

STATE OF IOWA
1924

REPORT OF THE

Bureau of Labor Statistics

FOR THE

Biennial Period Ending June 30, 1924

A. L. URICK, Commissioner

Published by
THE STATE OF IOWA
Des Moines

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LETTER OF TRANSMITTAL

HON. N. E. KENDALL, *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 Twenty-first Biennial Report of this Department.

Very respectfully,

A. L. URICK,
Commissioner.

Des Moines, September 30, 1924.

BUREAU OF LABOR STATISTICS ADMINISTRATION

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REPORT OF BUREAU OF LABOR STATISTICS

In submitting this, the twenty-first biennial report of the Bureau of Labor Statistics, the plan adopted four years ago is again followed. Under this plan a rather brief resume is given of the activities in a biennial report, while the greater details are issued in bulletins treating separately the several subjects coming under the jurisdiction of the department. By this plan a considerable economy is effected both in printing and in distribution, in that a considerable number of people are interested in some particular subject only, and which can be supplied them in a more concise manner without overburdening the mail, and at the same time save the printing and material in which they have no particular interest.

The bulletins of which this report is a resume are as follows:

Bulletin No. 12, Child Labor, biennium ending June 30, 1924.

Bulletin No. 13, Labor Organizations of Iowa (Trade Union Statistics) for year 1924.

Bulletin No. 14, State Free Employment Service, biennium ending June 30, 1924.

Bulletin No. 15, Factory inspection, prosecutions and accident reports for biennium ending June 30, 1924.

It will be noted Manufactures Statistics, as formerly published in bulletin No. 2 of 1919, and bulletin No. 8 of 1921, have been abandoned. The reason for this is that when this form of statistics was begun in 1913, it was deemed important that a prompter means of conveying conditions of the manufacturing industries was necessary than that of the plan of the U. S. Census, which made a concise investigation every ten years, with a more limited report at five-year intermediate periods. Iowa, a rapidly developing industrial state, was thought to be entitled to a prompter service to show its status. Prior to 1921, however, Congress directed that the Census Bureau make a report biennially. For the year 1921, both the Iowa Bureau of Labor and the U. S. Census Bureau gathered such statistics, and while a rather close co-operation existed, this bureau felt that there was no use in duplicating work and expense, and consequently Statistics of Manufactures, as formerly published, were discontinued.

Another reason for this discontinuation is contained in the Monthly Employment Survey, which was first published by this bureau for the month of January, 1922. During and immediately

following the war, rumors arose and were published broadcast throughout the country, describing a condition of unemployment in Iowa that were greatly exaggerated and in one or two instances, wholly unfounded, and decidedly harmful to our state. There was no really practical way of refuting these, so it was deemed advisable to devise some plan whereby an actual condition could be made available at sufficiently close periods to at all times protect against unfounded or exaggerated rumors. Under this survey plan, 450 industrial establishments of the numerous classes of industries were selected and requested to furnish certain facts relating to conditions of their individual concerns, and especially the total number of employees on the last pay day of the month. Cities are also requested to furnish the number of building permits and estimated cost of construction. In addition the activities of the State-Federal Employment Services are given. All of these compiled and compared by month and by year show a condition that cannot be controverted.

Pertinent remarks on business outlook by concerns reporting, is probably one of the best barometers of business conditions that can be devised, and is one of the features of the survey that have made it popular and effective.

From reports coming into the office, and from the splendid cooperation of the firms reporting, there can be no doubt that the substitution of the survey for the former bulletin of manufactures statistics is a decided improvement. It is of course the intent to make just a slight addition in the near future that will make of it a more perfect medium of defining at short intervals industrial conditions of both employers and working people.

During 1919, and again during 1921, this bureau issued a directory of manufacturing establishments of the state by first giving city in which the plant is established, railroad facilities, population, and class of goods manufactured, also a list of plants classified by industries. A brief outline of Iowa's natural and developed resources including agricultural and mining, is also given with other facts that indicate resources and activities.

A revision of this directory for 1924 is nearing completion.

Bulletin No. 12, Child Labor Statistics, as in former issues, includes age, sex, school grade, height and weight of children to whom work permits were issued during the last biennium. These records show a gradual lessening of the number of children working in the regulated occupations. For the biennium ending June 30, 1920, there were issued 7,469 permits; that ending June 30, 1922, there

were issued 3,825 permits, while for that ending June 30, 1924, but 3,132 permits were issued. It should be recalled that the first period mentioned included the active war period when there was an extraordinary shortage of workers and a consequent call for labor from wherever sources it could be had. The second period came during the readjustment stage and also the Federal tax act for the regulation of child labor.

The last biennium is no doubt partly affected by retarded industrial conditions, but most of the decrease can be attributed to the recognition that the labor of immature children does not mean economy in production nor satisfaction in management.

