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MISCELLANEOUS SERIES

ASSOCIATION OF GOVERNMENTAL OFFICIALS IN INDUSTRY OF THE UNITED STATES AND CANADA

[Formerly Association of Governmental Labor Officials]

SIXTEENTH ANNUAL CONVENTION TORONTO, CANADA, JUNE 4-7 1929



JANUARY, 1930

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OFFICERS, 1928–29

President.—Andrew F. McBride, M. D., Trenton, N. J. First vice president.—Maud Swett, Milwaukee, Wis. Second vice president.—James H. H. Ballantyne, Toronto, Ontario. Third vice president.—W. A. Rooksbery, Little Rock, Ark. Fourth vice president.—E. Leroy Sweetser, Boston, Mass. Fifth vice president.—Eugene B. Patton, New York, N. Y. Secretary-treasurer.-Louise E. Schutz, St. Paul, Minn.

CONSTITUTION

Adopted at Chicago, Ill., May 20, 1924; amended August 15, 1925; June 3, 1927; May 24, 1928

ARTICLE I

Section 1. Name.—This organization shall be known as the Association of Governmental Officials in Industry of the United States and Canada.

ARTICLE II

SECTION 1. Objects.—To encourage the cooperation of all branches of Federal, State, and Provincial Governments who are charged with the administration of laws and regulations for the protection of women and children, and the safety and welfare of all workers in industry; to maintain and promote the best possible standards of law enforcement and administrative method; to act as a medium for the interchange of information for and by the members of the association in all matters pertaining to the general welfare of men, women, and young workers in industry; to aid in securing the best possible education for minors which will enable them to adequately meet the constantly changing industrial and social changes; to promote the enactment of legislation that conforms to and deals with the ever recurring changes that take place in industry, and in rendering more harmonious relations in industry between employers and employees; to assist in providing greater and better safeguards to life and limb of industrial workers; and to cooperate with other agencies in making the best and safest use of property devoted to industrial purposes; to secure by means of educational methods, a greater degree of interstate and interprovincial uniformity in the enforcement of labor laws and regulations; to assist in the establishment of standards of industrial safety that will give adequate protection to workers; to encourage Federal, State, and Provincial labor departments to cooperate in compiling and disseminating statistics dealing with employment, unemployment, earnings, hours of labor and other matters of interest to industrial workers and of importance to the welfare of women and children; to collaborate and cooperate with associations of employers and associations of employees in order that all of these matters may be given the most adequate consideration; and to promote national prosperity and international good will by correlating as far as possible the activities of the members of this association.

ARTICLE III

Section 1. Membership.—The active membership of this association shall consist of-

- (a) Members of the United States Department of Labor, United States Bureau of Mines, and the Department of Labor of the Dominion of Canada; such representatives of the bureaus or departments of the United States or Canada being restricted by law from paying dues into this association may be members with all privileges of voice and vote, but are not eligible for election to office. They may serve on committees.

(b) Members of State and Provincial departments of labor.
 (c) Members of Federal, State, or Provincial employment services.

Sec. 2. Honorary members.—Any person who has rendered service while connected with any Federal, State, and Provincial department of labor, and the American representative of the International Labor Office, may be elected to honorary membership by a unanimous vote of the executive board.

¹ Name changed May 24, 1928.

ARTICLE IV

Section 1. Officers.—The officers of this association shall be a president, a first, second, third, fourth, and fifth vice president, and a secretary-treasurer. These officers shall constitute the executive board.

Sec. 2. Election of officers.—Such officers shall be elected from the members at the regular annual business meeting of the association by a majority ballot and shall hold office for one year, or until their successors are elected and qualified.

SEC. 3. The officers shall be elected from representatives of the active membership of the association, except as otherwise stated in Article III.

ARTICLE V

Section 1. Duties of the officers.—The president shall preside at all meetings of the association and the executive board, preserve order during its deliberations, appoint all committees, and sign all records, vouchers, or other documents in connection with the work of the association.

SEC. 2. The vice presidents, in order named, shall perform the duties of the president in his absence.

SEC. 3. The secretary-treasurer shall have charge of all books, papers, records, and other documents of the association; shall receive and have charge of all dues and other moneys; shall keep a full and complete record of all receipts and disbursements; shall keep the minutes of all meetings of the association and the executive board; shall conduct all correspondence pertaining to the office; shall compile statistics and other data as may be required for the use of the members of the association; and shall perform such other duties as may be directed by the convention or the executive board. The secretary-treasurer shall present a detailed written report of receipts and expenditures to the convention; shall pay out no money until a voucher has been issued and signed by the president. The secretary-treasurer shall publish the proceedings of the convention within four months after the close of the convention, the issue to consist of such numbers of copies as the executive board may direct. The secretary-treasurer shall receive such salary as the executive board may decide, but not less than \$300 per year.

SEC. 4. In the event of a vacancy in any office, the executive board may elect a successor: *Provided*, The president shall be succeeded by the ranking vice president

Sec. 5. The business of the association between conventions shall be conducted by the executive board, and all questions coming before the board shall be decided by a majority vote, except that of the election of honorary members, which shall be by unnimous vote.

