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STATE OF IOWA 1920

REPORT OF THE

Bureau of Labor Statistics

FOR THE

Biennial Period Ending June 30, 1920

A. L. URICK, Commissioner

Published by THE STATE OF IOWA Des Moines

LETTER OF TRANSMITTAL

HON. W. L. HARDING, Governor.

SIR—In compliance with Section 2470, Chapter 8, Title XII, Supplemental Supplement to the Code 1915, I have the honor herewith to transmit to you the Nineteenth Biennial Report of this department.

Very respectfully,

A. L. URICK,

Commissioner.

Des Moines, September 30, 1920.

BUREAU OF LABOR STATISTICS ADMINISTRATION

A. L. URICK	Commissioner
ALFRED SHEPHERD, succeeded by	
J. D. SEAMAN	Deputy Commissioner
Н. Н. Вув	Factory Inspector
F. T. CROCKETT	
ELLEN M. ROURKE	Factory Inspector
JOHN E. NORDSKOG	Statistician
MAY DOUGLAS	Department Clerk
RUTH SMITH, succeeded by	
ESTHER SMITH	Stenographer
GEO. B. ALBERT	Free Employment Clerk

BUREAU OF LABOR STATISTICS

In submitting this Nineteenth Biennial Report of the Bureau of Labor Statistics, Section 2470 of the Code of 1897 as amended by the Twenty-ninth and Thirty-first General Assemblies was held in mind, but as indicated in former reports the Section is so comprehensive that to meet all its requirements the present force in both office and field work would have to be at least tripled. It was therefore deemed advisable to aim at greater perfection in line with our three latest reports in relation to matters covered. The various subjects which have heretofore been included in one Biennial Report, are, according to a new policy made possible by change in the printing law governing the department, issued in separate bulletins as follows:

- Bulletin No. 2, Manufactures Statistics, year 1919; including Report on Factory Inspection for biennium ending June 30, 1920.
- Bulletin No. 3, Arbitration and Conciliation, for biennium ending June 30, 1920.
- Bulletin No. 4, Child Labor, for biennium ending June 30, 1920.
- Bulletin No. 5, Labor Organizations of Iowa (Trade Union Statistics) for year 1919.
- Bulletin No. 6, State Free Employment Service, for biennium ending June 30, 1920.

By issuing separate or related topics in Bulletin form, rather than in one Biennial Report, the department will be able to submit to the public with less delay, information more serviceable in meeting particular needs or specific requests for data compiled by the department, and with economy due to eliminating waste in printing.

The original law covering the work of the Bureau gave authority to and made it the duty of the Commissioner to collect statistics "relating to all departments of labor in the state, especially in its relation to the commerce, social, educational and sanitary conditions of the laboring classes"; also to collect statistics of the amount and condition of the manufacturing and mechanical interests of the state, the intent being to impart information of value to other states as a means of promoting the value and growth of establishments and industries already existing, and to furnish information that may be

the means of bringing other industrial institutions into our commonwealth; the expressed thought of the statute being that of furnishing employment to a greater number of persons. Beginning with the Sixteenth Biennial Report a special effort was made to collect and systematize statistics of manufactures under the thought of showing the importance of this industry with relation to capital invested, value of raw materials or partly fabricated materials used in process of evolution for some final use; the value of products; the number of factories and wage earners; wages earned in classified industries and the continuity of employment. These were considered the main factors in showing the extent of manufacturing industries and its relation to labor in employment as specified by the code. Interest charges, rentals, salaries of management and even salaries of employes not engaged in actual production process, etc., were eliminated because it was evidently not contemplated by the law that a collection of statistics should enter into any detail that would lead to the disclosure of profits. This policy and thought has been continued in Bulletin No. 2, Manufactures Statistics.

The manufactures statistics show a gratifying increase in value of products, which must in part be attributed to changed money values, so that the number of wage earners engaged is the better test of increased activities. The statistics on this increased employment shows a healthy increase for the manufacturing institutions over that of any former report submitted, which must be taken as gratifying in view of the general disarrangement of all lines of industries during the war. That factories of the state have made a splendid progress for the year 1919, the first year following the war, should be taken as an excellent criterion for the future when new normals, both of industry and wage earners, will be fully developed in the readjustment that will and must inevitably take place.

