a breaker for our coal to drop on, and smash it up before it was screened, which resulted in making about 27½ per cent reduction on every ton of coal mined. Since that time we have had 12½ per cent reduction in price for mining, making a total of 40 per cent reduction these last two years. These are facts which can be proved by every miner in Angus. I would like to see something done about this screen question, so we could get our coal weighed before it is screened, and give us just rights for our labor.—*Miner.*

Of the evils which are detrimental to my trade, the following are the greatest. (These are classed together as the miner has arranged them with such system that to separate them some of their force would be lost:)

1st. The rule by which the co-operations have established long payments. It is everywhere held that wages are due whenever the work is performed, and it is not very long since it was considered that the payment of the miner was due for every bushel as soon as dug. The present system is very unjust—is an imposition of the worst kind. Working people succeed best where the wages are paid weekly, simply for the reason that they will never have occasion to incur large liabilities and thus they remain more independent.

2d. The rule by which the employers usurp the right to take as many men in their employ as they please, and give them as much work as they please.

In this manner it has come to the deplorable fact that while we may be able to control the price of mining per ton or bushel by unions or organization, we are powerless in regard to earnings per month. By increasing the working force and diminishing the out-put, the operators can at all times starve the miners as much as suits their purposes. It is here where legislation is needed. Labor has a moral right to employment. This expression is not a communistic one. Even Prince Bismarck, in a recent debate on the subject of labor in the German parliament, maintained it. He said, "Labor has not only a right to employment, but to profitable employment, and it is the duty of good government to see that it is furnished." Any other employe is by law responsible for the time of his employees. Why should a mining corporation be excepted?

3d. The screen question.

Previous to its institution the miner had to make an excavation of 12x12 x13 inches for a bushel of coal. To my actual knowledge (and by measurement I do know,) it takes on the average 12x12x23 inches now to make a bushel. Is it anything but unjust if we are paid for only half the work we perform.

Some of the so-called nut coal is sold as such at reduced prices, but most of it is sold as lump coal. The operators put the smaller coal in the bottom



of the cars, and dump the coarser kind on top. Here is fraud somewhere. If it is all lump coal, why does not the miner get his pay for it? If it is worthless, why should the public be made to pay for it?

All coal which passes over a screen of one inch mesh is merchantable coal, and diamond bars of one-half inch distance will let larger pieces through than one inch mesh. If the screens cannot be abolished altogether, they should not be larger than indicated.

4th. The company stores.

"Pluck me" is the correct name. Prices are in all instances higher, and the goods, especially in the dry-goods line, of poorest quality. It is a common excuse of the companies, that it makes too much work for them to find the sum due the worker, to pay cash in the interval between pay days, but in the stores they have time always to look over a man's account for five cent's worth of goods.

5th. The inefficiency of the present law in regard to ventilation.

To preserve the health of the miner it is absolutely necessary to force a certain amount of air into the face of each and every working place, and justice demands that the failure to do so be made a criminal act. It is no less murder to choke a man slowly with carbonic and sulphuric acid gases, and air devoid of oxygen, than it is to cut his throat.

6th. The present way in which coal is weighed. In very rare instances, the miner receives pay even for what coal is really run over the screen. If it is a forgery when the cashier of a bank enters a smaller sum of money on his books than he receives, is it not also one, if the weighmaster gives the miner credit for less coal than the scales indicate? If any tradesman can be prosecuted for fraud if he uses weights and measures which are not standard, why can coal operators use such without being prosecuted for fraud?

The State Inspector of Mines ought to be furnished with the necessary outfit for the control of the correctness of the scales, and have the power to inspect the books of the companies *for the purpose of ascertaining whether the operators have paid for as much coal as they have sold*, and if not, cause the difference to be paid.

As to the best means for the amelioration of the condition of the miners they would be, in the opinion of the writer:

(a) Payment of wages every two weeks in cash, with about three days back pay.

(b) To do away with scales altogether. Every miner should have cars of a uniform size, the capacity of which to be established by the mine inspector. The miner, if paid by the run of the mine and the bulk of his outfit, would have justice, and the operators could make as many grades of coal as they liked.

(c) The establishment of a minimum price per day's work, which the operator should have to pay to the men in their employ for each day they are at their disposition.

(d) The abolition of child labor. I know by statistical compilations that the average working capacity of the miner, by eight hour shifts in common work and six hours per day, under adverse circumstances, such as poor air,

water, extra exertion, etc., is not more than about twelve years. Therefore, no boy should be allowed to work under ground before he is sixteen years old.

Finally, as the natural resources of a State are the foundation of the prosperity of a great number of her citizens, it ought to be unlawful for those who diminish those resources to import labor from anywhere, when not all the labor at the place of their respective industry is employed.—*Miner.*

- 1st. All coal to be weighed before being dumped.
- 2d. Weekly pay instead of monthly. To be made in money and in full.
- 3d. Disputes to be settled by impartial arbitrators.
- 4th. The prohibition of convict and pauper labor being brought to this country to supply the place of our own laborers when disputes arise.
- 5th. A more close inspection of all coal mines.
- 6th. The shortening of labor hours from 10 to 8 hours per day.
- 7th. All breaks between rooms to be made every 40 feet instead of 60.
- 8th. The adjusting of all scales used for weighing coal, at least once in three months, by an inspector under State appointment.—*Miner.*

The following is from the check weighman's book of the Standard Coal Company, Angus, for September, 1883:

No. men who worked 23 days.....	17
No. men who worked 22 days.....	25½
No. men who worked 21 days.....	4
No. men who worked 20 days.....	2
No. men who worked 19 days.....	8
No. men who worked 18 days.....	3
No. men who worked 17 days.....	3
No. men who worked 16 days.....	7
No. men who worked 15 days.....	4
No. men who worked 14 days.....	7½
No. men who worked 13 days.....	5
No. men who worked 12 days.....	3
No. men who worked 11 days.....	4
No. men who worked 10 days.....	2
No. men who worked 9 days.....	1
No. men who worked 8 days.....	5½
No. men who worked 7 days.....	4
No. men who worked 6 days.....	5
No. men who worked 5 days.....	13
No. men who worked 4 days.....	11½
No. men who worked 3 days.....	4
No. men who worked 2 days.....	3
Total number of men.....	142
Total number of days.....	275

which gives less than an average of two days to each man.



During this month probably twenty men were at entry work. At this work steadily, a man would drive from sixteen to eighteen yards in a month at \$2.12½ per yard.

This book shows that during this month sixty-two flat cars were loaded with nut coal and shipped from this mine, and 309,850 pounds of the same grade of coal was sold to local consumers. The latter was sold to miners at \$1.40 per ton, and to outside parties at \$2.50. On 492 flats of lump coal shipped, the company claimed 200 pounds shrinkage on each flat.

The above was copied for me by the possessor of the book and submitted herein just as given, at his request.

NOTE.—In this office there are over one hundred expressions from miners of the same character as the foregoing, regarding screens. Want of space alone prevented their appearing here.

#### INDUSTRIAL EDUCATION, TRAINING SCHOOLS.

Do let us have some training schools, where one can get a knowledge of the different elements necessary to become good mechanics. In such schools let there be books, so that working men can get a chance to read, and thus make progress.—*Carpenter*.

Manual training schools would be a great help to Iowa, not only to employes, but to the boys of Iowa—and girls too.—*Carpenter*.

The only safe and good method for producing a better class of practical mechanics, both in point of morals and workmanship, lies in the forming of industrial schools in connection with other branches of learning, and in that way give the boy a fair chance, instead of working him against odds.—*Tinner*.

A school where carpenters can learn the trade, open for young and old, I think would be advantageous for Iowa.—*Carpenter*.

Let us have a manual training school.—*Harness maker*.

A good manual training school would do Iowa more good than anything I know of.—*Blacksmith*.

Can't Iowa be liberal enough to adopt some plan by law, so we can educate our boys (and girls too) in a State Industrial School.—*Blacksmith*.

Let us have a school or two, in which manual training is taught. Don't let so many other States be far ahead of Iowa.—*Tinner*.

We need an industrial training school, to protect our trades and save our boys.—*Carpenter*.

Can't the State encourage industrial education.—*Carpenter*.

Let the State establish industrial schools for both boys and girls, if they want to help the mechanic.—*Carpenter*.

Schools where working men or their children, or both, could go and receive a practical and industrial education, is what we want more than anything. I know of no one greater good you could exert than your influence toward the establishment, under a State law, of an Industrial School.—*Carpenter*.

NOTE.—The views of the coal operators should be read in connection with those of the miners. They are submitted in Part XIII.

#### STRIKES, ARBITRATION, CO-OPERATION.

Let us have a board of arbitrators; then no more strikes.—*Harness maker*.  
I believe that arbitration and the ballot should take the place of strikes.—*Plasterer*.

My opinion is that employers and workmen should unite and settle their disputes and grievances by arbitration. No arbitration is worth anything without enforcement. My idea would be for either party to be subject to fine or imprisonment if they did not abide by the decision of the arbitrators after they have agreed to do so. Let the General Assembly make a law compelling this arbitration way of settlement. Strikes are a curse to both parties; let something be done to stop them.—*Miner*.

We must have arbitration to settle strikes.—*Miner*.

If some plan could be devised for operatives to have an interest in the profits it would be well.—*Machinist*.

Let us have a board of arbitration, by which all disputes between labor and capital shall be kindly settled. Let this be done by the force of law, and then it will be successful.—*Miner*.

Arbitration, backed by the law-making power, will give us real help.—*Miner*.

Let us have a legal arbitration board, and we shall be contented.—*Miner*.

#### MISCELLANEOUS.

Can't some law be enacted to prevent adulterations in paints and oils, as well as food?—*Painter*.

I am doing better in Iowa than I did in Virginia or Ohio. I think I never was as comfortable as I am now, or earned as much money.—*Carpenter*.

The laboring classes are prospering well with us. Many of us have comfortable little homes, and all paid for.—*Carpenter*.

Machinery has transferred the tool into the hands of the few, and the town shoe shop, with its half dozen "journs," is a thing of the past.—*Shoemaker*.

Six of our painters own homes, and three do not. The latter are single men.—*Painter*.

I would say that steady employment (if only upon small wages) is the first step toward progress for the working man. It has been my experience that steady employments cut off all extra expenses and idle mischief, which wage-laborers are more apt to indulge in than any other class, when they are once out of employment.—*Harness-maker*.

I think the wage-workers of Iowa the best clothed and best fed of any country. If they are sober and industrious, they are better off than those of any country.—*Blacksmith*.

In this part of the State (Adams county) all workingmen and women who are capable and willing, have work. I see no reason why any person with a good trade, either in city or country, should want for work, if they are honest in their dealings with their employers. My policy is honesty with em-



ployer, and employed, patient labor for the necessities of my family, and total abstinence from all that will keep me poor and miserable.—*Blacksmith.*

I have lived in this vicinity since September, 1853. I came here without anything, and have now a home with sixty-five acres, well improved; also a wagon and smith shop, worth probably \$2,500. My land is worth \$50 an acre. I have plenty of stock, and money, and owe nobody.—*Blacksmith.*

A good many of us laboring-men here own our houses, and are bettering our condition. Our children generally attend school.—*Blacksmith.*

All employers should be held responsible to their employes in case of accident—that is, if an employe should be disabled from following his usual occupation, not through his own fault, and could so prove, then the burden should fall on the employer.—*Machinist.*

I have invariably observed that with steady habits, industry and economy, a mechanic gets something ahead for a rainy day.—*Machinist.*

Masons as a rule, in this part of the State (O'Brien county), earn on an average \$86.00 per month for the time they work, which is about eight months in the year. As a rule, the remaining four months he is idle. All classes of laboring-men and mechanics are paid good wages in this county, and need not be idle more than three or four months in the year. Working-women are scarce—not enough to supply the demand. They are paid \$3.00 a week and board, on an average.—*Plasterer.*

I have a little home paid for, raise my own garden truck, make our own butter, and raise a hog or two for meat in the winter. Am very happy.—*Laborer.*

When I get steady work I can make money fast, but there are just about four months in the year that I can't get work, but I save enough in the other eight to keep clear of debt.—*Mason.*

A German stone-mason writes: If a man wants to work here in Iowa, and not live too high, he can save some money. I have been in Iowa since 1857. Was in the last war, Co. G, 1st Iowa Inf. I have twenty-two lots, a house 14x30, one a half story, three cows, a horse, ten hogs, and a hundred chickens.

If we get hurt doing a company's work, and are laid up, we have our own doctors' bills to pay, and everything else, which oftentimes takes all we can save during the year. The State ought to pass a law compelling companies to pay the expenses of their men while injured, and let their time go on till they are able to go to work. I mean, of course, only when they are injured in doing the company's work.—*Railroad trackman.*

The railroad discriminations in traffic should be taken hold of by the Legislature.—*Local Editor.*

My opinion is, that economy and industry will lead any man to success. I came here many years ago a poor man. Saving a little, I bought a lot, then another, and built a little home; now my fruit and garden would keep me, if I had no other work.—*Plasterer.*

The law should compel every working man to whom a blank is sent by the Commissioner of Labor Statistics to fill it out.—*Miner.*

Laws, such as iron-clad mortgages, high rates of interest, and the strain-

ing efforts to equalize the labor of the country with the low-paid wagemen of other parts of the world, are the evils we are suffering under, and upon which new legislation should be had.—*Carpenter.*

I am 64 years old. Have seven children at home. By hard work, steady habits and economy I have a nice home and a little farm, and still work at my trade.—*Carpenter.*

Since July 13, 1874, I have accumulated twenty-five hundred dollars and a nice home and place. My eldest child is twelve years old and my youngest seven, and I have lived as well as my neighbors, but I have kept clear of unions, but worked every day I was able, if I could obtain work, even at one dollar a day. I worked for this all one season. Am perfectly contented and happy.—*Carpenter.*

The wageworkers around here (Adair county) are as a rule in a fair condition, with the exception of a very few. They have homes of their own. The wages paid are from \$1 to \$2.50 per day.—*Carpenter.*

There ought to be a law to protect a blacksmith or wagon-maker. As it is now we get cheated too often. We ought to be in as good shape as the carpenter or doctor. If a man comes and gets me to put ten or twenty dollars worth of work on his wagon, and he takes it away, unless he owns so much I cannot collect. Now this isn't right. We ought to be allowed to claim the wagon or have it sold.—*Wagon-maker.*

In my opinion a proper regard for Sunday would have a beneficial effect on railway men as far as health and morals are concerned. As matters stand now on all the trunk lines, operators, dispatchers and train men work every day in the year—dispatchers eight hours, train men twelve to eighteen, and operators twelve per day. The work on trunk lines being of such a responsible nature I believe it would be beneficial to employer and employed if it could be arranged so all men in the operating department could have at least one day in seven for rest and recreation.—*R. R. agent and operator.*

It seems to me that one great trouble with our working men and women is their poor idea of accumulating anything. There are a great many exceptions to this rule. But I am speaking of our young men and women as a class; it is "spend as you go," and a good many of them a little faster, even in the best working part of the year, so that when winter comes, or sickness or misfortune, then they have nothing to fall back on but the charity of those who have been more frugal and economical.—*Broom-maker.*

Agents of this Company must wear a full suit of uniform blue, with the accustomed amount of red tape laid down in the Company's rules. Two suits per year for which \$50 is charged, or \$25 a suit. This amount is deducted from our wages. This rule, together with a reduction in our wages of from five to fifteen per cent, has been productive of great disadvantage among our agents, and the only alternative is to resign. A hospital fee of 35 cents on salaries of \$50 or less is charged per month, under rules so stringent as to bar all but unfortunate train or brakemen from its benefits, and is a scheme to shoulder the burden of an expense on the employe which justly belongs to the Company.—*Telegraph operator for R. R.*



My complaint is the long hours and Sunday work. We are required to be on duty the same Sundays as week days.—*R. R. station agent and operator.*

A great difficulty to my trade is the discrimination in freight rates, at a point where there is no railroad competition. (This is written at Cromwell.) The freight on a car-load of lumber from Burlington here, is \$38; from the same point to Council Bluffs—ninety-eight miles further—about one half this sum. From Chicago to Cromwell, over the C., B. & Q. R. R., \$65; from Chicago to Council Bluffs, \$22.50, over the same line.—*Carpenter.*

I have no fault to find with the general laws of the State, except that I have to pay taxes on what property I own and also on what encumbrance I have on my house, while the capitalist that furnishes the money, pays only on what he owns.—*Carpenter.*

The evils existing among coal miners can never be remedied by the forces which the miners are using at present. I think the sooner they do away with caste and color lines, the better it will be for them.—*Miner.*

Let some law be enacted by which child labor shall be prevented. The law now, so far as regards mines, is a failure; children of all ages are at work.—*Miner.*

## PART XIII.

### VIEWS OF OPERATORS REGARDING COAL SCREENS.

Of course, no just decision in the matter of screens could be arrived at from the opinions of the miners alone, or of the operators alone. Having received the views of a very large number of miners (some of which have been presented), I selected six of the largest coal mines in the State, located apart, and to the superintendents of these, I addressed a letter, asking for their views. The following are the replies:

FORT DODGE, IOWA, July 10, 1885.

E. R. HUTCHINS, *Commissioner of Labor Statistics, Des Moines, Iowa:*

DEAR SIR—Your favor of 8th came duly to hand, in which you ask for our views on "the screen question." You do not state in what particular or in what form "the screen question" is being discussed; but, as we know in a general way that the question of screens has been agitated among both miners and operators, we will briefly state our convictions, based upon an experience of more than twenty years in the coal fields of Illinois and Iowa.

It appears to us to be a difficult question to regulate by law. Nearly all the mines being operated in Iowa may properly be called surface mines, *i. e.*, the coal lays within from 60 to 100 feet below the surface, hence the dip of the coal is undulating and irregular. The lay of the vein in mines less than 200 to 300 feet deep in most cases sympathizes with the surface. In places where it (the coal) approaches nearest the surface, it is usually much softer than where heavily covered. These mines are more or less troubled with surface water, and where the coal is being worked with the dip, must of necessity be brought out wet and mushy. Such coal will not clean itself in running over a screen that would clean coal from a dry mine. Coal *must* go to market well screened and clean, to secure market rates. So far as my own experience and practice goes, I have never been disposed to use a wider



screen than was necessary to clean the product, and have never had any trouble with the miners on that question.

There are unquestionably always a percentage of men among any considerable number engaged in mining, or other labor, who are either unable or unwilling to recognize facts as they exist locally, or as a whole, touching the condition and requirements of the market in which they, as operatives, are as much interested as the operator. On the other hand, there is, I think, as a rule, a greater percentage of reasonable and reasoning men, who are able to take in the situation and recognize the fact that the interests of the operator and operative are identical.

In my opinion, if an operator recognize the fact that he is in the main dealing with men having common rights and identical interests with their own, a large percentage of whom are possessed of ability to see and distinguish a necessity from a fraud, a question like that of the screen to be operated under such varied conditions, can be best handled and arranged between the parties, to suit local trade. I believe, however, that with a diamond-shaped screen bar, 10 to 12 feet long, a space between the bars of 1½ inches, would be sufficient in any case. Operators are by no means free from blame in the matter of screen abuses, especially in and about your goodly city of Des Moines. That miners have been defrauded there of their rights, I have no doubt. In no other part of the State are such "cattle guards" used; nor would they be tolerated, either by the miner or operator.

The close proximity of these mines to the city, where there is a large demand for what they call *nut* coal, but is really small but *uniform lump*, and the very best quality of the entire product of the mine, excites the cupidity of the operator, and he spreads out his screen wider and wider, and maintains it partly by offering to the miner one-half cent per bushel on what little lump coal is left after running over the *ladder*; more than the market would admit of in case so great a proportion of it did not run into the gratuitous heap that he calls *nut* coal. The bad influence of this Des Moines cupidity has been felt all over the State, and I venture the prediction that if the nuisance could be abated about Des Moines, the screen question in Iowa would no longer be a bone of contention between operator and men in a public way, but that each locality would settle the matter to suit circumstances, locally considered.

On account of the varied conditions it is impossible to regulate this screen question by a law to operate *uniformly* under all conditions, but in order to protect the trade of the State from the evil effects of a "cast iron" law, which would of necessity shut up many mines in the State, and to protect the miners from the greed of operators who are disposed to take more than is necessary to clean the product for market, and also to remove one of the many causes and excuses for strikes and delays, I would suggest a law to cover points of equity, and apply as follows: Whenever the space of screens cannot be agreed upon at any particular mine it be settled by a committee of three, of whom the State Mine Inspector shall be one, the operator interested one, and the remaining one to be chosen by the miners at any such mine. The Mine Inspectors' expense to be paid by the mine

adjudicated. After considering the law and rendering a decision on these grounds the verdict to be binding and final until reconsidered or changed by common consent. In suggesting legislation upon any question affecting the industries of the State, and especially in the matter of coal mining, the fact must not be lost sight of that such legislation is often suggested and sometimes dictated by parties having personal ends to accomplish or petty spite to gratify, and great care should be taken that none of these narrow views be sprung upon this great industry to bind it hand and foot to the benefit of Illinois mines through the co-operation of the railroads in low rates for long hauls, inter-State business, etc., etc.

Yours very truly,

J. L. PLATT,  
President Ft. Dodge Coal Co.

WHAT CHEER, Iowa, July 13th, 1885.

MY DEAR SIR:—I have your esteemed favor of the 8th instant, relating to the screen question. Reply has been delayed on account of sickness.

We use a wrought-iron flang (not Diamond) screen bar, ten foot long, one inch and one-eighth thick, with a scant one and a quarter inches opening between the bars. Five years experience with this kind of a screen has shown us there is nothing passes through that our company realized anything from. To explain, what we realized from the sales of nut coal, went to pay for handling and taking care of our slack, which we have no market for.

The screen question is being extensively agitated throughout the State, with perhaps the exception of this "What Cheer" district, where the miners as a rule are perfectly satisfied with our present method of screening and weighing coal, and that it is necessary to have coal well screened and clean in order to compete with Illinois and Ohio coal. A few miners throughout the State, and a great many *politicians* are in favor of the "Cassett" Screen Bill, the miners because they are ignorant of what the result of the passage of such a law would be, and the politicians are in favor of *anything* to catch the miners' vote. Do you realize what the result of the passage of a screen bill similar to the Missouri or the Cassett Bill would be? We are paying say seventy-five cents per ton for mining, and if such an unjust law were passed, we should for self protection, have to reduce the price paid for mining one-half, etc. Why? In Ohio and Illinois, whom we come in direct competition with, there is used from one and one-fourth to two and one-half inch screen, and they pay for mining in Ohio forty to fifty cents per ton; in Illinois from fifty to seventy-five cents per ton; hence you can readily see that with the passage of the Cassett or any other bill, you would paralyze one of the greatest industries that your State has, for instead of helping the miners you would be doing them a great injustice, and instead of encouraging capital to invest in your State, you would drive them elsewhere. Such a law would shut up every mine of any consequence in the State of Iowa, for with the extremely low rates from Illinois and the east,



coal would be brought into Iowa and sold at a profit at a much less price than we could produce it, as it is being done to a great extent now.

Yours truly,

J. H. VINCENT,

*Asst. President Granger Coal Co.*

E. R. HUTCHINS, Esq.,

*Commissioner of Labor Statistics, Des Moines, Iowa.*

EXCELSIOR, IOWA, July 13, 1885.

E. H. HUTCHINS, Esq., *Com'r of Labor Statistics:*

DEAR SIR—Replying to yours of the 8th, I would say: I have given the screen matter very little attention aside from our own mines. The market coal is sold in, and the purpose it is put to, seems to decide the question for us as to how it shall be screened.

Our coal goes to northern Iowa, Minnesota and Dakota, and is nearly all used for locomotive consumption, and is brought into competition with Illinois and other Eastern coal, while the coal from the southern districts goes to Kansas and Nebraska, and consequently is brought into competition with Missouri, Kansas, Illinois, Colorado and Wyoming coals.

I do not know the requirements of that market. Besides, the coal at different mines differ so materially that a uniform screen would not operate alike, and while it perhaps might benefit one section, it would prove detrimental to the others, and make their property worthless.

Des Moines, perhaps, meets the least competition from foreign coals of any in the State. Angus, Fort Dodge and What Cheer, with nearly all on the Iowa Central, is sold in the northwestern market, and at best, furnish but a small portion of the trade, and any change that would increase the cost, or lessen the value, would cut us off from that market, and cause the entire supply, perhaps, to be drawn from Eastern mines. In regard to others, I do not know how they would be affected.

I understand the object of legislation on the matter is to do away with strikes and disputes, now occasioned by the different screens and changing screens; but I cannot see how this would bring about the desired result. It could not fix a price to be paid for mining, and the party finding himself aggrieved would reduce the price per ton proportionally, and a strike would be the result unquestionably. My views, to be brief, is that there is a certain amount per ton the coal will bring, and there will always be a dispute as to how it shall be divided; and to fix the screen over which the coal shall pass, or whether it shall pass over any, only transfers the dispute from the width of screen to the price to be paid. This question was discussed in the last legislature, and no conclusion reached. The older mining States have deliberated on this same question, and do not seem to have found any way out yet.

Very truly yours,

B. WIGHTMAN,

*Supt. Excelsior Coal Co.*

KIRKVILLE, IOWA, July 12, 1885.

To E. R. HUTCHINS, Esq.,

*Commissioner Labor Statistics, Des Moines, Iowa.*

DEAR SIR:—In response to your request for my views on the screen question permit me to submit the following:

It seems to me that the subject of screens has been magnified into an importance that it is in no wise entitled to.

There are in Iowa quite a number of coal mines generally of small area and scattered over a large extent of territory. The quality of the coal in some of them is very fair, and in others very poor, while the average quality is much inferior to the coal of Illinois and other States to the east of us. All of our coal, except possibly some very thin veins, have large quantities of sulphur, bone, slate and black-jack intermingled with the coal. Further, nearly all of our coal in "shooting," produces large quantities of dirt and fine coal that must be taken out before the coal becomes merchantable. In order that this may be accomplished the coal as it comes from the mines is passed over screens of such a size, depending on the character of the coal, as will remove all dirt and fine coal, then after throwing out by hand all sulphur, slate, bone and black-jack that passes over the screens, the remainder, the clean coal, is weighed and paid for by the bushel or ton.

Hardly any two mines use the same size screens, as the conditions vary, i. e., the character of the coal is different. The price of mining should and generally does vary with the size of screens, thickness of vein, "shooting" quality, and cleanness of coal. The conditions, at any particular mine, as regards size of screens, character of coal, etc., may be assumed and are practically constant.

Now if these statements and premises are correct, and I have no fears of their being successfully controverted, the whole question resolves itself into the amount that should be paid for mining a bushel or ton of lump coal under the conditions at any particular mine. If miners are not receiving sufficient pay for mining, then they should be paid more. That is plain. But the price is not the complaint, but rather that certain screenings are sold by the operator and no allowance made for mining them.

This statement is not only misleading but utterly fallacious as has already been shown. While separate payment is not made for mining screenings, payment is included and fully covered in the price paid for mining lump coal. Is it possible that anyone is so verdant as to suppose that if all screenings and refuse material were weighed with the lump coal, and the whole paid for by the bushel or ton that the price of mining would not be correspondingly reduced? It would most certainly be done, for no new profit would accrue to the mine operator and therefore he could afford to pay no more for the total output than he pays now, and as before stated, if he does not pay enough now, then he should pay more. I believe there would be little difficulty in showing that there is scarcely a mine in the State where the profits from mining have paid the interest on the invest-



ment during the past two years, but that has nothing to do with the subject under discussion.

Of course it would be possible to weigh all screenings and pay a certain price for mining them according to their value, but it would be very difficult to do so, and would cause considerable additional expense and labor, and still leave the price of mining an open question as before, bringing no benefit to the miner and putting an additional expense on the operator; and if all is paid now that the operator can afford to pay for mining, then in the new rates that would be paid for mining, the miner would be the loser to the extent of the increased expense. But one proposition is to weigh the car on top just as it comes from the mine, including not only the screenings but all sulphur, stone, slate, bone and black-jack that might be and often are sent out with the coal.

Now can there be any honest and just motive in the proposition to pass such a law? It is claimed that a law of this kind would have a tendency to prevent strikes? Would reducing the price of mining twenty-five to forty cents a ton, on account of the lesser value of the material weighed, tend to prevent strikes?

Would the daily and hourly discharging of miners for sending out and asking pay for worthless stuff for coal have a tendency to breed good feeling between employer and employe, and prevent strikes?

Would making the price of mining at one mine, where they are compelled to use large screens in order to make their coal saleable, twenty to thirty per cent less than they are able to pay at another mine where the coal requires far less screening, tend to keep down strikes? They would not, but on the contrary, such a law would banish stability from the coal mining industry and inaugurate a ceaseless round of strikes.

Every miner in the State knows, even admitting it be constitutional, which I seriously question, it could result in nothing but confusion, disorder and strikes, and no one could hope to benefit by it except on the assumption that in the new prices fixed for mining, the operator would be unable to figure what he could afford to pay per ton for mining the *mixture* as compared with a ton of lump coal. The dishonest miner might gain by the change, but the honest miner would be the loser as the new prices would be based on the average ratio of the lump coal to the whole amount sent out.

We have a class of politicians among us whose interest in the subject of coal mining, and especially in the miners is measured by the value of some office and the number of votes they can possibly secure by raising a false issue and appealing to the miners to rid themselves of the imaginary grievance. These persons denominate as robbery the using of screens. Is it robbery for the operator to get out his coal so that it will sell, thus enabling him to successfully work his mine; for without screening the coal as it is now done, there would be no market for it? Is it robbery for the mine operator to so prepare his coal that it will sell, thereby giving steady and profitable employment to labor? Is it robbery for the operators to pay prices for mining lump that fully pay for all work done by the miner?

These things are not robbery, but simply necessary and just methods of conducting the business, and are some of the reasons for the almost universal custom of weighing lump coal only.

No honest politician would advocate, and no just legislator would vote, for the enactment of a law requiring all material sent out to be weighed on top, if they would take the trouble to visit any of the principal mines of the State and see thrown out often from a single pit car from 100 to 1,500 pounds of material that is not coal.

I again repeat that the screen question is not a real one, but simply "a man of straw," and that the real question is what it is worth to mine a bushel or ton of coal under the conditions as they are at any particular mine.

Yours truly,

H. L. WATERMAN.

It was hoped that before this went to press, replies would have been received from Mr. Garver of Des Moines, Mr. Phillips of the White Breast Coal Company, and Mr. Foster of Angus, to whom requests were sent. If they shall be received, perhaps there may be space at close of this report to add them.

These views are worthy of study. While I am thoroughly convinced that some measure should be enacted regarding this screen question—either something like uniformity or the doing away with it altogether—I am equally convinced that such plans would effect wages. The operator *must* have clean, merchantable coal; the miner *should* be paid for *all* the labor he performs.



## PART XIV.

## SUGGESTIONS OF MANUFACTURERS, STORE-KEEPERS, ETC.

The following suggestions (voluntary) come from various industries, and are classified as to subjects, on margin:

## BREWERY.

Prohibition. My business is nothing since the prohibitory law came into effect.

## BRICK AND TILE FACTORIES.

(Correctionville, Woodbury County.) The educational privileges are equally good for all. Financially, the laboring class is in good condition. So is it socially, and in a sanitary point.

(Lemars, Plymouth County.) The majority of my hands have been in my employ for five years, and all are a hard-working, intelligent and respectable class of men.

(Guthrie Center, Guthrie County.) Some of my hands have been with me for ten years. Ninety per cent of my men become interested in their work, and can be fully trusted. I think the secret of my success with hands or labor is from the fact that I never withhold from them the facts of expense and profit in my business. I allow them the very best Co-operation. wages I can afford. I believe capital and labor are best served in unity of interests.

(McGregor, Clayton County.) The real value of labor has increased since July 4, 1884. Men are more steady. Instead of blue Monday, it is fresh Monday. Men that never had a full suit of clothes before, have them now. There are several here.

LeGrand, Marshall County.) Transportation is so high that it ruins the Transportation business.

(Eldon, Wapello County.) The condition of the working-class in this place is, in my opinion, better than the average. There is generally steady employment. Many of our laborers of the different industries are making homes through the building associations here.

(Cherokee, Cherokee County.) I think the laboring classes are in a good condition to get along. So far as my observation goes, they were never better. Just as long as prohibition is in force, it is one of the greatest benefits that ever occurred for the working-classes.

(Nashua, Chickasaw County.) Prohibition is having a good effect with us. Let the law be enforced.

## CANNING COMPANY.

(Keokuk, Lee County.) In 1883, we packed 400,000 cans; in 1884, about 600,000, and 1,100 barrels pickles.

## CIGAR FACTORY.

(Des Moines, Polk County.) The reason I have had no strike was, first, I employed no union men; second, I used my men well.

Wages paid to good cigar-makers are high enough to enable each and every one of them to start in some kind of business for himself, with the savings of a year or two. Ignorance, tramping and shiftlessness, and, before all, drinking, prevents this often.

## COAL OPERATOR.

(Flagler, Marion County.) We think there should be some law to regulate the width of screen between bars, and length of same, as this is the chief cause of difference between operators and miners at present time. We think a wise law, regulating the matter, would settle this difficulty and tend to produce better feeling between the parties.

## CONTRACTOR.

(Cedar Rapids, Linn County.) The workingmen of our city are in a prosperous condition, as of late years they have had plenty of work at reasonably good wages, and a large proportion of them have homes of their own, and many are accumulating other property. The social and moral condition is also good.

## COOPERAGE, BUTTER TUBS, ETC.

I would say that one great injury to our manufacturing interests, both to employers and employes, has been the competition brought about by convict labor. I think labor from the State prison of Illinois and other States, and we protest against the injustice of being compelled to compete with such labor. It is such injustice as this, that is moving the masses of mechanics and laboring men. This seems to me to be the suitable place to suggest that some movement be put on foot to remedy this evil. Let some inquiries be made into the extent of injury done to laboring-men and their families, by this unjust competition.

The cooper business is being killed by cooperage from Joliet penitentiary



being sold by their agents in Iowa at a lower rate than we can manufacture Same. it, and unless it can be stopped we will have to give up the business, as will all others.

## CREAMERY.

For the interest of all concerned in the dairy business—producer, manufacturer and his helpers—in order to see this branch of labor continue in a Bogus butter. prosperous condition, we hope to see Iowa step into the front rank with the strongest of anti-bogus butter laws.

## CREAMERY GOODS AND SUPPLIES.

The creamery supplies manufactured and patented by me, are shipped all Extent of over the U. S. I have also shipped goods to England and Ger-  
trade. many.

## DRUGS.

(Fort Madison, Lee County.) In our business the pay of competent Competent clerks. clerks has been increased, and such persons have been scarce. This is due to the pharmacy law, which requires a person to pass an examination. It is a good law, and we hope it will stimulate the Pharmacy young men of our State, so that thoroughly competent persons law. will be found.

## FLAX AND TOW FACTORY.

(Algona, Kossuth County.) The C., M. & St. P. R. R. and C., & N. W. R. R. have pooled rates, so that we have to pay about \$10 on a car extra. We think it poor policy thus to combine to keep prices above the R. R. freight rates. natural land, and when practical we think the Legislature should take action to put a stop to it.

## FLOUR AND FEED MILLS.

We find the most trouble with men who have jumped into the business of Unskilled milling without serving any time to learn the business.  
labor.

R. R. discrim- Railroads discriminate in transportation in favor of large and  
ination. wealthy shippers.

Laws should regulate inter-state commerce so that the rich and poor man Inter State may have a more equal race in the acquirement of profits.  
commerce.

(Franklin, Hampton County.) This is a strong temperance community; never tolerated or have had saloons; consequently the social, educational, Temperance. financial and sanitary conditions of our working people are of a high order.

(West Liberty, Muscatine County.) The educational advantages of the working classes of this community are excellent, and they avail themselves

Education. of the opportunities the independent district offers them, both white and colored.

Condition of The working classes are thrifty, and live within their means  
working in comfortable style. The sanitary condition is remarkably  
people. good, owing to good regulations of Board of Health, and the ready acqui-  
Sanitary. escence of the people to submit to their wholesome rules.

(Plymouth, Cerro Gordo County.) I believe the condition of the working Condition of class in this vicinity is better now (1885) than in 1884. I know of  
working none out of work that desire to work for a fair price.  
people.

(Winneshiek County.) The educational condition of the working people of this neighborhood is good. Everybody, as far as my information goes, can write, read and reckon, and I have not heard of a person yet that was Same. unable to transact his business, in town and county, on account of lacking education.

The financial condition of the working people here is on an average good. Want among them is rarely met with.

Socially, the working class enjoy life in a far better way than most of the smaller farmers and business men; and as regards their sanitary condition, it is very good, which is attested by the fact that sickness is very rare among them.

(Missouri Valley, Harrison County.) The laboring class of our city number about nine hundred, and they seem to be satisfied with their present Same. wages. Many of them are securing themselves cheap and comfortable homes.

(Boone, Boone County.) Our laborers find ready employment. Their children enjoy good schooling, but too frequent change of school-books School books. make it very hard for some of them, that have many children, to obtain. Health generally excellent.

## FOUNDRIES.

(Des Moines, Polk County.) Employ no drinking men. Pay on Monday Temperance. to prevent Saturday night and Sunday dissipation. The high Pay day. rates of freight on raw materials and in the distribution of manufactured goods give manufacturers in Eastern States such an advance R. R. freight. tage that manufacturers who are obliged to import raw materials from other States labor under a crushing disadvantage.

## FURNISHING GOODS—WHOLESALE.

(Burlington Des Moines County.) Our men have been with us many Wages. years and when we make money they get a bonus, otherwise only lowest agreed on wages are paid.

## GROCER.

(Henry County.) My business is almost entirely with laboring people, and I find many of them unable to pay their bills. The custom is to pay Pay day. hands once a month—that is they pay about the 15th of the



preceding month, consequently the employers always have fifteen days pay in their hands, and part of the time forty-five days, and I have known instances where the pay of the men has been withheld for ninety days. The Credit system. result is that generally the men are always in the storekeepers debt, and if misfortune or sickness overtake them, the grocers bill remains unpaid, which would not be the case if the men were paid every week. The result is that the grocers are afraid to trust working people, and they are thereby compelled to deal in stores belonging to, or at least controlled by their employers, where they are completely in the power of the company. The remedy is simple. Pay the men wages in money every week.

## INSURANCE COMPANY.

(Des Moines, Polk County.) We pay women the same wages for same work that we do men. We have learned by experience that women are more reliable, and do better work as a rule than do men.

## LINSEED OIL MILLS.

(Marshalltown, Marshall County.) All who work for us avail themselves of the excellent educational facilities of this city. Most of them are married, the majority have homes of their own, are clean, industrious and economical.

In all cases the children are growing up superior to their parents in intelligence and ability.

(Iowa City, Johnson county.) We pay our employes wages from \$7.50 to \$12.00 per week, and at end of year distribute among them ten per cent of our net profits.

## MORRISON MANUFACTURING COMPANY.

(Fort Madison, Lee County.) Men who grow up as laborers could easily acquire trades in their boyhood, and thus put themselves in demand at from \$2 to \$4 per day, but the trouble is our American boys wait around for something to turn up, while our workshops all over the country are filled with skilled labor from foreign countries.

## PAPER FACTORY (STRAW WRAPPING.)

(Decorah, Winneshiek County.) Our men are as a rule sober and industrious. Some of them have purchased homes within the past ten years and paid for them.

## PLOW COMPANY (RAY.)

(Burlington, Des Moines County.) Regular workmen are steady and industrious, and lose little if any time. The roving class come and go at their inclination. The lower grade or grammar schools are tolerably well attended by workingmen's children, but a gradual

falling off in attendance of their children in the high schools. This is because of the increased expense to parents, and the child being put to work to add to the earnings, etc. The steadier, older men are acquiring homes.

The German, Swede, Irish and American workingmen represent the nationalities, and in about the order named.

## POTTERY.

Our business (Yellow Rockingham Crockery ware) for table and kitchen use is exceptional, being the only crockery ware pottery west of Pittsburg, R. R. thus laboring under many disadvantages as to procuring skilled workmen. But we have now several young men of our own training, who have homes in this vicinity, and are anxious to remain in our employ, and the labor supply is thus increasing. The greatest obstacle to the success of this and other manufactures hereabouts, is the enormous discrimination against home shippers and short haul freights by the railroad companies. The usual difference in railroad freight rates from this point to any part of the State, one hundred miles or more from Davenport, are but little less than is charged on shipments of the same class of freights from Pittsburg (600 miles Eastward) to the same points. The cheap coal prices at Pittsburg giving the manufacturers there the advantage more than equal to the slight difference in freight rates. Employees will never strike as long as they are convinced that their employers *do the best they can*. Labor troubles will measurably be reduced by allowing the employes a share of the profits, by providing constant work, reducing hours of labor, and preventing contract emigration.

## OTTUMWA PORK PACKING HOUSES.

(Wapello County.) Workingmen in this vicinity seem very well contented. Savings. Steady men are saving a little all the time, with a disposition to invest in better homesteads. The children of workingmen appear to receive Education. care in their education.

## TIN, SHEET-IRON AND COPPER WARE.

(Des Moines, Polk county.) Thorough mechanics are scarce in nearly every trade, and few American boys are learning trades. This may be attributed to three causes, to-wit: *First*. The tendency of the present school system is to educate away from the trades and the mechanics. *Second*. The present apprentice system keeps the best young men, to a great extent, from entering the shop. The apprentice is submitted to the most menial drudgery, often entirely useless, and in many cases he does not learn as much in three years as he could, with proper instruction, in three months. *Third*. Restrictions of the Trade Unions which demand that only a certain number of apprentices can be taken in. Manual Training Schools will tend to greatly remedy these evils.