ARTICLE VI

Section 1. Finances.—The revenues of the association shall be derived from annual dues determined on the following basis: (a) Federal, State, or Provincial departments of labor, when the department staff consists of 1 to 5 persons, \$10; 6 to 25 persons, \$15; 26 to 75 persons, \$25; more than 75 persons, \$50.

The executive board may order an assessment levied upon affiliated departments not to exceed one year's dues.

ARTICLE VII

SECTION 1. Who entitled to vote.—All active members shall be entitled to vote on all questions coming before the meeting of the association as hereinafter provided.

SEC. 2. In electing officers of the association, State departments of labor represented by several delegates shall only be entitled to one vote. The delegates from such departments must select one person from their representatives to cast the vote of the group.

The various bureaus of the United States Department of Labor and the Department of Labor of Canada may each be entitled to one vote.

The rule for electing officers shall apply to the vote for selecting convention city.

ARTICLE VIII

Section 1. Meetings.—The association shall meet at least once annually at such time and place as the association in convention may select. The date of the annual meeting shall be decided by the executive board unless otherwise ordered by the convention.

ARTICLE IX

Section 1. Program.—The executive board shall act as committee on program and shall prepare and publish the convention programs of the association.

SEC. 2. The committee on program shall set aside at least one session of the convention as a business session, at which session the regular order of business, election of officers, and selection of convention city shall be taken up, and no other business shall be considered at that session until the "regular order" has been completed.

ARTICLE X

Section 1. Rules of order.—The deliberations of the convention shall be governed by "Cushing's Manual."

ARTICLE XI

Section 1. Amendments.—Amendments to the constitution must be filed with the secretary-treasurer in triplicate and referred to the committee on constitution and by-laws. A two-thirds vote of all delegates shall be required to adopt any amendment.

ARTICLE XII

SECTION 1. Order of business .-

- 1. Roll call of members by States and Provinces.
- 2. Appointment of committees.
 - (a) Committee of five on officers' reports.
 - (b) Committee of five on resolutions.
 - (c) Committee of three on constitution and by-laws.(d) Special committees.
- 8. Reports of officers.
- 4. Reports of States and Provinces.
- 5. Reports of committees.
- 6. Unfinished business.
- 7. New business.
- 8. Selection of place of meeting.
- 9. Election of officers.
- 10. Adjournment.

DEVELOPMENT OF THE ASSOCIATION OF GOVERNMENTAL OFFICIALS IN INDUSTRY 1

ASSOCIATION OF CHIEFS AND OFFICIALS OF BUREAUS OF LABOR

No.	Date	Convention held at-	President	Secretary-treasurer
1	September, 1883	Columbus, Ohio	H. A. Newman	
2	June, 1884	St. Louis, Mo	do	Do.
3	June, 1885	Boston, Mass	Carroll D. Wright	John S. Lord.
4	June, 1886	Trenton. N. J.	ld0	E. R. Hutchins.
5 l	June, 1887	Madison, Wis	ldo	Do.
6 (May, 1888	Indianapolis, Ind	do	Do.
7	June, 1889	Hartford, Conn	do	
- 1	1890	Des Moines, Iowa	do No meeting	Do.
8	May, 1891	riinadeidina, Pa	I Carron D. Wright	Frank H. Deuon.
9	May. 1892	Denver, Colo	Charles F. Peck	Do.
i	1893	Albany, N. Y.		
10	May, 1894	Washington D C	Carroll D Wright	L. G. Powers.
11	September, 1895	Minneapolis, Minn	dodo	Do.
12	June, 1896	Albany, N. Y.	do	Samuel B. Horne.
13	May, 1897	Nashville, Tenn	do	Do.
14	June, 1898	Detroit, Mich	do	Do.
15	July, 1899		do	Do.
16	July, 1900	Milwankee Wis	do	James M. Clark.
17	May, 1901	St. Louis, Mo	do	Do.
18	A meil 1009	New Orleans, La	do	Do.
19	April 1903	Washington, D. C.	do	Do.
20	Tuly 1004	Concord N H	do	Do.
21	Sentember 1905	San Francisco Calif	do	W L. A Johnson
22	Tular 1008	Roeton Mace	Charles P. Neill	Do.
23	July, 1907.	Norfolk Va	do	Do.
24	August, 1908	Detroit Mich	do	Do.
25	June. 1909	Dochostor N V	do	Do.
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¹ Known as Association of Governmental Labor Officials, 1914-1927.