FACTORY INSPECTION

The tables on factory inspection, included in Bulletin No. 2, show a healthy decrease in number of recommendations made with approximately the same number of inspections as in former years. This decrease is exceptionally noticeable in recommendations covering the well recognized and extreme danger hazards, showing the good co-operation of employers generally with the Inspection Department in meeting the requirements of former recommendations made. In recommendations looking to the health

and comfort of employes there was an increase as indicated under the classification providing for better care and repair of closets, furnishing of good drinking water and the providing of washing facilities and dressing rooms. As the industries of the state grow in importance, the tendency is more and more in the direction of buildings and equipments fitted for the particular use to be made of them. This means better lighted, ventilated and arranged factory buildings for the particular work to be done. It means the installation of all of the best possible conveniences and comforts for employes; and in the factory equipment, means an installation that is the last word in safety. Many of the buildings erected of late years for specific purposes are equal in design and utility to those in any part of the country. It has been the effort of the Department to at all times make recommendations tending toward perfection in every possible line, without too seriously discommoding the management of any plant or establishment during the period of transformation. In this work there have been found three general types of employers-the type that will make no improvements except when forced-the type that is a strict abider of the law and willingly does that which the law provides but no moreand the type always alive to any and all changes that will tend to improve conditions whether of safety, health or comfort. This latter is the real progressive type that believe such betterments result in an economy of management, even though the law does not command. The first type is getting rare in Iowa. The second type is somewhat more plentiful, and the third type is gradually growing into a majority, so great as to become an incentive for all the less progressive to follow.

OTHER BULLETINS

Referring to the other Bulletins, issued for this biennium, the tables on child labor, labor organizations, arbitration and conciliation, and employment service will be found more complete than heretofore, and a fairly comprehensive analysis will be found with each table. The farm wage tables have been changed from former methods and compilation, this partly because the township assessors' reports to the secretary of the State Board of Agriculture were abandoned for the year, and, further, through a better systematized free employment service it was possible to gather sta-

tistics, if anything, more directly representative than those heretofore presented, and of a type easier of presentation and more comprehensive in detail.

LEGISLATIVE NEEDS

Boiler Inspection. In a number of reports of this Bureau attention was called to the wholly inadequate safety provisions relating to boilers, except those of locomotives which come under Federal inspection. The only inspection now made is that by casualty insurance companies, and a boiler not inspected by them or rejected by them as too hazardous a risk may be used at the option of the owner and to the jeopardy of employees and citizens and property adjacent. In addition, Iowa has no fixed standard of construction or installation of boilers, which is becoming a source of danger to the state, because boilers constructed upon plans that do not meet the requirements of other states can readily be disposed of in Iowa, and which will eventually make Iowa the dumping ground for this class of boilers. The great majority of the states have at this time fixed standards both for construction and installation, these standars having the approval of the American Society of Mechanical Engineers, and with which standards there is the best of co-operation by the majority of boiler manufacturers.

The Bureau of Labor is in receipt of a number of communications from boiler manufacturers throughout the nation asking for our Iowa standards, saying that they are desirous of meeting all of the specifications by the respective states in any boilers sold within such state's jurisdiction. It is evident the reply must be that the only safety requirement in the construction or the installation of a boiler is that of Section 5026 of the Code of 1897, which provides that boilers must have a safety valve, a steam and water gauge. This is a decidedly unsafe standard for a progressive state like Iowa, which is so rapidly growing into a great manufacturing and industrial commonwealth. To meet the requirements of the time and need, a law should be enacted providing for the following:

- There should be a fixed standard of construction, installation and maintenance of boilers.
- (2) Boilers which carry a steam pressure above fifteen pounds to the inch should have at least one external and internal inspection during each year.
- (3) There should be a definite standard for qualifications of inspectors whether of the state or of the casualty insurance companies.