The figures of bulletin No. 12 will also show the per cent of all work permit children from 14 to 15 years of age decreasing, while the per cent of those from 15 to 16 years of age has increased.

Bulletin No. 13, Labor Organizations, shows the number of organizations by location, craft and sex; also wage schedules, number out of work December 31, 1923, number of strikes and lockouts with number of employees involved during the biennial period, also legislative needs. All of these particulars are given as reported by local secretaries.

The report shows 919 local organizations with a membership of 59,575 for the end of December, 1923, as against 1,002 locals with a membership of 70,332. Owing to the long drawn out controversy of the railway shop crafts, and which was still unsettled on several large railway systems when the figures for 1923 were taken, there was evidence that a number of locals worked "under cover" and consequently did not report either existence or membership, so that the figures given are not quite as complete as in former reports. There is every evidence, however, that because of the railway controversy and general trade reaction, both the number of locals and of membership decreased during the biennium.

Bulletin No. 14, State-Federal Employment Service. This title is used because the Free Employment Service is in reality conducted as a co-operative service between "The State Free Employment Bureau" and the "U. S. Employment Service," both so far as Iowa is concerned, under the direction of the state commissioner of labor. Three offices are in operation, one located in the county court house at Des Moines, this room being furnished rent free by the county board of supervisors; one located in the city hall, at Sioux City, in a room given rent free by the city council, and one at Creston conducted entirely free of expense by the agent of the farm bureau.

During the fiscal year ending June 30, 1923, these offices placed

27,791 males and 10,434 females; for the year ending June 30, 1924, there were placed 28,405 males and 10,543 females, a total placement for the biennial period of 56,196 males and 20,977 females, a grand total of 77,173 persons at a per capita placement expense of 21.5 cents. Of those placed during the two-year period 22,656 men and 331 women, a total of 22,987 were placed in some kind of farm work.

Bulletin No. 15, Factory Inspection. During the biennium ending June 30, 1924, there were inspected 3,707 plants, many of these were reinspected several times. Reinspection is largely dependent upon the nature of business and size of plant, general conditions being taken into consideration. For instance, canning plants operate only a short period of the year. In these it is customary to go over all machinery and general conditions a short time before the plant begins active operation. This, so that all needed changes and corrections can be made without inconvenience or time lost because of defects, during the active season. These plants are again visited during operation to check on former inspection and to check up on child labor, sanitation, and other features covered by law.

In the 3,707 plants inspected, 1,630 orders for compliance with law were made as follows: guard gears 106; remove or cover set screws 79; guard saws, jointers, etc. 76; cover extractors 9; guard rail or screen machinery 315; rubber mats for switchboards 17; guard or rail openings 29; repair or build new stairways 68; erect fire escapes 222; repair fire escapes 63; provide drop or extension ladders 21; signs to fire escapes 130; swing doors outward 54; suction fan 2; ventilator for fumes 14; repair elevators and gates 42; repair water gauges, boilers 8; better passageways 114; new water closets for men 24; for women 17; repair closets for men 28; for women 25; remove obscene writing 4; provide washing facilities 3; provide dressing room 1; provide seats for female employes 29; post list of or secure work permits for children 29; remove children under 14 years 32; and miscellaneous orders 79.

In addition nearly all plans for new school buildings are submitted to the bureau for approval relating to exits, fire escapes, etc. This applies also to a great number of store, office and theater buildings. Many architects are closely co-operating with the bureau, so that all requirements of existing law may be met during construction. The largest school district in the state has adopted the plan that no architect's plan for school buildings be accepted unless it has met the approval of this bureau. Fire escape manufacturers submit all plans for approval before fabrication and erection, and

many school boards and others insist upon inspection and approval before payment is made.

Closely connected with inspection work is the accident hazard, which the inspection work aims to reduce. For this purpose when reports of accidents come into the office, a brief notation of place, person, and nature of accident, especially of the more serious ones, is made. These notations are given the inspectors for further investigation. This follow-up tends to bring closer attention to the accidents. Sometimes the negligence of the foreman or others in charge of work is made evident; again, in many cases the carelessness of employees is plain, and in either event greater future care is established, for no one cares to be placed in position of established blame for injury either to self or others.

While the accident rate appears to remain at about the same number, the per cent of those of a less serious nature is increasing while the per cent of more serious cases is apparently decreasing. The number of accidents resulting from unguarded machinery is decidedly low, with about the same continuing quota of those resulting from machinery from which proper guards have been removed for some cause or other without replacement as provided by law. It seems peculiar that those who know better among the workmen should continue this negligence when so many resulting examples of accidents are in evidence. It is likewise peculiar that so many managers, superintendents and foremen should share in the negligence by permitting this dangerous practice to continue on the part of workmen.