## TRUNKS, BOXES, ETC.

The saloon is my greatest trouble here (Keokuk). It is hard to keep men out of them.

## WAGON-WORKS.

(Cedar Rapids, Linn county.) We have a number of men who have worked sobriety. for us steadily from eight to twelve years. Where men are sober and industrious, they are contented and prosperous. Most of our married homes. men own their homes, some of them being worth, and would find ready sale, at from \$2,000 to \$3,000. Our observations of the financial condition of and sanitary condition of the working people here, as a whole, leads to the conclusion that it is equal to that of any manufacturing city. They are subject to errors of judgment and good management, as well as any other class of people, but when careful and economical, they are prosperous. The returns for labor during the past year have been greater, with no attendant risks, than to the capital employed.

(Burlington.) It is our opinion that the penitentiaries have a tendency to depress prices and wages in our line. For instance, the Caldwell Wagon Co., of Leavenworth, Kansas, furnish wagons, in less than car lots, freight allowed, to points within 30 to 50 miles of Burlington, and set them in their agents' warehouse to sell, and pay for them after sold, or when sold, at a lower figure than we can afford to sell for on short time. Now, it is the difference in cost of labor that enables them to do this. With sufficient machinery, most any kind of help can do the work. There are three or four penitentiaries making wagons, who only pay from forty cents per day up to sixty cents, and they get such help as roustabouts free. Now, any one ought to see that free labor cannot well compete with this.

## WIRE FACTORY (BARBED.)

Extent of (Baker, Des Moines, Polk county.) Constantly at work with business. one hundred and twenty-five men day and night.

## WIRE-CLOTH AND GOODS.

(Dubuque, Dubuque county.) We find our greatest difficulty in selling Freight rates. goods along the lines west, is on account of freight rates. Chicago parties can ship to any of our neighboring towns as cheap, if not cheaper, than we can; freight rates being so much in their favor.

## WOOD-MANTLES, STAIRS, ETC.

I give my hands steady employment, summer and winter, allowing them full time in winter, when they make only eight hours, instead of ten, as in Profit sharing. long days; and I always make them each a small present of from \$5 to \$50 on Christmas day; and never forget to give each a good, fat turkey for Thanksgiving; and I have never in a long number of years had any trouble in keeping a good class of hands.

## WOOLEN MILLS.

(Manchester, Delaware county.) Education limited. Need technical schools to educate operatives to run automatic machinery, and more skill in science and practical knowledge of machinery.

## WANTS.

In the blanks sent out to manufacturers, the questions Nos. 9 and 10 were as follows:

9. What class of employes do you have the most trouble in getting?

10. For what employment do you have the most applicants?

In both cases many returned the same replies, but in the following, repetitions are omitted, and the replies are classified according to occupations and numbers, as above, 9 and 10.

## BUTTER AND CHEESE INDUSTRIES.

No. 9.

No. 10.

Gilt edge butter makers  
Competent skimmers.  
Good cream gatherers.

Collectors of cream.  
Laborers.

## CANNED GOODS, CATSUPS, PICKLES, ETC.

No. 9.

No. 10.

Experts.  
Coopers.  
Those that take an interest for the employer.  
Tanners.  
Industrious and honest help.

Laborers.  
Pulling and filling.  
Boys and girls.  
Tomato peeling department.  
Traveling salesmen.

## CIGAR MAKERS.

No. 9.

No. 10.

Men not fond of drink.

To learn the trade.

## FEED MILLS.

No. 9.

No. 10.

Good mechanics.  
First class millers.  
Stone-cutters.

Laborers.  
Second millers.



## FOUNDRIES, MACHINE SHOPS, ETC.

No. 9.	No. 10.
First class boiler-makers.	Helpers.
Wood-workers who are willing to be told.	Painters.
Good machinists.	Laborers.
Moulders.	Furriers.
Skilled workmen.	Second class boiler makers.
Skilled plumbers.	Tramp machinists.
Good roofers.	Foundrymen.
Good wire workers.	Bench men.
Good steam-fitters.	Agents on salaries.
Non-drinking tinnners.	Clerks.
	Men who say they "can do most anything."

## LINSEED OIL MILLS.

No. 9.	No. 10.
Americans.	Laborers.
Good workmen.	"The easiest jobs."
	Swedes.
	Book-keepers.

## PORK-PACKERS.

No. 9.	No. 10.
First class men.	Common laborers.
Engineers.	Roustabouts.
	Clerks.

## WAGON-MAKERS.

No. 9.	No. 10.
First class mechanics.	"Gentlemen."
Machinists.	Laborers.
Ornamental painters.	Helpers.
Good wood-workers.	

## WOOLEN MILLS.

No. 9.	No. 10.
Skilled hands.	Spinners.
Weavers.	Laborers.
	Unskilled work.

## MISCELLANEOUS.

No. 9.	No. 10.
Steady men.	Common laborers.
Skilled workmen.	Traveling salesmen.
Good piece workers (coopers).	Clerks.
Glaziers.	Book-keepers.
Good machinists.	Men without trades.
Sober men.	Inexperienced mechanics.
Experts (horse collars).	Harness-makers.
Skilled cabinet-makers and upholsterers.	Girls for machine work.
Carvers and letterers (marble workers).	Varnishers.
Women (Match Co.)	Stone-cutters.
Men to properly run machinery.	Salesmen.
File-cutters.	Inexperienced mill workers.
	Carpenters.
	Teamsters.
	Polishers.

## PART XV.

SCHOOL TEACHERS, WAGES, COST OF LIVING,  
OPINIONS REGARDING UNIFORM TEXT-  
BOOKS, ETC.

With the copious report of the Superintendent of Public Instruction before us, it would be useless to attempt any discussion regarding the educational system of our State; but as the teachers represent the wage-workers in their sphere, as well as the tradesmen, blanks were sent out and a large number of replies received. When the Twentieth General Assembly met, it will be remembered that upon the recommendation of the Governor of the State, a bill was introduced looking to the adoption of a uniform system of text-books. It was met with strenuous opposition from publishing houses all over the country. One great difficulty with the friends of the measure, arose from the fact that but little data regarding this subject was in their possession. The teachers themselves had not been heard from. In sending out this circular from this office, the question, "Do you favor or oppose a uniform system of text-books for the State?" and replies will be found herein. Their reasons were also asked, and these are also given. Of course, a very great number gave the same reasons; but in this case, as in others, repetition is avoided. The same rule is observed in the replies to the questions, "What are the chief obstacles to your work?" and "What, if any legislation do you suggest?"



## MALE

Table of wages, cost of living, savings,

	Age.	Nativity. All native, except in cases otherwise specified.	Average No. of hours taught per day.	Number of terms taught.	No. having received a college education.	Earnings per month.	Total earnings for the year.
Superintendent.....	30	.....	6	15	1	\$ 50.00	\$ 127.50
.....	33	.....	4	12 years	1	112.00	1,220.00
.....	33	.....	6	12	.....	34.00	500.00
Superintendent.....	28	.....	6	2	1	100.00	900.00
.....	19	.....	6	2	.....	33.33	100.00
.....	34	.....	6	19	.....	30.00	175.00
.....	38	.....	6	19	.....	30.00	.....
.....	26	.....	6	12	1	75.00	617.50
.....	21	.....	6	1st	.....	34.50	.....
.....	22	.....	6	2	.....	33.00	300.00
.....	23	.....	6 1/2	2	.....	40.00	150.00
.....	26	.....	7	1	1	31.00	.....
Principal.....	23	.....	6	3	1	100.00	.....
.....	20	.....	6	2	.....	31.50	150.00
.....	35	.....	6	35	.....	70.00	680.00
.....	23	.....	6	3	1	35.00	390.00
.....	35	.....	6	40	.....	65.00	650.00
.....	29	.....	6	17	.....	40.00	275.00
.....	24	.....	7	11	.....	45.00	495.00
.....	19	.....	8	14	.....	35.00	.....
.....	25	.....	6	18	1	60.00	650.00
.....	26	.....	6	6	.....	33.00	300.00
Principal.....	44	Germany	6	6	1	100.00	.....
.....	30	.....	7	15	.....	30.00	240.00
.....	35	.....	6	14	.....	45.00	400.00
.....	20	.....	6	2	.....	31.25	120.00
Superintendent.....	38	.....	8	39	1	133.33	.....
.....	25	.....	6	8	.....	40.00	300.00
.....	23	.....	6	8	.....	30.00	400.00
.....	33	.....	6	17	.....	32.00	150.00
.....	8	.....	8	18	.....	32.50	250.00
.....	27	.....	8	14	.....	45.00	450.00
.....	20	.....	6	4	.....	29.50	244.00
.....	24	.....	6	11	1	45.00	90.00
Prin. and teaches eve'gs.	38	.....	6	15 years	1	169.00	1,450.00
.....	18	.....	6	1st	.....	40.00	.....
.....	20	.....	7	2	.....	35.00	150.50
.....	33	.....	7	15	.....	37.50	356.00
.....	21	.....	6	1	.....	25.00	140.00
.....	25	.....	6	11	.....	65.00	450.00
.....	21	.....	6	5	.....	35.00	300.00
.....	27	.....	6	3	.....	30.00	.....
.....	38	Switzerland.	6	42	.....	45.00	390.00
.....	19	.....	6	3	.....	32.50	300.00
.....	40	.....	6	17	.....	31.50	200.00
.....	57	.....	6	6 years	.....	33.00	280.00
.....	53	.....	6	15	.....	40.00	220.00
.....	22	.....	6	2	.....	30.00	.....
.....	28	.....	6	7	.....	40.00	.....
.....	21	.....	7	5	.....	35.00	302.00
Principal.....	62	.....	6	42 years	.....	150.00	1,500.00
.....	30	.....	7	9	.....	35.00	340.00
.....	23	.....	8	2	.....	30.00	.....
.....	28	.....	6	13	.....	30.00	100.00
.....	27	.....	6	3	.....	33.33	.....
.....	26	.....	6	14	.....	35.00	245.00
.....	24	Norway	6	2	.....	35.00	200.00
.....	20	.....	7	2	.....	27.00	300.00
.....	22	.....	6	2	.....	40.00	.....
.....	53	.....	6	45	.....	30.00	120.00
.....	27	.....	6	8	1	70.00	.....
.....	23	.....	6	6	.....	30.00	120.00
.....	19	.....	6	1	1	32.00	.....
.....	27	.....	7	6	.....	35.00	275.00
.....	19	.....	8	2	.....	38.00	77.00
.....	28	.....	6	10	.....	40.00	20.00

## TEACHERS.

uniformity in text books, etc.:

	Cost of living for the year.	Average monthly cost of board.	Total No. wholly or partially dependent on teacher for support.	When paid. (Monthly unless otherwise specified.)	No. belonging to a beneficiary ass'n.	No. having insurance.	No. having accumulated savings.	No. having run in debt.	No. favoring a State uniformity of text books.	No. opposing same.	No. owing a home.
.....	\$.....	\$ 10.00	3	.....	L.	.....	.....	.....	1	.....	.....
.....	.....	18.00	1	.....	1	.....	.....	.....	1	.....	1
.....	200.00	.....	4	.....	1 L.	.....	.....	.....	1	.....	.....
.....	500.00	.....	.....	.....	L. F. & A.	.....	.....	.....	1	.....	1
.....	150.00	10.00	.....	.....	.....	.....	.....	.....	1	.....	.....
.....	.....	12.00	3	.....	.....	.....	.....	.....	1	.....	1
.....	400.00	16.00	1	.....	.....	.....	.....	.....	1	.....	.....
.....	250.00	8.00	.....	.....	.....	.....	.....	.....	1	.....	.....
.....	300.00	12.00	1	.....	.....	.....	.....	.....	1	.....	.....
.....	50.00	8.00	3	.....	.....	.....	.....	.....	1	.....	.....
.....	300.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	500.00	.....	3	.....	1 L.	.....	.....	.....	.....	.....	.....
.....	120.00	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	250.00	25.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	275.00	12.50	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	11.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	285.00	15.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	8.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	3	.....	1 L.	.....	.....	.....	.....	.....	.....
.....	155.00	10.00	4	.....	.....	.....	.....	.....	.....	.....	.....
.....	300.00	12.00	3	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	125.00	12.00	1	.....	L. & F.	.....	.....	.....	.....	.....	.....
.....	.....	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	9.00	.....	.....	F.	.....	.....	.....	.....	.....	.....
.....	200.00	10.00	8	.....	F.	.....	.....	.....	.....	.....	.....
.....	250.00	9.00	6	.....	.....	.....	.....	.....	.....	.....	.....
.....	224.00	12.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	200.00	11.00	2	.....	.....	.....	.....	.....	.....	.....	.....
.....	1,200.00	6.00	6	.....	L. & F.	.....	.....	.....	.....	.....	.....
.....	.....	8.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	150.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	14.00	4	.....	F.	.....	.....	.....	.....	.....	.....
.....	105.00	11.00	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	400.00	15.00	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	150.00	16.57	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	120.00	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	300.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	150.00	9.00	2	.....	F.	.....	.....	.....	.....	.....	.....
.....	225.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	400.00	11.00	2	.....	1 L.	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	400.00	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	14.00	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	257.00	15.00	2	.....	.....	.....	.....	.....	.....	.....	.....
.....	1,200.00	.....	.....	.....	1 L. & F.	.....	.....	.....	.....	.....	.....
.....	300.00	10.00	3	.....	.....	.....	.....	.....	.....	.....	.....
.....	100.00	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
.....	80.00	10.00	.....	Close of term	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	200.00	10.00	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	75.00	9.00	.....	Close of term	.....	.....	.....	.....	.....	.....	.....
.....	275.00	.....	3	Close of term	.....	.....	.....	.....	.....	.....	.....
.....	.....	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	300.00	6.00	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	300.00	30.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	100.00	10.00	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	120.00	10.00	10	.....	.....	.....	.....	.....	.....	.....	.....
.....	115.00	12.00	.....	.....	.....	.....	.....	.....	.....	.....	.....

L. Life. A. Accident. F. Fire.



## MALE TEACHERS

	Age.	Nativity. All native, except in cases otherwise specified.	Average No. of hours taught per day.	Number of terms taught.	No. having received college education.	Earnings per month.	Total earnings for the year.
.....	24	.....	6	4	.....	\$ 37.50	\$ 305.00
.....	24	.....	6	3	.....	.....	196.00
.....	18	.....	7	3	.....	40.00	275.00
.....	26	.....	7	9	.....	30.00	200.00
.....	30	.....	6	17	1	65.00	550.00
.....	29	.....	6	9	.....	35.00	650.00
.....	34	.....	6	10	1	40.00	150.00
.....	36	Canada	6	10	.....	40.00	210.00
Principal	42	.....	6	30	1	100.00	1,200.00
Principal	47	.....	10	50	1	144.44	1,300.00
.....	20	.....	6	3	.....	32.00	250.00
.....	21	.....	6	3	.....	32.50	250.00
.....	25	.....	6	10	1	45.00	180.00
.....	27	.....	6	21	.....	40.00	335.00
.....	29	.....	6	17	1	30.00	.....
.....	19	.....	6	1st	.....	33.00	300.00
.....	20	Germany	8	1st	.....	30.00	.....
.....	25	.....	9	2	.....	35.00	300.00
Principal	26	.....	10	48	.....	92.60	1,100.00
.....	22	Norway	6	35	1	35.00	162.00
.....	22	.....	6	1	.....	28.00	.....
.....	28	.....	6	10	.....	35.00	.....
.....	23	.....	6	1st	.....	35.00	.....
.....	28	.....	6	3	.....	33.33	375.00
.....	23	.....	6	6	.....	38.00	150.00
Principal	60	.....	6	34 years	1	90.00	900.00
.....	26	.....	7	2	.....	40.00	200.00
.....	19	.....	7	1st	.....	32.00	200.00
Principal	32	Sweden	7	13	.....	50.00	600.00
.....	34	.....	6	9	.....	100.00	1,300.00
.....	30	.....	7	18	.....	35.00	300.00
.....	22	.....	6	1st	.....	30.00	.....
.....	27	.....	7	10	1	75.00	675.00
Superintendent	32	Germany	6	34	.....	165.00	1,025.00
.....	21	.....	6	3	.....	35.00	325.00
.....	26	.....	6	8	.....	40.00	.....
.....	25	.....	6	10	1	60.00	540.00
.....	18	.....	8	2	.....	37.00	175.00
.....	26	.....	8	7	1	75.00	500.00
.....	26	.....	6	10	.....	45.00	.....
Principal	48	.....	6	20 years	1	110.00	1,300.00
.....	24	.....	6	1	.....	35.00	100.00
.....	24	.....	6	3	.....	35.00	200.00
.....	23	.....	6	6	.....	30.00	175.00
Superintendent	30	.....	6	12	1	100.00	1,000.00
.....	29	.....	6	12	1	50.00	350.00
.....	34	.....	6	17	.....	37.50	200.00
.....	24	.....	6	13	.....	45.00	405.00
Principal	29	.....	6	7 years	1	100.00	940.00
.....	26	.....	6	5	.....	32.50	200.00
.....	19	.....	8	1st	1	35.00	.....
.....	24	.....	7	9	.....	70.00	600.00
.....	26	.....	6	23 years	1	55.00	500.00
.....	21	.....	6	7	1	60.00	500.00
.....	24	.....	6	1	1	55.00	125.00
.....	26	.....	6	7	.....	80.00	760.00
.....	24	.....	6	8	.....	45.00	310.00
.....	37	Canada	6	14	.....	33.00	80.00
.....	34	Germany	6	17	.....	30.00	270.00
.....	26	.....	6	8 years	1	60.00	540.00
.....	20	.....	6	5	.....	40.00	325.00
.....	23	.....	6	10	.....	50.00	475.00
.....	30	.....	6	25	.....	65.00	650.00
Superintendent	27	.....	9	19	1	125.00	1,500.00

—CONTINUED.

Cost of living for the year.	Average monthly cost of board.	Total No. wholly or partially dependent on teacher for support.	When paid. (Monthly unless otherwise specified.)	No. belonging to a beneficiary association.	No. having insurance.	No. having accumulated savings.	No. having run in debt.	No. favoring a State uniformity of text-books.	No. opposing same.	No. owning a home.
\$ 200.00	\$ 12.50	1	Close of term	1	F.	1	.....	1	.....	1
91.00	8.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
175.00	12.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
150.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
450.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
300.00	12.00	3	Indefinite.	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
350.00	at h'me	3	.....	.....	F.	.....	.....	.....	.....	.....
900.00	.....	3	.....	.....	L. & F.	.....	.....	.....	.....	.....
900.00	20.00	3	.....	.....	L.	.....	.....	.....	.....	.....
160.00	9.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
250.00	12.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
180.00	8.50	6	.....	.....	.....	.....	.....	.....	.....	.....
160.00	11.00	.....	.....	.....	.....	.....	For home.	.....	.....	.....
350.00	8.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
100.00	12.00	3	.....	.....	.....	.....	.....	.....	.....	.....
.....	at h'me	4	.....	.....	F.	.....	.....	.....	.....	.....
120.00	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
1,100.00	.....	3	.....	.....	F.	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	10.00	4	Close of term	.....	F. & F.	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	8.00	3	Quarterly	.....	.....	.....	.....	.....	.....	.....
.....	8.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	5	.....	.....	F. and L.	.....	.....	.....	.....	.....
130.00	14.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
190.00	12.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
400.00	.....	6	.....	.....	L.	.....	.....	.....	.....	.....
.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....
.....	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	9	.....	.....	.....	.....	.....	.....	.....	.....
225.00	15.00	.....	Quarterly.	.....	.....	.....	.....	.....	.....	.....
600.00	.....	4	.....	.....	L. & F.	.....	.....	.....	.....	.....
130.00	10.00	.....	Quarterly.	.....	.....	.....	.....	.....	.....	.....
300.00	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
175.00	14.00	.....	.....	.....	.....	.....	\$25	.....	.....	.....
160.00	12.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
300.00	16.00	1	.....	.....	L. & F.	.....	.....	.....	.....	.....
150.00	12.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
400.00	10.00	.....	.....	.....	L.	.....	.....	.....	.....	.....
.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
150.00	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
125.00	10.00	.....	Close of term	.....	.....	.....	.....	Undecided	.....	.....
400.00	18.00	.....	.....	.....	L.	.....	.....	.....	.....	.....
215.00	13.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
200.00	15.00	2	.....	.....	F.	.....	.....	.....	.....	.....
845.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
100.00	11.33	3	.....	.....	F.	.....	.....	.....	.....	.....
.....	20.00	.....	.....	.....	L. & F.	.....	.....	.....	.....	.....
350.00	13.00	3	.....	.....	F.	.....	.....	.....	.....	.....
.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....
500.00	14.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
300.00	30.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
500.00	18.00	2	.....	.....	.....	.....	.....	.....	.....	.....
125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
100.00	10.00	.....	Close of term	.....	.....	.....	.....	.....	.....	.....
700.00	16.00	4	Quarterly.	.....	F.	.....	.....	.....	.....	.....
350.00	30.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
225.00	14.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
350.00	17.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
500.00	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
700.00	16.00	1	.....	.....	L.	.....	.....	.....	.....	.....







Cost of living for the year.	Average monthly cost of board.	Total No. actually paid on teacher for support.	When paid. Monthly unless otherwise specified.	No. belonging to a beneficiary association.	No. having insur- ance.	No. having accumulated savings.	No. having run in debt.	No. favoring a State uniformity of textbooks.	No. opposing same.	No. owing a home.
\$	Works.	2		F.				Undecided	1	
	7.00								1	
	Home.								1	
140.00	8.00		Quarterly	1					1	
	5.00	3		1					1	
	9.00			1					1	
	8.00			1					1	
200.00	10.00			1					1	
64.00				1					1	
150.00	8.00		Close of term	1					1	
100.00	13.33			1					1	
	9.00	7		1					1	
	8.00			1					1	
	10.00			1					1	
55.35	8.00			1					1	
300.00		2		F.	1			Undecided	1	
200.00	10.00				1				1	
		3	Close of term						1	
121.00	8.00								1	
56.00	8.00								1	
	8.00								1	
	8.00		Quarterly.						1	
140.00	12.00				1				1	
				1					1	
	8.00								1	
150.00	10.00								1	
	12.00								1	
	8.00								1	
55.00	10.00				1				1	
200.00	9.00		Close of term				For ed's'n		1	
	9.00								1	
250.00		2			1			Undecided	1	
	8.00		Close of term						1	
120.00	8.00								1	
	12.00			1					1	
		1	Quarterly.						1	
	8.00	4	Close of term		1				1	
125.00	6.00		Time yearly.						1	
120.00	10.00	1	Quarterly.						1	
	Home.		Close of term		1				1	
	8.00		Quarterly.		1				1	
	Home.		5 months.		1				1	
75.00	Home.				1				1	
187.00	6.00			1	1				1	
90.00	9.00				1				1	
275.00	15.00				1				1	
600.00	10.00				1				1	
	8.00				1				1	
	8.00			1			For home.	Undecided	1	
200.00	Home.				1				1	
300.00	8.00		Close of term		1				1	
150.00					1				1	
20.00	8.00								1	
50.00	6.00		Close of term						1	
120.00		3	Semi-ann.	F.	1	For home.			1	
93.00	8.00								1	
250.00	10.00				1				1	
200.00	12.00				1				1	
	5.00		Close of term						1	
185.00	10.00				1				1	
	10.00				1				1	



## FEMALE

Age.	Nativity. All native, except in cases otherwise specified.	Average No. of hours taught per day.	Number of terms taught.	No. having received a college education.	Earnings per month.	Total earnings for the year.
41		8	46		\$ 45.00	\$ 540.00
22		6	7		32.00	200.00
19		6	2		25.00	79.00
Superintendent		15			120.00	780.00
22		12			27.50	62.50
17		6	1		27.50	160.00
24		6	3		30.00	170.00
25		6	18		30.00	220.00
22		6	5		35.00	350.00
25		6	5		30.00	175.00
22		6	5		40.00	415.00
43		6	28		35.00	290.00
43		6	9		30.00	225.00
28		6	10		33.00	170.00
23		6	6		25.00	80.00
18		6	1		80.00	850.00
Superintendent		10	16		65.00	710.00
43		6	20 years	1	35.00	360.00
38		7	25		27.50	220.00
36		6	20		30.00	285.00
20		6	10		30.00	89.00
22		6	2		24.00	150.00
23		6	4		24.00	252.00
28		6	20		45.00	420.00
19	Nova Scotia.	6	6		33.33	69.00
20		7	1		30.00	190.00
18		6	4		40.00	200.00
28		6	15		35.00	70.00
22		6	4		40.00	310.00
30		6	16		35.00	275.00
18		6	1		25.00	332.00
19		6	5		50.00	500.00
30		6	26		30.00	200.00
20		6	4		35.00	95.00
27		6	7		30.00	75.00
20		6	1		25.00	300.00
21		6	9		35.00	105.00
18		6	3		35.00	268.00
24		6	2		35.00	295.00
21		6	10		35.00	315.00
29		6	33		55.00	475.00
16		6	2		40.00	75.00
19		6	4		28.00	81.00
20		6	3		35.00	215.00
47		6	23 years		350.00	350.00
19		7	5		30.00	200.00
34		8	29		40.00	265.00
19		6	3		25.00	175.00
19		7	8		25.00	200.00
29		6	24		40.00	360.00
21		7	6		35.00	315.00
23		6	8		30.00	270.00
24		6	5		30.00	225.00
19		8	1		20.00	60.00
30		6	15 years		28.00	206.00
24		6	13		40.00	300.00
24		6	12		37.50	282.00
25		6	2		20.00	68.00
22		5	10	1	30.00	270.00
25		5	1		35.00	220.00
20		7	4		200.00	150.00
20		8	4		73.00	233.00
29		6	3			

## TEACHERS—CONTINUED.

Cost of living for the year.	Average monthly cost of board.	Total No. wholly paid for support.	When paid. (Monthly unless otherwise specified.)	No. belonging to a beneficiary association.	No. having insurance.	No. having accumulated savings.	No. having run in debt.	No. favoring a uniformity of textbooks.	No. opposing same.	No. owing a home.
\$ 350.00	\$ 15.00	1	Quarterly	F	1				1	1
48.00	7.00	6	Close of term		+				1	
400.00	8.00	3	Quarterly		1				1	1
16.00	8.00	1			1				1	
10.00	10.00	1			1				1	
74.00	7.00	3			1				1	
130.00	9.00				1				1	1
70.00	8.00				1				1	
225.00	10.00				1				1	
7.00	7.00	1	Close of term		1				1	
253.44	14.00	1		F	1				1	
16.00	16.00	2			1				1	
120.00	9.20	1		L	1				1	
8.00	8.00			L	1				1	
10.00	10.00				1				1	
600.00	Home.	3	Quarterly					Undecided		1
500.00	Home.	3	Close of term	L & F	1				1	1
8.00	8.00		Close of term		1				1	
300.00	10.00				1				1	
8.00	8.00	3							1	
Home.	8.00		Close of term		1				1	
150.00	8.00		Semi-an.		1				1	
Home.	15.00				1				1	
420.00	15.00		Close of term		1				1	
200.00	10.00				1				1	1
10.00	10.00				1				1	
90.00	15.00	1	Close of term		1				1	
165.00	8.00				1				1	
8.00	8.00	5							1	
Home.	9.00			F	1				1	
120.00	9.00	1			1				1	
70.00	Home.	1			1				1	
80.00	6.57				1				1	
Home.	7.00				1				1	
10.00	10.00				1				1	
100.00	10.00				1				1	1
315.00	17.00	2			1				1	
17.00	11.00	5			1				1	
11.00	9.00	1	Close of term		1				1	
8.00	8.00	1		1	1				1	
350.00	7.00	5	Close of term		1				1	
75.00	8.00		Close of term		1				1	
50.00	8.00				1				1	
8.00	8.00				1				1	
60.00	7.00		Close of term		1				1	
160.00	Home.	3	Quarterly		1				1	
Home.	9.00		Close of term		1				1	
200.00	10.00	1			1				1	1
215.00	8.00				1				1	
200.00	8.00				1				1	
50.00	8.00				1				1	
10.00	10.00				1				1	
93.00	6.00		Close of term		1				1	
8.00	8.00	5	Close of term		1				1	
200.00	8.00		Semi-an.		1				1	
80.00	8.00		Close of term		1				1	
80.00	8.00		Quarterly		1				1	
73.00	Home.		Close of term		1				1	

\* Work for board.

+ For use of organ.

‡ Gave all to parents.



## FEMALES—

	Age.	Nativity. All native except in cases otherwise specified.	Average No. of hours taught per day.	Number of terms taught.	No. having received a college education.	Earnings per month.	Total earnings for the year.
.....	18	.....	6	1	.....	\$ 30.00	\$ 105.00
.....	18	.....	6	1st	.....	35.00	.....
.....	33	.....	8	20	.....	35.00	384.00
.....	40	.....	6	52	1	45.00	390.00
.....	28	.....	6	31	.....	40.00	360.00
.....	20	.....	6	4	.....	25.00	100.00
.....	21	.....	6	7	.....	35.00	238.00
.....	22	.....	6	11	.....	30.00	295.00
.....	22	.....	5½	10	.....	27.50	215.00
.....	17	.....	7	1	.....	38.00	.....
.....	19	.....	7	2	.....	35.00	.....
.....	26	.....	6	7	.....	30.00	295.00
.....	19	Norway	6	4	.....	28.00	100.00
Superintendent	40	.....	8	25	.....	100.00	1,200.00
.....	20	.....	6	5	1	35.00	315.00
.....	18	.....	6	3	.....	32.00	.....
.....	23	.....	6	4	.....	32.00	120.00
.....	26	.....	6	11	1	40.00	440.00
Superintendent	28	.....	8	15	.....	.....	640.00
.....	23	.....	6	3	.....	36.00	332.00
.....	28	.....	6	15	.....	35.00	255.00
.....	18	.....	7	1	.....	28.00	.....
.....	21	.....	6	7	.....	25.00	176.00
.....	20	.....	7	6	.....	37.00	189.00
.....	19	.....	6	2	.....	28.00	.....
.....	25	.....	6	8	.....	33.00	264.00
.....	25	.....	6	8	.....	28.00	97.50
.....	23	.....	8	10	.....	40.00	300.00
.....	21	.....	6	9	.....	35.00	277.50
.....	22	.....	7	2	.....	20.00	120.00
.....	23	.....	6	11	.....	33.50	175.00
.....	21	.....	6	7	.....	28.00	174.00
.....	17	.....	7	1st	.....	30.00	223.00
.....	37	.....	6	17	.....	33.00	250.00

—CONTINUED.

Cost of living for the year.	Average monthly cost of board.	Total No. wholly or partially dependent on teacher for support.	When paid. (Monthly less unotherwise specified.)	No. belonging to a beneficiary association.	No. having insurance.	No. having accumulated savings.	No. having run in debt.	No. favoring a State uniformity of textbooks.	No. opposing same.	No. owning a home.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
\$ 50.00	\$ 10.00	.....	.....	.....	.....	.....	\$5.00	.....	.....	.....
300.00	16.00	.....	.....	.....	.....	.....	.....	1	.....	.....
200.00	10.00	3	.....	.....	.....	.....	.....	1	.....	1
39.00	32.00	.....	.....	L	1	.....	.....	1	.....	1
360.00	16.00	2	.....	.....	1	.....	.....	1	.....	.....
.....	8.00	.....	Close of term	.....	.....	.....	.....	1	.....	.....
150.00	8.00	3	Close of term	.....	1	.....	.....	1	.....	.....
100.00	8.00	7	.....	.....	.....	.....	.....	1	.....	.....
200.00	10.00	.....	.....	.....	1	.....	.....	1	.....	.....
175.00	9.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
150.00	10.00	.....	Close of term	.....	.....	.....	.....	1	.....	.....
120.00	10.00	.....	.....	.....	.....	.....	.....	1	.....	.....
.....	8.00	.....	Close of term	.....	.....	.....	.....	1	.....	.....
.....	16.00	3	Quarterly	F. & L	1	.....	.....	1	.....	1
.....	Home	.....	.....	.....	1	.....	.....	1	.....	.....
.....	10.00	.....	Close of term	.....	.....	.....	.....	.....	.....	.....
.....	8.00	.....	.....	.....	.....	.....	.....	1	.....	.....
350.00	4.00	.....	.....	.....	1	.....	.....	1	.....	.....
400.00	10.00	.....	Quarterly	.....	1	.....	.....	1	.....	.....
175.00	9.00	.....	Close of term	.....	1	.....	.....	1	.....	.....
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
100.00	.....	.....	Close of term	.....	.....	.....	.....	1	.....	.....
140.00	10.00	.....	.....	.....	1	.....	.....	1	.....	.....
38.00	8.00	.....	Close of term	.....	1	.....	.....	.....	.....	.....
.....	Home	2	.....	.....	1	.....	.....	1	.....	.....
105.00	7.50	.....	Close of term	.....	.....	.....	.....	.....	.....	.....
.....	5.00	1	.....	.....	1	.....	.....	1	.....	.....
.....	Home	4	.....	.....	1	.....	.....	.....	1	1
.....	8.00	.....	Close of term	.....	1	.....	.....	.....	.....	.....
85.00	6.00	.....	Close of term	.....	1	.....	.....	1	.....	.....
.....	Works.	.....	Close of term	.....	1	.....	.....	.....	.....	.....
50.00	Home	.....	.....	.....	.....	.....	\$5.00	.....	1	.....
.....	8.50	.....	.....	.....	1	.....	.....	.....	.....	.....



## RECAPITULATION.

Total number of returns.....	347
Males.....	181
Females.....	166
Average age—	
Male.....	28 years, 7 days.
Female.....	23 years, 10 months, 15 days.
Total number native-born, males.....	167
Total number native born, females.....	161
Total number of foreign-born, males.....	14
Total number of foreign-born, females.....	5
Average number of hours worked per day—	
Males.....	6 h., 12 m.
Females.....	6 h., 20 m.
Average number of terms taught—	
Males.....	12 77-90
Females.....	9½
Total number having received a college education—	
Males.....	45
Females.....	10
*Average monthly allowance—	
Males.....	\$ 39.12
Females.....	32.63
*Average annual earnings—	
Males.....	\$ 315.30
Females.....	230.73
*Average cost of living for the year—	
Males.....	\$ 250.49
Females.....	161.95
Average monthly cost of board—	
Males.....	\$ 11.91
Females.....	9.12
Average number wholly or partially dependent on teacher for support—	
Males.....	3½
Females.....	3
Total number belonging to a beneficiary association—	
Males.....	33
Females.....	4
Total number having insurance—	
Males.....	48
Females.....	11
†Total number having accumulated savings—	
Males.....	127
Females.....	109

\*Superintendents and Principals (as marked in table) not included.  
 †Education and homes are considered savings.

## Total number having run in debt—

Males.....	25
Females.....	15
Total number favoring a State uniformity in text-books—	
Males.....	120
Undecided.....	7
Females.....	117
Undecided.....	6
Total number opposing same—	
Males.....	51
Females.....	27
Total number owning homes—	
Males.....	53
Females.....	19

For supervision, Council Bluffs pays \$2,000; Burlington and Clinton, \$1,900; Cedar Rapids, Davenport, Marshalltown, East Des Moines, West Des Moines and Sioux City, \$1,800; Oskaloosa and Ottumwa, \$1,600; Fort Dodge, East Waterloo and West Waterloo, \$1,500; Keokuk, McGregor and Waverly, \$1,400; Cedar Falls and Garden Grove, \$1,350; Charles City and Mason City, \$1,300; Atlantic, Boone, Centerville, Clarinda, Creston, LeMars, Grinnell, Lyons, Manchester, Maquoketa, Marion and Shenandoah, \$1,200.

For High School Principals, Dubuque pays \$1,800; Burlington and Davenport, \$1,500; East Des Moines and West Des Moines, \$1,300; Keokuk, \$1,200; Council Bluffs, Cedar Rapids, Oskaloosa and Ottumwa, \$1,000. Where women act as Principals the pay is usually much less, as is shown in Marshalltown at \$810, Iowa City at \$760 and Clinton at \$760. Cedar Rapids and Ottumwa pay lady principals \$1,000. The largest salaries paid women in the State are given to Mrs. M. Severance, at Davenport, \$1,200; Miss Belle Thompson, of the same city, \$1,100; Mrs. L. M. Wilson, of Des Moines, \$1,100—each acting as principal of a ward school. Mrs. Wilson has recently been elected superintendent of West Des Moines schools.

The following replies to questions already explained give valuable information from authentic sources:

## MALE TEACHERS.

## CHIEF OBSTACLES OR DRAWBACKS TO TEACHERS' WORK.

Irregular attendance of pupils.  
 Want of co-operation of parents.  
 Too small salaries.  
 Too frequent changes of teachers.  
 Want of apparatus.  
 Lack of uniformity of text-books.  
 Incompetent teachers.  
 Want of system in school work.



Want of interest on the part of school directors.  
 Lack of support from school boards.  
 Want of grading of schools.  
 Wretchedly bad black boards.  
 Number of school months too short.  
 That it does not afford steady employment.  
 No library.  
 Many children do not attend school at all.  
 Too many studies.  
 Too many young teachers.  
 People do not understand the need of exclusive pursuit of one thing.  
 Inefficient workers undoing what has been done.  
 Too little attention given by examining boards to experience.  
 Too anxious to make money, hence dissatisfaction with wages.  
 Difficulty in finding teachers who understand child nature.  
 Lack of home training and influence.  
 Need of classification.  
 Cost of attendance at county institutes and associations.  
 Public opinion as regards the profession of teaching.  
 Improper ventilation and light.  
 Changing of school boards too often.  
 Standard of examination too low.  
 Constant desire on the part of directors to favor relatives.  
 Skating rinks.  
 Selling my scholars' "hard cider."  
 Need of a more practical education.  
 Interference of parents in teachers' work.  
 Advancement of pupils beyond their ability to comprehend.  
 Political, denominational and social bias.  
 Misapprehension in regard to the incidence of taxation.

#### FEMALE TEACHERS.

Not being a steady occupation.  
 Lack of ventilation.  
 Too young, and thus necessarily too poorly qualified teachers.  
 Too short terms—too long a time between terms.  
 A twenty years old arithmetic, and an equally old dictionary.  
 The short time allowed for recitations consequent upon ungraded school system.  
 Cost of books.  
 Necessity of renewal of certificate.  
 Bad roads, for want of a decent highway law.  
 Poor school furniture, and non-attendance of pupils.  
 Want of parental co-operation.  
 Want of co-operation among directors.  
 Constant change of teacher, and non-uniformity of text-books.

Want of compulsory education.  
 Parents who think "Johnny" and "Mary" ought to have a special class.  
 Opposition to introduction of anything new.  
 County superintendent thinking, it's too far too go to your school. Result, he has been here one half hour in two years.  
 Parents keeping children home to weed the garden, do the chores, etc.  
 Lack of proper home training.  
 The prejudice existing against a woman filling a public office.

#### LEGISLATION OR CHANGE IN SCHOOL LAWS DESIRED—MALE TEACHERS.

Compulsory education.  
 Uniformity in text-books.  
 A law entitling the teachers to the National holidays without special permission of directors.  
 Raise the standard of teachers' qualifications.  
 Compel nine months school in all schools having fifteen or more pupils.  
 One examination with life certificate, thus saving the teacher being mulched of one dollar every year.  
 A change in the method of electing county superintendents.  
 Compel boards to provide schools with proper apparatus, globes, charts, etc.  
 Abolish office of County Superintendent.  
 Repeal the section charging teachers for certificates, and have the expense of normal institutes borne by the State.  
 A thorough codification of the school laws.  
 Less subdistricts.  
 Let the districts furnish the books for the use of pupils.  
 School age six or seven, instead of five.  
 Establish kindergartens.  
 Power given teacher to suspend or expel pupils.  
 Manual training schools.  
 Power to have necessary repairs made to school-house at the expense of the district.  
 Supply books to pupils of indigent parents.  
 Eight per cent interest instead of six upon unpaid orders.  
 When a teacher presents his order and is told "out of funds," let him be allowed interest for his money as at banks, etc.  
 Make teachers members of school boards.

#### FEMALE TEACHERS.

I am convinced that if it were made a requirement of the law, that school boards shall furnish the necessary apparatus for a teacher to work with, such as good blackboards, a dictionary, wall maps, etc., it would be advantageous to the teachers and greatly enhance the results obtained from our schools.  
 Raise the standard for certificates.



Compel the County Superintendent to pass all examinations.

Deprive the school board the right to compel teaching on National holidays or forfeit their pay.

A uniformity of certificate throughout the State.

A law requiring the director of each district to pay the teachers of that district, instead of they being compelled to go (sometimes eight or nine miles) to the township treasurer to draw it.

A law making every district independent.

Abolish the office of County Superintendent.

An act to compel the proper officers to attend school the last day of the term, and pay the teacher or give him the same for mileage as is allowed other officers for collecting debts. Teachers frequently must travel thirty miles to collect their savings, and then if the Secretary or the President should be absent from home, the teacher must make another trip before receiving pay.

Compulsory education is what is most needed.

Do away with annual examinations for certificates.

The County Superintendent ought to be appointed rather than elected. Anybody can get a certificate just before election.

State uniformity of text-books.