- (4) All inspectors should hold a certificate of competency from this bureau.
- (5) All insurance inspectors should be required to file a complete report of each boiler inspected within twenty days of the date of inspection.
- (6) All users of boilers coming within the provision of this act should be required to notify this bureau of the number and type of boilers used.
- (7) The state should enforce adopted standards, and where boilers are not inspected by insurance inspectors should make that inspection by a properly qualified state officer.
- (8) Boilers subject to inspection by the United States government should be exempted.

Under these provisions a regulation would be given to the casualty insurance inspectors, and, where a boiler was rejected by their company as being too hazardous a risk to carry by them, the state should see that such boilers comply with the state standards, and that they could not be used to jeopardize employees and others within danger zones. It would give the state the power of inspecting boilers, the owners of which are at this time willing to assume all risk, and it would place the officials of the state in a position to supervise all inspections without the creation of a large force of inspectors such as would be required for direct inspection and supervision of all boilers.

Lighting. The statutes of the State of Iowa do not in any way mention lighting of shops or other establishments where work is done, although it is an important element in safety and management. One of the large insurance companies of the country in an analysis of 91,000 cases of accidents which occurred in factories discovered that 10 per cent of these were caused directly by poor lighting, and that in 13.8 per cent poor lighting was found as a contributory cause. In a study of British accident statistics it was found that 39.5 per cent more men stumble and fall during the dark winter months than in the light summer months. A prominent electrical engineer is responsible for the statement that adequate lighting facilities will increase the total output of steel mills by 2 per cent, and that in other classes of plants, such as shoe factories and textile mills, it will increase the output 10 per cent. These figures indicate the interest of the state in enforcing proper lighting facilities as a means of protection to its citizens and other employees, and as a means of greater production upon a better basis of economy.

Many of the buildings recently constructed in Iowa for the particular industries which are to occupy them are built and arranged along the best modern lines. A great number of establishments constructed in the past, or perhaps in buildings constructed for other purposes than those of their present occupancy, have no arrangements for good, practical lighting, in part making up for the poor natural lighting facilities by artificial light insufficient in quantity and oftentimes very improperly distributed. The state should have a fixed standard for the established needs of the industries according to their classification and requirements.

RECOMMENDATIONS

Administration and Needs. The administrative force of the Bureau consists of a commissioner, deputy commissioner, three factory inspectors (of whom one is a woman), statistician, clerk and one stenographer. In addition, one chief clerk of the state free employment service.

Attention has been called, upon several occasions, to the inadequacy of this force if the work already coming under the jurisdiction of the Bureau of Labor is to be done in a satisfactory manner. Because of the small inspection force the deputy, during the past eight years, has been employed practically all of his time as an inspector, but even with this addition it can readily be seen that the entire state cannot be covered and the duties properly performed as contemplated by the laws under which the Bureau of Labor Statistics is operating. When it is taken into consideration that the state now has approximately 4,500 establishments in which power driven machinery is used; that all of the great number of mercantile establishments must be inspected with relation to elevators, seats for female employees, toilet facilities and other possible conditions of employment; that all of the telephone exchanges, laundries, et cetera, must also receive due consideration; that in addition it is the duty of the Department to enforce the child labor laws, look after all buildings to be equipped with fire escapes other than buildings used for habitation purposes in cities of 15,000 or over, and that the fire escape law includes school houses of two stories or more, all moving picture shows, theaters, etc., with relation to fire escapes and exits, it can readily be seen that the force is inadequate. Many of the larger establishments complain because inspections are too infrequent, making the number of recommendations at each visit oftentimes expensive in compliance. At the present time there is one woman inspector. Under the duties as designated by the law this inspector is required to cover the entire state, while with the other inspectors the state is divided into three districts, and which in emergency calls oftentimes requires a jump of several hundred miles. When an emergency comes, if an inspector is in an opposite end of the district, the time required for his attending the place of emergency is too long and the expense of the trip is unreasonable. The inspection force should at least be doubled. This will make possible a division of the work, beneficial to the state and to the industries, and oftentimes mean a considerable saving in expense in the long jumps now required.