This bureau, according to the law, receives report of all accidents occurring in industrial employment exclusive of farm or horticultural workers, railway train service, and of those in coal mines, the latter reports going to the mine inspection department.

The number of reports received follows:

July 1, 1920, to June 30, 1921.....	11,154
July 1, 1921, to June 30, 1922.....	11,125
July 1, 1922, to June 30, 1923.....	13,160
July 1, 1923, to June 30, 1924.....	13,583

From this it is evident that the total accident frequency remains about the same as the total number of employees, and has either increased or decreased according to employment conditions for the particular period.

The co-operation of employers with the bureau has been good. The readjustments of industry since the war have resulted in un-

stabilizing employment by emphatic changes of personnel in the changes from shut downs or part force operation, to either full or nearly full force, full time operation. In these changes men unfamiliar with plant or plant practices, and in many cases unfamiliar with the type of work had to be employed. Such conditions make management, even by the most expert managers, more difficult and enhances accident hazard. With stabilized industrial conditions, with resulting stabilized employment, there is no doubt the accident frequency could be diminished by at least one-third.

There were nine cases of prosecution during the biennial period, one of these being in Cedar Rapids, four in Davenport, two in Des Moines and one in Mason City. All cases were for violation of some provision of the child labor law. One of these cases was against parents for permitting employment of children; all others for employment of children. In only one of these cases was the employment in other than theaters.

*For greater detail see Bulletin No. 15, Factory Inspection, etc.

Manufactures Directory. The law provides that this bureau "shall disseminate such information as will induce the location of mechanical and other producing plants within the state," the aim being to tend to increase the productions, and consequent employment of producers. To definitely cover this feature of the law, there was printed during 1919 Bulletin No. 1, a directory of manufacturing plants, classified by location and class of goods produced, also including a brief summary of natural resources, locations of such, volume of products both agricultural and mechanical, and features showing Iowa activities. This bulletin received so much encouragement that a revision was made for 1921, known as bulletin No. 7, and at this time a revision is nearing completion bringing all features and corrections down to the middle of 1924.

Elevator Code. The 40th General Assembly enacted a law providing that "every elevator and elevator opening and machinery connected therewith in every elevator, hoistway, hatchway, and well-hole, shall be so constructed, guarded, equipped, maintained and operated as to render it safe for the purposes for which it is used." Elevator hoisting devices coming under the jurisdiction of the state mine inspector are made exceptions as these were already provided for by law.

The governor was directed to appoint a conference board of five members to adopt a code of standards, rules and regulations for the construction, installation, equipment, maintenance and operation of elevators, such code to have the force and effect of law, and

made it the duty of the commissioner of labor to publish and enforce the provisions thereof. The conference board was promptly appointed by the governor and immediately proceeded to work. Numerous causes, however, delayed the work so that at the time of this report the board has just about completed its tentative code and is preparing for a public hearing on its provisions before concluding its final report. With the completion of this code Iowa for the first time will have an elevator code that will largely protect against catastrophies such as brought about the legislative activity.

RECOMMENDATIONS

Boiler Inspection. As the Randolph Hotel elevator catastrophe brought about the enactment of an elevator code so may it be that the Vallandigham store ammonia tank explosion, by which eleven lives were lost, and a number of others suffered untold agonies, will bring some protection on the part of the state seeking to safeguard its citizens against similar catastrophies.

The evidence of experts in ammonia high pressure tanks in the above case was unanimous that the tank causing the catastrophe was improperly designed, constructed, and installed, and that in attempted corrections the hazard was increased.

The Labor Commissioner, in the seventh biennial report (1897) called attention to lack of legal provisions for making boilers and the maintenance thereof safe. Every commissioner since that time has called attention to this lack of regulation, and the present commissioner in his sixteenth, seventeenth, eighteenth, nineteenth and twentieth biennials has somewhat fully covered the subject.

We can at this time do no better than to repeat the recommendations made in the twentieth biennial report as follows:

"Attention has upon several occasions been called to the need of boiler inspection, pointing out the fact that the only statute relating to boilers is an enactment of the Fifteenth General Assembly, and which provides that boilers shall be equipped with a steam gauge, safety valve and water gauge, so that excepting these three particulars no part of a boiler is subject to inspection on the part of the state. The only inspection service is that by casualty insurance companies, and when a boiler is rejected by them as too unsafe for them to assume responsibility of insurance, the owner thereof may continue to operate it at his own sweet will and thus jeopardize not only the lives of those in the establishment but also those within the danger zone outside, and certainly endangering adjoining properties.