Pass some law compelling directors to visit schools at least two or three times during a term, and pay them a salary to enable them to do it.

#### STATE UNIFORMITY OF TEXT-BOOKS—MALE TEACHERS.

##### *Reasons for favoring.*

It would make books cheaper. As teacher succeeds teacher, each one would have a definite starting point.

It would be a great saving to poor people, especially renters.

It gives teachers a better chance to become acquainted with their work and as a result their work would be better.

Too many kinds of books in schools now, and hence good work is retarded. This would obviate it.

If a teacher moves to a different part of the State he would know what books, he would teach from, and be better able for his duties.

Schools could be better classified. As it is in some schools, almost every scholar has a different book from the others.

A superior grade of books would be furnished and the outgrown ones be discarded.

It would unify the work of teachers and scholars.

It would avoid the trouble of the teacher to decide which of the many books would be best to use.

Economy of money and time.

Pupils coming into schools could commence their work with a class at once and more easily.

The difference of views of authors on same subject confuse the mind, which ought to be clear.

It would lead to grading our schools; more time for recitations.

We need a change badly. The old sing-song readers that pupils have committed to memory should be discarded.

No teacher can do good work who has more than one text-book in same grade and branch.

I have taught in counties where there is uniformity of text-books. They form a standard of comparison in progress, a measure for the superintendents.

Scholars learn faster and get the benefit of some blackboard exercises if books are alike.

Boards are frequently composed of men who do not possess the ability to, or at least do not adopt, good text-books.

Double the number of pupils can be successfully taught.

Because I believe the State should furnish the best possible education for the least possible money.

The directors are liable to make a change too often, and then their order is not strictly enforced.

One district school of seventeen scholars has *fourteen* different kinds of reading books—almost one reading class for each scholar in the school.

I have found in my school that every scholar that lives on a rented farm has a book of his own, and no two have the same.

Minnesota re-adopts after five years trial.

#### FEMALE TEACHERS.

Convenience of time, advances the pupils' interests.

The schools of Iowa will form one great school bent to a common purpose.

It gives the teacher the benefit of close classification.

It would do away with the present system of three or four reading classes in one grade, giving more time for recitations.

Parents moving from one section of the State to another can take their books with them and find them of equal use in their schools at their new homes.

Our "free school" system is for the benefit of the poor. With the present system of school books this is not true.

It would encourage the scholar. If he is alone in the class his ambition is very slight.

Gives much more time to blackboard and practical instruction.

A half dozen miles moving frequently necessitates an outlay of as many dollars to a father who can ill afford to spend it.

We shall then be able to get the best.

It is better to have a large class than a small one, and the pupils will study with much more interest.

#### REASONS FOR OPPOSING—MALE TEACHERS.

I believe we ought to have several authors or text-books in the same school, and such a law would bar the admission of such.



Difference of needs in different parts of the State.

Fear of machine work.

No one book or set of books can give the complete knowledge that may be obtained from many. A subject to be understood must be reviewed from various standpoints. This is obtained from a variety of text-books.

Country and city schools require different graded texts.

Difficulty in adopting good books.

It would build up monopolies.

I think the floating population too small a per cent to justify such a revolution.

Text-books are constantly improving, and the change from one to the other should be gradual, and none but the transient are hurt by the diversity.

It will block the wheels of progress and hinder improved methods of instruction, and return the days of the old fashioned spelling-book.

The more text-books the better. They afford better opportunities for variety of ideas. Uniformity in townships is sufficient.

Should not all be cast in one mold. Variety will give more breadth and scope to the mind.

Fear jobbery, and think that the grades of texts would deteriorate. Think a far better plan would be to let school districts own the books, and loan or rent them to pupils.

Believe that competition between different publishing houses will produce text-books of greater merit than books made to order.

Under any of the proposed plans for uniformity, the gain would be slight, and the losses severe, and too numerous to mention.

It would give disinterested parties authority to assign text-books.

Teachers can often accomplish better results with certain text-books, that can under the present system be procured by change at very little cost.

It is bad in theory, and has been worse in practice.

One particular method of instruction may be a success as practiced by one teacher and a failure by another. The teacher should have a text-book in harmony with his line of instruction.

It makes the views of one author supreme. He becomes an autocrat.

We would thereby lose the desire to read and find out what different authors think of the same subject, and they would become monotonous.

Intelligent boards know best what is required for the good of the schools in their charge.

I have known of three cases of the adoption of State uniformity—twice in Minnesota and once in Illinois—which proved unsatisfactory.

It would lack sufficient respect for talent unrequited.

It results in inferior text-books, and checks progress.

#### FEMALE TEACHERS.

No one author publishes a book containing all that is required on any topic.

The needs of schools cannot be the same throughout a whole State.

A non-uniformity affords a greater supply of reference.

County uniformity would in my judgment be better. Text-books might be adapted to the nationality of the population; some text-books do better for children of foreign birth than others.

I believe in the child using the books which he understands whether it be uniformity or not.

Variety of text-books creates a desire to investigate different subjects.

Every author rides his own hobby, and no committee could make a selection suitable to all teachers needs. We have a uniformity in this county, and very few teachers like the selection made.

A State cannot be expected to keep up with the most advanced education in its publications. It cannot print them as cheap as the large companies. The rule is difficult to enforce and has led in Minnesota to a great deal of trouble.



## PART XVI.

## STREET RAILWAYS.

## AVERAGE EARNINGS AND EMPLOYMENT HOURS OF STREET RAILWAY EMPLOYEES IN THE STATE.

## BURLINGTON-UNION RAILWAY.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foremen .....	\$ 10.50	15	7
Conductors .....	8.75	16	7
Drivers .....	8.75	16	7
Hostlers .....	8.75	12	7
Blacksmiths .....	10.50	10	6
Trackmen .....	7.50	10	6
Other mechanics, \$7.50 to \$10.50; average .....	9.00	10	7
Car-housemen .....	7.50	12	7
Watchmen .....	8.75	10	6
Laborers .....	7.50	10	6
Boys .....	6.00	10	6

Total number of hands, 12.

Amount of capital invested in the railway, \$32,500.00.

How many stockholders, 1.

Miles of road, three completed and one in progress of building.

Strikes, none.

Accidents, none.

## BURLINGTON.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foremen .....	\$ 14.40	10	6
Conductors .....	10.02	12 to 17; av., 14½	7
Drivers .....	9.05	15	7
Hostlers, \$8.10 to \$11.05; average .....	12.00	10	6
Blacksmiths .....	9.00	12	7
Trackmen .....	9.00	13	7
Watchmen .....	9.00	13	7

Total number of hands, 21 to 26.

\* Amount of capital invested in the railway, don't know.

\* How many stockholders, don't know.

Miles of road, about 10.

Strikes, none.

Accidents, one man slightly bruised by jumping from a runaway car.

\* These replies are rather singular, coming as they do from the Superintendent of the road.

## CEDAR RAPIDS.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Drivers, 4 .....	\$ 10.00	15	7
Hostler, 1 .....	9.00	16	7
Trackmen, 2 .....	7.50	10	6
Car-houseman, 1 .....	10.50	10	6

Total number of hands, 8.

Amount of capital invested in the railway, \$25,000.

How many stockholders, 15.

Miles of road, 4½.

Strikes, none.

Accidents, none.

## CLINTON.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foremen .....	\$ 11.00	12	7
Conductors .....	10.00	10	6½
Drivers .....	10.00	10	6½
Hostlers .....	10.00	10	7
Trackmen .....	11.00	10	6
Watchmen .....	11.00	12	7

Total number hands, 12.

Amount of capital invested in the railway, \$25,000.

How many stockholders, 20.

Miles of road, 5.

Strikes, none.

Accidents, none.



## COUNCIL BLUFFS.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foreman, 1 .....	\$ 17.00	12	7
Drivers, 3 .....	8.00	12	6½
Hostlers, 3 .....	8.00	12	7
Blacksmiths, work done by job .....			
Trackmen, 2 .....	8.40	10	6

Total number of hands, 9.

\*Amount of capital invested in the railway, can't say.

How many stockholders, 9.

Miles of road, 3 and 3888-5280.

Strikes, none.

Accidents, none.

\*This is also signed by the superintendent.

## DAVENPORT.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foreman, 1 .....	\$ 11.25	15	7
Drivers, 6 .....	12.00	15	7
Hostlers, 3 .....	11.25	15	7

Total number of hands, 10.

Amount of capital invested in the railway, \$75,000.

How many stockholders, 45.

Miles of road, 4.

Strikes, none.

Accidents, one boy killed by being thrown under the cars by a passing hack.

## DES MOINES.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Conductors 15 .....	\$ 9.00	10 to 14	7
Drivers .....		10 to 14	7
Hostlers, 7 .....	9.00	10 to 14	7
Blacksmiths, 2 .....	12.00	10	7
Trackmen, 4 .....	9.00	10	7
Watchmen, 2 .....	9.00	10 to 14	7
Starters, 1 .....	11.00	10 to 14	7

Total number of hands, 31.

Amount of capital invested in the railway, \$100,000.

How many stockholders, 6.

Miles of road, including single and double track, ten miles.

Strikes, none.

Accidents, none.

## DUBUQUE.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foreman, 1 .....	\$ 12.50	14	7
Drivers, 7 .....	10.00	14	7
Hostlers, 2 .....	11.50	14	7
Blacksmiths, 2 .....	11.50	10	7
Trackmen, 2 .....	10.00	10	7

Total number of hands, 14.

Amount of capital invested in the railway, \$75,000.

How many stockholders, 6.

Miles of road, 5.

Strikes, none.

Accidents, none.

## KEOKUK.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foremen, 2 .....	\$ 9.00 and 12.50	12 and 10	7
+Conductors, 9 .....	9.00	13	7
Hostlers, 5 .....	8.00	12	7
*Blacksmiths, 1 .....	7.00	10	6
Trackmen, 2 .....	9.00	10	6
Other mechanics, 2 .....	12.00	10	6
Watchmen, 1 .....	9.00	10	7

Total number of hands, 22.

Amount of capital invested in the railway, \$40,000.

How many stockholders, 3.

Miles of road, 3¼.

Strikes, none.

Accidents, none.

\*The conductors, who are also drivers, can work six or seven days as they please, being paid for the time they work. Generally, they choose to work seven days. About fourteen of the regular hands are married, the others single. No drinking is tolerated. Mechanics in this city generally own their homes.

\*Work for other persons also.

## MARSHALLTOWN.

EMPLOYEES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foreman, 1 .....	\$ 8.75	16	7
Drivers, 3 .....	8.75	16	7
Hostlers, 1 .....	10.00	16	7
Trackmen, 1 .....	8.75	16	7

Total number of hands, 6.

Amount of capital invested in the railway, \$30,000.

How many stockholders, 4.

Miles of road, 2¼.

Strikes, none.

Accidents, none.



## MUSCATINE.

EMPLOYES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foreman, 1 .....	\$ 12.00	16	7
Drivers, 5 .....	9.35	14½	7
Hostlers, 2 .....	9.50	17	7
Car-housemen, 1 .....	8.75	17	7
Watchmen, 1 .....	6.00	17	7
Boys, 1 .....	5.00	14½	7

Total number of hands, 11.

Amount of capital invested in the railway, \$30,000.

How many stockholders, 120.

Miles of road, 3.

Strikes, none.

Accidents, none.

## OTTUMWA.

EMPLOYES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Foreman, 1 .....	\$ 10.00	.....	.....
Drivers, 3 .....	9.00	.....	.....
Hostlers, 1 .....	7.00	.....	.....
Laborers, 1 .....	9.00	.....	.....

Total number of hands, 6.

Amount of capital invested in the railway, \$25,000.

How many stockholders, 3.

Miles of road, 2.

Strikes, none.

Accidents, none.

## RED OAK.

EMPLOYES.	Weekly wages.	Daily employment hours.	No. of days employed in the week.
Conductors, 1 .....	\$ 5.00 and board	10	7
Drivers, 2 .....	5.00 and board	10	7
Hostlers, 1 .....	5.00 and board	10	7

Total number of hands, 4.

Amount of capital invested in the railway, \$8,000.

How many stockholders, 9.

Miles of road, 1¼.

Strikes, none.

Accidents, none.

## RECAPITULATION.

EMPLOYES.	Average weekly wages.	Average daily employment hours.	Average No. of days employed in the week.
Foremen .....	\$ 12.12	14	7
Coductors .....	9.58	13	7
Drivers .....	9.31	14 h. 4 m.	7
Hostlers .....	13.18	10	6 1-11
Blacksmiths .....	8.94	10 h. 30 m.	6 1-6
Trackmen .....	11.85	10	6
Other mechanics .....	9.47	10	6 1-10
Car-housemen .....	9.16	10 h. 42 m.	7
Watchmen .....	7.50	10	6
Laborers .....	6.91	10 h. 20 m.	6 1-10
Boys .....			

Total number of hands, 167.

Amount of capital invested in the railway, total reported, \$ 440,500; average \$42,164.

No. of stockholders, 241; average 21 11-13.

Miles of road, total 57; average 4¾.

Strikes, none.

Accidents, one man slightly injured; one boy killed.



# PART RAILROADS

JUNE 30, 1883, TO

NAME OF ROAD.	Miles of road in Iowa.	Average number employed for year ending June 30, 1884.	Total No. employed at date of returns.
Wabash, St. Louis & Pacific.....	227.8	507	416
Burlington, Cedar Rapids & Northern.....	689	1,750	1,852
Central Iowa Railway Company.....	410	1,000	1,075
Chicago, Milwaukee & St. Paul.....	1,411	4,407	4,720
Chicago & Northwestern.....	1,048	3,490	3,490
Chicago, Burlington & Quincy.....	462	6,071	6,612
Chicago, Rock Island & Pacific.....	921	8,349	.....
Illinois Central.....	402	1,022	1,131
Chicago, St. Paul, Minneapolis & Omaha.....	99	238	238
Des Moines & Ft. Dodge.....	137	280	240
Des Moines, Osceola & Southern.....	91	100	105
Minneapolis & St. Louis.....	141	308	278
Humeston & Shenandoah.....	112	335	326
Wisconsin, Iowa & Nebraska.....	106	107	160

JUNE 30, 1884, TO

Wabash, St. Louis & Pacific.....	383 9.10	1,029	1,029
Burlington, Cedar Rapids & Northern.....	825.27	2,025	2,296
Central Iowa.....	412.975	900	1,000
	Owned.		
	401.650		
	Operated.		
Chicago, Milwaukee & St. Paul.....	1,411.60	4,238	4,540
Chicago & Northwestern.....	1,112.42	3,787	3,628
Chicago, Burlington & Quincy.....	758.45	4,985	5,430
Chicago, Rock Island & Pacific.....	921 7.10	3,500	3,532
Illinois Central.....	462.16	1,000	1,140
Chicago, St. Paul, Minneapolis & Omaha.....	99.74	275	336
Des Moines & Ft. Dodge.....	137.83	300	325
Des Moines, Osceola & Southern.....	101	150	230
Minneapolis & St. Louis.....	141	175	213
Humeston & Shenandoah.....	113	284½	239½
Wisconsin, Iowa & Nebraska.....	116	185	200
Dubuque and Dakota.....	63 2.10	54	64

## XVII.

IN IOWA.

JUNE 30, 1884.

Ticket or station agents.	Average monthly salary.	Secre-taries.	Average monthly salary.	Clerks.	Average monthly salary.	Train Dis-patchers.	Average monthly salary.
.....	.....	1	\$ 75.00	2	\$ 45.00	2	\$ 85.00
.....	.....	.....	.....	42	50.00	10	100.00
.....	.....	.....	.....	44	55.00	6	110.00
.....	.....	.....	.....	43	58.00	27	143.00
.....	.....	.....	.....	108	58.50	15	95.00
.....	.....	.....	.....	116	56.39	25	36.73
.....	.....	.....	.....	27	37.76	2	110.00
.....	.....	.....	.....	.....	.....	4	82.50
.....	.....	.....	.....	8	45.00	.....	.....
.....	.....	.....	.....	7	60.00	1	100.00
.....	.....	.....	.....	1	40.00	1	75.00
.....	.....	.....	.....	1	55.00	1	125.00
.....	.....	.....	.....	3	48.33	1	105.00
.....	.....	.....	.....	12	57.50	1	65.00

JUNE 30, 1885.

73	\$ 51.00	.....	\$ 58	\$ 47.58	6	\$ 95.00
140	50.00	3 75.00	53	50.00	14	100.00
.....						
o 133	34.19	1	40	56.33	5	96.00
201	50.35	.....	47	52.96	32	95.30
165	53.44	.....	100	52.75	17	97.50
127	49.17	.....	142	48.16	19	101.06
130	52.20	.....	117	44.28	15	89.33
k 22	65.56	.....	336.26	46.15	5	85.67
11	65.00	.....	10	50.00	.....	.....
24	52.00	1 50.00	5	72.00	1	100.00
14	40.00	.....	3	60.00	1	75.00
16	53.25	.....	1	55.00	1	125.00
24 5.12	80.17	.....	3½	57.08	2½	84.43
17	40.00	None.	6	56.00	1	80.00
10	45.00	1 75.00	1	75.00	Included	in agents.



## RAILROADS

JUNE 30, 1885, TO

NAME OF ROAD.	Opera- tors head- quar- ters.	Average monthly salary.	Locomo- tive en- gineers.	Hours employed.	Average daily wages.
Wabash, St. Louis & Pacific .....	2	\$ 60.00	36	12	\$ 3.50
Burlington, Cedar Rapids & Northern .....			83		3.50
Central Iowa Railway .....			55		3.25
Chicago, Milwaukee & St. Paul .....			221	10	3.44
Chicago & Northwestern .....			200		3.25
Chicago, Burlington & Quincy .....	86	36.73	221	10	3.33
Chicago, Rock Island & Pacific .....	29	42.68	46	10	3.63
Illinois Central .....			57	8½	3.49
Chicago, St. Paul, Minneapolis & Omaha .....	6	33.33			
Des Moines & Ft. Dodge .....			10	7	3.75
Des Moines, Osceola & Southern .....	13	45.00	4		3.00
Minneapolis & St. Louis .....	2	77.50	14	11	3.52
Humeston & Shenandoah .....	1	61.00	12	9½	3.88
Wisconsin, Iowa & Nebraska .....		50.00	7	10	3.00

JUNE 30, 1885, TO

Wabash, St. Louis & Pacific .....	\$ .....	46	10	\$ 3.28
Burlington, Cedar Rapids & Northern .....	3 67.50	104	10	3.50
Central Iowa .....		56	100 miles.	3.12
Chicago, Milwaukee & St. Paul .....		213	10	3.46
Chicago & Northwestern .....		205	8 to 12	3.54
Chicago, Burlington & Quincy .....		252	8 to 10	3.84
Chicago, Rock Island & Pacific .....		170	10	3.51
Illinois Central .....		48	10	97.86 per month.
Chicago, St. Paul, Minneapolis & Omaha .....		22	10 to 12	3.50
Des Moines & Ft. Dodge .....		12	7	3.50
Des Moines, Osceola & Southern .....		6	10	2.50
Minneapolis & St. Louis .....		6	10	3.75
Humeston & Shenandoah .....	2 77.50	11½	5½	4.00
Wisconsin, Iowa & Nebraska .....		8	10	3.69
Dubuque & Dakota .....		2	10	3.50

1885.]

## IN IOWA—CONTINUED.

JUNE 30, 1884.

Locomotive Firemen.	Hours em- ployed.	Average daily wages.	Passenger Conductors.	Hours em- ployed.	Average daily wages.
	12	\$ 2.15	12	12	\$ 3.16
36		2.00	15		3.20
83		1.86	10		3.00
57		2.04	31	9	3.58
221	10	2.10	63		3.00
191		1.90	100	6	3.20
229	10	1.90	9	10	2.99
49	10	1.74	9	9	3.30
56	8½				
		1.75	4	5	2.90
10	7	1.50	1		2.50
4	11	2.00	5	12	3.33
14	9 1-8	2.11	2	6¼	3.25
13		1.83	2	10	2.83
7	10				

JUNE 30, 1885.

49	10	\$ 1.67	8	10	3.22
108	10	2.00	18		3.20
a 50	100 miles.	1.92	6		90 per month
213	10	2.05	32	10	3.50
206	8 to 12	2.16	136	8 to 12	2.82
283	8 to 10	2.09	24	7.30	90 per month
d 170	10	1.93	37	10	2.86
46 13-20	10	52.97 per month	9	8	88.33 per month
g 22	10 to 12	2 10	h 7	10 to 12	3.00
12	7	1.75	4	7	75 per month
6	10 "	1.33	2	10	2.00
6	10	2.00	2	10	100 per month
12 1-6	12	2.16	3	7½	3.20
8	10	2.04	2	10	3.26
2	10	1.87	3	10	2.30



## RAILROADS

JUNE 30, 1883, TO

NAME OF ROAD.	Freight conductors.	Hours em- ployed.	Average daily wages.
Wabash, St. Louis & Pacific.....	20	12	\$ 3.00
Burlington, Cedar Rapids & Northern.....	47	.....	2.90
Central Iowa Railway Company.....	36	.....	2.85
Chicago, Milwaukee & St. Paul.....	124	10	2.83
Chicago & Northwestern.....	63	.....	3.00
Chicago, Burlington & Quincy.....	120	8	2.55
Chicago, Rock Island & Pacific.....	28	10	2.56
Illinois Central.....	22	12	2.77
Chicago, St. Paul, Minneapolis & Omaha.....	.....	.....	.....
Des Moines & Ft. Dodge.....	6	7	2.90
Des Moines, Osceola & Southern.....	2	.....	2.00
Minneapolis & St. Louis.....	9	10	3.00
Humeston & Shenandoah.....	7	12	2.76
Wisconsin, Iowa & Nebraska.....	3	10	5.50

JUNE 30, 1884, TO

Wabash, St. Louis & Pacific.....	37	10	\$ 2.95
Burlington, Cedar Rapids & Northern.....	54	.....	2.90
Central Iowa Railway Company.....	27	100 miles	2.70
Chicago, Milwaukee & St. Paul.....	110	10	2.88
Chicago & Northwestern.....	See passen ger.	.....	.....
Chicago, Burlington & Quincy.....	148	9 h. 40 m.	64 per mo.
Chicago, Rock Island & Pacific.....	70	10	2.52
Illinois Central.....	21 23-26	10	71.50 per mo.
Chicago, St. Paul, Minneapolis & Omaha.....	13	10 to 12	2.80
Des Moines & Ft. Dodge.....	6	7	75 per mo.
Des Moines, Osceola & Southern.....	1	10	2.00
Minneapolis & St. Louis.....	6	10	3.00
Humeston & Shenandoah.....	6½	12	2.78
Wisconsin, Iowa & Nebraska.....	3	12	2.90
Dubuque & Dakota.....	Run passen ger also.	.....	.....

## IN IOWA—CONTINUED.

JUNE 30, 1885.

Brakemen.	Hours em- ployed.	Average daily wages.	Men in the ma- chine shops.	Hours em- ployed.	Average daily wages.
52	12	1.98	8	10	2.60
180	.....	1.50	470	.....	2.00
86	.....	1.61	25	10	2.33
331	10	1.81	1,008	9	1.74
250	.....	1.75	80	.....	2.10
431	8	1.75	327	10	2.60
97	10	1.40	101	10	1.80
44	12	1.73	195	10	1.68
.....	.....	.....	113	10	1.50
20	7	1.70	40	10	2.00
4	.....	1.50	6	10	2.00
28	10	2.00	2	10	2.75
19	10½	1.76	5	10	2.81
8	12	1.50	1	11	2.75

JUNE 30, 1885.

111	10	1.94	15	10	2.53
154	.....	1.50	561	.....	*1.35 to 2.25
And baggage men, 60.	100 miles	40 to 50 per mo.	b* 140	10	1.87
283	10	1.83	927	10	1.73
264	8 to 12	1.82	79	10	2.02
351	8	46 to 59 per mo.	386	10	2.22
256	10	1.47	464	10	1.89
55 16-26	10	45 per mo.	189	9 42 to 85 per month.	.....
42	10 to 12	1.58	30	9 to 10	2.75
20	7	1.67	8	10	2.75
3	10	1.33	1	10	2.50
16	10	1.75	2	10	2.75
17 5-6	8½	1.64	6 7-12	10	2.69
6	12	1.80	2	10	2.30
2	10	1.73	1	10	1.93



## RAILROADS

JUNE 30, 1883, TO

NAME OF ROAD.	Watchmen.	Hours employed.	Average daily wages.	Section hands.	Hours employed.	Average daily wages.
Wabash, St. Louis & Pacific.....	1	12	\$ 1.35	211	10	\$ 1.31
Burlington, Cedar Rapids & North'n.	13	.....	1.50	632	.....	1.00
Central Iowa Railway Company.....	20	12	1.38	250	10	1.21
Chicago, Milwaukee & St. Paul.....	10	11	1.08	1,422	10	1.22
Chicago & Northwestern.....	92	.....	2.00	1,023	.....	1.36
Chicago, Burlington & Quincy.....	110	10	1.40	1,198	10	1.17
Chicago, Rock Island & Pacific.....	.....	.....	.....	463	10	1.30
Illinois Central.....	21	12	1.00	340	10	1.15
Chicago, St. Paul, Minneapolis & O..	2	10	1.54	76	10	1.12
Des Moines & Ft. Dodge.....	1	10	1.65	120	10	1.15
Des Moines, Osceola & Southern.....	5	10	1.50	60	10	1.25
Minneapolis & St. Louis.....	2	12	1.80	166	10	1.25
Humeston & Shenandoah.....	1	12	1.50	177	10	1.35
Wisconsin, Iowa & Nebraska.....	2	12	1.50	80	11	1.15

JUNE 30, 1884, TO

Wabash, St. Louis & Pacific.....	9	12	\$ 1.02	599	10	\$ 1.21
Burlington, Cedar Rapids & North'n.	13	.....	1.50	932	.....	1.10
Central Iowa Railway Company.....	3	10	1.45	And switch and y'd men, 280	10	53.65 per mo.
Chicago, Milwaukee & St. Paul.....	11	10	1.13	1,401	10	1.22
Chicago & Northwestern.....	101	10	2.20	940	10	1.30
Chicago, Burlington & Quincy.....	9	12	1.54	1,545	10	1.18
Chicago, Rock Island & Pacific.....	6	10	1.20	881	10	1.10
Illinois Central.....	39 8-26	12	42.80	394	10	29.08 per mo.
Chicago, St. Paul, Minneapolis & O..	4 5	10	1.50	88	10	1.25
Des Moines & Ft. Dodge.....	2	12	1.00	130	10	1.15
Des Moines, Osceola & Southern.....	6	10	1.50	90	10	1.10
Minneapolis & St. Louis.....	.....	.....	.....	100	10	1.15
Humeston & Shenandoah.....	1	12	1.48	138	10	1.34
Wisconsin, Iowa & Nebraska.....	1	12	1.50	77	10	1.10
Dubuque & Dakota.....	.....	.....	.....	21	10	1.25

x Chicago, Rock Island & Pacific, other employees, 25; \$1.40 per day.  
 y Chicago, Milwaukee & St. Paul, other employees, 699; \$1.27 per day.  
 \* Shopmen, 431; laborers, 130.  
 + Including agents, clerks, yard and switchmen and laborers at stations. Agents, 140; clerks, 66—same average, \$50 per month. Operators, 56; same. Yardmen, 67; laborers, 23—from \$2.00 to \$1.75 per day.  
 a Wipers, etc., 26; 10 hours; \$1.29.  
 b Others in round-house, 17; \$1.65.  
 c Dining-car service, 27 employees; \$39.45 per month.  
 d Wipers, 79 employees; \$1.36 per day, 10 hours.  
 e Roadmasters, section and bridge foremen, 236; 10 hours; \$2.11; extra gangs, etc., 537; 10 hours; \$1.43.  
 f Telegraph operators, 4 employees; \$2.69 per day, 10 hours.  
 g Wipers, 80; 10 to 12 hours; \$1.25.  
 h Baggage men, 7; 10 to 12 hours; \$1.70.

## IN IOWA—CONTINUED.

JUNE 30, 1884.

Telegraph operators.	Hours employed.	Average daily wages.	Passengers killed.	Passengers injured.	Em- ploys killed.	Em- ploys injured.	Others killed.	Others injured.
33	12	\$ 1.44	17	3	13	1	3	
263	.....	1.66	25	7	100	9	16	
91	.....	1.25	.....	4	21	1	4	
66	.....	48.81 per month.	.....	14	27	5	2	
80	.....	1.56	1 5	14	54	6	11	
111	11	1.68	2 3	16	148	17	21	
.....	.....	.....	1 1	2	3	8	2	
23	10	1.31	1 9	3	19	3	3	
.....	.....	.....	1	.....	2	1	1	
29	10	2.00	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	1	.....	.....	
.....	12	1.33 1/2	.....	.....	8	.....	.....	
3	12	1.72	.....	1	2	.....	.....	
18	12	1.66	.....	.....	2	.....	2	

JUNE 30, 1885.

54	10	\$ 1.00	12	3	34	3	3
4352	.....	50.00 per month.	1 2	8	25	7	3
Included with station agents.	.....	.....	.....	.....	.....	.....	.....
63	.....	43.50 per month.	7	9	29	13	8
76	.....	44.30 per month.	3	9	107	10	16
102	12	43.96 per month.	7 54	28	p 547	22	36
7 97	10	44.82 per month.	3 1	5	22	14	5
31	10	41.97 per month.	.....	.....	.....	.....	.....
7	10	45.00 per month.	.....	.....	3	1	2
1 6	12	1.50	.....	.....	.....	.....	.....
See ag'ts	.....	.....	.....	.....	12	.....	.....
See ag'ts	.....	.....	.....	.....	3	.....	1
See ag'ts	12	35.00 per month.	.....	.....	6	.....	.....

Besides agents.  
 i Yardmen, 7; \$2.50; 7 to 12 hours. Assistant master mechanic, 1; \$4.20; 9 to 10 hours.  
 Foremen of shops, 2; \$3.00; 9 to 10 hours. Clerks of shops, 2; \$2.40; 9 to 10 hours. Boiler makers and helpers, 16; \$2.80 and \$1.65; 9 to 10 hours. Blacksmiths and helpers, 17; \$2.75; 9 to 10 hours. Carpenters, 10; \$2.25; 9 to 10 hours. Car-repairers, 27; \$1.75 9 to 10 hours. Painters, 5; \$2.00; 9 to 10 hours. Warehouse men, 8; \$1.50; 10 hours.  
 j and switchmen. Other employees, 216 12-20; 10 hours; \$48.19 per month.  
 k Joint operators and agents, 22; \$65.56 per month.  
 l and switchmen.  
 o Clerks and operators.  
 p Numbers of employees reported as hurt, only slightly injured, often causing no loss of time from their work.



As a fact in determining rates of wages, the railway corporations deserve study. Their varied necessities are greater than those of any other business. Hence, Iowa, with her 7,250 miles of road and the great number of employes necessary for the successful working of her different lines, presents an interesting field for such study. Railroads need the most reliable employes, from manager down. It is in this field of work that pay is sure, employment steady, and promotion largely certain.

The courtesy of the managers of the various roads in this State has been very marked to this office. Through their direction the auditors of these roads supplied this office with very complete reports in answer to blanks sent to them, and the tables presented in the foregoing pages were prepared from these reports.

## PART XVIII.

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### THE MINING INDUSTRY.

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A great many returns from mines were made to this office, but were excluded from this report on account of the small number of employes. Only the returns from the larger mines are here tabulated. In the rate of wages, as given in the following, it is evident that in some cases mistakes have been made, as for instance one return shows the average daily wages of the miner to be over \$4 per day, an amount not received by any miner in Iowa. They are submitted here, however, just as given by the operators to this office.



## COAL

Days in operation, hours of employment,

NAME OF MINE.	NAME OF OPERATOR.	LOCATION OF MINE.	No. of days in operation, June 30, 1883, June 30, 1884.	Average number employed year ending June 30, 1884.
Chic. & Van Meter Coal Co.	Platt & Thompson	Dallas	306	61
Mallory Mine	Chariton Coal Co.	Lucas	232	154
Whitebreast	Whitebreast Coal & M. Co.	Lucas	287	700
Standard Coal Co.	Standard Coal Co.	Appanoose	312	25
Flagler Mine	Union Coal & Mine Co.	Marion	173	103
Cincinnati	Cincinnati Coal Co.	Appanoose	252	130
Eagle Branch—Excelsior	C. M. & St. P. R. R. Co.	Boone	312	150
Standard	Standard Coal Co.	Mahaska	150	175
Excelsior	Excelsior Coal Co.	Mahaska	218	560
Diamond Coal Co.	Wyman, Walton & G.	Polk	113	50
Consolidated Coal Co.	Consolidation Co.	Mahaska	279	523
Vulcan	Langdon, Hawey & R.	Keokuk	100	100
Standard No. 2	Hollister & Patton	Polk	165	24
Garver	Garver Coal & Mine Co.	Polk	312	57
Silknetter Mine	B. F. Silknetter	Appanoose	250	30
Crooked Creek Coal Co.	C. C. Coal Co.	Webster	194	60
Tipton Coal Co.	Phillips, Turner & F.	Webster	300	25
Standard	Standard Coal Co.	Boone	235	125
Polk County Mine	Polk County Coal Co.	Polk	125	40
Pioneer Mine	Pioneer Coal Co.	Polk	200	25
Summerset Mine	W. E. Russell	Warren	61	60
Eureka Mine	Haskins & Cormac	Polk	285	58
Eclipse Mine	S. S. Ethridge	Polk	218	25
Zero	Darrow, Fitch & Powell	Lucas	312	50
Keystone	Head Bros. D. M. Ft. D. R. R.	Boone	250	300
Climax No. 2 and 3	Climax Coal Co.	Boone	250	175
Giant No. 1 and 2	Giant Coal Co.	Polk	250	5
Black Diamond Coal Works	W. A. Cornwell	Keokuk	100	24
Swan Mine No. 1	Swan Coal & Mine Co.	Marion	100	40
Black Heath	Drummond & Simpson	Jasper	164	75
W. D. Johnson & Co. Mine	W. D. Johnson & Co.	Boone	200	60
Red Rock Coal Co. No. 1	Red Rock Coal Co.	Marion	245	100
Jasper Co. Coal & R'y Co.	D. S. Couch, Supt.	Jasper	219	28
Union Coal Co.	R. Sylvester and Wm. Birne	Jasper	26	15
Diamond Coal Co.	Conway & Blatchford	Jasper	35	62
Central Iowa Coal Co.	Central Iowa Coal Co.	Marion	240	65
Armstrong Bros. Co.	Henry, Oliver B. and Frank	Boone	220	19
Knoxville City Co.	S. L. Collins	Marion	256	269
Diamond Shaft No. 1 and 2	Oliver, Dague & Lane	Appanoose	369	882
Molonga	Molonga Coal Co.	Boone	138	125
Centerville Mine	Centerville Coal Co.	Appanoose	300	80
Van Ginkle Coal Co.	G. Van Ginkle	Polk	313	30
Walnut Creek Coal Co.	Walnut Creek Coal Co.	Polk	50	33
Ontario Coal Mines	Hutchison Bros.	Boone	189	28
Runnells Coal Co.	Garver, Bachtel, K. & McC.	Polk	40	35
Northwestern Coal Co.	R. E. Montgomery	Boone	260	50
Union Coal Co.	Young & Adelfinger	Polk	300	25
American	American Coal Co.	Warren	260	200
Scandinavian	Scandinavian Coal Co.	Appanoose	200	10
Craig No. 2, 3 and 4	Craig Coal Co.	Webster	184	150
Ame No. 1	Western Union Fuel Co.	Mahaska	240	200
Knoxville Junction No. 2	American Coal Co.	Mahaska	240	200
Jasper Co. Coal & R'y Co.	D. S. Couch	Jasper	221	125

## MINES.

wages of employes, strikes, etc.

No. employes at date of this return.	Mine bosses. Av. weekly wages.	Miners. Av. weekly wages.	Inside day laborers. Av. weekly wages.	Outside day laborers. Av. weekly wages.	Mule drivers. Av. weekly wages.	Engineers. Av. weekly wages.	Blacksmiths. Av. weekly wages.
40	\$ 16.30	\$ 10.38	\$ 12.00	\$ 12.00	\$ 12.00	\$ 12.00	\$ 12.00
169	25.00	14.10	10.50	7.50	12.00	15.00	12.00
980	22.50	18.00	12.00	7.80	12.00	15.00	15.00
160	12.00	18.00	6.00	11.25	10.00	12.50	12.50
71	22.00	16.80	10.50	9.75	10.50	15.00	15.00
65	18.00	15.00	9.00	9.00	10.50	12.00	10.00
104	17.50	12.50	12.90	10.00	10.00	14.00	13.50
140	14.00	14.00	13.00	9.00	12.00	16.00	12.00
575	15.00	12.50	12.00	9.00	10.50	17.50	15.00
87	15.00	16.50	12.60	9.00	12.60	13.00	12.90
601	24.00	15.00	12.00	10.00	12.00	15.00	15.00
200	20.00	15.00	12.00	10.00	12.00	13.50	12.00
30	15.00	12.00	12.50	10.00	10.50	1.25	15.00
90	15.00	15.00	10.50	9.00	10.00	10.00	10.00
36	12.00	12.00	10.00	10.00	10.50	12.30	15.00
71	20.00	12.00	11.00	10.50	10.00	10.00	10.00
100	15.00	22.50	13.50	10.50	12.00	17.50	16.50
21	18.00	13.50	12.00	10.50	12.00	15.00	13.50
60	20.00	20.00	10.50	9.00	10.50	15.00	13.50
30	17.50	15.00	12.00	8.00	10.00	16.00	12.00
40	12.00	12.00	10.50	10.50	12.00	16.00	15.00
37	21.00	15.00	13.00	11.25	12.00	18.00	15.00
35	15.00	12.00	12.00	8.10	10.50	11.58	11.58
75	18.00	13.00	11.00	10.00	12.00	15.00	12.50
16	20.00	16.00	13.00	9.00	11.50	18.00	15.00
150	17.00	15.00	10.00	9.00	10.50	15.00	15.00
80	8.00	8.00	7.50	9.00	12.00	15.00	12.00
35	12.50	10.88	16.50	9.00	12.00	10.38	15.00
67	18.75	12.50	12.00	9.00	13.50	12.87	12.87
100	18.20	13.75	12.37	9.62	12.50	12.50	13.50
45	18.00	13.50	12.00	9.00	12.00	15.00	15.00
136	20.00	15.00	13.50	10.00	13.00	15.00	15.00
39	14.00	12.00	9.00	10.00	6.00	15.00	15.00
35	12.00	12.00	8.25	8.25	12.00	17.50	13.50
60	25.00	16.00	10.50	9.00	12.00	15.00	15.00
75	16.25	17.00	12.00	10.50	11.25	15.00	15.00
24	12.00	10.00	9.00	9.00	10.00	12.50	12.00
102	15.00	17.00	10.25	8.25	10.00	12.50	12.00
138	15.00	12.00	4.00	10.50	9.00	15.00	15.00
115	16.25	15.00	12.00	8.10	9.00	15.00	9.00
50	17.25	13.50	12.00	12.00	11.25	15.00	13.50
50	20.00	15.00	10.50	9.00	12.50	12.50	12.50
33	14.00	14.00	12.00	12.00	9.00	10.50	10.50
40	15.00	18.00	10.00	10.50	12.00	15.00	13.50
70	15.00	15.00	10.00	10.50	12.00	15.00	12.00
20	18.00	12.00	10.50	10.50	12.00	12.00	12.00
260	25.00	18.00	12.00	10.50	12.00	12.00	12.00
70	12.00	14.00	10.00	10.00	10.00	12.00	12.00
85	17.31	13.50	12.00	10.50	12.00	12.69	15.00
225	25.00	15.00	12.90	40.90	12.70	20.00	12.00
200	21.00	15.00	13.50	10.50	12.90	20.00	13.50
140	20.00	18.00	13.50	10.50	13.50	13.50	15.00







The area of the Iowa coal field is about sixteen thousand square miles, and within this limit there are thirty-three counties and parts of counties producing coal to a greater or less extent. The total number of mines in the State is about five hundred. Many of them are, of course, small, but show at least the presence of coal for the development of the mine.

The following table gives the approximate estimate of the mines of the State by counties for the four years since the State mining law went into effect:

COUNTIES.	1881.	1882.	1883.	1884.
Makaska.....	917,495	701,397	927,387	932,714
Keokuk.....	463,010	511,849	500,040	430,940
Lucas.....	498,274	413,217	487,821	410,729
Polk.....	473,893	327,819	558,821	619,921
Boue.....	337,724	286,891	466,981	473,073
Webster.....	184,300	218,478	248,560	214,014
Wapello.....	131,815	207,721	237,821	240,730
Appanoose.....	107,348	97,976	128,896	158,986
Monroe.....	98,143	90,325	93,435	98,427
Marion.....	93,967	90,927	90,925	97,085
Greene.....	81,530	62,531	88,851	90,327
Jasper.....	42,435	40,189	45,883	46,321
Dallas.....	47,884	36,001	38,008	37,185
Jefferson.....	39,124	22,121	38,887	8,172
Warren.....	12,989	11,081	12,828	13,727
Scott.....	3,804	3,711	3,714	3,821
Hardin.....	1,317	1,125	1,203	1,075
Adams.....	3,708	1,691	3,891	3,981
Hamilton.....	1,787	874	1,998	1,878
Wayne.....	77	51	1,892	4,947
Van Buren.....	987	216	1,678	1,778
Davis.....	489	301	527	1,207
Page.....	685	118	748	1,009
Taylor.....	87	84	91	127
Henry.....	67	65	65	87
Cass.....	36	41	43	.....
Guthrie.....	.....	.....	.....	5,187
Total.....	3,500,000	3,127,700	3,881,300	3,903,488

In reference to the probable future supply of coal for Iowa, it is estimated that after making a reduction of three fourths of this area of sixteen thousand square miles for the erosions of the streams and other causes that have either carried away the coal or prevented its deposit, there will be left at least four thousand square miles that might be estimated to carry a four-foot seam of coal and that this deposit, if the estimate hold good, would furnish 4,000,000 tons per annum for 3,000 years.