Ventilation and Sanitation. A perusal of the law relating to this subject will at once determine its inadequacy with relation to present conditions. The only mention of ventilation and sanitation in the present laws relates to toilets, dust carrying devices where emergency wheels or tumbling barrels are in use, and to pipes to carry off deleterious gases and fumes from molten metal or other materials giving off such substances. Experience and investigations by sanitary experts and physicians have made definite the need of sufficient volume of pure air and good sanitary conditions and environments for the protection of the health of employees, and as a means of minimizing accident hazards. Efficiency experts, economists and progressive managers have become thoroughly convinced that these things are necessary for economic production, as they mean in the end workers that are more alert and careful, more contented, less subject to accident, and as a consequence better citizens. In a former report we called attention to the fact that the state spends thousands of dollars annually in educating men and women to cure disease and to care for the sufferers, much of it occupational in its origin, and much of it could be prevented by a law regulating ventilation and sanitation in places of employment. A worker cannot perform good service in unwholesome air. He becomes drowsy, and dull of mind, which causes inefficiency and subjects him to a great accident hazard. All of the large manufacturing states have found it necessary to make provisions along this line, and as Iowa is developing rapidly into a manufacturing state it cannot afford to longer delay making the provisions that have been found wholesome and beneficial in other states. These things should all be done during the time of development of the industry, so that there will be no future disarrangement of any of our industries in bringing about the protection, safeguards and economies that are inevitable in well developed industries.

Building Code and Inspection. The State of Iowa has for more than twenty years made some provisions for the inspection and safeguarding of machinery as a means of safeguarding the life and limbs of workers. There are few that would abandon this activity of the state. It is therefore peculiar that no effort has heretofore succeeded in making adequate provisions for the safety of workers engaged in building construction, a highly hazardous occupation. This is especially noticeable because of the fact that more than onehalf of our sister commonwealths have had such laws for a term of years, and in all of these states these laws are working to the entire satisfaction of all concerned. The responsible building contractor has supported this class of legislation because he is, as a matter of protection for himself, compelled to furnish reasonably adequate protection to his workmen, while the irresponsible contractor can shift the burden of the accident hazard upon the workmen, and to this extent has an advantage of the responsible contractor. Legislation of this kind is, therefore, important to this class of contractors in the meeting of competition. The building laborer or mechanic wants this protection of safety, because under the common law in case of injury he has no protection whatsoever when working for an otherwise irresponsible contractor, and who, because of irresponsibility, does not find it necessary to provide insurance as contemplated by the Compensation Act.

The beneficent purpose of safety legislation is generally recognized and, in the case of construction work on buildings, should be established in view of the fact that compensation insurance is not compulsory to the irresponsible contractor. The thousands of men working in this line of industry are certainly entitled to as much protection as is accorded those engaged in any other line of industrial activity.

Complaints are frequent of buildings being so poorly constructed as to be a possible hazard. At the present time, the state makes no provisions whatsoever for safe construction, except that powers are delegated to cities and towns to regulate by ordinances this class of work. Many cities make no provision for it, while in some of the other cities they aim at standards that are so low that they cannot be held to be of any real benefit. Complaints come to this Bureau

from many localities, many of these from officers of municipalities, asking that an inspector be sent to inspect buildings that to them appear to be unsafe. The state has no power in any of its departments to make such inspections, or to condemn any sort of structure unless it has become a fire hazard. The fact of it being a danger to life and limb is not accorded any consideration. This is especially true in many cases where buildings are used for public gatherings. Some provisions should be made for a standard code of construction according to the use that is to be made of buildings, and below which standard no construction should be permitted. Our citizens when attending any place of amusement or place of public gathering should be made as safe as possible, and the state's duty to its citizenship is not fulfilled until all of the precautions for their safety have been established.

Modern Method. The factory inspection laws now standing upon the statute books, were, in the main, written years ago at the time when there were no greatly developed industries, and when factory inspection was receiving its first trials. The laws, as written at that time, served good purposes, but, in the light of development and at this time, are, in the main, inadequate. The enormity of the tasks of legislators in meeting all present day requirements have developed more modern methods of administration. Industrial conditions, changes in machinery for the doing of the work, and the rapid changes of industrial methods have made it impossible for legislators to give personal consideration to all details in drafted statutes. Two years ago attention was called to this, and the modern methods adopted by most of the larger manufacturing states were described as follows:

"Under this plan authority is given to the department having supervision of industrial conditions, in addition to the right to investigate, the power to ascertain, declare and prescribe what safety devices, safeguards, or other means or methods of protection are best adapted to render the employees of every establishment and place of employment and frequenters of every place of employment safe, and to adopt reasonable and proper rules and regulations relative to the exercise of its powers and authority and the mode and manner of conducting investigations and hearings. The plan is, with the co-operation of employers and employees, to work out codes of safety in all lines of industry, and which will become effective after due hearings and publication. By this means the experience

of the worker, the knowledge of the employer and the critical ability of the expert can all be molded into constructive methods for safety, health and welfare, and upon the most concise and economic plan. These by their knowledge, experience and expert skill can give attention to close detail impossible upon the part of a legislature with its multiplicity of problems, and which at best in questions of standards can only be general in their treatment."

Section 4999-a1. Two years ago attention was called to this action. In that section provision is for separate water closets and privies for the sexes with separate entrances, for manufacturing establishments, work shop and hotels in which five or more persons are employed, but makes no provision for mercantile establishments. As this section evidently attempted to protect sex privacy, there is no reason why the need for it is not as great in mercantile establishments as in any of the places enumerated. When it comes to the furnishing of dressing rooms, clothes lockers, washing facilities, this separation is provided for mercantile establishments as well as other classes of establishments, indicating that the omission of mercantile establishments in the first instance was wholly one of oversight. This should undoubtedly be corrected.

Child Labor. Section 2477-b of the supplemental supplement excludes the employment of all persons under sixteen years of age in hotels. This means that a restaurant and café running in connection with or as part of a hotel cannot employ children under this age; yet, the restaurant or café not operated in connection with a hotel may employ children of any age. The Child Labor law in no way whatsoever applies to this class of establishments. This is not only using a discrimination between places of similar employment, but if the intent is a protection to the child then the work of such child in any of the restaurants and cafés must be held fully as objectionable as the employment in or about a restaurant in connection with hotels.

The Child Labor Law, as it now stands upon the statute books, provides that children between the ages of fourteen and sixteen may work in the occupations cited in Section 2477-a, supplemental supplement of the code, upon the securing of a work permit from the superintendent of schools or person authorized by him in writing, providing the child can meet certain qualifications, one of these being an education equal to six yearly school grades. The intent of this is plain, that of compelling school attendance until that grade is

reached, but if the child above fourteen years of age is held capable under the law to perform labor during the school term when he has a sixth grade education, then there can be no reason to question the sufficient development of a child by standard of school grade alone when working during the vacation period, when there is no opportunity of acquiring the standard grade. There is no good reason for the otherwise well developed child of fourteen years of age during the school vacation to be prohibited from work simply because of educational qualification, when the child having attained such grade, and no better developed, is permitted to work both school term and school vacation. A great many of our states are setting the age of employment higher than fourteen, but so long as the State of Iowa, in its wisdom, believes that fourteen is the proper age of employment for well developed children, or children developed up to a certain physical standard, there can be no good reason for withholding a work permit during a vacation period from the child because of educational qualifications alone.

Fire Escapes. The fire escape law of Iowa is among the very best of the nation. It provides for the erection of a type of escape according to the type of building and the use made of it. It provides for a modern method of regulating, and the drafting of specifications for erection of the several types of escapes. But, as in the case of all legislation, experience indicates some need for changes. A highly important change of this kind is required in a certain type of buildings erected for resident purposes, but that may afterwards be put to use for rooming and other purposes. We refer directly to some of the buildings used for the housing of students in a number of our cities and towns where great educational institutions are situated. With the rapid development of these institutions, and the consequent great attendance of students, it has, in many cases, been found that the housing facilities are inadequate. Because of this crowded condition, attics have been made over to afford rooming facilities, making out of them three story buildings, which under the law can be equipped with stairway fire escapes only. Without some form of escape these houses are unsafe for such purposes. Usually there is only one narrow stairway for egress in case of fire, but the stairway fire escape is too expensive a construction for a building of this type, and some other less expensive type would be sufficiently adequate for all purposes. Either some provisions should be made for special construction of escapes on this type of