"There should be enacted a code fixing standards both for construction, installation and maintenance of boilers and high pressure tanks, such as has the support and encouragement of all of the better type of boiler manufacturers, and based upon a code drawn by the American Society of Mechanical Engineers. Such code should fix a minimum standard of safety and should provide a definite standard for qualifications of inspectors, who should hold a certificate of competency from some examining board connected with the labor department. Under this plan the insurance boiler inspectors, which in the main are selected for competency, could inspect the same as they are now inspecting, their companies making a report of each inspection to the bureau to indicate that they are meeting the fixed state standards. Insurance companies in other states are doing this. Boilers coming within the provisions of the law should be registered with the department of labor, which should have a competent boiler inspector, holding a certificate from the board of examiners, and it should be his duty to examine all boilers not inspected by the insurance companies, and he should further look after all of the boilers rejected by the insurance companies to bring them either within the provisions of safety or condemn their use. This plan would bring the state within the same standards provided by other industrial states, and if not followed will mean that within a few years Iowa will find itself with great numbers of boilers not meeting the safety requirements of other states, and which are even now sold in Iowa because of there being no fixed standards."

Let us add that a law in itself is inadequate unless provision is made for competent and sufficient means of enforcement.

Lighting. A recent publication of the national committee for the Prevention of Blindness opens its chapter on "Industrial Lighting" as follows:

"It is obvious that no person can do his work efficiently unless he can see what he is doing, clearly and comfortably; yet this fundamental principle of industrial hygiene and business efficiency is violated in thousands of factories and offices. As a result, the worker suffers from eye strain or from one or more of the many disorders which have their root in eye strain, and industry suffers from decreased production, increased spoilage and errors, increased personal injuries and compensation costs, and lowered plant morale."

Two years ago attention was called to the finding of insurance carriers that at least ten per cent of all industrial accidents are caused directly by poor lighting, and that in approximately fourteen per cent of all cases poor lighting is found as a contributory cause.

While no Iowa data is available yet it is safe to say accidents from this cause will run fully as high, if not higher, than the national experience. This, due to the fact that in a developing industrial state many buildings are used not originally constructed for the purpose, consequently poor light arrangement with its resultant eye strain and accident hazard. In all of the more modern structures rather close attention is paid to day-light lighting, but even in these new buildings scientific distribution of artificial light according to need for class of work is overlooked.

For light to be good, it must be sufficient, continuous, and the diffusion must be good. Glare must always be avoided. Expert evidence proves it injurious to eye and nerves; causes discomfort and fatigue; and as it interferes with clear vision it increases the accident hazard. An efficient and well distributed light means economy from every angle. It is estimated that the average loss of time of three minutes per day by an operative will offset the annual cost of proper lighting, and that thirty minutes loss per day during the year equals ten times the cost of efficient light maintenance.

In the interest of safety to person and economy to industry a minimum lighting standard should be adopted by the state.

Building Code. According to the occupation table of the U. S. Census for 1920, there are over 60,000 persons in Iowa engaged in building construction. It is rather remarkable that with this number of men engaged in an occupation more or less hazardous, there should be no provision by the state fixing some definite minimum code of safety for construction, maintenance or repair of buildings in equipment, scaffolding, flooring, and other safeguards generally accepted as necessary to protect the life and limb of workers engaged in this industry, as well as those persons who in their daily business or other affairs find it necessary to occupy such structures after erection, either transiently or more permanently. Such minimum code would also be beneficial to the financially responsible contractor, who for his own protection, must make a reasonable provision for safety to his employees, while the wholly irresponsible contractor can shift practically all the hazard on to the workman, thus avoiding all expenditures for safety, and to this extent be at an advantage over more responsible bidders. It should be held in mind that the wholly irresponsible contractor can even avoid the terms of the workmen's compensation law, and is therefore at further advantage.

Two years ago we said in part as follows: "Time after time

requests come into this office for inspectors to examine into the safety of buildings, yet there is no provision under the laws of the state for the inspection or condemnation of any building except that the fire marshal may condemn a building because of its being a fire hazard. It is true that authority is delegated to cities and towns to regulate by ordinance building construction and maintenance, but where this is not done by them there is no one with any authority to provide for safe buildings regardless of what use may be made of them. In this particular the state should make some provision for a minimum standard with which all cities now having authority should comply, not taking from them, however, the right of fixing standards for safety beyond such minimum. This provision of safety should be made especially applicable to places of amusement, schools, and buildings used for public gatherings."

Twenty-five states now have such laws defining standards of safety. Every state surrounding Iowa, with the exception of South Dakota, has such legislation. Considering the importance of the industry, both from the number of persons employed therein, as well as the ever increasing population which of necessity makes use of such structures after erection, it is recommended and urged that the necessary legislation be enacted.

Department of Banking

First Building, Iowa City, Iowa, 1915

ROBT. L. ...