## PART XIX.

## COST OF LIVING.

It will be noticed in the subsequent tables, showing wages of working men, that the cost of living is also enumerated, and as a general rule the question has been answered. The simple statement that a man's annual income was so much would be valueless without a statement as to the sum used by him for living expenses. The two sides of the working man's account are necessary, the one as much as the other, hence so far as this office has been able, it has secured this information. The subject of food alone as a factor in the question of cost of living assumes a formidable magnitude when we remember that the average man spends sixty per cent of his income for food. As stated by Hon. Carroll Wright of Massachusetts: "No comparison as to the prosperity of industrial communities can be just, that does not take into consideration the relative ease with which the working men in those communities may procure the means of subsistence, and the relative amount of comfort attainable for a given outlay of time and effort. Statistics of wages and cost of living, therefore, furnish the essential elements for such comparisons, and they are of vital importance in every economic discussion."

## PRICES.

In Table I the average retail price for various commodities, coming under the general head of groceries, are given:



TABLE I.

## PRICES—GROCERIES.

ARTICLES.	PRICE.
Flour, wheat, best, per sack 50 lbs.*	\$ 1.00
Flour, wheat, family, per sack 50 lbs.*	1.10
Flour, Graham, per sack 12½ lbs.	.35
Flour, rye, per sack 50 lbs.*	1.30
Corn meal, per sack 12½ lbs.	.15
Codfish, dry boneless, per lb.	.09
Rice, per lb.	.12
Lard, per lb.	.05
Beans, per lb.	20, 30, 40, 75c and \$1
Tea, Oolong, per lb.	12½ and 16c
Coffee, Rio, green, per lb.	15 and 20c
Coffee, Rio, roasted, per lb.	.07
Sugar, "A," per lb.	.06½
Sugar, extra "C," per lb.	.07½
Sugar, granulated, per lb.	60, 75c and \$1
Molasses, New Orleans, per gal.	.50
Sorghum, per gal.	.05
Soap, washing, per lb.	.06½
Starch, per lb.	20 to 35c
Butter,† per lb.	.10
Lard, per lb.	.30
Eggs,† per doz.	.15
Oil, kerosene, per gal.	20 to 75c
Potatoes, per bush.	

\*Sacks are marked 50 lbs., but contain 48 lbs. of flour.

†Butter and eggs, at the time this table was prepared, March 1st, were as high as at any time during the year, hence may be considered properly one extreme. Taking the other extreme, when these two articles are cheapest, the price of butter would be 12½c per lb. and eggs 10c per doz.

Table No. II shows the average retail prices of meats per pound in various counties scattered over the State, with general average:

TABLE II.

## MEATS—PRICES.

COUNTY.	TOWN OR CITY.	BEEF.	MUTTON.	VEAL.	PORK.	SALT MEATS.	DECREASE OR INCREASE OVER FORMER YEARS.
		Cents.	Cents.	Cents.	Cents.	Cents.	
Adams	Corning	8½	9	10½	8½	15	Same.
Benton	Vinton	8½	9	9	10	15	Pork and salt meats 2 cents cheaper; rest, same.
Boone	Boone	9	10	11	10	12½	Same.
Carroll	Carroll	9	10	12½	10	15	Same.
Cass	Atlantic	8	10	10	8	9	Same.
Cerro Gordo	Mason City	11	11	11	12	12½	Same.
Chickasaw	New Hampton	6	6	7	5½	7	Pork, salt and fresh, 1½ cents cheaper; rest, same.
Clarke	Osceola	9	9	10	8	15	Same.
Clayton	McGregor	10	10	10	10	10	Same.
Clinton	Clinton	12½	10	15	10	10	Same.
Dallas	Dallas Center	7½	9	9	8	14	Increase ½ cent.
Des Moines	Burlington	12½	10	15	9	10	Same.
Dubuque	Dubuque	12½	12½	12½	10	11	Same.
Greene	Angus	12½	12½	10	11	13	Same.
Hardin	Ackley	10	12	12	10½	15	Same.
Jasper	Newton	9	9	10	10	12	Same.
Johnson	Iowa City	11	9	12½	10	10	Same.
Jones	Anamosa	12	15	15	12½	15	Same.
Lee	Keokuk	11	10	12½	10	8	Same.
Linn	Cedar Rapids	9	9	11	10	7	Same.
Louisa	Wapello	10	10	15	10	15	Same.
Madison	Winterset	9	11	11	10	12½	Same.
Mahaska	Oskaioosa	10	12	12½	10	12½	Same.
Marion	Knoxville	9	10	11	10	14	Same.
Marshall	Marshalltown	11	12	12	11	10	Same.
Montgomery	Red Oak	8	8	10	9	12½	Same.
Monroe	Albia	9½	9	9½	11	11	Same.
Muscatine	Muscatine	10	10	12½	10	12½	Same.
Page	Clarinda	9	10	8½	8	12½	Beef 1c lower; rest, same.
Plymouth	Le Mars	9½	10	12	10	10	Same.
Polk	Des Moines	11	12½	12½	11	12½	Same.
Pottawattamie	Council Bluffs	10½	10	12½	11	14	Increase of ½ ct.
Scott	Davenport	10	10	15	10	15	Veal 2 cts. higher; pork and salt meats 2 cts. less. Rest, same.
Tama	Tama City	10	11	11	8	10	Same.
Union	Creston	10	12½	15	10	12½	Same.
Wapello	Ottumwa	10½	9	13	8½	14	2 cts. lower.
Warren	Indianola	7	9	11	9	8	Same.
Wayne	Corydon	9	8	.....	9	12	Same.
Woodbury	Sioux City	12½	12½	12½	9	8½	Same.

## GENERAL AVERAGE.

MEATS.	PRICE.
Beef, per pound	9½
Mutton, per pound	10½
Veal, per pound	11½
Pork, per pound	9½
Salt meats, per pound	12



TABLE III.

Table three shows retail prices of necessities of life in Europe and the United States.

ARTICLES.	England (Liverpool).	Germany (Berlin).	Switzerland (Berne).	France (Marseilles and Rheims).	Austria (Vienna and Prague).
<b>Meats:</b>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Bacon.....per pound..	12 to 20	25 to 30	30	15 to 20	15 to 18
Ham.....do.....	24	25 to 30	30	40 60	30 38
Beef.....do.....	14 20	17 20	15 to 18	14 30	10
Mutton.....do.....	16 20	17 20	14	14 25	9 16
Veal.....do.....	16 20	22 25	16 18	25 35	9 18
Pork.....do.....	16 20	16 20	18 20	15 20	
<b>Groceries:</b>					
Sugar.....per pound..	4 7	8 13	8	6½ 12	7 8
Tea.....do.....	32 89	70 \$2.00	\$1.00 \$1.50	\$1.00 \$1.40	
Coffee.....do.....	24 40	20 40	18 32	35 60	
Butter.....do.....	24 32	20 38	30	32 60	25 27 16 28
Lard.....do.....	12 16	18	20	12 16	12 16
Cheese.....do.....	12 22	10		14 24	6
Rice.....do.....	4 8	5 10	6	5 10	3 5
Flour.....do.....	3½ 4	4½ 5½	4 6	5 10	3 5
Corn-meal.....do.....		5½ 6		3 5	
Bread.....do.....	2½ 4	5 9	4 5		3
Oatmeal.....do.....	4 9	5½ 6			
Potatoes.....do.....	8-10 1	1	8	1 2	1 2
Codfish.....do.....	8 12	9			

TABLE III—CONTINUED.

ARTICLES.	Belgium (Brussels).	Holland (Amster- dam.)	New York.	Chicago.	Iowa.
<b>Meats:</b>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Bacon.....per pound..	16 to 20	16 to 18	16	14 to 20	12½
Ham.....do.....	30	16 26	16	14 18	12½
Beef.....do.....	15 17	15 29	10 to 25	6 15	9½
Mutton.....do.....	18	16 24	11 15	9 12	10½
Veal.....do.....	18	14 22	17 25	10 18	11½
Pork.....do.....	16		8 13	12½	9½
<b>Groceries:</b>					
Sugar.....per pound..	12	9 15	8	7 8½	6 to 7
Tea.....do.....		17 54	25 70	\$1.00 25 \$1.00	
Coffee.....do.....	16	13 25	20 32	20 35	15 35
Butter.....do.....	20	22 33	30	20 28	15 30
Lard.....do.....		16 22	15 16	12½	12
Cheese.....do.....		13 23	20	12½ 14	12 15
Rice.....do.....	4 5	3½ 6	10	5 9	5 9
Flour.....do.....		4 6	5	3 5	2 4
Corn-meal.....do.....					1 1½
Bread.....do.....	3 5	2½ 5½		5 7	4 6
Oatmeal.....do.....				1½	3½ 4
Potatoes.....do.....	1	1		8 12½	8 10
Codfish.....do.....					

It must be remembered in this connection that Iowa furnishes as fine potatoes, corn meal and oat meal as any place in the world. Her beef brings the highest prices in both western and eastern markets, and her butter always takes the first premium everywhere.

Table IV shows average retail prices of the most common staple

articles of dry goods. It shows the ruling prices for articles in use by the working men and their families, from the poorer to the well-to-do classes.

TABLE IV.

## STAPLE DRY GOODS—PRICES.

GOODS.	PRICES.
Alpaca, per yard.....	\$ .25 to .50
Blankets, white, best, per pair.....	8.50
Blankets, white, medium, per pair.....	3.75
Blankets, white, cheapest, per pair.....	1.35
Calico, best, per yard.....	.07
Calico, medium, per yard.....	.04
Calico, cheapest, per yard.....	.50
Flannels, twilled, colored, best, per yard.....	.50
Flannels, twilled, medium, per yard.....	.30
Flannels, twilled, cheapest, per yard.....	.30
Gingham, best, per yard.....	.10½
Gingham, medium, per yard.....	.09
Gingham, cheapest, per yard.....	.05
Muslin, bleached, best, 4x4, per yard.....	.12½
Muslin, bleached, medium, 4x4, per yard.....	.08
Muslin, bleached, cheapest, per yard.....	.05
Muslin, unbleached, best, per yard.....	.09
Muslin, unbleached, medium, per yard.....	.07
Muslin, unbleached, cheapest, per yard.....	.05
Plaids and checks, all wool, per yard.....	.50 to 1.00
Sheetings, 10x4, best, per yard.....	.22
Sheetings, 10x4, medium, per yard.....	.18½
Sheetings, cheapest, per yard.....	.12½
Ticking, best, per yard.....	.22
Ticking, medium, per yard.....	.15
Ticking, cheapest, per yard.....	.08½
Toweling, best, per yard.....	.15
Toweling, medium, per yard.....	.10
Toweling, cheapest, per yard.....	.05

Table V represents the average retail price of boots and shoes.

TABLE V.

## BOOTS AND SHOES—PRICES.

ARTICLES.	PRICES.
Boys' boots, best, per pair.....	\$ 4.00
Boys' boots, medium, per pair.....	2.50
Boys' boots, low, per pair.....	1.50
Boys' shoes, best, per pair.....	4.00
Boys' shoes, medium, per pair.....	2.50
Boys' shoes, low, per pair.....	1.25
Girls' shoes, best, per pair.....	3.50
Girls' shoes, medium, per pair.....	2.00
Girls' shoes, low, per pair.....	1.00
Men's boots, best, per pair.....	8.00
Men's boots, medium, per pair.....	3.50
Men's boots, low, per pair.....	2.25
Men's shoes, best, per pair.....	7.50
Men's shoes, medium, per pair.....	4.50
Men's shoes, low, per pair.....	1.50
Women's shoes, best, per pair.....	6.00
Women's shoes, medium, per pair.....	2.75
Women's shoes, low, per pair.....	1.00



Table VI shows the average retail price of men's and boys' clothing.

TABLE VI.  
CLOTHING—PRICES.

ARTICLES.	PRICE.
Boys' overcoats, fine .....	\$ 14.00
Boys' overcoats, heavy .....	6.00
Boys' overcoats, low .....	2.50
Boys' suits, fine .....	13.00
Boys' suits, heavy .....	6.00
Boys' suits, low .....	4.00
Mens' coats, fine .....	20.00
Mens' coats, heavy .....	8.00
Mens' coats, low .....	3.50
Mens' overcoats, fine .....	24.00
Mens' overcoats, heavy .....	14.00
Mens' overcoats, low .....	7.00
Mens' pants, fine .....	7.00
Mens' pants, heavy .....	5.00
Mens' pants, low .....	2.00
Mens' vests, fine .....	3.50
Mens' vests, heavy .....	1.75
Mens' vests, low .....	1.00

Under this head—cost of living—the subject of rents is classed. It will be seen from tables from individual employes that a very large percentage of those making returns are owners of homes. No one feature of these returns speaks better for Iowa than this—home ownership. A large number of our wage-workers have invested money in homes of their own, and while this is eminently commendable in these people, it is a happy feature for Iowa as a State. Permanency is thus made a feature of her present citizenship. In table No. VII the same plan has been pursued relative to rent statistics as of meats. Facts have been gathered from all sections of the State, which give a result in general average which is necessarily fair. It must be borne in mind that our largest cities are represented in this table, and of course rents are higher than in smaller places. These figures were kindly furnished this office by real estate agents to whom blanks were sent for this purpose.

TABLE VII.  
RENTS—PRICES.

COUNTY.	CITY OR TOWN.	HABITATION.	PRICE.
Carroll	Carroll	For 2 living rooms, per month .....	.....
Carroll	Carroll	For 3 living rooms, per month .....	.....
Carroll	Carroll	For 4 living rooms, per month .....	.....
Carroll	Carroll	For 3 roomed house, per month .....	\$ 5.00
Carroll	Carroll	For 4 roomed house, per month .....	7.00
Carroll	Carroll	For 6 roomed house, per month .....	13.50
Carroll	Carroll	For 7 roomed house, per month .....	20.00
Cerro Gordo	Mason City	For 2 living rooms, per month .....	4.00
Cerro Gordo	Mason City	For 3 living rooms, per month .....	5.00
Cerro Gordo	Mason City	For 4 living rooms, per month .....	6.00
Cerro Gordo	Mason City	For 3 roomed house, per month .....	6.00
Cerro Gordo	Mason City	For 4 roomed house, per month .....	8.00
Cerro Gordo	Mason City	For 6 roomed house, per month .....	10.00
Cerro Gordo	Mason City	For 7 roomed house, per month .....	15.00
Clayton	McGregor	For 2 living rooms, per month .....	2.00
Clayton	McGregor	For 3 living rooms, per month .....	3.00
Clayton	McGregor	For 4 living rooms, per month .....	5.00
Clayton	McGregor	For 3 roomed house, per month .....	5.00
Clayton	McGregor	For 4 roomed house, per month .....	6.00
Clayton	McGregor	For 6 roomed house, per month .....	8.00
Clayton	McGregor	For 7 roomed house, per month .....	10.00
Des Moines	Burlington	For 2 living rooms, per month .....	5.00
Des Moines	Burlington	For 3 living rooms, per month .....	7.00
Des Moines	Burlington	For 4 living rooms, per month .....	9.00
Des Moines	Burlington	For 3 roomed house, per month .....	9.00
Des Moines	Burlington	For 4 roomed house, per month .....	12.00
Des Moines	Burlington	For 6 roomed house, per month .....	15.00
Des Moines	Burlington	For 7 roomed house, per month .....	20.00
Dubuque	Dubuque	For 2 living rooms, per month .....	6.00
Dubuque	Dubuque	For 3 living rooms, per month .....	7.00
Dubuque	Dubuque	For 4 living rooms, per month .....	8.00
Dubuque	Dubuque	For 3 roomed house, per month .....	8.00
Dubuque	Dubuque	For 4 roomed house, per month .....	10.00
Dubuque	Dubuque	For 6 roomed house, per month .....	12.00
Dubuque	Dubuque	For 7 roomed house, per month .....	15.00
Johnson	Iowa City	For 2 living rooms, per month .....	5.00
Johnson	Iowa City	For 3 living rooms, per month .....	8.00
Johnson	Iowa City	For 4 living rooms, per month .....	10.00
Johnson	Iowa City	For 3 roomed house, per month .....	10.00
Johnson	Iowa City	For 4 roomed house, per month .....	12.00
Johnson	Iowa City	For 6 roomed house, per month .....	16.00
Johnson	Iowa City	For 7 roomed house, per month .....	20.00
Lee	Keokuk	For 2 living rooms, per month .....	4.00
Lee	Keokuk	For 3 living rooms, per month .....	6.00
Lee	Keokuk	For 4 living rooms, per month .....	8.00
Lee	Keokuk	For 3 roomed house, per month .....	7.00
Lee	Keokuk	For 4 roomed house, per month .....	10.00
Lee	Keokuk	For 6 roomed house, per month .....	12.50
Lee	Keokuk	For 7 roomed house, per month .....	18.00
Linn	Cedar Rapids	For 2 living rooms, per month .....	10.00
Linn	Cedar Rapids	For 3 living rooms, per month .....	12.00
Linn	Cedar Rapids	For 4 living rooms, per month .....	16.00
Linn	Cedar Rapids	For 3 roomed house, per month .....	12.00
Linn	Cedar Rapids	For 4 roomed house, per month .....	10.00
Linn	Cedar Rapids	For 6 roomed house, per month .....	16.00
Linn	Cedar Rapids	For 7 roomed house, per month .....	20.00
Marshall	Marshalltown	For 2 living rooms, per month .....	5.00
Marshall	Marshalltown	For 3 living rooms, per month .....	7.00
Marshall	Marshalltown	For 4 living rooms, per month .....	8.00
Marshall	Marshalltown	For 3 roomed house, per month .....	8.00
Marshall	Marshalltown	For 4 roomed house, per month .....	10.00
Marshall	Marshalltown	For 6 roomed house, per month .....	15.00
Marshall	Marshalltown	For 7 roomed house, per month .....	20.00



TABLE VII—CONTINUED.

## RENTS—PRICES.

COUNTY.	CITY OR TOWN.	HABITATION.	PRICE.
Muscatine.....	Muscatine.....	For 2 living rooms, per month.....	\$ 2.00
Muscatine.....	Muscatine.....	For 3 living rooms, per month.....	5.00
Muscatine.....	Muscatine.....	For 4 living rooms, per month.....	7.00
Muscatine.....	Muscatine.....	For 3 roomed house, per month.....	7.00
Muscatine.....	Muscatine.....	For 4 roomed house, per month.....	8.00
Muscatine.....	Muscatine.....	For 6 roomed house, per month.....	12.00
Muscatine.....	Muscatine.....	For 7 roomed house, per month.....	14.00
Polk.....	Des Moines.....	For 2 living rooms, per month.....	6.00
Polk.....	Des Moines.....	For 3 living rooms, per month.....	8.00
Polk.....	Des Moines.....	For 4 living rooms, per month.....	10.00
Polk.....	Des Moines.....	For 3 roomed house, per month.....	8.75
Polk.....	Des Moines.....	For 4 roomed house, per month.....	10.50
Polk.....	Des Moines.....	For 6 roomed house, per month.....	16.75
Polk.....	Des Moines.....	For 7 roomed house, per month.....	21.25
Pottawattamie.....	Council Bluffs.....	For 2 living rooms, per month.....	15.00
Pottawattamie.....	Council Bluffs.....	For 3 living rooms, per month.....	20.00
Pottawattamie.....	Council Bluffs.....	For 4 living rooms, per month.....	25.00
Pottawattamie.....	Council Bluffs.....	For 3 roomed house, per month.....	10.00
Pottawattamie.....	Council Bluffs.....	For 4 roomed house, per month.....	15.00
Pottawattamie.....	Council Bluffs.....	For 6 roomed house, per month.....	18.00
Pottawattamie.....	Council Bluffs.....	For 7 roomed house, per month.....	23.00
Scott.....	Davenport.....	For 2 living rooms, per month.....	5.00
Scott.....	Davenport.....	For 3 living rooms, per month.....	6.00
Scott.....	Davenport.....	For 4 living rooms, per month.....	7.00
Scott.....	Davenport.....	For 3 roomed house, per month.....	9.00
Scott.....	Davenport.....	For 4 roomed house, per month.....	8.00
Scott.....	Davenport.....	For 6 roomed house, per month.....	15.00
Scott.....	Davenport.....	For 7 roomed house, per month.....	18.00
Union.....	Creston.....	For 2 living rooms, per month.....	8.00
Union.....	Creston.....	For 3 living rooms, per month.....	10.00
Union.....	Creston.....	For 4 living rooms, per month.....	16.50
Union.....	Creston.....	For 3 roomed house, per month.....	7.50
Union.....	Creston.....	For 4 roomed house, per month.....	8.50
Union.....	Creston.....	For 6 roomed house, per month.....	13.50
Union.....	Creston.....	For 7 roomed house, per month.....	17.50
Wapello.....	Ottumwa.....	For 2 living rooms, per month.....	6.00
Wapello.....	Ottumwa.....	For 3 living rooms, per month.....	7.50
Wapello.....	Ottumwa.....	For 4 living rooms, per month.....	10.00
Wapello.....	Ottumwa.....	For 3 roomed house, per month.....	7.00
Wapello.....	Ottumwa.....	For 4 roomed house, per month.....	10.00
Wapello.....	Ottumwa.....	For 6 roomed house, per month.....	12.00
Wapello.....	Ottumwa.....	For 7 roomed house, per month.....	17.50
Woodbury.....	Sioux City.....	For 2 living rooms, per month.....	4.00
Woodbury.....	Sioux City.....	For 3 living rooms, per month.....	6.00
Woodbury.....	Sioux City.....	For 4 living rooms, per month.....	8.00
Woodbury.....	Sioux City.....	For 3 roomed house, per month.....	5.00
Woodbury.....	Sioux City.....	For 4 roomed house, per month.....	8.00
Woodbury.....	Sioux City.....	For 6 roomed house, per month.....	12.00
Woodbury.....	Sioux City.....	For 7 roomed house, per month.....	15.00

## RECAPITULATION.

General average, cost per month for 2 living rooms.....	\$ 5.75
General average, cost per month for 3 living rooms.....	7.83½
General average, cost per month for 4 living rooms.....	10.23½
General average, cost per month for 3 roomed house.....	7.45
General average, cost per month for 4 roomed house.....	9.11
General average, cost per month for 6 roomed house.....	13.55
General average, cost per month for 7 roomed house.....	17.58

As has been stated, the above list includes the largest cities of the State. In Oskaloosa, Mahaska county, the "Steam Power Co." have ten houses which they rent to their employes or to others, if their

employes do not desire them. These houses have four rooms each on lots 60 x 120 feet, well fenced, with good outhouses, walks and wells, and rent for \$8.50 per month.

Table VIII shows the average retail price of fuel. The basis is made at Des Moines, which gives a fair average of the State.

TABLE VIII.

## FUEL—PRICES.

COAL.	PRICE PER TON.
Hard.....	\$ 9.50
Soft lump.....	3.00
Soft nut.....	2.75
Soft pea.....	1.50
Soft slack.....	1.75
Coke (crushed).....	7.50
Coke (uncrushed).....	7.00

  

WOOD (CORD).	PRICE PER CORD.
Hickory, shell, dry.....	\$ 7.00
Hard maple, dry.....	6.50
Oak, dry.....	5.50
Mixed hard, dry.....	5.25
Hickory, green.....	6.25
Hard maple, green.....	6.25
Oak, green.....	5.00
Mixed hard, green.....	3.50
Soft wood, green.....	3.00
Soft wood, dry.....	4.50



## PART XX.

## TABLES OF WAGES, COST OF LIVING, ETC.

It may be said by some who are either opposed to the Bureau—indeed it has already been said, that the wages compiled in the following tables are in many cases too high for an average. If this is true, it is the fault of the wage-workers alone, that is, of those who may be classed as dissatisfied and restless ones, who have refused to express their views to the Bureau. If the statements made in these tables are those of the more industrious and frugal, so much more credit is due them for having made them; and after all, it is the voice of the intelligent and better class of workmen that we want to hear. In every instance they are given *exactly as returned to this office*. If, coming as they do from this class, and the aggregate makes a showing of good wages, it is none the less true, and if the object of a dissatisfied few was to show through this Bureau a paucity of returns of good wages, that object has been defeated by the manly action of other workingmen. All points shown are interesting, but two features are especially so, namely, the number having saved money, and the number owning homes. The latter is remarkable, and shows Iowa to be largely a State of homes, as Philadelphia, Penn., is known as the “city of homes.” In a number of instances in the column of “No. of days lost” will be found a large loss to the workingmen. This is largely true of the coal miners, but to an extent it is so among all vocations. This is due chiefly to the law of supply and demand, which thus ruthlessly applied becomes tyrannical. Humanity would seem to urge that labor be excepted from this cruel law: “the recognition by employers of a minimum of wages for labor, varying as the cost of food, rental, etc., may vary in different communities; and a conscientious endeavor on the part of

employers of labor to give permanence and promise to faithful, efficient service.” Employers will find their own interest best served when they recognize the fact that well-paid labor is the very best guarantee against individual reverses.

It is true that wages in the United States have advanced during the last twenty-five years, but it is equally true that the wants to be satisfied have also increased. As the country advances in its productiveness, man advances in his needs and tastes. Hence, it is with force said that the real question is “not whether workers receive more than before, but whether they produce more, and get a larger proportion of what is produced than before. In this country, where more intelligent, and therefore more efficient labor than is found elsewhere, secures comparatively high wages, workers of the lower grades of intelligence or skill are denied their share of the benefits of a higher civilization, if they have to compete, not only with the pauper labor of Europe, but with imported contract labor.”

Added to the following tables of our own State, are those taken from the Report of the Secretary of State, the late Hon. Mr. Frelinghuysen, giving the wages of foreign labor, to which, for comparison, has been added those of Iowa in the same vocations.

In December, 1884, Bradstreet's reported the extent to which industrial workers had been thrown out of employment in the United States during two and one half years last past. The investigation was one unique in journalism, and was met by fairly satisfactory results, the showing being that about 350,000 fewer operatives were then employed than in 1882, or about 14 per cent. In March it undertook to get the necessary data to determine the extent to which industrial workers' wages had been reduced during the same period.\*

The inquiry embraced the leading manufacturing industries in the United States, those in which the value of the goods annually produced is equal to or in excess of \$30,000,000.

In order to furnish a fair and sufficiently comprehensive exhibit of the rates of wages paid and received weekly, inquiries were extended, in each case, to the leading establishments in each industry at seven cities or towns. The cities were selected on the basis of the amount of capital invested and value of products in each line, and were given in order under appropriate classifications by industries.

It is impossible here to give the tabulated statements published by

\*These tables may be found in Bradstreet's for the months indicated above.



them at that time, but in giving them they make the following interesting statements:

In the lines of industry covered there were, in 1880, 194,500 establishments in the United States out of a total of all manufacturing concerns amounting to 253,800, nearly 77 per cent of the whole. The number of hands employed was 2,005,000 out of 2,732,505, or 73 per cent. The total wages paid by them annually amounted to \$688,361,961 out of a grand total of \$947,953,795, or 72 per cent. The annual value of materials used was \$2,654,702,809 out of an aggregate of \$3,396,823,549, or 77 per cent, and the annual total value of products was \$4,101,889,676 out of a grand aggregate in all industrial lines amounting to \$5,369,579,191, or 76 per cent. The industrial wages investigated represent, therefore, those at seven cities in order of prominence, and may be regarded as fairly typical of the rates paid to three quarters of the industrial workers of the country. The investigation has been conducted at 60 cities, from which over 250 separate reports have been received, involving at least 1,500 special inquiries by correspondents of Bradstreet's. This does not include instances where information was refused, or where it was furnished but appeared to be faulty or likely to mislead.

There are three primary facts to be taken into account in studying the classified tables of wages presented below:

1. With the restricted call for products, and in the effort to maintain wages—under pressure from workers to have them maintained—marked reductions in the number of employes have been made since 1882, as pointed out in Bradstreet's, December 20, 1884. As will be recalled, it was then shown: that the enforced reduction in the number of employes, those thrown out by shutting down of factories and mills and by strikes and lock-outs (since 1882), amounted (as reported) to 316,000 in 21 States, where 90 per cent of the total of industrial workers were employed; that the grand total was probably nearer 350,000 than 316,000, or say 14 per cent of the total engaged in 1882; that at least 80,000 fewer iron and steel, machinery and foundry workers were employed—or 23 per cent of the total dispensed with; that 35,000 fewer clothing operatives (east of Ohio), or 10 per cent; 20,000 fewer cotton goods operatives, about 6 per cent; 24,000 fewer woolen fabric operatives, or 7 per cent; about 13,000 fewer tobacco operatives, or less than 4 per cent, and about 4,700 glass workers, or say 1.3 per cent of the 350,000 displaced—had been thrown out. This has been one element in helping to maintain the rate of wages of those remaining at work. The total displaced, as enumerated, number nearly 177,000, or about 51 per cent of those whose services had been done away with.

2. Work has been restricted at various establishments, hours having been shortened or work furnished fewer days in the week.

3. Employes have been given piece work in place of a stated sum per day, week or month, the quantities furnished being limited in many cases.

In addition to these, strong trades unions among iron and steel, glass-workers, building trades, boots and shoes, tobacco and textile operatives,

and in other lines, have brought a pressure to bear to prevent reductions of wages, frequently to gain an advance.

The reductions in rates of wages in most all instances are less than the gross reductions in amounts received within two and one-half years. The percentages of rate reductions calculated indicated, therefore, the apparent cut; in some cases (generally specified) it is actual, but the losses due to restricted time or to a limited quantity of piece work are not always a determinate factor.

Several features of the exhibit are nevertheless more striking than any late developments regarding our manufacturing industries.

Six highly protected industries, iron and steel (also foundries and machine shops, etc.), clothing, cotton, woolen, tobacco and glass manufactures, which employed 34 per cent of all industrial workers (as reported in 1880), have thrown out one-half of the total number of workers since 1882, 177,700 in number, as reported by Bradstreet's in December, 1884.

All of these lines have run nearly, if not quite, as much on short time as any others named.

They, with other textile establishments, have practically had a monopoly of the larger strikes of the past year or two, with the exceptions of those in the coal regions, and they have suffered, on the average, a greater reduction in rates of wages paid.

Iron and steel workers and coal miners have suffered by far the greatest reduction in wages from all causes, and are followed by operatives in textiles. Glassmakers thus far have suffered less proportionately than the above, and then only in certain departments of labor. Excepting tobacco and cigars from food products and the latter have suffered least of all. Wages rates in the building trades and woodworking industries have been only moderately depressed. Workers in leather have not found their wages cut severely, and paper mill employes and printers have escaped with but a moderate reduction.

The following tables are the result of a compilation from returns made to this office. As suggested, many more than these have been received, but discarded from their apparent untruthfulness or gross carelessness:



TABLE OF WAGES, COST

OCCUPATION.	Number of returns.	Average age.	Native born.	Foreign born.	Average number of hours worked per day.
Agents, express.	2	43	2		12
Agents, station.	2	29	7		12.18
Bakers.	3	34	1	2	12
Barbers.	4	33	4		11
Blacksmiths.	108	39	77	29	9.57
Boiler-makers.	6	36	4	3	10
Book-keepers.	7	42	4		9
Box-maker.	1				14
Bricklayers.	72	42	48	17	10
Brick-makers.	4	35			12
Bridge-builder.	1	37	1		10
Broom-maker.	1	73			10
Butcher.	1				10
Butter-makers.	4	28	3		10
Cabinet-makers.	6	40	3	3	10
Carpenters.	201	43	118	21	10.14
Carriage trimmer.	1				10
Cigar-makers.	14	32	5	3	9.17
Collector.	1	41	1		15
Commercial travelers.	2	30	1		9
Cook.	1				1.66
Coopers.	3	47	2		1.70
Draymen.	12	40	6		2.38
Engineers.	19	39	15	3	2.62
File-maker.	1	37	1		3.75
Gardener.	1				1.33
Harness-makers.	48	38	37	11	1.62
Iron workers.	5	39	3		3.28
Janitor.	1	40	1		1.25
Jewelers.	6	30	6		3.28
Laborers, day.	100	40	47	33	1.44
Laborers, railroad.	4	36		2	1.33
Ladder-maker.	1	42		1	
Local editor.	1	51	1		
Locksmith.	1	34	1		
Machinists.	34	36	26	5	2.89
Marble cutters.	2	32	2		2.50
Millers.	3	36	3	1	2.67
Miners, coal.	209	37	84	117	1.53
Painters.	74	38	45	7	2.42
Paper hanger.	1	36	1		2.50
Peddler.	1				2.00
Plasterers.	53	41	41	7	3.08
Plumbers.	3	41	1	2	2.67
Potters (stoneware).	10	45	2		1.75
Printers.	16	26	16		2.19
Saw repairers.	3	51	1	1	2.18
Section foremen.	10	36	1		1.48
Shoe-makers.	33	47	17	11	1.81
Stair-builder.	1	44	1		4.00
Stone-cutter.	1				3.00
Tailors.	2	45	1	1	2.00
Teamster.	1	45			3.00
Telegraph operators.	1	27	1		1.85
Tinners.	3	34	15		2.26
Wagon-makers.	49	41	28	11	2.21
Waiters.	10	30	10		1.17
Weighman (coal).	1	44		1	2.59
Well-digger.	1	40	1		4.00
Whitewasher.	1				1.50
Total number of returns.	1,183		696	294	

a In getting the average age, that nearest birthday is given.

OF LIVING, ETC.

Average daily wages.	WAGES.			TIME LOST.			Number assisted by their families.	Average earnings of families.	Average cost of living for the year.
	Average weekly wages.	Average monthly wages.	Average annual earnings of individuals.	Average days lost during year.	From sickness.	From inability to obtain work.			
\$ 1.72	\$ 10.35	\$ 47.50	\$ 400.00					\$	500.00
1.50	9.50	35.00	526.85	15			1	280.00	353.34
2.08	17.50	45.00	533.33	14			1		333.33
2.12	12.75	58.00	500.00					40.00	300.00
2.57	15.37	56.88	683.44	35			15	50.00	410.38
2.30	14.16	52.00	615.00	10					411.00
2.25	19.50	78.33	1,055.00	10			1	75.00	616.66
1.25	9.50	25.00	205.00						300.00
3.42	21.04	80.43	640.25	87 1/2	1 1/4		6	91.67	423.17
2.63	15.75	57.00	565.00						267.00
2.50	15.00	65.00	425.00	130					418.00
1.23									200.00
2.00	12.00	48.00	600.00						400.00
1.50	13.75	50.00	495.00	4					
2.00	12.00	48.00	612.50	10	8		1	100.00	412.00
2.85	14.19	57.83	559.32	53 3-7	18	35	54	143.01	415.36
2.50	15.00	55.00	750.00						361.00
1.95	11.70	43.00	421.10	27 1/2	20 47	6	1	600.00	426.78
1.00	6.00	22.00	300.00				1	300.00	360.00
2.50	15.00	65.00	608.00	8			1	100.00	325.00
1.66	10.00	40.00	350.00	60	27	20			
1.70	10.30	37.50	331.00	95	12	85			
2.38	14.25	43.35	432.86	17 2-5	5	12	2	94.34	328.43
2.62	15.67	63.34	733.18	140	98 1/2	15			481.89
3.75	22.50		850.00						450.00
1.33	8.10	35.00	400.00	13					465.00
1.62	10.62	41.77	488.08	20 1/2	15	19 7-9	7	185.70	344.36
3.28	19.68	72.00	967.00	30					557.00
1.25	6.25	26.00	300.00	30			1	250.00	430.00
3.28	19.68	120.00	880.00	19					473.40
1.44	8.77	34.20	380.98	28 4-5	12 29-30	21 12-57	43	140.20	325.38
1.33	9.55	39.00	441.00	39	16				378.44
1.67	10.00	43.00	525.00	7					300.00
3.00	18.00	66.00	725.00	30					490.00
2.89	16.94	69.84	727.32	23 1/2	16 1/2	20	3	85.00	515.93
2.50	15.00	55.00	600.00	20					480.00
2.67	16.00	68.67	838.67	4 1/2				Very little.	728.67
1.53	9.50	35.58	311.54	94 25-204	16 1/2	50 112-145	47	116.43	292.42
2.42	14.33	56.52	488.94	110 1/2	20 3-5	75 1/2	17	156.35	270.91
2.50	15.00		600.00						400.00
2.00	12.00	45.00	125.00	150	40	98	1	180.00	
3.08	17.35	73.63	717.75	80 8-13	11 13-48	56 1/2	7	72.28	404.32
2.67	16.00	70.00	1,100.00						590.00
1.75	10.50	43.00	500.00	15					400.00
2.19	13.59	53.52	585.47	47 9-13	24	50		390.00	260.00
2.18	14.05	72.00	700.00	11					635.33
1.48	8.88	39.13	473.85	49 9-13	11		1	200.00	421.80
1.81	10.53	41.80	479.60	20 17-22	12 3-7	10 1/2	12	325.00	386.14
4.00	24.00	90.00	1,100.00						500.00
2.00	12.00	45.00	500.00	120					300.00
3.00	18.00		610.00	80					
1.85	11.10	40.70	592.00	3 1/2					293.00
2.26	10.40	53.65	591.01	50 6-15	7 1/2	65 1/2			425.24
2.21	12.81	47.30	559.21	57 33-49	15 9-46	5 10-33	4	119.62	403.72
1.17	6.75	26.25	312.50				2	100.00	162.50
2.59	15.54	70.00	840.00				1	400.00	350.00
4.00	24.00	96.00	350.00		3		1	75.00	350.00
1.50	10.00	30.00	300.00	100		100	1	40.00	350.00

C Day board is given in all cases, and in some lodging also. The above are wages in money.



## TABLE OF WAGES, COST OF

## ADAIR

OCCUPATIONS	Number of re- turns.	Age (aver- age.)	Nativity.	Average number of hours worked per day.	Maxi- mum daily wages.	Mini- mum daily wages.	Aver- age daily wages.	Average annual earnings of indi- viduals.
Blacksmiths .....	5	36	4 N, 1 F	10	\$ 3.50	\$ 1.50	\$ 2.38	\$ 771.50
Bricklayers .....	1	44	N	10	3.50	3.50	3.50	750.00
Carpenters .....	1	35	N	10	2.50	2.50	2.50	500.00
Shoemakers .....	1	42	N	10	1.50	1.50	1.50	400.00
Wagon-maker .....	1	45	N	10	.....	.....	.....	800.00
Total No. returns..	8							

## ADAMS

Blacksmiths .....	1	33	N	10	\$ 2.50	\$ 2.50	\$ 2.50	\$ 600.00
Bricklayers .....	2	41	N	10	3.50	3.50	3.50	600.00
Carpenters .....	3	43	N	10	2.50	2.00	2.25	300.00
Harness-makers. 1..	1	30	N	10	1.75	1.75	1.75	400.00
Miners, coal .....	8	39	4 N, 4 F	10	2.00	1.00	1.45	300.00
Plasterer .....	1	.....	.....	10	3.00	3.00	3.00	210.00
Total No. returns..	16							

## ALLAMAKEE

Blacksmiths .....	3	44	N	10	\$ 2.00	\$ 1.50	\$ 1.75	\$ 520.00
Bricklayers .....	1	41	N	10	3.75	3.75	3.75	700.00
Carpenters .....	3	43	N	10	2.00	1.75	1.87	454.00
Harness-makers .....	1	39	F	10	1.75	1.75	1.75	500.00
Jeweler .....	1	27	N	14	3.00	2.00	2.50	750.00
Painter .....	1	38	N	10	2.00	1.25	1.62	300.00
Shoemakers .....	1	43	N	12	2.00	2.00	2.00	400.00
Total No. returns..	11							

## APPANOOSE

Blacksmiths .....	1	38	N	10	\$.....	\$.....	\$.....	\$ 200.00
Carpenters .....	1	38	N	10	2.50	2.50	2.50	.....
Clerks .....	1	45	N	10	2.00	1.00	1.50	500.00
Harness-makers .....	1	51	N	10	1.25	1.25	1.25	130.00
Jeweler .....	1	38	N	12	3.00	3.00	3.00	975.00
Miners, coal .....	15	32	12 N, 3 F	10	1.75	2.42	1.42	289.97
Wagon-makers .....	1	55	N	10	2.00	2.00	2.00	500.00
Total No. returns..	21							

## LIVING, ETC., BY COUNTIES.

## COUNTY.

Number assisted by their families.	Average earnings of fami- lies.	Average cost of living for the year.	Percent- age of increase in cost of living.	Percent- age of decrease in cost of living.	Num- ber own- ing a home.	Num- ber rent- ing.	Average number in fam- ily.	Num- ber in debt past year.	Number having saved money.
2	\$ 316.00	\$ 600.00	.....	.....	20	5	5	2	3
.....	.....	450.00	.....	.....	.....	1	5	.....	1
.....	.....	150.00	.....	.....	.....	1	4	.....	1
.....	.....	385.00	.....	.....	.....	1	5	1	1
.....	.....	700.00	.....	.....	.....	1	6	1	.....