building, or some power of discretion should be given the Commissioner of Labor in buildings of this class. In the matter of exits from theaters, et cetera, the law provides that the inspector shall, subject to the final decision of the commissioner, have power to determine the number of exits from all theatres, opera houses. all assembly halls and those having one or more balconies, and the relation of such exits to the fire escape, but gives no control to the passage ways and means of reaching the exits. For instance, in a theater, the seats may be loose, thus liable to be moved from place to place and becoming an obstruction to the exits and passageways leading to the exits; or the arrangement may be such as to make it almost impossible for patrons in an emergency to reach same, so that proper provisions should be made for the commissioner to have the authority not only as to the exits but should have control over the arrangement of seats, aisles and all of the passageways leading to such exits.

Private Employment Eureaus. We again call attention to the fact that while this department has the right of calling for and inspecting all of the books, records and other papers of private employment offices, yet the law does not require them to keep any such records. This should be remedied, as the right of inspection without the compulsory keeping of records is meaningless, and in no way indicates the nature of transaction of such employment service. The law requires that all those sent to a position shall be furnished a copy of agreement specifying the nature of the work to be performed, the wages to be paid and the fee charged, but under the present condition of things no inspection can indicate the number of persons supplied with these duplicate contracts, for the office itself is not required either to keep or file the contract or record thereof. Then again, under the provision of Section 700, supplement to the code 1913, cities and towns are given the power to license and regulate these offices. Some of the cities take advantage of this provision by adopting ordinances to license and regulate, while other cities fail in these rights, consequently making a discrimination between employment offices conducted in the several cities. Some uniform method should be adopted where all of these offices could be brought to uniform standards, requirements and responsibilities.

Free Employment Bureaus. In Bulletin No. 6, the activities of the state free employment bureau are fully set forth, as well as the purposes to be served with a well regulated service of

this type. If the service is to be maintained in a highly efficient manner, it will be required to have a reasonable distribution of these offices in several cities of the state. The future of these offices will, in all likilihood, be that of the respective states conducting the employment service proper, while the Federal government will act as a clearing house to take care of the distribution between the several states according to the needs thereof. To have an adequate service of this kind would require an appropriation of at least \$25,000.00 for the salaries of employees, rentals and proper locations, and the other expenses incident to the service.

Hours of Women Wage-earners. For a number of years the women of Iowa have asked for a law limiting the hours of service for women wage-earners. All but six states of our nation now have such laws. Decisions of state courts and the Supreme Court of our land have held such laws constitutional under the police powers of the state, and have declared them necessary because of functions of womanhood and her relation to the future welfare of citizenship. Inasmuch as Indiana, West Virginia, Alabama, Florida and New Mexico are the only other states not affording this safeguard and protection to the working women, any argument of the industries of our state being placed under prohibitive competition with like industries of other states can no longer be held reasonable. Nor can it be held that the protection and safeguarding of the women in health and functions of motherhood can tend toward any goal other than a stronger, healthier and more robust oncoming generation.

In view of the conditions cited, and which are generally conceded, it is recommended that an act providing for reasonable limitation of both the number of hours per day and per week for women wage-earners should be enacted. The facts are that progressive managements are themselves conceding the need of such limitation by a reduction in the working time of their women operatives, and what is conceded by the best of these managements should preclude the continuation of a license for the less thoughtful.

EXPENSE OF THE BUREAU OF LABOR STATISTICS

(For the Biennial Period, July 1, 1918, to June 30, 1920)

Salaries, for biennial period		\$26,203.16
Traveling and hotel expenses		6,036.59
Supplies and postage:		
Paper	\$47.89	
Envelopes	49.20	
Pencils, pens, etc	8.88	
Baskets, brushes, brooms	.26	
Books	4.78	
Rubber bands	2.58	
Paste, ink, etc.	4.53	
Sundries	75.53	
Postage and stamped envelopes		
Total for supplies and postage	\$1,442,67	1,442.67
Printing, binding, engraving, and paper stock		2,176.68
Telephone and telegraph		153.81
Express, freight and cartage		104.73
Furniture and stores		632.28
Miscellaneous expenses, supplies, repairs, etc		253.03
Grand total for biennial period ending June 3	10, 1920	\$37,002.95