## COUNTY.

.....	.....	420.00	.....	.....	1	.....	4	.....	1
.....	.....	400.00	.....	.....	2	.....	4	.....	2
.....	.....	270.00	.....	.....	3	.....	5	3	.....
1	75.00	810.00	.....	.....	1	.....	2	.....	1
2	100.00	290.0	.....	.....	3	3	3	4	4
1	.....	150.00	.....	.....	1	.....	3	.....	1

## COUNTY.

.....	.....	321.66	.....	.....	6	2	1	6	2	2
.....	.....	420.00	.....	.....	.....	1	.....	4	.....	1
1	100.00	358.00	.....	.....	5	4	.....	5½	2	3
.....	.....	.....	.....	.....	.....	1	.....	4	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	3	1	1
.....	.....	300.00	.....	.....	.....	.....	1	4	.....	.....
1	50.00	400.00	.....	.....	8	1	.....	8	1	1

## COUNTY.

.....	.....	200.00	.....	.....	.....	1	4	.....	.....	.....
.....	.....	450.00	.....	.....	.....	1	1	5	.....	1
.....	.....	600.00	.....	.....	.....	1	.....	5	.....	1
1	100.00	182.50	.....	.....	6	1	.....	4	.....	1
.....	.....	500.00	.....	.....	.....	1	.....	5	.....	1
1	350.00	299.50	.....	.....	20	4	10	4½	8	10
1	275.00	600.00	.....	.....	10	.....	1	8	.....	.....



## AUDUBON

OCCUPATIONS.	Number of returns.	Age (average).	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmiths.....	1	30	N	10	Runs shop		\$ 2,600.00	
Carpenters.....	3	43	2 N, 1 F	10	4.00	1.00	2.50	425.00
Harness-makers.....	2	28	N	10	2.00	1.00	1.50	450.00
Painters.....	1	39	N	10	2.25	2.25	2.25	450.00
Wagon-makers.....	1	54	N	10	2.00	2.00	2.00	450.00
Total No. returns..	8							

## BENTON

Blacksmiths.....	2	41	N	10	3.00	2.50	2.75	800.00
Bricklayers.....	1	44	N	10	4.00	2.00	3.00	400.00
Harness-makers.....	1	44	N	10	3.25	2.75	3.00	900.00
Laborers, day.....	2	45	F	10	1.40	1.40	1.40	330.00
Machinists.....	1	39	N	10	2.75	2.75	2.75	725.00
Painters.....	1	37	N	10	2.25	2.25	2.25	460.00
Shoe-makers.....	1			12	2.00	1.00	1.50	440.00
Stone masons.....	1			10	2.00	2.00	2.00	400.00
Total No. returns..	10							

## BLACK HAWK

Bricklayers.....	1	44	N	10	3.50	3.50	3.50	800.00
Carpenters.....	1			10	3.00	3.00	3.00	1,300.00
Carriage trimmer.....	1			10	2.50	2.50	2.50	750.00
Harness-makers.....	1	37	N	10	1.75	1.75	1.75	456.00
Laborers, day.....	2	39	N	10	1.50	1.50	1.50	400.00
Millers.....	1			12	3.00	3.00	3.00	936.00
Painters.....	1	39	N	10	2.50	2.50	2.50	550.00
Stone masons.....	1			10	2.50	2.50	2.50	600.00
Wagon-makers.....	2	42	N	10	2.50	2.50	2.50	650.00
Total No. returns..	11							

## BOONE

Blacksmiths.....	3	41	N	10			1.68	440.00
Bricklayers.....	2	45	N	10	4.00	3.00	3.50	575.00
Carpenters.....	2	40	1 F, 1 N	10	2.50	2.00	2.25	425.00
Laborers, day.....	2	67	N	10	1.38	1.38	1.38	300.00
Machinists.....	1	37	N	10	3.00	3.00	3.00	775.00
Miners, coal.....	24	42	4 N, 20 F	10	3.00	.95	1.47	258.65
Painters.....	1				4.00	4.00	4.00	1,000.00
Plasterers.....	1	51	N	10	4.00	4.00	4.00	650.00
Total No. returns..	36							

## BREMER

Blacksmiths.....	1	50	N	10	2.00	2.00	2.00	
Cabinet-makers.....	1	32	F	10	2.00	1.50	1.75	480.00
Harness-makers.....	1	65	F	10				500.00
Laborers, day.....	1	63	F	10	1.00	1.00	1.00	300.00
Machinists.....	2	47	N	10	3.00	3.00	3.00	800.00
Painters.....	1	52	N	10	2.50	2.50	2.50	650.00
Wagon-makers.....	2	35	F	10	2.25	2.25	2.25	550.00
Total No. returns..	9							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
	\$ 462.00				1		4		1
	300.00				3		4½	2	1
	375.00				1	1	2		1
	380.00						4		1
	300.00			10	1		6		1

## COUNTY.

	\$ 200.00	\$ 400.00		2		4		2
		400.00		1		7		
	90.00	400.00		1		4		
		300.00			2	4½		1
		413.00		1		4		1
		460.00		1		5	1	1
	400.00	250.00		1		4		1

## COUNTY.

	\$ 600.00			1		3		1
	600.00			1		3		1
	360.00			1		3		1
	398.00			1		3		1
	395.00			2		4		2
	396.00				1	5	1	
	400.00				1	4		1
	500.00					2		1
	475.00			2		4		2

## COUNTY.

	\$ 375.00			2	1	4	1	2
	200.00	380.00	5½	2		5	1	1
		350.00		2		7	1	2
		275.00		2		5		
	214.00	480.00		1		3		
		514.00		10	14	5	17	10
	200.00	390.00	10		1	2		1
				1		4		1

## COUNTY.

	\$ 300.00			1		7		
	300.00			1		3		
	500.00			1		11		1
	440.00			2		6		2
				1		2		1
	300.00			1		4	1	1



## BUCHANAN

OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Barbers .....	1	.....	.....	8	\$.....	\$.....	\$ 2.50	\$.....
Blacksmiths .....	2	52	N	10	2.00	2.00	2.00	420
Bricklayers .....	2	46	N	10	3.00	2.00	2.50	300
Carpenters .....	1	.....	.....	10	2.50	2.50	2.50	285
Plasterers .....	2	43	N	10	3.00	1.50	2.25	450
Shoemakers .....	1	69	N	.....	.....	.....	.....	600
Total No. returns ..	9	.....	.....	.....	.....	.....	.....	.....

## BUENA VISTA

Carpenters .....	2	45	N	10	4.00	2.50	3.25	975
Laborers, day .....	1	50	N	11	1.40	1.40	1.40	325
Painters .....	2	38	N	10	2.50	2.00	2.25	375
Total No. returns ..	5	.....	.....	.....	.....	.....	.....	.....

## BUTLER

Blacksmiths .....	1	44	F	10	2.00	2.00	2.00	520
Carpenters .....	1	.....	.....	10	3.00	2.25	2.67	1,000
Laborers, day .....	1	.....	.....	14	1.00	1.00	1.00	300
Painters .....	2	48	N	.....	3.00	2.25	2.63	800
Whitewashers .....	1	.....	.....	.....	2.25	2.25	2.25	300
Total No. returns ..	6	.....	.....	.....	.....	.....	.....	.....

## CALHOUN

Blacksmiths .....	1	31	F	10	2.00	2.00	2.00	480
Bricklayers .....	1	29	N	10	3.00	3.00	3.00	250
Carpenters .....	2	32	.....	10	2.50	1.25	1.87	462
Painters .....	1	37	N	10	2.00	2.00	2.00	410
Total No. returns ..	5	.....	.....	.....	.....	.....	.....	.....

## CARROLL

Blacksmiths .....	1	38	N	10	2.50	2.50	2.50	600
Carpenters .....	1	.....	.....	.....	2.00	2.00	2.00	.....
Engineers, stationary .....	1	.....	.....	10	1.50	1.50	1.50	480
Painters .....	1	.....	.....	10	2.50	2.50	2.50	250
Plasterers .....	1	41	.....	10	2.75	2.75	2.75	525
Section foremen .....	1	42	F	.....	1.75	1.75	1.75	540
Stone-cutters .....	1	.....	.....	10	3.00	3.00	3.00	500
Total No. returns ..	7	.....	.....	.....	.....	.....	.....	.....

## COUNTY.

Number assisted by their families.	Average earnings of families.	Cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
.....	.....	.....	.....	.....	1	.....	4	1	1
.....	.....	400	.....	.....	2	.....	9	.....	2
.....	.....	275	.....	.....	2	.....	3½	.....	.....
1	44	450	.....	.....	1	.....	4	.....	.....
.....	.....	275	.....	.....	2	.....	4½	.....	1
.....	.....	.....	.....	.....	1	.....	4	.....	1

## COUNTY.

.....	.....	650	.....	5	2	.....	5½	1	2
.....	.....	250	.....	.....	2	.....	2½	.....	2
.....	.....	200	.....	.....	2	.....	5	1	.....

## COUNTY.

.....	.....	400	.....	.....	1	.....	4	1	.....
.....	400	600	.....	.....	1	.....	7	1	.....
.....	.....	100	.....	.....	.....	.....	3	1	.....
.....	.....	625	.....	.....	1	1	1½	1	.....
1	40	300	.....	.....	.....	1	6	.....	.....

## COUNTY.

.....	.....	400	.....	5	1	.....	4	1	1
1	40	110	.....	.....	1	.....	4	1	1
1	40	350	.....	.....	2	.....	8	1	1
.....	.....	400	.....	.....	1	.....	5	.....	.....

## COUNTY.

.....	.....	410	.....	.....	1	.....	4	.....	1
.....	.....	.....	.....	.....	1	.....	5	.....	.....
1	75	Rent ¾	.....	.....	1	.....	5	.....	1
.....	.....	200	.....	.....	1	.....	.....	.....	.....
.....	.....	400	.....	.....	1	.....	5	.....	1
.....	.....	540	.....	.....	1	.....	6	.....	.....
.....	.....	.....	.....	.....	1	.....	2	.....	.....



OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Box-maker.....	1	.....	.....	14	\$ 1.25	\$ 1.25	\$ 1.25	\$ 265
Bricklayers.....	1	.....	.....	10	2.00	2.00	2.00	300
Carpenters.....	3	37	.....	10	3.00	2.25	2.83	560
Cigarmakers.....	3	.....	.....	10	2.50	.58	1.69	337
Engineers, stationary	2	33	N	11	2.00	1.25	1.66	475
Harness-makers.....	1	.....	.....	10	1.66	1.66	1.66	351
Laborers, day.....	15	37	6 N, 5 F	10½	1.50	1.00	1.30	232
Machinists.....	1	.....	.....	10	2.00	2.00	2.00	550
Painters.....	1	.....	.....	10	2.50	2.50	2.50	250
Section foreman.....	1	.....	.....	10	1.10	1.10	1.10	190
Teamster.....	1	45	N	.....	3.00	3.00	3.00	.....
Tinners.....	4	.....	.....	10	2.50	1.50	2.12	654
Total No. returns..	34	.....	.....	.....	.....	.....	.....	.....

## CEDAR

Blacksmiths.....	1	50	N	10	\$.....	\$.....	\$ 3.40	\$ 800
Carpenters.....	3	43	N	10	2.50	2.50	2.50	780
Jeweler.....	1	20	N	13	.....	.....	.....	400
Painters.....	1	40	N	10	2.00	2.00	2.00	450
Stone-masons.....	1	44	N	10	3.00	2.50	2.75	200
Total No. returns..	7	.....	.....	.....	.....	.....	.....	.....

## CERRO GORDO

Blacksmiths.....	2	44	N	10	\$ 3.00	\$ 3.00	\$ 3.00	\$ 450
Carpenters.....	1	.....	.....	12	3.00	3.00	3.00	800
Engineers, stationary	1	23	N	.....	2.66	2.66	2.66	960
Harness-makers.....	1	50	.....	8	2.50	2.50	2.50	750
Shoemakers.....	1	38	N	10	1.75	1.75	1.75	450
Total No. returns..	6	.....	.....	.....	.....	.....	.....	.....

## CHEROKEE

Blacksmiths.....	2	41	1 M, 1 F	10½	\$ 2.00	\$ 2.00	\$ 2.75	\$ 675
Carpenters.....	2	36	N	10	2.50	1.25	1.87	380
Laborers, day.....	1	44	N	10	1.50	1.50	1.50	400
Painters.....	1	34	N	10	2.00	2.00	2.00	500
Shoemakers.....	1	40	N	11	1.75	1.75	1.75	468
Total No. returns..	7	.....	.....	.....	.....	.....	.....	.....

## CHICKASAW

Blacksmiths.....	1	26	N	10	\$ 2.00	\$ 2.00	\$ 2.00	.....
Bricklayers.....	1	56	N	10	2.00	2.00	2.00	.....
Coopers.....	1	42	N	10	1.71	1.71	1.71	311
Dairymen.....	2	25	1 N, 1 F	10	2.00	.66	1.33	400
Laborers, day.....	1	30	N	10	1.25	1.25	1.25	390
Millers.....	1	.....	.....	12	3.00	3.00	3.00	1,000
Tinners.....	1	24	N	10	1.50	1.50	1.50	420
Total No. returns..	8	.....	.....	.....	.....	.....	.....	.....

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
.....	.....	\$ 300.00	.....	.....	.....	1	2	1	.....
.....	100.00	350.00	.....	.....	.....	.....	.....	.....	.....
1	100.00	366.66	.....	.....	3	.....	3½	.....	.....
.....	.....	337.00	.....	.....	.....	3	3½	.....	1
.....	.....	316.00	.....	.....	1	.....	2½	.....	.....
.....	.....	195.00	.....	.....	1	.....	7	.....	1
10	80.00	306.50	.....	.....	6	.....	5½	7	1
.....	.....	.....	.....	.....	1	.....	3	.....	1
.....	50.00	350.00	.....	.....	.....	.....	.....	.....	.....
.....	.....	270.00	.....	.....	1	.....	6	.....	.....
.....	.....	.....	.....	.....	1	.....	7	.....	.....
.....	.....	302.00	.....	.....	1	3	2½	2	2

## COUNTY.

.....	.....	500.00	.....	.....	1	.....	5	.....	1
.....	.....	500.00	.....	10	3	.....	3½	.....	2
.....	.....	225.00	.....	.....	.....	1	1	.....	.....
.....	.....	367.00	.....	.....	1	.....	3	.....	1
.....	.....	200.00	.....	.....	1	.....	3	.....	1

## COUNTY.

1	50.00	\$ 415.00	.....	.....	2	.....	5	.....	2
1	.....	1,080.00	.....	.....	1	.....	5	1	1
.....	.....	.....	.....	.....	1	.....	3	1	1
1	300.00	300.00	.....	.....	1	.....	4	.....	1
.....	.....	395.00	.....	.....	1	.....	4	.....	1

## COUNTY.

.....	.....	440.00	.....	.....	1	1	4	1	2
1	20.00	350.00	.....	.....	2	.....	4	1	1
1	40.00	300.00	.....	.....	1	.....	3	.....	1
1	50.00	340.00	.....	.....	1	.....	3	.....	1
.....	.....	.....	.....	.....	1	.....	2	.....	1

## COUNTY.

.....	.....	175.00	.....	.....	.....	1	1	.....	.....
1	110.00	364.00	.....	.....	1	.....	6	1	.....
.....	.....	.....	.....	.....	.....	2	2	1	.....
.....	.....	125.00	.....	.....	1	.....	6	.....	1
.....	.....	800.00	.....	.....	1	.....	3	.....	1
.....	.....	.....	.....	.....	.....	1	2	.....	1



## CLARKE

OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmiths.....	1	26	N	10	1.50	1.50	1.50	150.00
Butter-makers.....	1	33	N	10	2.50	2.50	2.50	250.00
Carpenters.....	2	36	N	10	2.25	2.00	2.12	326.00
Engineers, stationary	1	40	N	10	1.50	1.50	1.50	700.00
Harness-makers.....	1	49	N	10	1.95	1.95	1.95	600.00
Laborers, day.....	2	42	N	10	1.50	1.50	1.50	375.00
Laborers, railroad.....	1	45	N	10	1.10	1.10	1.10	303.40
Stone-masons.....	1	45	N	10	2.50	1.00	1.75	500.00
Wagon-makers.....	2	36	N	10	2.00	1.50	1.87	500.00
Total No. returns..	12							

## CLAY

Blacksmiths.....	1	38	N	10	2.75	1.80	2.27	668.00
Carpenters.....	6	38	N	10	3.00	2.00	2.50	500.00
Machinists.....	1	37	N	14	10.00		5.00	
Painters.....	1	43	N	10	2.50	2.50	2.50	
Total No. returns..	8							

## CLAYTON

Blacksmiths.....	1	25	N	10	1.67	1.67	1.67	400.00
Bricklayers.....	1	29	N	10	3.00	3.00	3.00	468.00
Laborers, day.....	2	44	F	10	1.50	1.50	1.50	390.00
Painters.....	1	42	N	9	2.50	2.50	2.50	600.00
Plasterers.....	1	42	F	10	3.00	3.00	3.00	600.00
Shoe-makers.....	1	54	F	10	2.00	1.50	1.75	
Tinner.....	1	24	N	10	2.00	2.00	2.00	
Total No. returns..	8							

## CLINTON

Barber.....	1	29		8			1.33	
Blacksmiths.....	2	40	1 N 1 F	10	3.25	3.25	3.25	900.00
Bricklayers.....	2	40	1 N 1 F	10	4.00	2.00	3.40	450.00
Carpenters.....	2	59	1 N 1 F	10	2.00	2.00	2.00	375.00
Engineers, stationary	1	38	N	12	3.00	3.00	3.00	1000.00
Iron molder.....	2	37	N	7	3.85	1.80	2.82	850.00
Laborers, day.....	7	53	6 N 1 F	10	1.50	1.25	1.38	412.00
Machinists.....	1			10	2.85	2.85	2.85	850.00
Plasterers.....	1	61	1 N 1 F	10	3.50	2.00	2.75	500.00
Saw repairers.....	2	47	1 F 1 N		3.00	3.00	3.00	850.00
Tinners.....	2	37	N	10	2.25	2.00	2.13	600.00
Total No. returns..	24							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
1	\$ 300.00	\$ 325.00				1	5	1	
		290.00			2	1	5		1
		350.00				1	2		1
					1		6		
		237.50			1	1	3	1	1
		240.00				1	3		
					1		6	1	
		390.00			1		6	1	1

## COUNTY.

		410.00			1		3		1
		375.00		2%	5		3 2-5	1	4
					1		4		1
		300.00			1		1		1

## COUNTY.

		300.00					1		1
		310.00				1	5		1
1		85.00			1	1	5	1	2
1		100.00			1		8	1	
					1		5		1
					1		7	1	
						1	1		

## COUNTY.

								1	
		475.00			2		3%		2
		350.00			2		3		2
		300.00			2		2%		1
		300.00			1		3		1
						2	3%		
2		50.00	377.00		5	2	4	1	6
1		200.00			1		5	1	1
1		230.00	500.00	5	2		2	1	1
		750.00			2		5		1
		405.00			2		5		1



## CRAWFORD

OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmiths.....	2	41	1 N, 1 F	10	\$ 3.00	\$ 2.50	\$ 2.75	\$ 670
Carpenters.....	2	36	F	10	2.50	1.25	1.87	360
Laborers, day.....	1	44	N	10	1.50	1.50	1.50	400
Painters.....	1	34	N	10	2.00	2.00	2.00	500
Shoemakers.....	1	40	N	11	1.75	1.75	1.75	468
Total No. returns ..	7							

## DALLAS

Blacksmiths.....	1	42	N	10	4.00	4.00	4.00	1,400
Machinists.....	1	45	N	10	1.66	1.66	1.66	500
Painters.....	2	54	N	10	2.50	2.50	2.50	500
Total No. returns ..	4							

## DAVIS

Carpenters.....	2	53	N	11	2.00	2.00	2.00	490
Harness-makers.....	1	41	F	11	3.50	3.50	3.50	900
Painters.....	1	32	N	10	2.50	2.50	2.50	675
Wagon-makers.....	1	32		10	2.00	2.00	2.00	600
Total No. returns ..	5							

## DECATUR

Blacksmiths.....	4	45	N	10	3.50	1.25	2.12	450
Carpenters.....	2	38	N	12	3.00	1.75	1.87	500
Shoemakers.....	1	54	N	8	4.00	1.50	2.75	600
Stone-masons.....	1			10	3.00	3.00	3.00	
Wagon-makers.....	2	37	N		1.75	1.50	1.62	425
Total No. returns ..	10							

## DELAWARE

Blacksmiths.....	1	42	N	10	3.00	3.00	3.00	700
Bricklayers.....	1	39	N	10	3.00	3.00	3.00	500
Broom-makers.....	1	73	N	10	1.50	1.00	1.25	300
Carpenters.....	1	60	N		2.00	2.00	2.00	
Laborers, day.....	2	41	1 F, 1 N	10	1.50	1.50	1.50	375
Shoemakers.....	1			12	2.00	2.00	2.00	450
Total No. returns ..	7							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
1	20.00	440.00			1	1	4	1	2
1	30.00	350.00			2		4	1	1
1	40.00	300.00			1		3		1
1	50.00	340.00			1		3		1
					1		2		1

## COUNTY.

	300.00	5	1	5	1
	800.00			6	1
	385.00		2	4	1

## COUNTY.

1	20.00	120.00	10	1	1	14	2
		500.00		1		4	1
		350.00		1		5	1
		416.00			1	3	1

## COUNTY.

	300.00		3	1	3	1	3
	500.00		2		4		1
	250.00	12%	1		3		1
	300.00			1	4		
1	40.00	375.00	6	2	4	1	1

## COUNTY.

	500.00			1	6	1	1
	400.00				4		1
	300.00			1	4		
	302.00			1	4		1
1	250.00	400.00		1	10	1	
	200.00			1	2		1



## DES MOINES

OCCUPATIONS.	Number of returns.	Age. (aver. age.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmiths.....	1	32	N	10	\$ 3.00	\$ 3.00	\$ 3.00	925
Bricklayers.....	2	41	1 N 1 F	10	4.25	3.75	4.00	800
Engineers, stationary	2	37	N	10½	2.75	2.75	2.75	725
Laborers, day.....	3	41	2 F 1 N	10	1.50	1.50	1.50	396
Machinists.....	2	37	1 N 1 F	10	3.00	3.00	3.00	800
Marble-cutters.....	1	40	N	10	2.50	2.50	2.50	600
Painters.....	1	29	N	10	3.00	3.00	3.00	800
Plasterers.....	2	40	1 N 1 F	10	3.00	3.00	3.00	700
Printers.....	1	39	N	10	2.50	2.50	2.50	750
Tinners.....	1	39	N	10	2.25	2.25	2.25	550
Wagon-makers.....	2	40	1 N 1 F	10	2.50	2.25	2.38	625
Total No. returns..	18							

## DICKINSON

Blacksmiths.....	1	38	F	10	\$ 2.25	\$ 2.25	\$ 2.25	675
Bricklayers.....	1	27	N	10	4.00	3.50	3.75	.....
Carpenters.....	3	41	2 N 1 F	10	2.50	2.50	2.50	538
Laborers, day.....	1	43	N	10	2.50	1.00	1.75	525
Painters.....	2				2.65	2.65	2.65	600
Total No. returns..	8							

## DUBUQUE

Blacksmiths.....	1			10	\$ 3.00	\$ 3.00	\$ 3.00	792
Boiler-makers.....	2	41	1 N 1 F	10	2.50	2.00	2.25	600
Bricklayers.....	2	41	F	10	4.00	3.50	3.75	800
Carpenters.....	1			10				.....
Cigar-makers.....	2			10	1.50	1.40	1.45	417
Engineers, stationary	2	37	1 N 1 F	10	3.00	3.00	3.00	800
Laborers, day.....	5	41	3 F 2 N	10	1.50	1.50	1.50	380
Machinists.....	2	38	1 F 1 N	10	3.00	3.00	3.00	850
Painters.....	2	39	1 F 1 N	10	2.50	2.30	2.50	500
Plasterers.....	2	41	N	10	3.00	3.00	3.00	625
Stone-masons.....	1	39	N	10	2.75	2.75	2.75	700
Tinners.....	1	37	N	10	2.50	2.50	2.50	650
Wagon-makers.....	1			10	1.50	1.50	1.50	420
Total No. returns..	24							

## EMMET

Blacksmiths.....	1	40	N	10	\$ 2.75	\$ 2.75	\$ 2.75	750
Total No. returns..	1							

1885.]

## COMMISSIONER OF LABOR STATISTICS.

317

## COUNTY.

Number assisted by their families.	Average earnings of families.	Cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money past year.
.....	.....	600.00	.....	.....	1	.....	4	.....	1
.....	.....	515.00	.....	.....	2	.....	5	.....	2
.....	.....	450.00	.....	.....	1	1	4	.....	2
.....	.....	312.00	.....	.....	1	2	5	.....	2
.....	.....	510.00	.....	.....	1	1	4	.....	2
.....	.....	420.00	.....	.....	1	.....	3	.....	1
.....	.....	500.00	.....	.....	2	.....	5	.....	2
.....	.....	400.00	.....	.....	.....	1	1	.....	1
.....	.....	400.00	.....	.....	.....	1	4	.....	1
.....	.....	410.00	.....	.....	1	1	4	.....	1

## COUNTY.

.....	.....	385.00	.....	20	1	.....	4	.....	1
.....	.....	175.00	.....	.....	.....	.....	.....	.....	1
.....	.....	400.00	.....	.....	1	1	2	.....	2
.....	.....	300.00	.....	15	1	.....	4	.....	1
.....	.....	310.00	.....	.....	2	.....	4	.....	2

## COUNTY.

.....	.....	600.00	.....	.....	.....	1	10	.....	.....
.....	.....	400.00	.....	.....	1	1	3	.....	1
.....	.....	525.00	.....	.....	1	1	4	.....	1
.....	.....	.....	.....	.....	10	1	3	.....	1
.....	.....	335.00	.....	.....	.....	.....	4½	.....	2
.....	.....	510.00	.....	.....	2	2	4	.....	2
.....	.....	305.00	.....	.....	3	2	4	.....	2
.....	.....	500.00	.....	.....	.....	.....	4	.....	2
.....	.....	460.00	.....	.....	1	1	4	.....	1
.....	.....	512.00	.....	.....	1	.....	6½	.....	2
.....	.....	400.00	.....	.....	1	.....	5	.....	1
.....	.....	400.00	.....	.....	.....	1	5	.....	1
.....	.....	393.00	.....	.....	.....	1	4	.....	.....

## COUNTY.

.....	.....	475.00	.....	.....	1	.....	5	.....	1
-------	-------	--------	-------	-------	---	-------	---	-------	---



## FAYETTE

OCCUPATIONS.	Number of re- turns.	Age (aver- age.)	Nativity.	Average number of hours worked per day.	Maxi- mum daily wages.	Mini- mum daily wages.	Aver- age daily wages.	Average annual earnings of indi- viduals.
Blacksmiths.....	1	58	N	11	\$ 3.00	\$ 3.00	\$ 3.00	\$ 800.00
Bricklayers.....	1	58	N	10	3.00	3.00	3.00	550.00
Carpenters.....	2	55	N	10	2.25	1.50	1.87	527.00
Painters.....	1	62	N	10	1.50	1.50	1.50	350.00
Wagon-makers.....	1	53	N	10	1.50	1.50	1.50	300.00
Total No. returns..	6							

## FLOYD

Blacksmiths.....	2	46	N	10	\$ 2.00	\$ 2.00	\$ 2.00	\$ 600.00
Bricklayers.....	2	52	N	10	4.00	4.00	4.00	800.00
Carpenters.....	1	54	N	10	2.50	2.50	2.50	400.00
Plasterers.....	1	49	N	10	5.00	3.00	4.00	550.00
Shoemakers.....	1	58	F	10	1.75	1.75	1.75	525.00
Total No. returns..	7							

## FRANKLIN

Bricklayers.....	1	42	N	10	\$ 3.50	\$ 3.50	\$ 3.50	\$ 616.00
Carpenters.....	1	45	N	12	4.00	4.00	4.00	900.00
Laborers, day.....	1	43	N	10	1.40	1.40	1.40	400.00
Painters.....	1	34	N	10	2.50	2.50	2.50	500.00
Plasterers.....	1	41	N	10	3.00	3.00	3.00	594.00
Total No. returns..	5							

## FREMONT

Blacksmiths.....	2	42	N	10	\$ 1.50	\$ 1.50	\$ 1.50	\$ 454.00
Drayman.....	1	.....	.....	10	1.54	1.54	1.54	.....
Laborer, R. R.....	1	39	F	10	1.10	1.10	1.10	275.00
Section foreman.....	1	.....	.....	10	1.20	1.20	1.20	480.00
Shoemaker.....	1	53	N	8½	2.00	1.50	1.75	325.00
Total No. returns..	6							

## GREENE

Carpenters.....	1	.....	.....	10	\$ 2.65	\$ 2.65	\$ 2.65	\$ 816.00
Harness-makers.....	1	31	N	10	1.75	1.75	1.75	425.00
Miners, coal.....	8	35	5 F, 3 N	10	1.90	.95	1.40	309.75
Plasterers.....	1	34	N	10	2.50	2.50	2.50	375.00
Wagon-makers.....	1	43	.....	9	2.00	2.00	2.00	480.00
Total No. returns..	12							

## COUNTY.

Number assisted by their families.	Average earnings of fami- lies.	Average cost of living for the year.	Percent- age of increase in cost of living.	Percent- age of decrease in cost of living.	Num- ber owning a home.	Num- ber rent- ing.	Average number in family.	Num- ber in debt past year.	Number having saved money.
.....	.....	\$ 750.00	.....	.....	1	.....	7	.....	1
.....	.....	500.00	.....	.....	1	.....	6	.....	.....
.....	.....	400.00	.....	10	1	.....	3½	1	1
.....	.....	.....	.....	.....	1	1	3	1	.....
1	50.00	275.00	.....	.....	1	.....	6	.....	1

## COUNTY.

1	300.00	350.00	.....	.....	2	.....	5½	1	2
.....	.....	350.00	.....	.....	2	.....	2	.....	2
.....	.....	400.00	.....	.....	1	.....	4	.....	.....
.....	114.00	300.00	.....	.....	1	.....	5	1	1
.....	.....	250.00	.....	.....	1	.....	2	.....	1

## COUNTY.

.....	.....	350.00	.....	.....	1	.....	4	.....	1
.....	.....	300.00	.....	.....	1	.....	4	.....	.....
.....	.....	275.00	.....	.....	1	.....	3	.....	1
.....	.....	300.00	.....	.....	.....	1	3	.....	1
.....	.....	400.00	.....	.....	1	.....	4	.....	.....

## COUNTY.

1	100.00	300.00	.....	.....	1	.....	1	.....	1
1	94.30	.....	.....	.....	1	.....	5	1	1
.....	.....	480.00	.....	.....	1	.....	6	.....	.....
.....	.....	300.00	.....	.....	1	1	5	1	.....
1	200.00	350.00	.....	5	1	.....	5	.....	.....

## COUNTY.

.....	.....	520.00	.....	.....	1	.....	5	.....	1
.....	.....	375.00	.....	.....	.....	1	3	.....	1
2	300.00	363.50	5	5	4	.....	5½	7	2
.....	.....	.....	.....	.....	.....	3	5	1	.....
.....	.....	400.00	.....	.....	1	1	5	1	.....



## GRUNDY

OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmiths.....	2	36	1 N, 1 F	10	\$ 6.00	\$ 2.50	\$ 4.25	750.00
Carpenters.....	2	41	1 F, 1 N	10	2.50	2.50	2.50	600.00
Harness-makers.....	1	32	F	10	2.00	2.00	2.00	500.00
Total No. returns..	5							

## GUTHRIE

Blacksmiths.....	1	58	N	10	3.00	3.00	3.00	870.00
Carpenters.....	1	38	N	10	2.50	2.50	2.50	400.00
Harness-makers.....	1	50	F	10	2.00	1.50	1.75	496.00
Laborers, day.....	2	34	N	12	.85	.85	.85	250.00
Miners, coal.....	1	34	N	10	1.75	1.55	1.62	268.00
Painters.....	1	44	N	10	2.50	2.50	2.50	445.00
Total No. returns..	8							

## HAMILTON

Blacksmiths.....	2	45	1 F, 1 N	10	2.50	1.50	2.00	540.00
Bricklayers.....	2			10	3.00	2.50	2.75	321.75
Carpenters.....	1	33	N	10	3.00	3.00	3.00	1,150.00
Harness-makers.....	2	41	1 N	12	1.50	1.50	1.50	
Laborers, day.....	3			10½	1.25	.69	.90	214.00
Plasterers.....	1	42	N	10	2.75	2.75	2.75	490.00
Total No. returns..	11							

## HANCOCK

Blacksmiths.....	1	39	N	10	2.75	2.75	2.75	900.00
Bricklayers.....	1	38	N	10	5.00	5.00	5.00	1,400.00
Carpenters.....	1	55	N	10	2.50	2.50	2.50	500.00
Painters.....	1	40	N	10	2.25	2.25	2.25	450.00
Plasterers.....	1	30	N	10	3.00	3.00	3.00	900.00
Printers.....	1	29	N	10	2.25	2.25	2.25	675.00
Total No. returns..	6							

## HARDIN

Bricklayers.....	2	36	1 F, 1 N	10	3.00	2.50	2.75	537.00
Carpenters.....	2	36	1 F, 1 N	10	3.00	2.50	2.75	536.22
Painters.....	1	30	F	10	2.50	2.50	2.50	700.00
Shoemakers.....	1			10	2.00	1.00	1.50	300.00
Total No. returns..	6							

## HARRISON.

Blacksmiths.....	2	40	1 N, 1 F	10	3.00	3.00	3.00	700.00
Carpenters.....	1	43	F	10	3.00	3.00	3.00	
Engineers, locomotive	1	45	F	10	3.50	3.50	3.50	1,092.00
Laborers, day.....	2	40	N	10	1.50	1.50	1.45	360.00
Sinking wells.....	1	40		10	4.00	4.00	4.00	350.00
Total No. returns..	7							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
1	108.00	500.00			2		7½		1
		412.00			2		4		2
		350.00				1	3		1

## COUNTY.

1	100.00	500.00			1		9		1
		300.00			1		4		1
		350.00					4		1
		250.00					5	1	
	100.00	154.00			2		3½		2
1	100.00	400.00			10	1	6		

## COUNTY.

		312.50			1	1	4		1
		216.00			1	1	4	1	2
		650.00				1	4		1
					1		5½	2	
					1		2	1	
					1		3		1
		375.00							

## COUNTY.

		500.00			1		3		1
		300.00			1		6		1
					1		2		1
						1	3		1
		300.00					6		1
		240.00			1		3		
		450.00			1				

## COUNTY.

1		400.00			10	2	6		1
1	12.00	325.00			10	2	4½		2
		500.00			15	1	2		1
1	300.00	300.00				1	4	1	

## COUNTY.

		478.00			1	1	4	1	1
							8	1	
		600.00					6		1
		285.00			1	1	3	1	1
1	75.00	350.00				1	6	1	



## HENRY

OCCUPATIONS.	Number of returns.	Age (average).	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmiths .....	1	47	N	10	\$ 4.00	\$ 4.00	\$ 4.00	900
Bricklayers .....	2	50	1 N	10	4.00	2.75	3.37	1,124
Carpenters .....	2	26	N	10	2.50	2.00	2.25	550
Gardeners .....	1			10	1.35	1.35	1.35	408
Laborers, daily .....	1			10	1.50	1.50	1.50	390
Milkman .....	1	37	N	12	.95	.95	.95	390
Stone masons .....	1	61	N	10	2.00	2.00	2.00	450
Wagon-makers .....	1	47	F	10	1.75	1.75	1.75	350
Total No. returns ..	10							

## HOWARD

Carpenters .....	1	53	N	10	3.00	1.75	2.87	400
Laborers, R. R. ....	1			12	2.16	2.16	2.16	780
Shoe-makers .....	1	47	F	10				
Wagon-makers .....	2	32	F	10	3.50	2.00	2.75	811
Total No. returns ..	5							

## HUMBOLDT

Blacksmiths .....	1	44	F	9				1,100
Jewelers .....	1	35	N	12				
Plasterers .....	1	41	N	10	2.50	2.50	2.50	500
Section foremen .....	1			10	1.75	1.75	1.75	540
Shoemakers .....	1	61	F	10	1.00	1.00	1.00	300
Total No. returns ..	5							

## IDA

Carpenters .....	1	51	N	10	2.50	2.50	2.50	300
Painters .....	1	50	N	10	2.50	2.00	2.00	300
Shoemakers .....	1	50	F	10	2.00	2.00	2.00	500
Total No. returns ..	3							

## IOWA

Blacksmiths .....	1	38	N	10	2.00	2.00	2.00	660
Carpenters .....	1			10	2.50	2.00	2.25	
Harness-makers .....	3	39	N	10	2.00	1.50	1.75	467
Plasterers .....	2	35	N	10	2.75	2.75	2.75	490
Section foremen .....	1	32	F	10	1.50	1.50	1.50	540
Total No. returns ..	8							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
	\$ 400.00	675.00			1	1	6		1
	400.00	400.00			1	1	4		2
	325.00	465.00			1	1	5		1
	225.00	320.00			1	1	8		
	25.00	150.00			1	1	3	1	
					1	1	2		1
					1	1	5		1

## COUNTY.

1	150.00	400.00			1		11	1	1
		300.00				1	1		1
		450.00				1	9		1
		420.00				1	5½		2

## COUNTY.

		600.00		6	1		7		1
		500.00		10	1		2		1
		380.00			1		4		1
		240.00			1		3		1
1	300.00	500.00			1		4		

## COUNTY.

1	150.00	250.00			1		6		
1	150.00	250.00			1		6		1
		300.00			7	1	6		1

## COUNTY.

1	50.00	600.00		5	1		8		1
		500.00			1		8		
		333.33			2	1	3½		3
		300.00			2		4		2
		240.00		10	1		7		1



## JACKSON

OCCUPATION.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages	Minimum daily wages	Average daily wages.	Average annual earnings of individuals.
Laborers, day.....	4	32	1 N 3 F	10	\$ 1.50	\$ 1.50	\$ 1.50	355.00
Local editor.....	1	51	N	10	1.67	1.67	1.67	.....
Printers.....	2	20	N	10	1.75	*.75	1.75	.....
Tinners.....	2	21	N	10	2.00	*.83	2.00	.....
Wagon-maker.....	1	22	F	10	2.25	2.25	2.25	625.00
Total No. returns..	10							

\*Apprentice (not averaged.)

## JASPER

Blacksmiths.....	1	45	N	.....	3.00	3.00	3.00	300.00
Carpenters.....	2	47	N	10	2.00	1.75	1.87	450.00
Miners, coal.....	16	38	8 N 5 F	9½	2.00	1.25	1.69	288.51
Plasterer.....	1	25	N	.....	3.50	3.50	3.50	500.00
Shoemaker.....	1	43	N	10	2.00	2.00	2.00	570.00
Tinner.....	1	40	N	10	2.25	2.25	2.25	700.00
Total No. returns..	22							

## JEFFERSON

Blacksmiths.....	2	41	N	10	3.00	2.50	2.75	750.00
Carpenters.....	2	40	N	10	2.75	2.25	2.50	550.00
Laborer, day.....	1	.....	.....	10	1.75	1.75	1.75	570.00
Machinist.....	1	44	F	10	2.75	2.75	2.75	694.00
Shoemaker.....	1	.....	.....	10	1.00	1.00	1.00	300.00
Total No. returns..	7							

## JOHNSON

Blacksmith.....	1	39	.....	10	.....	.....	2.00	.....
Carpenters.....	2	46	N	10	3.00	1.75	2.37	700.00
Engineer, stationery.	1	37	N	10	2.75	2.75	2.75	700.00
Laborers, day.....	2	44	F	10	1.50	1.50	1.50	395.00
Machinist.....	1	40	N	10	2.75	2.75	2.75	700.00
Plasterer.....	1	35	N	10	2.00	2.00	2.00	225.00
Shoemaker.....	1	58	N	16	1.33	1.33	1.33	416.00
Total No. returns..	9							

## JONES

Agent, R. R.....	1	27	N	15	.....	.....	1.64	650.00
Blacksmith.....	1	39	F	10	2.50	2.50	2.50	500.00
Bricklayer.....	1	47	N	10	3.50	3.00	3.00	390.00
Carpenter.....	1	43	N	10	.....	.....	.....	.....
Laborers, day.....	3	41	N	10 h. 40 m.	2.00	1.25	1.50	480.00
Laborer, R. R.....	1	36	F	10	1.10	1.10	1.00	275.00
Plasterer.....	1	29	N	.....	2.00	2.00	2.00	600.00
Total No. returns..	9							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt last year.	Number having saved money.
1	\$ 245	\$ 320.00	.....	.....	3	1	4	.....	4
.....	.....	300.00	.....	.....	1	.....	2	.....	1
.....	.....	400.00	.....	.....	1	.....	4	.....	1
.....	.....	200.00	.....	.....	1	.....	3	.....	.....

## COUNTY.

.....	150.00	.....	.....	.....	1	.....	1	.....	1
1	200	212.50	.....	.....	2	.....	4	.....	1
.....	.....	269.00	.....	.....	8	5	4½	6	6
.....	.....	600.00	.....	.....	.....	1	2	.....	1
.....	.....	375.00	.....	.....	1	.....	3	.....	1

## COUNTY.

.....	500.00	.....	.....	.....	2	.....	3	.....	2
.....	420.00	.....	.....	.....	2	.....	4	.....	2
.....	150	.....	.....	.....	1	.....	5	.....	1
.....	657.00	.....	.....	.....	1	.....	9	.....	1
.....	.....	.....	.....	.....	1	.....	10	.....	.....

## COUNTY.

.....	450.00	.....	.....	.....	10	1	3	.....	1
.....	480.00	.....	.....	.....	1	1	6½	1	1
.....	285.00	.....	.....	.....	1	.....	4	.....	1
1	65	.....	.....	.....	2	.....	3	.....	1
.....	480.00	.....	.....	.....	1	.....	4	.....	1
1	20	200.00	.....	.....	.....	1	4	.....	1
1	.....	.....	.....	.....	1	.....	4	.....	1

## COUNTY.

.....	500.00	.....	.....	.....	1	.....	6	.....	1
.....	350.00	.....	.....	.....	1	.....	5	.....	1
.....	.....	.....	.....	.....	1	.....	5	.....	1
1	100	215.00	.....	.....	1	1	5	.....	3
.....	.....	.....	.....	.....	1	.....	4	.....	1
.....	250.00	.....	.....	.....	.....	1	6	.....	1



## KEOKUK

OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmith .....	1				\$ 3.00	\$ 3.00	\$ 3.00	\$ 500.00
Butter maker .....	1			11	2.31	2.31	2.31	720.00
Carpenter .....	1			10	2.00	2.00	2.00	
Harness-makers .....	2	36	N	10	1.50	1.50	1.50	200.00
Miners, coal .....	15	36	11 F, 1 N	10	2.50	1.00	1.67	300.00
Painter .....	1	40	N	10	2.50	2.50	2.50	500.00
Wagon-maker .....	1	67	N	10	1.25	1.00	1.12	351.00
Total No. returns..	22							

## KOSSUTH

Bricklayers .....	2	40	1 N, 1 F	10	\$ 10.00	\$ 2.50	\$ 6.25	\$ 720.00
Carpenters .....	2	34	N	10	3.00	3.00	3.00	600.00
Plasterers .....	2	38	N	10	3.00	3.00	2.00	1,165.00
Total No. returns..	6							

## LEE

Olgarmaker .....	1			10	\$ 3.00	\$ .75	\$ 1.87	420.00
Engineer, stationary .....	1	56	F		3.00	3.00	3.00	960.00
Iron-molder .....	1	44	F		3.50	3.00	3.25	975.00
Laborers, day .....	2	41	N	10	1.50	1.50	1.50	400.00
Machinists .....	2	47	N	11	3.45	2.75	3.10	940.00
Painters .....	2	46	1 F, 1 N	10	2.50	2.25	2.37	475.00
Plasterers .....	2	50	1 F, 1 N	10	3.00	1.75	2.31	575.00
Total No. returns..	11							

## LINN

Bricklayers .....	3	41	1 N, 1 F	10	\$ 3.50	\$ 3.00	\$ 3.25	\$ 700.00
Carpenters .....	4	52	N	10	3.33	1.60	2.56	494.00
Laborers, day .....	1	40	F	10	1.40	1.40	1.40	380.00
Machinists .....	2	40	N	10	3.00	3.00	3.00	875.00
Painter .....	1	47	N	10	2.00	2.00	2.00	400.00
Plasterers .....	2	34	N	10	4.00	2.50	3.25	650.00
Stone-mason .....	1			10	3.00	3.00	3.00	465.00
Wagon-makers .....	6	41	N	10	2.00	1.75	1.96	583.67
Teamster (with team) .....	1	46	F	10	3.00	3.00	3.00	720.00
Total No. returns..	21							

## LOUISA

Bricklayers .....	2	52	1 N, 1 F	10	\$ 4.00	\$ 3.00	\$ 3.50	\$ 700.00
Carpenters .....	2	45	N	11½	3.00	1.50	2.25	450.00
Laborers, day .....	1			10	1.50	1.50	1.50	420.00
Machinist .....	1	40	F	10	3.00	3.00	3.00	900.00
Wagon-makers .....	2	60	N	10	2.00	2.00	2.00	285.00
Total No. returns..	8							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
	\$ 400.00				1	1	4		
							5		
	150.00				2		2		
3	90.00	271.00			5	6	4	7	6
1	300.00	600.00			1		7		1
					1		3		1

## COUNTY.

	500.00				2		4		2
	429.00						2		2
	630.00		8		2		4½		2

## COUNTY.

	420.00			6		1	1		
	600.00				1		2		1
	700.00				1		8		
	315.00				2		4		
1	150.00	600.00				2	3½		
	400.00	400.00			1	1	4		2
	450.00				2		4½		1

## COUNTY.

	500.00				2	1	4		3
1	145.00	450.00		5	4		4		3
		275.00			1		4		1
		519.00			2		4		2
	20.00	300.00		15	1		6		1
		400.00			7	1	4½		
					7		5		5
	400.00	465.00			6		3½		5
	325.00				1		4		1

## COUNTY.

	410.00				2		3		2
	300.00				2		6½		1
					1		5		1
	500.00					1	3		1
	250.00				2		2		1



## LUCAS

OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmiths.....	3	49	1 F, 2 N	11½	\$ 2.80	\$ 1.25	\$ 2.02	\$ 645.50
Carpenters.....	3	35	N	10½	2.50	1.50	2.00	405.00
Engineer, stationary.	1	41	N	10½	2.00	2.00	2.00	
Harness-maker.....	1	21	N					
Jeweler.....	1	40	N	12	4.00	4.00	4.00	1,500.00
Miners, coal.....	34	33	11 N, 21 F	10	2.00	.90	1.06	294.00
Shoemaker.....	1	32	F	11	1.10	1.10	1.10	277.00
Weighman, coal.....	1	49	F	10	2.59	2.59	2.59	840.00
Total No. returns ..	45							

## LYON

Blacksmith.....	1	40	N	10	2.50	2.50	2.50	650.00
Stone-mason.....	1	41		10	6.00	3.00	4.50	
Total No. returns ..	2							

## MADISON

Blacksmith.....	1			10				
Bricklayers.....	4	41	N	10			4.00	700.00
Engineer, stationary.	1			10	5.00	5.00	5.00	
Harness-makers.....	2	35	N	10	1.66	1.66	1.66	425.00
Laborers, day.....	2			10	1.50	.67	1.08	248.00
Painter.....	1			10	2.50	2.50	2.50	350.00
Plasterers.....	2	46	N	10	3.00	2.00	2.50	400.00
Shoemaker.....	1			12	1.50	1.50	1.50	480.00
Stone-mason.....	1			10	2.00	2.00	2.00	
Total No. returns ..	15							

## MAHASKA

Bricklayer.....	1	44	N	10	4.00	4.00	4.00	800.00
Harness-maker.....	1	38	N	10	2.00	2.00	2.00	624.00
Machinist.....	1	39	N	10	3.00	3.00	3.00	700.00
Miners, coal.....	66	43	31 F, 29 N	9½	2.00	1.00	1.57	393.75
Plasterers.....	2	41	N	10	3.00	3.00	3.00	600.00
Section foreman.....	1			10	1.75	1.75	1.75	540.00
Total No. returns ..	72							

## MARION

Carpenters.....	2	39	N	10	2.75	2.25	2.50	500.00
Harness-maker.....	1	58	N	10				
Painters.....	8	23	F 1, N 2	10	2.25	2.00	2.12	500.00
Total No. returns ..	6							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
.....		\$ 478.50			2	1	4½		1
.....		325.00			3		5	1	1
1.....					1		3		
.....		195.00				1	2	1	
.....						1	1		1
6.....	\$ 137	176.00			8	15	4 1-6	9	10
.....		277.00				1	6		
1.....	400				1		5		1

## COUNTY.

.....	\$ 412				1		5		1
.....	250						1		

## COUNTY.

.....		500			1		11		
.....		500							
.....		330					1½		1
.....		200				2	5½	2	
1.....	100	350			1		8		
.....		350			1		4	1	1
1.....	300	400			1		4		
.....					1		6	1	

## COUNTY.

.....		510			2		3		11
.....		400			1		4		1
.....		485			1		3		1
15.....	17	314		7	21	43	4 5-6	18	14
.....		415			1	1	3 1-2		2
.....		540					6		

## COUNTY.

.....		425			2		4	1	2
1.....	500			20	1		8		
.....		250		5	2		3 1-2		3



## MARSHALL

OCCUPATIONS.	Number of returns.	Age (average).	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmiths.....	1			10	\$ 2.50	\$ 2.50	\$ 2.50	600.00
Boiler-maker.....	1	37	F	10	2.50	2.50	2.50	600.00
Carpenters.....	3	49	N	10½	6.00	1.50	2.33	415.33
Clerk.....	1	47		16	1.27	1.27	1.27	400.00
Drayman.....	1			13	1.90	1.90	1.90	594.00
Laborer, day.....	1			13	1.00	1.00	1.00	180.00
Machinist.....	1	35	N	11	1.43	1.43	1.43	400.00
Painter.....	1	33	N	11	2.50	1.00	2.25	375.00
Plasterer.....	1			12	2.00	2.00	2.00	180.00
Tinner.....	1	30	N	10	2.25	2.25	2.25	575.00
Wagon-makers.....	2	39	N	11	4.00	2.00	3.00	575.00
Total No. returns..	14							

## MILLS

Agent, R. R. and op'r	1	27	N	15	1.67	1.67	1.67	420.00
Blacksmiths.....	2	50	N	10	2.00	2.00	2.00	250.00
Carpenters.....	2			10	4.00	2.00	3.00	717.00
Laborer, R. R.....	1				1.33	1.33	1.33	400.00
Painter.....	1			10	3.00	3.00	3.00	430.00
Total No. returns..	7							

## MITCHELL

Butcher.....	1			15	2.00	2.00	2.00	600.00
Carpenter.....	1	62	N	10	2.50	2.50	2.50	600.00
Plasterer.....	1			10	3.00	3.00	3.00	468.00
Shoemaker.....	1	55	F	9	1.50	1.00	1.25	300.00
Total No. returns..	4							

## MONONA

Laborer.....	1			10	1.75	1.75	1.75	200.00
Painters.....	2	33	1 N 1 F	10	3.00	2.50	2.75	325.00
Tailor.....	1	32	N	16	5.00	2.50	3.75	600.00
Total No. returns..	4							

## MONROE

Agents, Express.....	1	49	N		2.12	2.12	2.12	660.00
Carpenters.....	2	55	N	10	3.00	2.50	2.75	700.00
Miner, coal.....	1	27	N	12				400.00
Painter.....	1	33	N	10	2.00	2.00	2.00	350.00
Plasterer.....	1	50	N	10	3.00	1.50	2.25	
Total No. returns..	6							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
1		375.00				1	3		
2	180	318.00			2	1	3		1
		300.00				1	3		1
		342.00			1		3		1
		150.00					2		
1	500	400.00		12		1	7		
1	1700	226.00			1		2		1
1	180	150.00			1		4		1
		400.00			1		3		1
1		425.00			2		4		2

## COUNTY.

		270.00					1	1	1
1	110	200.00		10	1	1	6½	1	
		512.50			1	1	4		1
1	250	1,000.00		2	1		5		1
1	100					1	2	1	

## COUNTY.

		400.00			1		7		1
		250.00		10	1		3		1
		468.00			1		3	1	
1	550	350.00			1		6		1

## COUNTY.

		250.00				1	3		
		203.00			1	1	3	1	1
		290.00			1		5		1

## COUNTY.

		600.00			1		3		1
1		500.00		5	2		3½		2
		250.00				1	4		1
		185.00					4		
1	100	337.00			1		4	1	1



## MONTGOMERY

OCCUPATIONS.	Number of re- turns.	Age (aver- age.)	Nativity.	Average number of hours worked per day.	Maxi- mum daily wages.	Mini- mum daily wages.	Aver- age daily wages.	Average annual earnings of indi- viduals.
Blacksmiths.....	3	28	1 F, 1 N	10	4.00	2.00	3.00	980.00
Carpenters.....	2	37	1 F, 1 N	10	2.50	2.50	2.50	412 50
Harness-maker.....	1	34	N	10	2.00	2.00	2.00	500.00
Plasterer.....	1	42	N	11	1.66	1.56	1.60	800.00
Shoemaker.....	1			10	2.50	2.50	2.50	400.00
Stone mason.....	1							400.00
Total No. returns..	9							

## MUSCATINE

Bricklayer.....	1			10	4.00	3.50	3.75	500.00
Cabinet-maker.....	1	56	N	10	2.00	2.00	2.00	600.00
Carpenters.....	2	50	N	10	3.00	1.50	2.25	450.00
Cigar-maker.....	1			9½	1.70	1.70	1.70	510.00
Cooper.....	1				1.75	1.75	1.75	371.00
Harness-makers.....	2	28	N	10	1.75	1.60	1.67	400.00
Machinist.....	1			10	3.23	3.23	3.23	1,000.00
Saw repaiier.....	1	76	N	8	1.35	1.35	1.35	400.00
Shoemaker.....	1				1.25	1.25	1.25	
Tinner.....	1	22	N	10	3.20	3.20	3.20	475.00
Total No. returns..	12							

## O'BRIEN

Carpenters.....	2	40	N	10	2.50	2.50	2.50	450.00
Harness-maker.....	1	29	N	10	1.00	1.00	1.00	300.00
Plasterer.....	1	36	N	10	4.00	4.00	4.00	800.00
Shoemaker.....	1	37	F	10				300.00
Total No. returns..	5							

## OSCEOLA

Blacksmiths.....	2	25	N	10	2.00	2.00	2.00	600.00
Carpenter.....	1	28	F	10	3.00	3.00	3.00	750.00
Total No. returns..	3							

## PAGE

Blacksmith.....	1	39	N	10	2.00	2.00	2.00	600.00
Laborer, day.....	1	28	F	10	1.50	1.50	1.50	225.00
Machinist.....	1			12	2.00	2.00	2.00	506.00
Miner, coal.....	1	30	N	10	1.25	1.25	1.25	400.00
Total No. returns..	4							

## PALO ALTO

Bricklayer.....	1	29	N	10	3.00	3.00	3.00	625.00
Carpenter.....	1	32	N	10	2.25	2.25	2.25	500.00
Marble cutter.....	1	21	N					
Total No. returns..	3							

1885.]

## COUNTY.

Number assisted by their families.	Average earnings of fami- lies.	Average cost of living for the year.	Percent- age of in- crease in cost of living.	Percent- age of de- crease in cost of living.	Num- ber owning a home.	Num- ber rent- ing.	Average number in family.	Num- ber in debt past year.	Number having saved money.
	\$ 350.00		13		3		8		2
	281.50				2		2		1
	400.00		10				4		1
	350.00				1		3		
	400.00					1	4		
	400.00					1	6	1	

## COUNTY.

1	50	500.00			1		5		
		400.00			1		4		1
		400.00			1	1	5½		1
		195.00					1		
	18	371.00				1	2	1	
		330.00			2		2½	1	1
		800.00				1	2		
		400.00					3		
		425.00			1	1	6		1

## COUNTY.

	400.00		5	1	4½		2		
	600.00			1	4		1		1
	275.00		10	1	6		1		

## COUNTY.

	225.00			2	3½		2		
	200.00			1	1		1		1

## COUNTY.

	400.00			1	4		1		
1	500.00	200.00			1	2	1		
	400.00				1	2			
	200.00					1			1

## COUNTY.

	300.00			1		1			
1	75.00	500.00			1	3			1
	360.00			1		3			1



## PLYMOUTH

OCCUPATIONS.	Number of returns.	Age (average).	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Blacksmiths.....	2	43	1 F 1 N	10	\$ 4.00	\$ 3.08	\$ 3.54	\$ 920.00
Clerk.....	1	41	N	9	2.00	1.50	1.75	420.00
Machinist.....	1	38	N	10	3.00	3.00	3.00	858.00
Painter.....	1	44	N	10	2.50	2.50	2.50	360.00
Plasterer.....	1	44	N	10	3.00	3.00	3.00	800.00
Wagon-makers.....	2	32	N	10	2.50	2.25	2.38	600.00
Total No. returns..	8							

## POCAHONTAS

Agent, R. R.....	1	38	N	14	1.33	1.33	1.33	500.00
Carpenter.....	1	55	F	10	2.50	2.50	2.50	450.00
Shoemaker.....	1	48	F	12				900.00
Total No. returns..	3							

## POLK

Bakers.....	2	32	1 N 1 F	12	2.00	2.00	2.00	500.00
Barbers.....	3	33	N	12	2.00	2.00	2.00	500.00
Blacksmiths.....	5	39	2 N 3 F	10	4.00	2.25	3.02	870.00
Boiler-makers.....	2	40	1 N 1 F	10	2.50	2.00	2.25	550.00
Book-keepers.....	5	45	1 N 4 F	9	5.77	2.30	3.55	1,014.00
Bricklayer.....	1	34	N	10	5.00	3.50	3.75	1,000.00
Brick-makers.....								
Laborers in yards..	3	36	1 F 2 N	14	1.75	1.75	1.75	400.00
Foreman in yards..	1	44	N	14	3.00	3.00	3.00	900.00
Cabinet-makers.....	3	35	F	10	2.50	1.75	2.00	612.00
Carpenters.....	20	38	14 N 5 F	10	3.00	2.00	2.51	690.18
Cigar-maker.....	1	29	N	9	2.50	2.50	2.50	600.00
Clerks.....	2	26	N	12	2.00	2.00	2.00	600.00
Dairyman.....	1	42	N	10	2.50	2.50	2.50	800.00
Draymen.....	4	35	N	12	2.50	2.00	2.25	555.00
Engineer, stationary.	1	38	N	10	2.75	2.75	2.75	700.00
Engineer, sanitary.	1	46	N	10	4.25	4.25	4.25	1,551.00
Engineer, locomotive	1	42	N	8	3.75	3.75	3.75	950.00
Expressman.....	1	38	N	10	1.50	1.50	1.50	400.00
File-makers.....	1	37	N	10	3.75	3.75	3.75	850.00
Harness-maker.....	8	38	2 F 6 N	10	2.50	2.00	2.31	663.67
Jeweler.....	1	41	N	12			5.00	1,500.00
Laborers, day.....	12	45	5 N 7 F	10	1.75	1.25	1.52	428.33
Janitor.....	1	46	N	13	1.25	1.25	1.25	300.00
Locksmith.....	1	34	N	10			3.00	725.00
Machinists.....	6	30	4 N	10	3.00	1.75	2.25	620.00
Moulders, brick yard	13	35	8 F 5 N	9 1/2	2.00	1.15	1.39	322.80
Painters.....	8	30	N	10	3.75	2.00	2.41	492.11
Paper-hangers.....	2	40	N	14	2.50	2.50	2.50	500.00
Plumbers.....	2	39	1 N 1 F	10	3.00	3.00	3.00	1,000.00
Plasterers.....	3	40	2 N 1 F	10	5.00	4.50	4.83	1,333.33
Potter.....	1	44	N	10	2.00	2.00	2.00	600.00
Potter, stoneware....	1	47	N	10	1.00	1.00	1.00	400.00
Printers.....	10	30	9 N	10	4.16	1.25	1.73	540.00
Railroad employe....	1			10	1.73	1.73	1.87	500.00
Shoemakers.....	2	42	N	10	2.00	1.75	1.87	500.00
Setters, brick yard..	2		N	14			2.50	530.00
Stone-mason.....	1			10	3.00	3.00	3.00	410.00
Tinners.....	2		1 N	10	3.00	3.00	3.00	600.00
Upholsters.....	2	27	N	10	2.50	2.00	2.25	700.00
Wagon-makers.....	2	39	N	10	2.50	2.25	2.37	550.00
Walters.....	10	31	N	10	1.25	1.10	1.17	312.50
Total No. returns..	149							

\*With day board, and, in some cases, lodging.

## COUNTY.

Number assisted by their families.	Average earnings of families.	Cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
1	150.00	729.00		5	2		5 1/2		2
1	100.00	390.00			1	1	4	1	1
		425.00			1		4		1
1	180.00	400.00			1		10		1
		450.00			1	1	4	1	
		400.00			1	1	3 1/2		2

## COUNTY.

		400.00		25.00	Furn'd	1			1
1		425.00				11			1
1	200.00	400.00				4			1

## COUNTY.

		300.00			1		2 1/2		2
	40.00	300.00			2	1	4	1	2
		505.00			1	4	4 2-5	1	5
		400.00			1	1	4		2
1	75.00	680.00			3	2	5	1	3
		600.00			1		4		1
1	120.00	219.00			1	2	5	1	2
		425.00			1		4		1
	100.00	462.00			1	2	5 1/2		2
8	175.00	470.00			11	7	6 1/2	2	15
		400.00				1	3		1
		325.00			1	1	2		2
		516.00			1		3		1
		337.50			3		3		4
		325.00			1		4		1
		900.00			1	1	5		1
		600.00			20	1	4		1
		325.00							
		450.00			1	1	4		1
		468.00			3	3	2	1	6
		600.00			1		3		1
10	160.00	354.50			7	3	3		8
1	250.00	400.00			1		3		1
		400.00			5	1	4		1
		371.87			1	2	3		3
2	275.00	278.00			3	7	4 1/2	2	7
		352.00			3	5	2 1/2	3	7
1	75.00	400.00			2	1	3 1/2		2
		575.00			2		3		3
		600.00			3		3		3
1	150.00	450.00			5	1	3		1
		400.00				1	4		
1	300.00	369.85			6		3 3-5		10
		400.00				1	3		1
2	550.00	600.00			2		5 1/2		2
		375.00			1	1	4		1
1	40.00	410.00			10	1	3 1/2	1	1
		400.00				2	2		1
		375.00			2		3 1/2		2
2	100.00	137.50			3	2	2 1/2	2	6



## POTTAWATTAMIE

OCCUPATIONS.	Number of re- turns.	Age (aver- age.)	Nativity.	Average number of hours worked per day.	Maxi- mum daily wages.	Mini- mum daily wages.	Average daily wages.	Average annual earnings of indi- viduals.
Blacksmith.....	1	22	N	10	\$ 2.50	\$ 2.50	\$ 2.50	700.00
Bricklayers.....	2	42	N	10	4.50	4.00	4.25	800.00
Carpenters.....	11	37	10 N, 1 F	10	4.00	1.50	2.28	583.25
Cigarmakers.....	2	40	1 F	8½	3.00	2.00	2.50	400.00
Laborers, day.....	2	40	N	10	1.50	1.50	1.50	400.00
Miller.....	1	24	F	12	2.00	2.00	2.00	550.00
Plasterers.....	2	43	N	10	3.00	3.00	3.00	600.00
Total No. returns..	21							

## POWESHIEK

Bricklayer.....	1			12	\$ 4.00	\$ 3.00	\$ 3.50	700.00
Carpenters.....	3	39	N	10	2.50	1.75	2.09	338.00
Plasterers.....	2	39	N	10	2.50	2.50	2.50	480.00
Stone-masons.....	2			10	2.00	1.50	1.75	200.00
Total No. returns..	8							

## RINGGOLD

blacksmiths.....	2	38	N	10	\$ 4.00	\$ 2.00	\$ 3.00	700.00
Brick-molder.....	1	25	N		2.50	2.50		300.00
Carpenter.....	1	42	N	10	1.50	1.50	1.50	350.00
Foreman R. R. track department.....	1	49	N	10	1.50	1.50	1.50	480.00
Harness-maker.....	1	35	N	10	1.00	1.00	1.00	250.00
Shoemaker.....	1	57	N	10			1.40	495.00
Total No. returns..	7							

## SAC

Carpenter.....	1	41	N	10	\$ 2.50	\$ 2.50	\$ 2.50	500.00
Painter.....	1	28	N	10	2.50	1.75	2.12	225.00
Plasterer.....	1	26	N	10	3.50	3.50	3.50	715.00
Section foreman.....	1			10	1.75	1.75	1.75	540.00
Total No. returns..	4							

## SCOTT

Bricklayers.....	2	42	F	10	\$ 4.00	\$ 4.00	\$ 4.00	775.00
Carpenter.....	1	50	N	10	2.00	2.00	2.50	300.00
Cigarmakers.....	2	47	1 F, 1 N	9	3.15	1.00	2.12	530.00
Engineer, stationary.	1	47	N	10	1.75	1.75	1.75	357.00
Laborers, day.....	2	44	N	10	1.50	1.50	1.50	100.00
Machinists.....	2	55	N	9	5.77	3.30	4.38	1,300.00
Painters.....	1	36	N	10	2.50	2.00	2.25	400.00
Paper-hanger.....	1	36	N	10	2.00	2.00	2.50	600.00
Plumber.....	1	43	N	10	2.00	2.00	2.00	600.00
Section foreman.....	1	33	F	10	1.20	1.20	1.20	450.00
Tailor.....	1	24	F	10	2.00	2.00	2.00	450.00
Total No. returns..								

## COUNTY.

Number assisted by their families.	Average earnings of fam- ilies.	Average cost of living for the year.	Percent- age of increase in cost of living.	Percent- age of decrease in cost of living.	Num- ber owning a home.	Num- ber rent- ing.	Average number in fam- ily.	Num- ber in debt past year.	Number having saved money.
	\$.....	\$ 250.00			1		1		
		515.00			2		5		
		418.00			2		3½		
1	50.00	500.00			1		3½		
		300.00			1	1	1		
		450.00					3		
		475.00			2		4		

## COUNTY.

		600.00			1		7		
		271.00			2		3½		
		390.00			2		3½		
		200.00							

## COUNTY.

1		400.00				1	2		
		100.00			1		3		
1	200.00	500.00				1	5		
		250.00		10	1		3		
		200.00			1	1	1		

## COUNTY.

					1		5		
		150.00			1		3		
		400.00			1		3		
		540.00			1		3		

## COUNTY.

		500.00			2		4½		
1	100.00	300.00			1		8		
1	312.00	437.00			1	1	7		
		412.00			1		5		
95	385.00	305.00			1	1	3		
		675.00			1	1	5		
		300.00			1	1	1½		
		400.00			1		2		
		500.00					3		
		215.00					1		
1	100.00	400.00				1	3		



## SHELBY

OCCUPATIONS.	Number of re- turns.	Age (aver- age).	Nativity.	Average number of hours worked per day.	Maxi- mum daily wages.	Mini- mum daily wages.	Aver- age daily wages.	Average annua, earnings of indi- viduals.
Carpenter.....	1	29	N	10	\$ 2.50	\$ 2.50	\$ 2.50	\$.....
Clerk.....	1	29	N	13	2.50	2.25	2.37	451.00
Cook.....	1			15	1.66	1.66	1.67	350.00
Pedler.....	1			10	2.00	2.00	2.00	189.00
Wagon-maker.....	1	29	F	12	4.50	1.50	2.75	500.00
Total No. returns..	5							

## SIOUX

Bricklayer.....	1	47	N	10	5.00	3.00	4.00	700.00
Carpenter.....	1	32	N	10	2.00	2.00	2.00	500.00
Tinner.....	1	24	F	10	2.00	2.00	2.00	300.00
Total No. returns..	3							

## STORY

Agent, railroad.....	1	26	N	12	1.70	1.70	1.70	750.00
Blacksmith.....	1	40	N	10	3.00	3.00	3.00	775.00
Carpenters.....	3	58	N	10	2.50	2.00	2.25	675.00
Harness-makers.....	2	37	1 N, 1 F	10	1.70	1.50	1.60	425.00
Shoemaker.....	1	51	N	11	2.00	2.00	2.00	600.00
Total No. returns..	8							

## TAMA

Blacksmith.....	1	34	F	10	3.00	.75	1.87	600.00
Carpenters.....	4	45	N	10	3.00	1.50	2.47	359.00
Cigar-maker.....	1	34	F					
Jeweler.....	1	33	N	12	4.00	3.00	3.50	
Stone mason.....	1	43	N	10	2.00	2.00	2.00	250.00
Total No. returns..	8							

## TAYLOR

Blacksmith.....	1	48	N	10	2.50	2.50	2.50	750.00
Carpenters.....	4	56	N	10	2.50	2.00	1.87	290.00
Harness-makers.....	2	48	N	10	1.85	1.00	1.43	300.00
Miner, coal.....	1	32	N	10	1.00	1.00	1.00	
Tinner.....	1	47	N	10	2.00	2.00	2.00	600.00
Total No. returns..	9							

## COUNTY.

Number assisted by their families.	Average earnings of fam- ilies.	Cost of living for the year.	Percent- age of in- crease in cost of living.	Percent- age of de- crease in cost of living.	Num- ber owning a home.	Num- ber rent- ing.	Average number in fam- ily.	Num- ber in debt past year.	Number having saved money.
		\$ 500			1		5		1
		250							1
							1		1
						1	4	1	
1	\$ 125				1		4		1
		200							

## COUNTY.

		600		10	1		5		1
		300							1
		200		16	1		3	1	1

## COUNTY.

		450				1	3		1
		420					4		1
		425		9	3		3 1/2	1	2
2	437				2		3		1
1		395			1		5		1
		500							

## COUNTY.

		400		5	1		6		1
		318.75		8	3		5 1/2		1
					1		2 1/2		1
		650			1		9		1
					1		4	1	

## COUNTY.

						1	5		1
				10	3		4		3
1		360			2		4		2
1	600	275				1	7		1
					1		4		



## UNION

OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Bricklayer.....	1	42	N	10	4.00	4.00	4.00	.....
Bridge-builder.....	1	37	N	10	2.50	2.50	2.50	425.00
Carpenters.....	3	47	N	10	3.00	2.25	2.67	600.00
Commercial traveler.....	1	.....	.....	11	3.00	3.00	3.00	684.00
Painter.....	1	32	N	10	2.25	2.25	2.25	500.00
Tinner.....	1	52	N	.....	.....	.....	.....	.....
Total No. returns..	8	.....	.....	.....	.....	.....	.....	.....

## VAN BUREN

Blacksmith.....	1	69	N	10	4.00	4.00	4.00	1,272.00
Laborer, day.....	1	26	N	12	1.30	1.30	1.30	405.00
Printer.....	1	19	N	8	2.00	2.00	2.00	200.00
Tinner.....	1	39	N	10	3.00	3.00	3.00	800.00
Total No. returns..	4	.....	.....	.....	.....	.....	.....	.....

## WAPELLO

Baker.....	1	38	F	12	2.25	2.25	2.25	600.00
Boiler-makers.....	2	39	N	10	2.50	2.50	2.50	700.00
Bricklayers.....	2	40	1 N 1 F	10	4.00	4.00	4.00	800.00
Carpenters.....	3	44	2 N 1 F	10	2.50	2.50	2.50	625.00
Harness-makers.....	2	38	N	10	2.00	1.50	1.75	450.00
Iron molders.....	2	39	N	8	3.75	3.75	3.75	900.00
Machinist.....	1	25	N	10	2.00	2.00	2.00	600.00
Painter.....	1	.....	.....	10	2.50	2.50	2.50	400.00
Plasterers.....	2	41	N	10	3.00	3.00	3.00	520.00
Total No. returns..	16	.....	.....	.....	.....	.....	.....	.....

## WARREN

Agents, R. R.....	2	34	N	12	1.33	1.12	1.24	400.00
Blacksmith.....	1	38	N	10	2.50	2.50	2.50	600.00
Carpenter.....	1	52	N	10	2.50	2.50	2.50	700.00
Wagon-makers.....	2	47	1 N 1 F	11	2.25	2.00	2.12	450.00
Total No. returns..	6	.....	.....	.....	.....	.....	.....	.....

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
.....	.....	\$ 650	.....	.....	1	.....	10	.....	1
.....	.....	418	.....	.....	6	1	.....	.....	1
.....	.....	500	.....	.....	2	1	8	1	1
1	1,000	.....	.....	.....	.....	1	5	.....	1
.....	.....	400	.....	.....	1	.....	2	.....	1
.....	.....	345	.....	.....	.....	.....	.....	.....	.....
.....	.....	500	.....	.....	1	.....	.....	.....	.....

## COUNTY.

1	.....	.....	.....	.....	.....	10	.....	.....	.....
.....	.....	400	.....	.....	1	5	.....	.....	1
.....	.....	450	.....	.....	1	4	.....	.....	1
.....	.....	450	.....	.....	.....	.....	.....	.....	.....

## COUNTY.

.....	.....	400	.....	.....	1	5	.....	.....	1
.....	.....	450	.....	.....	2	4	.....	.....	2
.....	.....	450	.....	.....	2	4	.....	.....	2
1	85	400	.....	.....	2	1	4	1	2
.....	.....	400	.....	.....	1	1	3	1	1
.....	.....	485	.....	.....	2	.....	3	.....	2
.....	.....	.....	.....	.....	.....	1	3	.....	1
1	100	275	.....	.....	.....	.....	3	.....	1
.....	.....	400	.....	.....	2	.....	3	.....	2

## COUNTY.

1	280	225	.....	8	2	4	.....	.....	2
.....	.....	400	.....	.....	.....	1	.....	.....	1
.....	.....	550	.....	.....	1	6	.....	.....	1
.....	.....	312	.....	10	2	5	1	.....	2



## WASHINGTON

OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Agent, insurance.....	1	45	N	8	\$ 2.00	\$ 2.00	\$ 2.00	\$ 600.00
Blacksmiths.....	2	50	N	10	2.00	2.00	2.00	700.00
Carpenter.....	1	35	N	10	2.00	2.00	2.00	210.00
Engineer., stationary	1	44	N	13	2.00	2.00	2.00	506.00
Laborers, day.....	3	47	N	10	1.50	1.25	1.37	410.00
Painters.....	2	57	N	10	2.50	2.50	2.50	591.50
Tailor.....	1			10	1.50	1.50	1.50	500.00
Total No. returns...	11							

## WAYNE

Blacksmith.....	1	26	N	10	1.25	1.25	1.25	375.00
Carpenter.....	1	32	N	10	2.50	2.50	2.50	600.00
Cigarmaker.....	1	41	N	10	3.00	3.00	3.00	1,000.00
Commercial traveler.	1	30		10	2.60	2.60	2.60	520.00
Jeweler.....	1	22		10	1.54	1.54	1.54	450.00
Plasterers.....	2			10	3.50	3.50	3.50	400.00
Printer.....	1	22	N	12	1.45	1.45	1.45	450.00
Wagonmaker.....	1	43	N	10			2.25	500.00
Total No. returns...	9							

## WEBSTER

Blacksmiths.....	2	39	N	10½	2.00	1.60	1.80	700.00
Carpenters.....	4	53	1 F 3 N	10	3.00	2.00	2.50	200.00
Laborer, day.....	1	50	F		.75	.75	.75	440.71
Miners, coal.....	4	35	3 F 1 N	10	2.00	1.50	1.67	2.00
Shoemaker.....	1				2.00	2.00	2.00	
Total No. returns...	12							

## WINNEBAGO

Blacksmith.....	1	37	F	8	1.00	1.00	1.00	360.00
Laborer, day.....	1	40	N	10	1.35	1.35	1.35	325.00
Total No. returns...	2							

## WINNESHIEK

Blacksmith.....	1	39	N	10	2.25	2.25	2.25	600.00
Carpenters.....	2	59	1 F 1 N	10	3.00	2.50	2.75	650.00
Painter.....	1	55	N	12	2.50	2.50	2.50	525.00
Wagonmaker.....	1	54	F	10	4.50	2.50	3.50	1,000.00
Total No. returns...	5							

1885.]

## COMMISSIONER OF LABOR STATISTICS.

343

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
1	\$ 1,200.00	450.00			10	1	3		1
1	200.00	350.00			2	1	7½		2
		350.00			1	1	4		1
		350.00			2	1	5		1
		350.00			1	1	6		1
		350.00			1	1	3		1

## COUNTY.

	350.00				1		2		
	600.00				1		4		
	100.00	600.00			1		8		1
1	100.00	250.00			1		5		1
		240.00			1		1		
		325.00			2		6		
		375.00			1		3		1

## COUNTY.

	52.00	350.00			2		3		2
1		433.00			2	2	4½	2	3
1	300.00	324.25			1	2	6		2
		150.00			1		2		

## COUNTY.

	70.00	240.00			1		4		
1		300.00			1		5		1

## COUNTY.

	425.00				10		1		1
	500.00				2		4		2
	500.00				1		3		2
	1,000.00				1		9		



## WOODBURY

OCCUPATIONS.	Number of returns.	Age (average.)	Nativity.	Average number of hours worked per day.	Maximum daily wages.	Minimum daily wages.	Average daily wages.	Average annual earnings of individuals.
Bricklayer.....	1	53	N	10	\$ 3.00	\$ 3.00	\$ 3.00	\$ 900.00
Carpenters.....	2			10	3.00	2.50	2.75	850.00
Cigar-maker.....	1			10	2.00	2.00	2.00	450.00
Harness-makers.....	2	39	1 N, 1 F	10	2.00	1.50	1.75	450.00
Laborers, day.....	2	40	2 F	10	1.50	1.50	1.50	410.00
Machinist.....	1	41	N	10	3.00	3.00	3.00	850.00
Painters.....	2	39	1 F, 1 N	10	2.50	2.50	2.50	600.00
Plasterer.....	1	52	N	10	3.00	3.00	3.00	600.00
Section foreman.....	1			10	1.10	1.10	1.10	343.00
Shoe-maker.....	1	40	F	10	2.00	1 00	1.50	
Wagon-makers.....	2	40	F	10	2.50	2.50	2.50	450.00
Total No. returns..	16							

## WORTH

Blacksmiths.....	2	35	F	10	3.00	3.00	3.00	875.00
Engineer, stationary.	1	33	N	12	1.54	1.54	1.50	480.00
Tinner.....	1	33	N		1.66	1.66	1.66	500.00
Total No. returns..	4							

## WRIGHT

Carpenters.....	3	35	N	9½	2.50	2.00	2.25	525.00
Laborer, day.....	1	29	N	10	1 50	1.50	1.50	400.00
Shoe-maker.....	1	54	F	12	4.00	3.00	3.50	700.00
Telegraph operator..	1	27	N	12	1.33	1.33	1.33	400.00
Wagon-maker.....	1	49	N	19	1.00	1.00	1.00	288.00
Total No. returns..	7							

## COUNTY.

Number assisted by their families.	Average earnings of families.	Average cost of living for the year.	Percentage of increase in cost of living.	Percentage of decrease in cost of living.	Number owning a home.	Number renting.	Average number in family.	Number in debt past year.	Number having saved money.
		\$ 532			1		10	1	
		450			1		1		2
		410			1	1	4	1	2
		296			1		3		1
		510			1		5		1
		400			1	1	4½		1
		250			1		2	1	1
					1		1		1
		338			10	1	5	1	1

## COUNTY.

	375			2		4½		2
	300				1	3		1
	500			1		5		

## COUNTY.

	300			1	2	3	1	2
	325		5		1	1		1
	500			1		5		1
	255				1	1		1
	300			1		6	1	



## WORKINGWOMEN.

It is to be regretted that a tabulated statement of the wage-workers among the women of the State cannot be presented here. Efforts were made from this office to this end. A large number of blanks were sent out and of nearly *six hundred* but *sixteen* returns were received. Failing in this, the Commissioner corresponded with several women in the State prominent in woman suffrage work, and in the society for the advancement of women, and blanks were supplied them to distribute and postage furnished for expense in forwarding the same, but to no purpose. This report, therefore, is published with this prominent absence. It may be safely said that this is not the fault of this office. With the large number of female employes in the State there should have been interest enough manifested by them, or by those specially interested in them to have presented valuable data in this volume. The wages and hours of employment, with annual salaries, etc., of many of the women wage-workers are given later in this report under the head of manufactures. Had it not been for the courtesy of many managers of these industries, there would have appeared in these pages literally nothing concerning this subject.

## COMPARATIVE WAGES—EUROPE AND U. S.—(IOWA).

## I—GENERAL TRADES.

*Comparison of the average weekly wages paid in the general trades in Europe with those paid in similar trades in New York, Chicago and Iowa.*

OCCUPATIONS.	England and Wales.	Germany.	France.	Belgium.	Austria.
BUILDING TRADES.					
Bricklayers.....	\$ 7.56	\$ 4.21	\$ 5.74	\$ 4.56	\$ 3.55
Masons.....	7.68	4.07	5.33	5.22	3.73
Plasterers.....	7.80	4.43	6.34	4.66	4.01
Carpenters.....	7.66	4.11	6.20	4.07	5.10
OTHER TRADES.					
Blacksmiths.....	7.37	4.00	5.81	5.38	3.18
Cabinetmakers.....	7.68	4.25	6.14	5.66	4.40
Cigarmakers.....	6.07	3.63	4.69	6.28	3.00
Coopers.....	7.50	3.97	5.58	5.17	3.64
Jewelers.....	8.76	5.21	6.24	6.84	3.80
Laborers.....	4.70	3.11	3.93	3.77	3.90
Millwrights.....	6.97	4.18	6.74	5.00	3.10
Potters.....	5.20	3.60	4.78	4.86	3.17
Printers.....	7.17	.....	6.64	5.94	3.85
Teachers public schools.....	12.00	.....	7.00	7.74	8.47
Saddle and harnessmakers.....	7.70	.....	.....	.....	.....
Shoemakers.....	6.63	3.69	5.70	5.51	3.80
Telegraph operators.....	.....	2.95	2.90	.....	.....
Tinsmiths.....	7.65	5.11	6.92	6.35	6.75
Machinists.....	6.56	3.55	5.46	4.46	3.70
Painters.....	.....	4.60	.....	.....	.....
.....	.....	4.82	.....	.....	.....



OCCUPATIONS.	Holland.	Switzer- land.	Russia.	Chicago.	New York.	Iowa.
BUILDING TRADES.						
Bricklayers .....	\$ 4.80	\$ 5.21	\$ 4.32	\$ 24.00	\$ 20.18	\$ 21.04
Masons .....	4.80	5.27	6.72	24.00	18.00	Same.
Plasterers .....	4.00	5.03	4.61	27.00	18.00	17.35
Carpenters .....	4.00	4.74	3.30	16.50	14.00	14.19
OTHER TRADES.						
Blacksmiths .....	4.80	5.20	3.72	15.00	13.00	15.37
Cabinetmakers .....	4.80	5.59	5.76	15.00	12.00	12.00
Cigarmakers .....	4.00	3.30	6.80	18.00	11.15	11.70
Coopers .....	4.80	4.78	3.68	12.00	12.00	10.20
Jewelers .....	.....	6.35	4.15	13.50	11.00	19.68
Laborers .....	3.20	3.61	2.88	10.50	9.00	8.77
Millwrights .....	4.80	6.30	3.30	.....	14.00	16.00
Potters .....	.....	4.17	5.76	.....	10.00	10.50
Printers .....	6.00	5.93	5.76	18.00	13.00	13.69
Teachers public schools.....	6.40	.....	9.60	.....	13.00	9.09*
Saddle and harnessmakers.....	.....	5.20	5.10	12.00	11.00	10.68
Shoemakers .....	4.00	.....	.....	.....	11.00	10.33
Telegraph operators .....	5.00	.....	6.55	.....	12.00	11.10
Tinsmiths .....	4.00	4.40	2.96	12.72	11.00	10.40
Machinists .....	.....	.....	.....	18.00	.....	16.94
Painters .....	.....	.....	.....	12.00	.....	14.33

\* This is the average of both males and females.

It will be noticed that in the above the wages are given for the cities of New York and Chicago. Those of Iowa are for the State in aggregate. Had those of one city been selected, as in the above instances, they would have been larger even than the aggregate of the State.

## PART XXI.

### MANUFACTURERS.

In presenting the following tabulated statements of the manufacturing interests of the State I desire to call attention to two or three facts which must be remembered in their study.

*First.* It is impossible to present the statistics of *all* the manufacturing industries of the State. This is due chiefly to the fact that the law is not definite enough in regard to *compelling* the giving of such statistics, and also because many refuse to give the amount of capital invested in their business. This objection on their part is an absurd one as no names are published with such details.

*Second.* It was hoped that the returns made to the census department of the State would have been complete, and such data as was desired for this report, in this respect could have been gained from that source. From some cause however, in the preparation of the manufacturers blanks, several items were omitted and the amount of capital invested which will appear in the census this year, has been gathered through this office. From these facts it must be borne in mind that the following tables by no means show the *total* manufactures in this State, but present for the purpose of this office most reliable data regarding wages, earnings, hours of employment, etc. To the addenda will be added another table containing such returns as shall be received subsequent to this matter going to press.



## MANUFACTURERS.

No. of returns.	Managers employed.	Manager's average monthly wages.	Salesmen employed.	Salesmen's average monthly wages.	Bookkeepers employed.	Bookkeeper's average monthly wages.	Clerks employed.	Clerk's average monthly wages.
731	427	\$ 88.78	466	\$ 64.27	244	\$ 67.56	187	\$ 45.39

Boys, girls and apprentices employed.	Women employed.	Men employed.	Average hours per day employed.	Men's highest daily wages.	Men's lowest daily wages.	Men's average daily wages.	Men's average annual earnings.
2,829	994	14,266	10 h, 16 m	\$ 6.00	.50	\$ 1.78	\$ 539.66

Women's highest daily wages.	Women's lowest daily wages.	Women's average annual earnings.	Boys and girls average weekly wages.	No. of Employees injured.	Average weeks employed, year.	Capital invested.
\$ 3.40	\$ .20	\$ 267.44	\$ 3.99	54	44 7-9	\$ 18,953,950

For the proper study of such features as are contemplated in the above table, the various industries should be tabulated separately. I have accordingly arranged several of these in the following tables:

CHARACTER OF INDUSTRY.	No. of returns.	Managers employed.	Manager's average monthly wages.	Salesmen employed.	Salesmen's average monthly wages.	Bookkeepers employed.	Bookkeeper's average monthly wages.	Clerks employed.
Machine shop, foundries and boiler shops .....	44	19	\$ 121.87	20	\$ 56.53	29	\$ 57.56	14
Woolen mills.....	17	15	83.60	34	75.21	9	61.67	12
Creameries.....	48	*	*	*	*	*	*	*
Canned goods.....	5	5	91.67			1	50.00	
Farm implements, (sale stores not included)....	11	11	123.05	22	80.38	10	65.30	6
Wagons and carriages....	54	25	85.06	29	88.36	15	62.92	8
Lumber.....	27	34	137.90	36	75.70	29	80.56	29
Cigars.....	12	7	126.20	6	75.00	4	80.00	5
Harness.....	10	5	56.00	19	70.47	8	55.75	5
Pork packing.....	5	12	173.33	6	80.50	8	96.45	14
Starch works.....	3			22	110.98	4	63.25	4
Barb wire.....	4	3	143.33	9	96.25	4	78.13	4
Linseed oil mills.....	8	6	123.00	1		7	77.00	6

CHARACTER OF INDUSTRY.	Clerks' average monthly wages.	Boys and girls employed.	Women employed.	Men employed.	Average hours per day worked.	Men's highest daily wages.	Men's lowest daily wages.	Men's average daily wages.
Machine shop, foundries and boiler shops .....	\$ 38.47	156	81	1,020	10	\$ 4.00	.83	\$ 2.08
Woolen mills.....	58.20	140	146	156	10 h. 2 m	4.17	.83	1.68
Creameries.....	*	19	22	400	10 h. 62 m	2.50	1.00	1.80
Canned goods.....		150	219	137	10 h. 20 m	3.00	1.04	1.59
Farm implements, (sale stores not included)....	48.33	63		377	10	3.83	1.00	1.15
Wagons and carriages....	90.00	135	35	913	10 h. 5 m	4.00	.75	1.78
Lumber.....	44.40	463	11	4,765	10 h. 24 m	5.25	.75	1.57
Cigars.....	35.00	55	229	198	10	6.00	.56	1.92
Harness.....	38.00	24	8	139	10	3.16	1.15	1.60
Pork packing.....	69.09	83	25	752	10	4.50	1.40	1.78
Starch works.....	48.75	148	50	68	10	3.00	1.25	1.60
Barb wire.....	45.00	7		452	10	4.18	1.00	1.57
Linseed oil mills.....	45.00	3		105	10 1/4	3.00	.87	1.31

CHARACTER OF INDUSTRY.	Men's average annual earnings.	Women's highest daily wages.	Women's lowest daily wages.	Women's average annual wages.	Boys' and girls' average weekly wages.	No. of men employed, year.	Average weeks employed, year.	Capital invested.
Machine shops, foundries and boiler shops .....	\$ 564.62	\$ 2.00	.50	\$ 425.00	\$ 4.14	45	49 1/2	\$ 1,053,000
Woolen mills.....	392.42	1.50	.50	191.06	3.62	2	36 1/2	465,100
Creameries.....	520.60	1.00	.35	352.00	3.62	44 1/2	35 1/2	230,350
Canned goods.....	110.00	2.00	.40	87.00	3.59	21	21	100,000
Farm implements, (sale stores not included)....	510.00				4.35	1	45 1-6	728,000
Wagons and carriages....	508.21	2.00	.25	402.00	4.73	3	50 1-16	1,329,800
Lumber.....	309.18	1.00	.33		4.28	4	35 1/2	5,000,500
Cigars.....	512.70	1.67	.75	300.00	3.11		51 5-6	195,500
Harness.....	499.75	2.00	.50	200.00	3.30		50 1/2	225,000
Pork packing.....	523.00	1.18	.83	250.00	4.57	38	2-5	808,000
Starch works.....	450.00				6.00	44 1/2	44 1/2	600,000
Barb wire.....	450.00				4.50	39		202,000
Linseed oil mills.....	497.17				4.50	45	3-8	700,000

\*As a rule the creameries have no managers, salesmen, bookkeepers or clerks.

†One fails to report capital invested.



## BRICK AND TILE.

No. of returns.	Av. number employed for year.	Total number at date of return.	Managers.	Av. daily wages.	Foremen.	Av. daily wages.	Moulders.	Av. daily wages.
71	11	148	28	\$ 2.63	56	\$ 1.73	62	\$ 2.14

Pressmen.	Av. daily wages.	Burners.	Av. daily wages.	Engineers.	Av. daily wages.	Firemen.	Av. daily wages.	Off-bearers.	Av. daily wages.
28	\$ 1.53	69	\$ 1.58	27	\$ 1.76	13	\$ 1.37	141	\$ 1.33

Millers.	Av. daily wages.	Teamsters.	Av. daily wages.	Laborers.	Av. daily wages.	Hours worked.	Strikes.	Weeks work'd (average.)	Book keepers.	Av. daily wages.
25	\$ 1.44	86	\$ 2.05	335	\$ 1.24	10.7	2	23%	15	148

The following table also represents the brick and tile industry, but the data was received upon "manufacturer's blanks." They are additional to the above. The amount of capital invested in this industry, and their location by counties, will be found in the addenda to this volume.

## BRICK AND TILE.

No. of returns.	No. of men employed.	No. of women.	No. of boys.	Highest weekly wages to men.	Lowest weekly wages to men.	Average weekly wages to men.	Men's average annual earnings.	Women's average annual earnings.	Boys' average weekly wages.
26	239	2	34	\$ 21.00	\$ 3.50	\$ 9.33	\$ 294.84	\$ 170.00	\$ 4.41

## FLOUR AND FEED MILLS.

Returns.	Average number employed during year.	Average number of weeks operated.	Number employed at date.	Managers.	Average monthly salary.	Salesmen.	Average monthly salary.
44	65	44 1-11	179	9	\$92.22	7	\$42.21

Book-keepers.	Average monthly salary.	Clerks.	Average monthly salary.	Foremen.	Average daily wages.	First miller.	Average daily wages.	Second miller.	Average daily wages.
6	\$38.33	3	\$40	9	\$2.34	30	\$2.77	32	\$1.60

Millwrights.	Average daily wages.	Engineers.	Average daily wages.	Teamsters.	Average daily wages.	Apprentices.	Average daily wages.	Laborers.	Average daily wages.	Hours daily.
5	\$2.60	24	\$1.67	25	\$1.29*	4	\$ .98	40	\$1.23	10.40

\* Without team.

The following table also represents this industry, showing data received from blanks returned by manufacturers. (For capital invested and location by counties, see addenda.) These are in addition to those enumerated above.

## FLOUR AND FEED MILLS.

No. of returns.	No. of men employed.	No. of women employed.	No. of boys employed.	Men's highest weekly wages.	Men's lowest weekly wages.	Men's average weekly wages.	Men's average annual wages.	Women's average annual wages.	Boys' average annual wages.
42	244	3	12	\$25.00	\$5.00	\$9.87	\$477.00	\$218.00	\$4.00



## CONTRACTORS.

Number of returns, 32. Number of persons employed at date of this return, 1,084.

## BUILDING TRADES—WOOD WORK (OUTSIDE WORKMEN).

EMPLOYEES.	AVERAGE DAILY WAGES.	NO. OF HOURS EMPLOYED DAILY.
Foremen .....	\$ 2.87½	10
Carpenters, first-class .....	2.36	10
Carpenters, second-class .....	1.95	10
Stair-builders .....	2.94	10
Apprentices .....	1.16½	10
Laborers .....	1.53	10

## PLANING MILLS OR SHOPS (INSIDE WORKMEN).

Foremen .....	2.50	10
Carpenters, first-class .....	2.00	10
Carpenters, second-class .....	1.75	10
Apprentices .....	1.25	10
Sawyers .....	2.00	10
Machine hands .....	1.50	10
Bench hands .....	2.00	10
Engineers .....	3.00	10
Teamsters .....	1.50	10
Laborers .....	1.50	10

## MASONRY.

Foremen .....	4.25	10
Brick-masons .....	3.75	10
Stone-cutters .....	3.37½	10
Stone-masons .....	3.25	10
Hod-carriers .....	1.75	10
Mortar-makers .....	1.92	10
Apprentices .....	1.66½	10
Laborers .....	1.50	10

## PLASTERING, PAINTING AND PLUMBING.

Plasterers .....	3.57	10
Mortar-makers .....	1.95	10
Painters .....	2.50	10
Plumbers .....	3.75	10
Laborers .....	1.66½	10

## STORES, BANKS, INSURANCE OFFICES, ETC.

Number returns.	Managers.	Average monthly salary.	Salesmen.	Average monthly salary.	Book-keepers.	Average monthly salary.	Clerks.	Average monthly salary.
103	117	\$ 122.76	144	\$ 68.98	96	\$ 70.10	283	\$ 37.48

Total number employees.	Men.	Women.	Boys.	Girls.	Highest wages—men, per week.	Lowest wages—men, per week.
1,368	816	203	128	121	\$ 52.08	\$ 3.00

Average wages—men, per week.	Highest wages—women, per week.	Lowest wages—women, per week.	Average wages—women, per week.	Average weekly wages, boys and girls.	Hours per day.
\$ 5.54	\$ 21.00	\$ 2.00	\$ 7.43	\$ 3.71	11:10



## PART XXII.

## MISCELLANEOUS.

## CRIME.

The criminal record prepared by the Hon. Secretary of State, is so complete that it is not necessary to multiply pages in this report by its re-publication; but the relation of the commitments for crime to the wage-workers, is worthy of notice here. In the entire list published in the Secretary's report, are found the following wage-workers:

Occupation.	Number.
Barbers .....	2
Blacksmith.....	1
Broom-maker.....	1
Butchers .....	5
Carpenters .....	7
Cigar-makers.....	4
Coal miners .....	14
Coopers .....	2
Gunsmith.....	1
Laborers .....	172
Machinist .....	1
Marble-cutter.....	1
Masons.....	3
Mechanic.....	1
Millers.....	2
Painters.....	2
Pattern-maker.....	1
Plasterer.....	1
Porter.....	1
Printers.....	2
Railroad hands.....	6
Shoemakers.....	3
Stone-cutters.....	3
Tailor.....	1
Teamsters.....	3
Telegraph operators.....	3
Tinners.....	2
Waiter (hotel).....	1
Total.....	246

Taking out the laborers, there are 74 commitments among the skilled laborers. Against this is found 318 commitments of saloon-keepers, 150 of farmers, and 99 of those engaged in legitimate business and professions.

Of such a comparative record, the wage-workers of Iowa have no reason to feel ashamed.

## IMPROVEMENTS IN THE PAST YEAR.

It would of course be impossible to summarize the improvements made during the past year in the various towns and cities in the State, but a fair conception can be had by noticing those in a few of the cities in opposite parts of the State. Hence, the following are given as fairly typical of the improvements made in 1884.

Taking the city of Des Moines as representing the central part of the State, the money expended during the year was as follows:

Business houses and factories.....	\$1,160,253
Residences .....	1,671,441
Churches, colleges and schools .....	66,960
Public buildings .....	219,397
Paving, sewerage, culverts and sidewalks.....	153,865
Parks .....	85,000
Railroad depots, round-houses, tracks, etc.....	115,500
Street railway, track and equipments .....	30,000
Total .....	\$3,502,416

As an example of improvement in the northwestern part of the State, Sioux City is cited. During the year the following sums were spent for—

Business houses.....	\$220,975
Manufactories .....	257,845
New dwellings .....	235,797
Additions and reconstructions .....	35,812
Railroad and public improvements.....	218,921
Miscellaneous .....	11,045
Total.....	\$980,395



Council Bluffs, for the southwest, expended for—

Sidewalks, curbing and guttering .....	\$ 35,000
Sewerage.....	75,000
Paving.....	335,000
Grading.....	415,000
Bridges.....	28,000
Street railway.....	20,000
Waterworks company.....	32,000
School-houses and churches .....	127,500
Business buildings, dwellings and improvements .....	362,150
<b>Total.....</b>	<b>\$1,429,650</b>

In Cedar Rapids, \$1,023,685 was expended during the year for building improvements alone.

In the eastern part of the State, Davenport has expended for the same purpose, during the year, about \$500,000.

What is true of these larger cities is equally true of the smaller places, the entire State more than keeping pace with the march of improvement in the other States.

## IOWA REGIMENTS DURING THE WAR OF THE REBELLION.

REGIMENTS.	Number of men.	Total casualties.	Killed or died of wounds.	Died of disease.
1st Battery.....	149	124	10	51
2d Battery.....	123	62	2	29
3d Battery.....	142	79	4	33
4th Battery.....	152	17	.....	5
1st Cavalry.....	1,478	543	54	187
2d Cavalry.....	1,394	602	65	191
3d Cavalry.....	1,360	770	77	224
4th Cavalry.....	1,227	590	48	186
5th Cavalry.....	1,245	452	43	187
6th Cavalry.....	1,125	193	21	59
7th Cavalry.....	502	402	40	92
8th Cavalry.....	1,234	274	33	91
9th Cavalry.....	1,178	258	15	162
Sioux City Cavalry.....	93	7	.....	.....
Co. A, 11th Pa. Cavalry.....	87	5	1	4
1st Infantry.....	809	165	17	7
2d Infantry.....	1,247	758	72	107
3d Infantry.....	1,674	749	99	90
2d and 3d Infantry condensed.....	.....	28	18	9
4th Infantry.....	1,184	973	108	237
5th Infantry.....	1,037	699	88	90
6th Infantry.....	1,013	855	132	124
7th Infantry.....	1,138	885	129	135
8th Infantry.....	1,027	761	93	137
9th Infantry.....	1,090	973	133	248
10th Infantry.....	1,027	739	91	134
11th Infantry.....	1,022	61	79	148
12th Infantry.....	981	708	62	243
13th Infantry.....	989	852	99	182
14th Infantry.....	840	526	56	122
14th Infantry, Res. Battery.....	.....	11	.....	.....
15th Infantry.....	1,196	1,029	130	174
16th Infantry.....	918	819	89	217
17th Infantry.....	950	614	61	97
18th Infantry.....	875	449	33	101
19th Infantry.....	985	562	86	91
20th Infantry.....	925	359	13	130
21st Infantry.....	980	531	66	137
22d Infantry.....	1,108	634	105	126
23d Infantry.....	961	570	69	196
24th Infantry.....	959	761	111	197
25th Infantry.....	995	564	61	130
26th Infantry.....	919	582	69	204
27th Infantry.....	940	530	21	162
28th Infantry.....	956	696	76	180
29th Infantry.....	1,005	511	36	248
30th Infantry.....	978	646	63	233
31st Infantry.....	977	540	27	261
32d Infantry.....	925	589	89	203
33d Infantry.....	985	580	62	196
34th Infantry.....	953	561	6	228
34th Consolidated.....	.....	72	5	13
35th Infantry.....	984	510	42	182
36th Infantry.....	986	619	69	226
37th Infantry.....	914	503	3	141
38th Infantry.....	910	451	1	310
39th Infantry.....	933	406	54	119
40th Infantry.....	900	361	15	179
41st Infantry.....	294	17	.....	2
44th Infantry.....	867	15	.....	14
45th Infantry.....	912	22	1	17
46th Infantry.....	892	28	1	23
47th Infantry.....	884	47	.....	45
48th Infantry.....	846	4	.....	4
1st African Infantry.....	903	383	5	331
<b>Totals.....</b>	<b>56,364</b>	<b>30,394</b>	<b>3,139</b>	<b>8,695</b>



## DAIRY INTERESTS.

There are 650 creameries in Iowa, 470 in Illinois, 430 in Wisconsin, 139 in Minnesota. Here is a total of 1,689 creameries in four North-western States, and Iowa has more than one third of them. Take the product of the same number of creameries in the other States named, and it will not equal the quantity of the Iowa creameries.

The amount of butter and cheese in Iowa for 1884 is: Butter, 60,000,000 pounds, at 12½ cents, \$7,580,000; cheese, 1,000,000 pounds, at 10 cents, \$100,000.

Iowa butter took the gold medal and sweepstakes, and eight of the eleven first premiums at the World's Industrial Exposition in New Orleans; and this is the fourth consecutive International Exposition at which this State has taken the great dairy prize.

## POULTRY AND EGGS.

The amount of poultry and eggs in Iowa for 1884 amounted to: Poultry, 8,500,000 pounds, at 10 cents, \$850,000; eggs, 32,000,000 dozen, at 8 cents, \$2,560,000.

## AGRICULTURAL STATISTICS.

The Hon. John R. Shaffer, Secretary of the State Agricultural Society, has prepared the following tables, showing the estimated number of acres in cultivation, the yield per acre, bushels produced, price per bushel, and value of products, and the stock, butter, cheese, poultry and eggs, in 1884:

CROP.	Number of acres.	Yield per acre.	Total product.	Market price.	Value of crop.
Corn .....	7,210,000	36	259,560,000	\$.24	\$ 72,294,400
Wheat .....	2,694,532	13	35,028,916	.55	19,265,904
Oats .....	2,082,378	31	64,553,718	.29	12,910,744
Rye .....	111,920	16	1,790,720	.38	680,473
Barley .....	176,900	24	4,245,600	.34	1,443,504
Buckwheat .....	17,100	11	188,100	.78	146,718
Flax .....	300,000	9	2,700,000	1.04	2,808,000
Irish potatoes .....	128,500	98	12,593,000	.27	2,400,110
Sweet potatoes .....	3,530	95	335,350	.90	301,815
Sorghum .....	31,350	98	3,072,300	.46	1,413,258
Hay .....	3,500,000	1½	5,250,000	4.42	23,305,000
Timothy seed .....		4½	1,800,000	1.17	2,106,000
Clover seed .....		2½	50,000	5.18	259,000
Millet seed .....					300,000
Total .....					129,634,926

## STOCK, BUTTER, CHEESE, POULTRY AND EGGS.

	Total product.	Price.	Value.
Number of cattle .....	2,800,000	\$ 15.00	\$ 42,000,000
Number of horses .....	790,000	50.00	39,500,000
Number of hogs .....	5,000,000	3.00	15,000,000
Number of sheep .....	450,000	2.00	900,000
Wool clip, pounds .....	2,500,000	.30	500,000
Cheese, pounds .....	60,000,000	.12½	7,500,000
Butter, pounds .....	1,000,000	.10	100,000
Poultry, number .....	8,500,000	.10	850,000
Eggs, dozens .....	32,000,000	.08	2,560,000
Total .....			108,910,000
Total products of the farm .....			238,544,926

## ADDITIONAL REMARKS BY MANUFACTURERS.

The Iowa general agent for the "John T. Noye Manufacturing Co., of Buffalo, N. Y." (makers of mill machinery, and brewers' and distillers' machinery, having a capital of \$500,000), sends the following statement, received too late to classify:

This house was established and has been in operation since 1835, employing twelve women and twelve hundred men, twelve girls and one hundred apprentices. The highest wages paid to women per week is \$20; lowest, \$6; girls, \$4 to \$6. The highest wages paid to men is \$35 per week; lowest, \$6. During this period of fifty years no strike has occurred.

The agent says:

The system the John T. Noye Manufacturing Co. adopted towards their employes is to make them interested in the welfare of the company as well as their own; and if reductions in wages have to be made, it will reduce the president's salary as well and in the same proportion as the lowest apprentice. We have men who are with us forty years.

The manager of the marble works at Charles City, writes:

My business is a novel one for Iowa, the only one of the kind in the State. Our marble is quarried here and manufactured into mantels, table and furniture tops, plumbers' slabs; in fact, everything that marble is used for, for interior work. It is constantly growing, and bids fair to find a market all over the country.

A contractor in Butler county, writes:

About eight tenths of mechanics and six tenths of laborers are capable of keeping their accounts and correspondence; and one fourth of all have a good



mathematical education. Not more than one fourth of all have homes of their own; hardly one tenth could live without the wages of their toil; three fourths of all are cleanly, and the other one fourth are improving, especially those whose children attend the public schools.

A manufacturer of agricultural implements in Floyd county, writes:

From the fact that 49 out of 50 boys and girls, after leaving our graded schools, either as graduates or before, from stern necessity must at once set about earning a livelihood, it is our opinion a well selected industrial course or technical course should be introduced in our school system. There is to-day, both in home and school life, a thorough education as to how to spend money; but no information imparted how to direct one's energies to make money; and all must live, and the industrious few have a heavy load to carry with their own expenses and the burden of taxes and demands for benevolence upon them. Our State school curriculums are not practical enough; there is *too much* higher mathematics, Latin and botany. Might far better spend time on learning to measure, square, handle common tools, become conversant with ordinary legal instruments, deeds, leases, mortgages, etc.; learn practically how to make roses bloom and cabbages grow bigger heads, than all the classifications of botany. And either French or German in place of any dead language; let these latter be learned and paid for at the recipient's expense, and not the State's. What we want is a course when received that places the graduate in a nominally independent position; not a course that has exactly the opposite effect,—by the cultivation of tastes and habits for such pursuits as are merely ornamental and not profitable in the way of providing necessities and comforts; for the fact remains that only about one out of fifty of our high school graduates ever can gratify those tastes, and must come down to the ordinary lot of mortals. Germany, France and England are away ahead of us in this matter of practical education.

## CONCLUSIONS.

As a result of the work of this office, the report of which I have herein submitted, I ask that the Twenty-first General Assembly take into careful consideration the following matters. I believe such consideration is demanded by the industries of the State. It is due to the representatives of capital and labor alike:

*First.*—That steps be taken which shall lead to the introduction of manual training or industrial education to some of the schools of the State. That this method of education be accorded such aid as shall lead to its firm establishment in at least our State institutions where ever the plan is practicable.

*Second.*—That a thorough examination shall be made regarding the screen question, and if fair and just to both parties, a screen of uniform size be established, or at least some plan adopted by which the miner shall be paid for work done by him. If, as is claimed, a uniform screen, or coal "weighed on top," will necessitate the lowering of wages, if the miners demand this, I can see no objection to it, if it will allay the present dissatisfaction.

*Third.*—The abolishing of the "truck system."

*Fourth.*—That plans be formulated by which convict contract labor shall be abolished at the termination of present contracts.

*Fifth.*—The establishment of a Board of Arbitration. I believe that such a board will tend more towards harmony between employer and employed than anything else.

A careful perusal of this report will doubtless suggest other conclusions than those suggested above. These seem to the Commissioner as really demanding action. The examinations which have resulted in this report have been conducted without bias or prejudice. To reach the very best end for employer and employed has been the aim of this office. It has met with obstacles from both sides, largely, it is believed, because of ignorance or prejudice, or both. It is believed, however, that this ignorance and bigotry will subside, and citizens generally will extend such help to the Bureau as shall make it a power to make our people better and happier.

Mazzini said: "Every political question is rapidly becoming a social question."



cial question, and every social question a religious question." And it has been well said that the aggressive civilization of to-day, the one that will conquer the world and supersede all others, the one that has proved the best for man, and that has lifted him up to higher planes than any other, is that built upon and shaped by the teachings of Christ. The best thoughts of all best thinkers and writers upon the industrial problem have found nothing equal to the words, "love thy neighbor as thyself," "do unto others as you would have them do unto you."

## ADDENDA.

I had hoped to have been able to add to this report the proceedings of the Convention of Chiefs and Commissioners of Bureaus of Labor Statistics, held at Boston the latter part of June last, but the proceedings have not yet been published. It was a Convention of very much interest and profit, and the papers presented would have added great value to this report. But a brief synopsis is given below:

### THIRD ANNUAL CONVENTION OF CHIEFS AND COMMISSIONERS OF BUREAUS.

Col. Carroll D. Wright called to order the Convention at the rooms of the Bureau of Statistics of Labor, No. 11 Mt. Vernon street. Beside Col. Wright, who represents the National Bureau, as also the Massachusetts Bureau, there were present Commissioner Arthur T. Hadley, of the Connecticut Bureau; Commissioner L. McHugh, of the Ohio Bureau; Chief James Bishop, of the New Jersey Bureau; Chief Wm. A. Peele, Jr., of the Indiana Bureau; Commissioner Charles F. Peck, of the New York Bureau; Commissioner John S. Enos, of the California Bureau; Commissioner C. V. R. Pond, of the Michigan Bureau; Commissioner E. R. Hutchins, of the Iowa Bureau; Secretary John S. Lord, of the Illinois Bureau, and Commissioner Frank H. Belton, of the Kansas Bureau. A ballot was taken for officers, which resulted in the election of Col. Wright as President, Mr. James Bishop as Vice-President, and Col. John S. Lord as Secretary. It was voted to make Mr. A. Blue, of Toronto, Ont., who was present, an honorary member of the Convention. After some discussion it was decided to hold the next annual Convention at Trenton, N. J., at such time as the President should appoint during the months of April, May or June, 1886. A recess was then taken until 8 o'clock.

The evening session was opened with the reading of an entertaining essay by Mr. Chauncy Smith, of Cambridge, on the "Influence of Inventions Upon Civilization." He dealt at length and in detail with the origin of the important inventions, the methods which they displaced, and the endless



subsequent improvements which they suggested. He spoke of the effect of such marvels of invention as the lens, the steam engine, the fish hook, the cotton gin, paper, etc., and he referred to their relations to labor. He believed that the field of invention, although rapidly enlarged, cannot be exhausted; that each new invention gives birth to a score of others; that the great achievements of America show an efficiency in the American workmen surpassing that possessed by those of other lands.

A vote of thanks was given to the essayist, and the suggestions thrown out by the speaker then gave rise to a lengthy and interesting discussion.

#### SECOND DAY'S SESSION.

The Convention opened on Tuesday, at 9 o'clock. The Hon. Mr. Africa, Secretary of Internal Affairs of Pennsylvania, and Joseph D. Weeks, Esq., of Pittsburgh, Pennsylvania, being present, they were invited to seats in the Convention. After an hour spent in the State House visiting the various departments and calling upon the Governor, the Convention listened to a paper by Edward Atkinson, Esq., upon the "Standard Ration of Subsistence." The prime force in the exchange of commodities, he declared, was competition, and competition really brought a most beneficent end; it would abate all poverty that could be abated, for it stimulated intelligence. Free competition in the North has made the so-called poor class richer; it has tended toward the equal distribution of the annual product while increasing that aggregate product each year. Mr. Atkinson next considered the proportion of each year's production which could be saved and added to the capital of the country. There is a waste of force in the matter of fixed capital, as, for instance, waste by fire, by useless taxation, and by poor choice of food rations. Half our effort and time is spent in acquiring food. French Canadians are more skillful in obtaining a good subsistence out of cheap food than any other people, because they choose food less costly but with good nutritive ingredients. The great problem now is to make work continuous and with few fluctuations. With increasing production the laborer will secure increasing proportions.

A short discussion followed, and then the gathering separated until afternoon, when they enjoyed a ride through the city, under the hospitality of Col. Carroll D. Wright. In the evening Mr. A. Blue, of Toronto, Ont., spoke upon the "Industrial Condition of Ontario," after which the Convention discussed the subjects presented by Mr. Atkinson and Mr. Blue, and also the methods of collecting statistical data and the presentation thereof.

#### THE THIRD DAY'S SESSION

Opened at nine o'clock A. M., President Carroll D. Wright occupied the chair. The discussion of the best methods of collecting and collating statistics was resumed. Col. Wright, Mr. Bishop of New Jersey, Mr. Hutchins of Iowa, Mr. Enos of California, and Mr. McHugh of Ohio, expressed their views. Col. Wright spoke of a manual of co-operation, for the benefit of working-men, which is to be published by his bureau in the

fall. He claimed that every publication by a statistical bureau was an educational factor. Mr. Bishop held that the need of instructing the workmen in the principles of co-operation was one which should receive much attention. Mr. Joseph D. Weeks, of Pennsylvania, spoke upon the question of collecting manufacturing statistics. He thought that the present methods could not be depended upon to give the true average. He believed that those whose duty it is to collect statistics upon a given subject should be thoroughly informed upon their own fields of labor. The methods of presenting statistics were next touched upon. Col. Wright said that the greatest care should be taken in the preparation of averages and tables, and thought that the horizontal headline and table should be used whenever possible. The aid of newspapers in disseminating statistics was referred to and discussed at length.

The report of the sub-committee appointed by the last Convention to prepare a memorial to Congress asking for the passage of a bill entitled: "An act to provide for the taking of the 10th and subsequent census," approved March 3, 1879, a law which would enable various States taking a census in 1885 to comply with the requirements of the general government, was presented by Col. Wright. The report urged that the next census might and should be shaped by the Convention, as the influence of its members in Congress would enable it to secure the most valuable industrial statistics yet obtained. It was voted to continue the present committee having the matter in charge.

Prof. Atwater of Wesleyan University, Middletown, Conn., was then introduced, and spoke upon the "Economy of Food." He said that Mr. Edward Atkinson and himself had been studying the same subject from different standpoints, and had arrived at almost identical results. Beginning with the statement that the average man spends 60 per cent of his income for food, he said that in looking at the matter from the chemists standpoint we find that we are very irrational in the use of food. For the well-to-do classes we find that the abuses from improper food are greater than those from drink. In regard to the poor man he said that his food is most uneconomically used and his money most uneconomically invested. In regard to the middle classes the speaker said that they are also uneconomical in the use of food. Whether the matter be viewed from the standpoint of statistician, philanthropist or political economist, it is a problem of great and vital importance. He went on to speak of the results of chemical analysis of various kinds of food, and from carefully prepared charts, gave the proportion of the nutritive material in various kinds of flesh, fish and grains, and spoke of the uses of the various kinds of nutritive matter contained in our different articles of food. He said that the three principal kinds of nutritive matter, protein, fats and hydro-carbons, have each their functions in the nutrition of the body, the protein (containing nitrogen) mainly supplying material for skin, bone and muscle, etc., the fat giving the necessary warmth and muscular strength, the carbo-hydrates also helping to supply warmth and strength. The protein is the most important class of nutrients and the most costly. He showed by another series of



charts a carefully prepared comparison of the amounts and kinds of food consumed by German soldiers, English laborers, London seamstresses, American students and certain brick-yard employes, deducing the facts that not only are Americans most wasteful in the use of food, but they use by far too large a proportion of the costliest kinds. The average American does not combine the various kinds of nutrients in the proper proportions. He then illustrated by charts such combinations of the popular articles of diet as would supply the right proportions and amounts of the most nutritive substances. The people of New England with their pork and beans have, like the German, Italian and Hindoo peasants, taken those articles which are cheapest, but, unlike them, they have taken a food which while cheap also supplies the adequate nutriment. Taking the protein as the standard of cost, the lecturer compared the prices of various kinds of food, and claimed that the laboring man can live upon vegetable food alone, but that the more digestive animal food in the diet of the American workman may account for his superiority over the laborers of other countries where the diet of the workmen is almost exclusively vegetable. Or, in other words, that the superiority of the American laborer is due to the superiority of his food. He suggested combinations of such articles as he believed would supply what is perhaps nearest to the necessary proportions of the nutritive substances for laborers' diet, and figured out the price of a day's rations. He believed that there is a decided nutritive value to beer and ale, but stated that the cost was five or six times greater than that of an equal amount of nutritive matter in ordinary food.

Brief remarks were made by Mr. Edward Atkinson.

Votes of thanks were passed to President Wright, the press and the essayists. The Convention then took a recess until 2 o'clock.

On reassembling, the Convention took up the discussion of the National and State Bureau of Labor.

Col. Wright opened the question by speaking of the work of the National Bureau. He said that Massachusetts labor-reformers have always felt that the State Bureau should be conducted for agitation of the condition of the laboring-men rather than for collection and presentation of facts. If the bureau should only present essays upon social problems, its work would have but little weight. It is on this question that the bureau and the labor-reformers were at variance. Col. Wright held that a statement of facts which cannot be controverted carries a far greater weight than any arguments based upon theories. It is the peculiar province of these bureaus to follow the historic methods of determining truths by recording facts. It should be remembered that the work of such a bureau cannot settle social questions, but it should rather aim to make its work of an educational character. To find the truth should be our sufficient reward, no matter whether corns are trod upon in the process. Let us hew to the line, let the chips fly where they may. The great labor parties of the country thoroughly indorse this policy.

The practical work of the National Bureau was next taken up. The speaker said that he had been overwhelmed with requests to investigate

many matters, but recognizing the fact that only by concentration could the first report be made effective and of value, he had chosen the subject of industrial depression as the one for investigation. The National Bureau may not only help the present State bureaus, but may assist in the creation of new ones. By bringing together the collations of statistics of the several States, the National Bureau may present statistics which shall be of National importance. We have set the example of investigating the social conditions and needs of the people. These reports are making their way into foreign lands, and with this comprehensive view of the social condition of our people with such statistics as we are collecting, we may regard the whole world as our constituency. There is a general demand for clearly defined, classified, accurate information.

The specific ways in which the State and National bureaus may co-operate are many. If all the State bureaus would canvass the single question of a standard ratio, the question becomes nationalized in its importance and in its dissemination. Whatever aid we can give each other will help us all. The beauty of all this labor is that we are establishing a chain, the value of which the public cannot fail to recognize. Our ambition should be to show our several Legislatures the facts, and show them so pointedly and accurately that the facts cannot be questioned.

Another method of co-operation lies in the facilities which the National Board possesses for supplying information to the bureaus of the several States. If any legislation comes up in Congress which may interest any particular State, we can see that that State is supplied with its details. On the other hand, should any interesting social or industrial question arise in your State which requires national investigation, we will make it. We may also co-operate and keep each other informed of passing events by means of bulletins and local agents. If you read the history of nations, you find that the historians in their records have left out the discussions of industrial and social questions. The men who write history a hundred years hence will be grateful to us if we do our work thoroughly and conscientiously. In the collection of our statistics, we must draw the line between statistics which are of permanent value, and those which are merely entertaining. The recommendations of a bureau of statistics will be of no value until they come as a supplement to thorough and original investigation of facts. If we carry out faithfully our original investigations, we will bring to bear a most potent influence for the settlement of great industrial questions, and will do a work the economic and historical value of which cannot easily be overestimated. Much has been accomplished. Our work is seen in this fact. The right to strike is now not only admitted, but the public usually sympathizes with the striker, because he can show collated facts to maintain the justice of his cause. The time is coming when the public will hold the man who permits a strike responsible for it. If I have given a wide field, I hope it is not too wide; that we have not assumed a contract heavier than we can carry. Let us feel that the greatest disgrace that can come to us is the discontinuance of any one of the bureaus. [Applause.]



Mr. Hutchins of Iowa then offered the following resolutions, which were adopted:

WHEREAS, This Convention of Chiefs and Commissioners of Labor Statistics, recognizing the office of Commissioner of Labor Statistics of the National Bureau as one demanding the best ability, and in the filling of which political partisanship should never be consulted; therefore,

Resolved, That we hereby express our hearty gratification in the appointment of and continuance in this office of Hon. Carroll D. Wright of Massachusetts, and we pledge to him our heartiest support in the exercise of his official duties.

The discussion was then resumed, and was participated in by most of the gentlemen present. The questions of strikes, contract labor in prisons, etc., were considered. Rev. Jesse H. Jones of Abington was then introduced, and spoke briefly. After a pleasant closing address by Col. Wright, the Convention adjourned at 4 P. M.

#### COAL SCREENS.

The following additional letters from operators upon the above subject were received after those already printed, hence are added here:

CHICAGO, ILL., July 27, 1885.

HON. E. R. HUTCHINS, *Commissioner of Labor Statistics, Des Moines, Iowa:*

Your letter of July 8th, to Mr. T. J. Phillips has been referred to me.

As I understand it, you want a statement of the "screen question" from an operator's standpoint.

The "screen question" is really a question of the proper basis on which miners' wages should be paid.

From the nature of the work and the condition under which it is performed, it is not practicable to pay for mining coal by the day or hour; the miners work singly or in pairs, in rooms and entries widely scattered through the mine, so that their work cannot be overlooked constantly by a foreman; this results in their becoming to a certain extent, contractors. Each miner is assigned to a certain room or entry, he provides his own tools, blasting powder, oil and everything required to mine and load the coal, in many cases employing an unskilled laborer to help him; he is subjected to but little oversight except for the purpose of seeing that he drives his room or entry straight and keeps the roof properly supported, and further than the requirement that he shall mine and load a sufficient amount of coal to fill his "turn" or quota, he is his own master as to the energy or time given to his work or the manner in which he performs it, and on his own skill and care depend the condition and quality of the coal which he loads and sends out; if he is a skillful and careful miner he will so locate his blasts and gauge his charges of powder as to mine the coal as coarse as possible, and

if he is an honest man he will not load rock and sulphur in with his coal, nor shovel slack into his car, so that it will be hidden by the larger lumps on top. As a consequence of these conditions, miners are paid on the basis of what they accomplish. The plan now carried out in most mines in the State of Iowa, is to weigh each miner's coal on track scales after it has passed over the screens, and only to weigh and pay for the coarsest or lump coal; it is not claimed that the smaller coal not weighed or paid for is of no value, but that the rate paid for the lump coal is sufficient to pay for all the labor performed by the miner, and that by basing the wages on the lump coal only, which is the most valuable and merchantable size, there is an inducement to the miner to mine his coal as large as possible; or in other words, quality, as well as quantity, is made the basis, instead of quantity regardless of quality.

The objections raised by the miner to this basis are that the screenings for which he is not paid are merchantable, are sold by the operator, and that the miner is consequently robbed of part of the results of his labor; but this view is obviously fallacious, and the only question properly raised would be as to whether the price per ton paid for the lump coal was sufficient, and that is purely a question of wages and not now under discussion.

The remedies proposed by the miners for what they consider "the robbery of the screens" are numerous and they are not united as to which is the most desirable.

The principal remedy is to have the legislature enact a law requiring that all coal shall be weighed in the car from which it comes from the mine without screening, or in other words to pay for all coal mined, regardless of quality or condition. This would be alike unfair to honest miners and employers; it offers a premium to dishonesty and places the skillful miners on the same footing with the unskilled and careless. It would necessitate a "docking boss" to estimate the amount of rock, sulphur and other impurities loaded in the coal, which would be a much more prolific cause for discontent and grumbling on the part of the miners, than the screens have been or ever will be. It would substitute the inaccuracy and guess work of weighing in pit cars, for the absolute accuracy of weighing the coal alone on track scales.

It would completely change the present basis of wages and necessitate a readjustment of the rates, as the miners would not expect nor the operators be willing to pay the same rate for all the coal mined as they now pay for the screened lumps, and this readjustment could not be arrived at without innumerable strikes and lock-outs, before the question could be settled even as satisfactorily as at present.

I am satisfied that the present basis of paying miner's wages on the amount of lump coal mined is the very best, and that many of the miners take the same view of it: the objections are almost entirely made by professional labor agitators and ambitious politicians. As to the size of the screens, that must be determined by the character and conditions of the



vein of coal, the manner in which it is mined and the requirements of the markets.

A brittle coal that is mined by blasting from the solid without previous undermining, will require more screen surface and larger spaces between the bars, to properly clean and separate the different sizes, than a tough coal or coal that is undermined before being wedged or blasted; so that it would be manifestly unjust to force all mines to adopt the same sized screens, and the size of the screens is in reality simply a question of wages: the amount of coal paid for is one element and the rate another; to reduce the quantity by enlarging the screens would reduce the wages, and to increase the quantity by making the screens smaller, would increase the wages, so that it does not matter what the sizes of the screens are, if the rate paid for each ton of screened coal is sufficient to induce miners to work for the wages which will result.

J. C. OSGOOD,

*President Whitebreast Coal and Mining Company.*

The following reply was received with the request to omit the writer's name. Suffice it to say it comes from a superintendent of large and long experience:

OSKALOOSA, IA., July 20, 1885.

HON. E. R. HUTCHINS, *Commissioner Labor Statistics:*

DEAR SIR—Answering your favor of the 8th inst., regarding the much vexed "screen" question; it seems to me that the solution thereof must be preceded by concession on the part of both operator and miner, but just now each party seems so determined to accept only such settlement as will give it undue advantage that he who advocates moderate measures is pretty certain of being censured and abused by both.

Generally speaking, the best law, especially in all matters pertaining to trade is that which grows out of long established custom and usage; and legislatures should be very chary of statutory enactments which interfere directly and radically with settled trade relations, unless such enactment is necessary to prevent wrong and injustice.

Now, if wrong and injustice have resulted from the abuse by mine operators of the wide liberty they have heretofore enjoyed as regards the methods and machinery employed in screening coal, legislation on the subject is proper and desirable; but the great and rapidly growing importance of the mining interests of the State should be constantly borne in mind, and no restriction or hindrance imposed unless experience has shown the vital necessity of such restriction to secure the safety and material justice to the miner. The relations between the coal miner and operator are, so far as the question of screening or cleaning coal is concerned, precisely the same as exist between the coal operator and the consumer.

So far as the miner is concerned, the operator is the consumer of the pro-

duct of his labor, as the buyer is in turn the consumer of the work of the operator.

There is generally an expressed, always a tacit agreement between the operator and the dealer that the product sold shall be clean and merchantable, and the same agreement should exist between the miner and operator; and such cleaning or screening as will take out the unmerchantable portion of the miner's product should not be prohibited or interfered with by law. On the other hand it seems clear to me that beyond such screening as will separate the merchantable from the unmerchantable, the operator has no right to go except at his own expense; and as by changing his system of screening and division of his products into different grades, without let or hindrance; paying the miner for the highest or lump grade only; he alters and changes the rate of wages without a mutual agreement with the miner; in other words one side makes or changes the contract and forces the other to accept it.

I confess that it is with astonishment I see on the one hand hundreds of operators insisting on their right to continue the enlargement of screens at pleasure, and to make each year hundreds of thousands of tons of the smaller varieties of coal which they tell the consumer is merchantable, and sell the same as such, while at the same time they treat it as unmerchantable in their settlement with the miner by ignoring it entirely—and on the other hand thousands of miners loudly clamoring that the law-making power of the State shall be used to force the coal operators to pay for the mining of hundreds of thousands of worthless refuse which is at great expense carted off into immense heaps to waste away slowly by self-combustion.

After twenty-five years of experience (on the side of the operator) I am convinced that the right to change screens at pleasure, thereby altering and rendering insecure the wage contract, should not be confided to the discretion of coal operators; that the enactment of a statute providing that all but unmerchantable coal should be paid for by the operator would be just and equitable and consequently beneficial to all parties; and that to enact what is known as the Cassatt bill, or any other bill which provides for the payment by the operator for what is unmerchantable would result in great damage to both operator and miner—it would put a premium on unskilled as against skilled labor—it would operate with special unfairness in favor of such coal fields as are worked without the use of powder, it would lower the grade of Iowa coal in the market, and lastly it (the Cassatt bill) is the work of a small demagogue, done in the interest of a great demagogue, and is not nor was it ever intended to advance public interests or secure public justice.

Yours truly.

A request was made of Mr. George Garver, of this city, a gentleman of much experience in this matter, to give his views and he promised to do so, but has not thus far.



## MANUFACTURING INDUSTRIES.

The following table showing the amount of capital invested in manufacturing industries, and arranged by counties, must not, as has already been suggested, be taken as the *total* number in this State. They are simply those which have reported to this office through blanks furnished them:

1885.]

## STATISTICS OF MANUFACTURES.

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ADAIR COUNTY.

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Sorghum .....	\$ 100 00

## ADAMS COUNTY.

Brick and tile .....	\$ 3,500.00
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## ALLAMAKEE COUNTY.

Butter .....	\$ 10,500
Butter and tubs .....	5,000
Canned goods .....	8,000
Flour and feed .....	3,000
Lumber .....	350,000
Tinware .....	4,000
Wagons .....	11,000
Total .....	\$ 391,500

## APPANOOSE COUNTY.

Confectionery .....	\$ 1,900
Creamery .....	7,000
Machinery .....	4,000
Tinware .....	16,000
Total .....	\$ 28,000

## BENTON COUNTY.

Brick and tile .....	\$ 4,000
Canned vegetables .....	12,000
Harness and saddles .....	2,000
Total .....	\$ 18,000

## BLACK HAWK COUNTY.

Bakery .....	\$ 25,000
Blank books and printing .....	20,000
Cigars .....	15,000
Creameries .....	8,000
Cooperage .....	400
Flour and feed .....	150,000
Oil gas .....	20,000
Sash, doors, stairs, etc .....	2,750
Soaps .....	13,500
Tailor .....	1,000
Tin, sheet iron, etc .....	42,000
Wagons, etc .....	40,000
Windmills, farm boilers, etc .....	20,000
Total .....	\$ 357,650



REPORT OF THE  
BOONE COUNTY.

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Barb wire.....	\$ 10,000
Creamery.....	1,000
Flour and feed.....	6,100
Harness and saddles.....	24,500
Knitting yarns.....	8,000
Linseed oil.....	50,000
Steam engines, furnaces, etc.....	10,000
Total.....	\$ 109,600

## BREMER COUNTY.

Creamery.....	\$ 12,300
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## BUCHANAN COUNTY.

Cigars.....	\$ 8,000
Creamery.....	3,000
Flour.....	18,000
Harness.....	3,000
Lumber.....	2,500
Total.....	\$ 34,500

## BUENA VISTA COUNTY.

Flour and feed.....	\$ 15,000
Marble works.....	2,000
Total.....	\$ 17,000

## BUTLER COUNTY.

Creamery.....	\$ 6,000
Flour and feed.....	15,000
Total.....	\$ 21,000

## CARROLL COUNTY.

Creamery.....	\$ 3,000
Sorghum.....	100
Total.....	\$ 3,100

## CASS COUNTY.

Flour and feed.....	\$ 7,000
Wagons.....	25,000
Total.....	\$ 32,000

## STATISTICS OF MANUFACTURES—CONTINUED.

## CEDAR COUNTY.

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Creamery.....	\$ 5,000
Wagons.....	4,000
Total.....	\$ 9,000

## CERRO GORDO COUNTY.

Clothing.....	\$ 2,000
Cooperage.....	4,000
Creamery.....	13,000
Soaps and oil (lard).....	5,000
Wagons.....	3,500
Total.....	\$ 27,500

## CHEROKEE COUNTY.

Flour and feed.....	\$ 16,000
Hemp, flax, and tow.....	10,000
Total.....	\$ 26,000

## CHICKASAW COUNTY.

Clothing.....	\$ 1,500
Creamery.....	7,500
Flour and feed.....	50,000
Tinware.....	4,000
Wagons.....	7,000
Total.....	\$ 70,000

## CLAYTON COUNTY.

Cigars.....	\$ 3,000
Lumber.....	250,000
Machinery.....	10,000
Wagons.....	3,000
Wood and ice.....	5,000
Total.....	\$ 271,000



REPORT OF THE  
CLINTON COUNTY.

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Animal power.....	\$ 7,000
Blank books and printing.....	20,000
Brooms.....	500
Brick and tile.....	11,000
Cigars.....	13,500
Clothing.....	5,000
Cooperage.....	200
Creamery.....	9,500
Flour and feed.....	3,000
Galvanized iron and tin.....	35,000
Gas.....	75,000
Harness.....	2,500
Hub-borer.....	7,000
Lumber.....	3,840,000
Machinery.....	30,000
Matches.....	20,000
Millinery and dressmaking.....	9,500
Paper.....	60,000
Plates, photographers.....	1,000
Sash, doors and blinds.....	695,000
Saw mill.....	30,000
Wagons.....	25,000
Total.....	\$ 4,900,700

## DALLAS COUNTY.

Agricultural implements.....	\$ 6,000
Brick and tile.....	10,500
Clothing.....	800
Creamery.....	2,500
Galvanized iron and tin.....	10,500
Gloves and mittens.....	2,500
Harness.....	1,400
Lumber.....	850
Total.....	\$ 34,650

## DAVIS COUNTY.

Cigars.....	\$ 250
Creamery supplies and tinware.....	2,000
Handles (axe, sledge, etc.).....	300
Lumber.....	6,000
Total.....	\$ 8,550

## DECATUR COUNTY.

Flour and feed and lumber.....	\$ 53,600
Harness.....	500
Wood turning.....	800
Total.....	\$ 54,900

## DELAWARE COUNTY.

Barb wire and foundry work.....	\$ 60,000
Brick and tile.....	61,350
Churns, etc.....	1,000
Cigars.....	1,000
Creamery.....	2,800
Flour and feed.....	27,500
Harness and saddles.....	1,400
Hay loaders.....	10,000
Total.....	\$ 165,050

## DES MOINES COUNTY.

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Agricultural implements.....	\$ 50,000
Blank books and printing.....	30,000
Burial caskets.....	5,000
Bullington carriage wheels.....	66,000
Church furniture.....	17,000
Clothing.....	18,500
Corn and feed.....	76,500
Harness.....	5,000
Letter and postal files.....	3,500
Linseed oil.....	200,000
Lumber.....	275,000
Machinery and castings.....	148,000
Marble and stone ornaments.....	8,000
Rolling mill.....	66,000
Sash, doors and blinds.....	80,000
Tinware.....	12,000
Trunks.....	1,500
Wagons, carriages, etc.....	239,000
Washing machines.....	4,000
Wire mattresses.....	25,000
Total.....	\$ 1,530,000

\* One reported without stating amount of capital.

## DUBUQUE COUNTY.

Bags—cotton, jute and paper.....	\$ 20,000
Beer and malt.....	400,000
Boots and shoes.....	77,000
Brass goods.....	202,000
Brick.....	11,000
Brooms.....	800
Crackers, snaps, etc.....	55,200
Creamery.....	4,500
Cigars.....	250
Clothing.....	2,000
Cooperage.....	40,000
Confectionery.....	45,000
Dressed stone.....	500
Doors, sash and blinds.....	204,000
Engines, boilers, etc.....	150,000
Furniture and coffins.....	115,000
Galvanized iron.....	2,500
Harness.....	5,000
Jewelry.....	2,000
Lime.....	9,000
Linseed oil.....	100,000
Lumber.....	200,000
Mattresses and bedding.....	10,000
Newspapers and job printing.....	80,000
Oat meal, barley and ground feed.....	90,000
Rubber goods and belting.....	10,000
Steam heating.....	35,000
Shot.....	25,000
Soap, candles and lard oil.....	40,000
Vinegar.....	40,000
* Wagons, sleighs, etc.....	56,000
Wire goods.....	45,000
Total.....	\$ 2,137,450

\* One reported without giving capital.

## FAYETTE COUNTY.

Flour and feed.....	\$ 35,000
Harness.....	4,500
Lumber.....	4,000
Total.....	\$ 43,500



REPORT OF THE  
FLOYD COUNTY.

[E 5]

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Agricultural implements .....	\$ 60,000
Bank, church and school furniture .....	30,000
Creamery .....	2,000
Marble .....	30,000
Wagons and carriages .....	2,500
Total .....	\$ 124,500

GREENE COUNTY.

Brooms .....	\$ 3,000
Flour and feed .....	50,000
Monuments .....	3,000
Total .....	\$ 56,000

GUTHRIE COUNTY.

Brick and tile .....	\$ 5,000
Cigars .....	3,000
Machine repairs .....	4,000
Total .....	\$ 12,000

HAMILTON COUNTY.

Brick and tile .....	\$ 3,000
Flour and feed .....	5,000
Total .....	\$ 8,000

HARDIN COUNTY.

Agricultural implements .....	\$ 10,000
Boots and shoes .....	2,500
Butter and butter tubs .....	2,500
Clothing .....	1,000
Flour .....	1,000
Lime .....	7,000
Pork packing .....	8,000
Soda water .....	1,500
Scaps .....	1,000
Stoneware, tile, etc. ....	12,000
Tinware .....	8,000
Total .....	\$ 52,200

HENRY COUNTY.

Brick and tile .....	\$ 9,000
Cigars .....	18,500
Doors, blinds and sash .....	20,000
Flour and feed .....	7,500
Harness and saddles .....	300
Monuments .....	3,000
Scales and foundry work .....	25,000
Wagons, carriages, etc. ....	25,000
Total .....	\$ 108,300

1885.]

COMMISSIONER OF LABOR STATISTICS.

HOWARD COUNTY.

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Creamery .....	\$ 10,000
Wagons, etc. ....	7,000
Total .....	\$ 17,000

HUMBOLDT COUNTY.

Flour .....	\$ 1,000
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IOWA COUNTY.

Beer .....	\$ 10,000
Brick and tile .....	6,000
Creamery .....	8,000
Flour and feed .....	10,000
Harness .....	1,000
Marble .....	500
Neck-yokes .....	2,850
Sorghum .....	1,500
Wagons, etc. ....	3,000
Total .....	\$ 42,650

JACKSON COUNTY.

Barrel heading .....	\$ 6,000
Creamery .....	2,000
Flour and feed .....	84,000
Lime .....	10,000
Lumber .....	25,000
Total .....	\$ 127,000

JASPER COUNTY.

Agricultural implements .....	\$ 11,000
Flour and feed .....	20,000
Harness .....	1,000
Heaters and stove repairs .....	16,000
Wagons, etc. ....	15,700
Total .....	\$ 63,700

JEFFERSON COUNTY.

Brooms .....	\$ 1,000
Flour and feed .....	20,000
Furniture .....	20,000
Woolen goods .....	20,000
Total .....	\$ 70,000



# REPORT OF THE JOHNSON COUNTY.

[E 5]

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Cooperage.....	\$ 2,000
Creamery.....	7,000
Galvanized iron cornices.....	5,000
Tools.....	4,000
Total.....	\$ 18,000

## JONES COUNTY.

Cooperage.....	\$ 1,000
Creameries.....	8,000
Machinery.....	5,000
Stump and tree-puller.....	2,500
Total.....	\$ 16,500

## KEOKUK COUNTY.

Brick and tile.....	\$ 16,500
Butter.....	200
Flour and feed.....	29,500
Harness and saddles.....	6,000
Woolen goods.....	50,000
Total.....	\$ 102,200

## KOSSUTH COUNTY.

Baled hay.....	\$ 11,500
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## LEE COUNTY.

Beer and mead.....	\$ 30,000
Boots and shoes.....	1,000
Brick and tile.....	2,000
Brooms.....	2,500
Crackers and candles.....	20,000
Cigars.....	13,000
Clothing.....	60,000
Cooperage.....	6,000
Creameries.....	7,000
Engines, boilers, etc.....	35,000
Hams, bacon, etc.....	15,000
Harness.....	2,400
Ice.....	2,000
* Lumber.....	375,000
Medicines.....	25,000
Millinery.....	27,000
Monuments and headstones.....	2,500
Newspaper and job printing.....	11,500
Roofing and wrought iron fences.....	22,000
Soap and lye.....	3,000
Stoves.....	60,000
Tinware and sheet iron.....	4,000
Trunks and screen doors.....	3,000
Wagons, etc.....	8,500
Washing machines and pumps.....	6,000
Wrapping paper.....	50,000
Woolen goods.....	5,000
Total.....	\$ 800,400

\* One fails to report amount of capital.

1885.]

# COMMISSIONER OF LABOR STATISTICS.

## LINN COUNTY.

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Agricultural implements.....	\$ 225,000
Beer, malt and soda water.....	120,000
Brick.....	1,000
Butter tubs.....	2,000
Chairs.....	2,500
* Crackers.....	100,000
Confectionery and extracts.....	18,000
Creameries.....	41,000
Creamery supplies.....	2,000
Engines and boilers.....	35,000
Flour and feed.....	10,000
Galvanized cornice, etc.....	8,000
Harness.....	60,000
* Newspapers and job printing.....	30,000
Oat and corn meal.....	75,000
Pork packing.....	480,000
Pumps.....	27,000
Sash, doors, and blinds.....	10,000
Soaps.....	45,000
Sorghum.....	200
Vinegar and pickled goods.....	25,000
Wagons.....	150,000
Washing machines and churns.....	1,500
Woolen goods.....	46,000
Total.....	\$ 1,512,200

## LOUISA COUNTY.

Brick and tile.....	\$ 10,000
Woolen goods.....	7,000
Total.....	\$ 17,000

## LUCAS COUNTY.

Creamery.....	\$ 5,000
Foundry.....	6,000
Total.....	\$ 11,000

## MAHASKA COUNTY.

Blinds and doors.....	\$ 10,000
Clothing.....	25,000
Drain tile.....	5,000
Engines and machinery.....	23,800
Flour and feed.....	1,000
Gloves, mittens and leather goods.....	50,000
Harness and saddles.....	8,000
Monuments.....	1,000
Nut and coffee roasters.....	10,000
Wagons, etc.....	13,000
Woolen goods.....	50,000
Total.....	\$ 196,800

## MARION COUNTY.

Foundry and wagons.....	\$ 30,000
Flour and feed.....	30,000
Total.....	\$ 60,000

NOTE.—One large shoe factory fails to report capital.

\* One fails to report capital.



REPORT OF THE  
MARSHALL COUNTY.

[E 5]

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Barbed wire.....	\$ 350,000
Brick and tile.....	24,000
Canned vegetables, etc.....	15,000
Creameries.....	10,000
Dressed lime stone, flour and feed.....	125,000
Engines, boilers, etc.....	40,000
Flour and feed.....	41,000
Furniture.....	37,500
Harness.....	5,000
Linseed oil.....	200,000
Pork-packing.....	75,000
Sash, doors and blinds.....	15,000
Soap.....	35,000
Vinegar, pickles, etc.....	25,000
Wagons.....	222,000
Total.....	\$ 1,240,500

## MILLS COUNTY.

Canning factory.....	\$ 35,000
Lumber.....	3,000
Pork-packing.....	50,000
Total.....	\$ 88,000

## MITCHELL COUNTY.

Creameries.....	\$ 1,800
Lime.....	2,000
Wagons.....	1,500
Woolen mills.....	40,000
Total.....	\$ 45,300

## MONONA COUNTY.

Flour and feed.....	\$ 20,000
Lumber.....	1,500
Total.....	\$ 21,500

## MONROE COUNTY.

Creamery.....	\$ 1,000
Miners' drills.....	10,000
Total.....	\$ 11,000

## MONTGOMERY COUNTY.

Flour and feed.....	\$ 3,000
---------------------	----------

## MUSCATINE COUNTY.

Aplarian supplies.....	\$ 4,000
Brick and tile.....	10,000
Canned fruits and vegetables.....	30,000
Creamery.....	10,000
Flour.....	8,000
Grease and tallow.....	1,000
Monuments and headstones.....	30,100
Newspaper and printing.....	5,000
Oatmeal.....	60,000
Pumps, water tanks, etc.....	2,000
Sash, doors and blinds.....	125,000
Soda and mineral water.....	5,000
Total.....	\$ 291,100

NOTE.—One manufacturer of general machinery fails to report capital.

1885.]

## COMMISSIONER OF LABOR STATISTICS.

385

## PAGE COUNTY.

CHARACTER OF BUSINESS.	CAPITAL
Cigars.....	\$ 1,000
Flour.....	18,000
*Machinery and general repairs.....	4,000
Wagons.....	10,000
Total.....	\$ 33,000

## POLK COUNTY.

Bakery.....	\$ 6,000
Barb-wire.....	125,000
Boilers and water tanks.....	35,000
Cigars.....	5,000
Engines, mine and mill machinery.....	5,000
Files.....	2,000
Flour and feed.....	14,000
Furniture.....	2,000
Harness and saddles.....	98,000
Linseed oil.....	75,200
Lumber.....	500,000
Machinery.....	15,000
Mantles (marble and granite).....	23,800
Medicines.....	15,000
Pork packing.....	1,200
Printing.....	60,000
Plumbing.....	5,000
Sash, doors and blinds.....	14,000
Scales.....	7,000
Starch.....	400,000
Steam heating and ventilating apparatus.....	14,000
Sorghum.....	2,000
Tin, copper and sheet iron.....	4,000
Vinegar, pickles, etc.....	25,000
Wagons.....	7,000
Total.....	\$ 1,479,200

NOTE.—Woolen mill reported without capital.

## POTTAWATTAMIE COUNTY.

Crackers.....	\$ 20,000
Creamery.....	4,000
Flour and feed.....	30,000
Harness.....	3,500
Machinery.....	4,000
Total.....	\$ 61,500

## POWESHIEK.

Barb-wire.....	\$ 107,500
Creamery.....	2,000
Wagons.....	87,000
Total.....	\$ 196,500

## RINGGOLD.

Creamery.....	\$ 3,000
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REPORT OF THE  
SCOTT COUNTY.

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Agricultural implements.....	\$ 175,000
Beer and soda water.....	5,000
Boilers.....	5,000
Brick and tile.....	1,500
Candles.....	30,000
Cigars.....	125,000
Cigar boxes.....	10,000
Cigar box lumber, shipping cases, etc.....	35,000
Engines, water-power machinery, etc.....	100,000
Extracts.....	50,000
Furniture.....	55,000
Glucose.....	200,000
Iron castings, etc.....	18,000
Lumber.....	650,000
Monuments.....	2,500
Paints.....	24,000
Sash, doors and blinds.....	50,000
Stair builders' supplies.....	29,000
Stoneware.....	1,000
Vinegar.....	45,000
Wagons.....	17,500
Washing machines.....	20,000
Woolen goods.....	50,000
Yellow and Rockingham ware.....	8,000
Total.....	\$ 1,707,500

## SHELBY COUNTY.

Wagons.....	\$ 500
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## SIOUX COUNTY.

Creamery.....	\$ 2,000
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## STORY COUNTY.

Brick and tile.....	\$ 1,000
Flour and feed.....	16,000
Total.....	\$ 17,000

## TAMA COUNTY.

Agricultural implements.....	\$ 35,000
Brooms.....	1,200
Cigars.....	1,500
Creamery.....	2,000
Flour and feed.....	17,500
Wrapping paper.....	20,000
Total.....	\$ 77,200

## TAYLOR COUNTY.

Cigars.....	\$ 5,000
Machinery.....	7,000
Total.....	\$ 12,000

## UNION COUNTY.

CHARACTER OF BUSINESS.	CAPITAL INVESTED.
Machinery.....	\$ 1,200
Sash, doors and blinds.....	4,000
Total.....	\$ 5,200

## VAN BUREN COUNTY.

Creamery.....	\$ 7,000
Flour and feed.....	7,500
Railroad ties and native lumber.....	26,000
Stoneware.....	4,000
Wagons.....	18,000
Woolen goods.....	100,000
Total.....	\$ 162,500

## WAPELLO COUNTY.

Agricultural implements.....	\$ 46,000
Cigars.....	2,000
Confectionary.....	12,000
Cooperage.....	40,000
Doors and window screens.....	2,500
Engines and mill machinery.....	79,000
Furniture.....	8,000
Harness and saddlery.....	95,000
Linseed oil.....	75,000
Lumber (native).....	1,500
Malt and beer.....	34,000
Marble works.....	1,500
Newspaper and job printing.....	3,000
Pork-packing.....	300,000
Sash, doors and blinds.....	10,000
Show cases.....	20,000
Soap.....	8,000
Starch.....	100,000
Total.....	\$ 837,500

## WARREN COUNTY.

Brick and tile.....	\$ 11,500
Flour and feed.....	32,000
Total.....	\$ 43,500

## WASHINGTON COUNTY.

Agricultural implements.....	\$ 12,000
Brick and tile.....	8,500
Butter and poultry.....	20,000
Canned fruits and vegetables.....	4,500
Furniture.....	1,500
Total.....	\$ 46,500

## WAYNE COUNTY.

Cheese.....	\$ 1,200
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## WEBSTER COUNTY.

CHARACTER OF INDUSTRY.	CAPITAL INVESTED.
Cooperage.....	\$ 12,000
Stucco and plaster.....	50,000
Total.....	\$ 62,000

## WINNEBAGO COUNTY.

Creamery.....	\$ 1,500
Wool carding.....	1,200
Total.....	\$ 2,700

## WINNESHIEK COUNTY.

Creamery.....	\$ 20,000
Flour.....	50,000
Harness.....	3,000
Newspaper and job printing.....	6,000
Sorghum.....	300
Tinware.....	5,000
Wagons.....	40,000
Wrapping paper.....	12,000
Total.....	\$ 136,300

## WOODBURY COUNTY.

Agricultural implements.....	\$ 30,000
Dressmaking.....	200
Engines, boilers and mill machinery.....	75,000
Paints.....	20,000
Sash, doors and blinds.....	6,000
Total.....	\$ 131,200

## WORTH COUNTY.

Creamery.....	\$ 3,000
Harness.....	700
Wagons.....	1,000
Total.....	\$ 4,700

## WRIGHT COUNTY.

Creamery.....	\$ 3,000
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It is hoped that when the next report is made from this Bureau that *all* counties will be represented in these tables, and that a record shall be made by them complete in itself, in this feature of statistical work. Should there be the hearty response which is merited, Iowa would show a very large capital invested in manufacturing industries and would be regarded by the general public as a far better manufacturing State than she now receives credit for.

The following table shows the aggregate value of goods manufactured in 1884, arranged by counties:



## STATISTICS OF GOODS MANUFACTURED IN IOWA IN 1884.

COUNTIES.	Value of goods made in 1884.
Adair.....	\$ 38,300.00
Adams.....	9,450.00
Allamakee.....	1,152,259.35
Appanoose.....	110,651.82
Audubon.....	No report.
Benton.....	330,240.00
Black Hawk.....	2,173,865.00
Boone.....	989,083.00
Bremer.....	191,356.00
Buchanan.....	337,062.00
Buena Vista.....	154,100.00
Butler.....	189,703.00
Calhoun.....	32,690.00
Carroll.....	128,630.00
Cass.....	53,000.00
Cedar.....	99,300.00
Cerro Gordo.....	156,896.00
Cherokee.....	53,900.00
Chickasaw.....	201,070.00
Clarke.....	12,927.00
Clay.....	No report.
Clayton.....	769,937.58
CClinton.....	4,970,147.00
Crawford.....	79,375.00
Dallas.....	151,230.00
Davis.....	86,799.00
Decatur.....	10,380.00
Delaware.....	651,363.82
Des Moines.....	3,289,030.00
Dickinson.....	10,200.00
Dubuque.....	10,216,390.00
Emmet.....	No report.
Fayette.....	372,844.00
Floyd.....	407,209.00
Franklin.....	65,700.00
Fremont.....	98,600.00
Greene.....	123,175.00
Grundy.....	138,680.00
Guthrie.....	22,748.00
Hamilton.....	23,700.00
Hancock.....	400.00
Hardin.....	No report.
Harrison.....	No report.
Henry.....	361,250.00
Howard.....	17,460.00
Humboldt.....	52,500.00
Ida.....	No report.
Iowa.....	411,573.00
Jackson.....	412,571.00
Jasper.....	310,509.00
Jefferson.....	104,080.00
Johnson.....	4,835.00
Jones.....	335,256.00
Keokuk.....	356,940.00
Kossuth.....	No report.
Lee.....	4,601,857.48
Linn.....	3,317,046.00
Louisa.....	45,950.00
Lucas.....	33,074.00
Lyon.....	10,000.00
Madison.....	74,456.32
Mahaska.....	479,857.00
Marion.....	586,928.00
Marshall.....	2,683,394.00

COUNTIES.	Value of goods made in 1884.
Mills.....	245,780.00
Mitchell.....	191,215.00
Monona.....	82,220.00
Monroe.....	3,508.00
Montgomery.....	17,000.00
Muscatine.....	2,001,840.00
O'Brien.....	2,550.00
Osceola.....	2,000.00
Page.....	109,713.00
Palo Alto.....	26,300.00
Plymouth.....	304,860.00
Pocahontas.....	2,875.00
Polk.....	2,000,480.00
Pottawattamie.....	466,900.00
Poweshiek.....	818,504.00
Ringgold.....	15,216.00
Sac.....	10,400.00
Scott.....	5,607,785.00
Shelby.....	4,100.00
Sioux.....	46,720.00
Story.....	146,545.00
Tama.....	175,820.00
Taylor.....	39,000.00
Union.....	No report.
Van Buren.....	550,800.00
Wapello.....	2,063,380.00
Warren.....	171,488.00
Washington.....	640,830.00
Wayne.....	32,875.00
Webster.....	42,337.00
Winnebago.....	28,105.00
Winneshek.....	508,616.00
Woodbury.....	No report.
Worth.....	47,700.00
Wright.....	23,343.00

\*Lee township not reported.



ADDITIONAL TABLE OF WAGES, HOURS OF EMPLOYMENT,  
ETC., OF MANUFACTURERS.

No. of re- turns.	No. of managers.	Average monthly salary.	No. of salesmen.	Average monthly salary.	No. of clerks.	Average monthly salary.	No. of boys and girls.
79	39	\$ 81.45	41	\$ 71.37	26	\$ 54.00	59

No. of women.	No. of men.	Average hours worked per day.	Highest daily wages paid men.	Lowest.	Average.	Annual.
21	689	10.16	\$ 4.20	\$ 1.00	\$ 1.55	\$ 399.39

Highest weekly wages paid women.	Lowest.	Average an- nual.	Average weekly wa- ges paid boys and girls.	No. of injuries.	No. of weeks employed.	Total amount capital in- vested.
\$ 3.75	\$ 1.50	\$ 104.00	\$ 3.72	3	49	\$ 795,000

## INDEX TO SUBJECTS.

Accidents R. R.	217
Acknowledgments	14- 15
Addenda	365- 392
Adler, Prof. Felix	83- 86
Africa, Hon. Mr.	366
Agricultural College (Iowa)	87
Amana Society	61- 62
Angus, riot in	153- 157
Angus, strike at	149- 158
Apprentice system	100, 205- 207
Arbitration	145, 149, 161-167, 225, 363
Association of Superintendents of Institutions for insane	182
Atkinson, Edward	80, 366
Atwater, Prof.	367
Ayers, L. L.	148
Baldwin, R. B.	93
Banking, school (Hunt's)	87- 92
Banks	355
Blanks, copies of	31- 46
Blue, A.	366
Boots and shoes, price of	291
Bricklayers Union	51, 52, 57
Bureau of Labor Statistics, Iowa, origin of	9
Bureau of Labor Statistics, National	19, 368- 370
Bureau of Labor Statistics, reports of Iowa	10
Butter	361
Brykit C. S.	14
Canned goods	350
Canning factories, need of	194, 196, 197, 199- 201
Camp, E. L.	80- 82
Capital and Labor	163- 166
Capital invested	375
Carson, Hon. Geo.	71
Castle Garden	184
Census, U. S.	29, 183



Centerville, strike at.....	158
Chaffee, H. L.....	99
Chariton Coal Co., checks of.....	169
Checks, company stores.....	168-169, 178
Cheese.....	361
Cheese, co-operative factory for.....	62
Cigarmakers union.....	52, 56
Clark, John S.....	97
Clark, Hon. Sam.....	100-101
Clerk of this Bureau.....	13
Clinton winter school.....	93-94
Clothing, prices of.....	292
Coal, bushels of, mined by miner.....	220
Coal, grades of.....	173
Coal industry.....	163
Coal miners, payment to.....	172
Coal miners, views of.....	217-224
Coal mines.....	282-283, 286
Coal operators, views of.....	229-235, 370-373
Coal, payment on single grade of.....	175-177
Coal screens.....	170-181, 229-235
Coal, weight of.....	217-224, 370-383
Coffin, C. C.....	97
Commissioner, duties.....	9-10
Commissioner, office of.....	9
Commissioner, salary of.....	9
Company stores.....	168-169, 178, 217
Conflict, the industrial.....	164-167
Congress, memorial to.....	29
Contract foreign labor.....	153, 184-185, 209-211
Contractors.....	354
Convention, commissioners.....	16-29, 365-370
Convict contract labor.....	123-144, 207, 208, 363
Co-operation.....	64-66, 225
Co-operative cheese-making.....	62
Co-operative guild.....	63
Co-operative societies.....	58-62
Co-operative wholesale stores (England).....	58-60
Counties, sites in.....	194-203
Cost of living.....	247, 249, 251, 253, 255, 257, 287-345
Creamery, need of.....	198-202
Crime.....	356
Dairy interests.....	
Debt, workingmen in.....	303-345
Dry goods, prices of.....	291
Dwight school.....	80-83

Education.....	209-210, 245
Education, industrial.....	67-105, 362-363
Eggs.....	360-361
Elkins, Hon. Stephen B.....	65-66
Families, No. in workingmen's.....	301-345
Familistere, society of the.....	60
Farm labor.....	187-191
Farm statistical problems of.....	21-29
Farms, value of.....	192-193
Farnam, Prof. H. W.....	98-99
Food, economy of.....	367-368
Foreign labor.....	153, 184-185, 209-211
Fort Madison Chair Co.....	123-127, 136-138
Fuel, prices of.....	295
Gaylord, E. A.....	149-150
Gilman, H. A.....	186
Groceries, prices of.....	288, 290
Hale, Rev. E. E.....	67-68
Hall, Titus.....	59
Hill, Gershom H.....	185-186
Homes, number of teachers owning.....	247-259
Homes, number of wage-workers owning.....	296, 302-345
Hours of employment.....	216-217, 246-253, 266-271, 274-279, 300, 304-345, 351-355
Hunt, Prof. Leigh.....	87
Huiskamp Brothers.....	131-138
Immigration.....	182-186, 209-211
Improvements.....	357-358
Industrial conflict, the.....	164-167
Industrial education.....	67-105, 362-363
Industries, sites for.....	194-203
Injunction, writ of (Angus).....	155
Institution for the blind.....	103
Institution for the deaf and dumb.....	103
Insurance offices.....	355
Inventions, influence of upon civilization.....	965
Iowa farming tool company.....	123-134
Iowa hospital for insane.....	185
Iowa immigration to.....	183-184
Knights of Labor.....	47-55
Labor and capital.....	163-166
Labor organizations.....	47-57, 211-213
Labor farm.....	187-191
Law creating Iowa Bureau.....	9-10



Letter of transmittal .....	11-15
Leader, Iowa State, strike in .....	147-148
Legislature, recommendations to .....	293
Locomotive engineers .....	50, 56
Locomotive firemen .....	51, 56
Lord, J. S., Hon. ....	11
Lowell, J. Russell, Hon. ....	58
Lowell school of design .....	77-80
Luther, M. J., letter from .....	160
McAllister, James. ....	95-95
Manual training schools .....	19, 67-104, 208, 362, 363
Manufactories .....	236-244, 349-353, 375-382
Massachusetts Institute of Technology .....	75-77
Meats .....	289, 290
Militia .....	153, 154, 157
Mines and miners (coal) .....	217-224, 281-286, 303
Mill, flouring, need of .....	194, 203
Money, number having saved .....	247-257, 305-345
Munson, Mr., killed .....	156
Naylor, A. W., letter from .....	91-93
Needs of counties (industries) .....	194-203
New Brunswick Co-operative Association .....	60, 61
Newton, Rev. Dr. ....	66
New York, persons of .....	140-142
Noye, J. T., Manufacturing Company .....	361
Office of Iowa Commissioner .....	9
Office of Iowa Commissioner, expenses of .....	9
Ohio, coal screens in, report .....	171-180
Oliver, H. K. ....	68
Ontario, Industrial condition of .....	366
Operators, coal, views of .....	229-235, 370-373
Orphans' Home (Iowa) .....	101, 102
Osgood, J. C., letter from .....	370-372
Perry, Hon. John D. ....	140-144
Philadelphia Industrial Co-operative Society .....	61
Pierce, Hon. Edward .....	68
Platt, J. L., letter from .....	229-231
Powderly, T. V. ....	50, 215
Poultry .....	360, 361
Prison labor in New York .....	140-142
Prohibition .....	213-215
Protest against presence of militia (Angus) .....	154
Pullman, city of .....	105-122

Railroads .....	272-280
Railroad conductors .....	53, 57
Railroads, discrimination of in traffic .....	226, 238
Railroad employees .....	272-280
Railways, street .....	266-271
Railways, street, employees .....	266-271
Ration, the standard .....	368
Recommendations of the Ohio legislative committee on coal screens and truck system .....	171-181
Recommendations to Iowa Legislature .....	363
Reform School, Iowa .....	102
Regiments, Iowa, in the rebellion .....	359
Register, the Iowa State .....	87-90
Rentals, farm .....	192, 193
Rents .....	293, 294
Reports of Bureau of Labor Statistics, Iowa, distribution of .....	10
Reports of National Convention .....	21
Report of Ohio legislative committee on coal screens and truck systems .....	171-181
Riot at Angus .....	156-157
Rue Tournefort school .....	87
Salaries of Commissioners and Chiefs .....	13-14
Salaries of employes, etc. ....	350-355
Salaries of railroad employes .....	272-279
Salary of Iowa Commissioner .....	9
Sanborn, Prof., address of .....	21-29
Scale, a sliding .....	157-158
Screens coal .....	170-181, 217-224, 229-235, 370-373
Shaffer, Hon. J. R. ....	360-361
Sherman, Hon. B. R., Gov. ....	11, 154
Shoe contract (prison) .....	131-134, 138-139
Smith, Chauncey M. ....	365-366
St. Louis manual training school .....	68-69, 71-75
Standard Coal Company, weighman's book .....	223
Statistics, mode of collecting .....	30, 367
Stock .....	361
Store-keepers, suggestions of .....	336-244
Stores .....	355
Stores, company .....	168-170, 217-225, 363
Streator, Ill., letter from .....	159-160
Street railways .....	266-271
Strikes .....	145-167, 225, 285
Subpoenas, Commissioner's power to issue .....	10
Sunday, work on .....	227-228
Surface draining .....	107-108



Teachers, school.....	245-255
Technical education.....	67-104
Temperance.....	213-215
Text-books, uniformity of.....	208-209, 245-255
Thomas, W. H.....	152
Tile factory needed.....	196-199
Trades Unions.....	211-213, 303
Training schools.....	67-104, 224
Truck system.....	168-170, 178, 363
Typographical Union.....	52, 55
Uniform text-books.....	208-209, 245-259, 262-265
University, State.....	87
United States, prison labor in.....	143-144
Value of farms.....	192-193
Vincent, J. H., letter from.....	232
Wages.....	188-
193, 216-217, 220, 245-259, 266-279, 282-285, 296-345, 347-348, 350-355, 392	
Wages, comparative.....	347-348
Wants.....	243-244
Weeks, Joseph D.....	366-367
Western Supply Company, checks of.....	168
Weight of coal before screening.....	172
What Cheer, strike in.....	148-149, 219-224
Wightman, B., letter from.....	232
Wisconsin Industrial school.....	103-104
Women, working.....	846
Woodrow, Fred. W.....	163-167
Woodward, Prof.....	68-70, 96-97
Workingmen, views of.....	204-228
Workingmen's school.....	83-86
Wright, Hon. Carroll D.....	11, 366-370