INTERNATIONAL ASSOCIATION OF FACTORY INSPECTORS

No.	Date	Convention held at—	President	Secretary-treasurer
1 2	June, 1887		Rufus R. Wade	
3	August, 1888	Trenton, N. J.	do	Do. Do.
5	August, 1890	Cleveland, Ohio		
6 7	September, 1893	Hartford, Conn Chicago, Ill	John Francy	Mary A. O'Reilly.
8	September, 1894 September, 1895	Providence, R. I	do	Evan H. Davis.
10 11	September, 1896 August and Septem-	Toronto, Canada Detroit, Mich	Rufus R. Wade	Alzina P. Stevens.
12	ber, 1897. September, 1898	Boston, Mass	do	Joseph L. Cox.
13 14	August, 1899 October, 1900	Indianapolis, Ind.		
15 16		Charleston, S. C.		
17 18	August, 1903 September, 1894	St. Louis, Mo	James Mitchell Daniel H. McAbee	Davis F. Spees.
19 20	August, 1905 June, 1906	Columbus, Ohio	Edgar T. Davies Malcolm J. McLead	C. V. Hartsell. Thos. Keity.
21 22	June, 1907 June, 1908	Toronto, Canada	George L. McLean	Do.
23	June, 1909		James T. Burke	Do.

JOINT MEETING OF THE ASSOCIATION OF CHIEFS AND OFFICIALS OF BUREAUS OF LABOR AND INTERNATIONAL ASSOCIATION OF FACTORY INSPECTORS

_				
24	August, 1910	Hendersonville, N. C.,	J. Ellery Hudson	E. J. Watson.
		and Columbia, S. C.	Louis Guyon	
25	September, 1911	Lincoln, Nebr	Louis Guyon	W. W. Williams.
26	September, 1912	Washington, D. C.	Edgar T. Davies	Do.
27	May. 1913	Chicago, Ill	Edgar T. Davies A. L. Garrett	W. L. Mitchell.

ASSOCIATION OF GOVERNMENTAL OFFICIALS IN INDUSTRY 1

Resulting from the Amalgamation of the Association of Chiefs and Officials of Bureaus of Labor and the International Association of Factory Inspectors

No.	Date	Convention held at—	President	Secretary-treasurer
1 2 3 4	June, 1914	Detroit, Mich Buffalo, N. Y	Barney CohendoJames V. CunninghamOscar Nelson	John T. Fitzpatrick. Do.
5 6 7	June, 1918 June, 1919 July, 1920	Des Moines, Iowa Madison, Wis Seattle, Wash	Edwin Mulready C. H. Younger Geo. P. Hambrecht	Linna E. Bresette. Do. Do.
8 9 10 11	May, 1921 May, 1922 May, 1923 May, 1924	Harrisburg, Pa Richmond, Va	Frank E. Hoffman Frank E. Wood C. B. Connelley John Hopkins Hall, jr	Do. Louise E. Schutz.
12 13 14	August, 1925 June, 1926 May-June, 1927	Salt Lake City, Utah Columbus, Ohio Paterson, N. J	George B. Arnold H. R. Witter John S. B. Davie	Do. Do. Do.
15 16	May, 1928 June, 1929		II. M. Stanley Andrew F. McBride ? Maud Swett	Do. Do.

Known as Association of Governmental Labor Officials, 1914-1927.
 Doctor McBride resigned in March, 1929.

BULLETIN OF THE

U. S. BUREAU OF LABOR STATISTICS

NO. 508

WASHINGTON

JANUARY, 1930

PROCEEDINGS OF THE SIXTEENTH ANNUAL CONVENTION OF THE ASSOCI-ATION OF GOVERNMENTAL OFFICIALS IN INDUSTRY OF THE UNITED STATES AND CANADA, TORONTO, CANADA, JUNE 4-7, 1929

TUESDAY, JUNE 4-EVENING SESSION

James H. H. Ballantyne, Deputy Minister of Labor, Ontario, Presiding

The sixteenth annual convention of the Association of Governmental Officials in Industry of the United States and Canada, formerly known as the Association of Governmental Labor Officials, convened on the evening of Tuesday, June 4, 1929, at the King Edward Hotel, Toronto, Canada, where an informal dinner was given the visiting delegates. Addresses of welcome were delivered by the Hon. Dr. Forbes Godfrey, Minister of the Ontario Department of Labor, and by R. C. Harris, commissioner of works for the city of Toronto, who represented the mayor of Toronto. Response to the addresses of welcome was given by Miss Maud Swett, president of the association.

An address was then given on the subject of "Stabilization of Employment in Industry," by Tom Moore, president of the Trades and Labor Congress of Canada; and another by J. S. McLean, president of the Canada Packers, which follows:

Stabilization of Employment in Industry

By J. S. McLean, president Canada Packers

In trying to get in order my thoughts for this evening, the thing that struck me particularly was that every trail led back to the war. I had never before realized the revolution which the war had brought about in our relations with our employees.

about in our relations with our employees.

Begin with rates of wages: In 1913 the minimum rate for laborers was 15 cents per hour; in 1918 the rate was 30 cents per hour; and to-day the minimum rate is 40 cents per hour. For another group, which might be called the senior division of our men—the loading gang—minimum rates were in 1913, 17 cents per hour; in 1918, 37 cents; and in 1929, 40 cents. For skilled men the rates were in 1913, 25 cents per hour; in 1918, 43 cents; and in 1929, 45 cents.

In comparing these rates, it must be remembered that a dollar to-day has less value than in 1913. The commonly accepted ratio is that \$1.60 to-day is equivalent to \$1 in 1913. Expressing to-day's wage rates in pre-war values (that is, \$1.60 to the dollar), we find that actually wages have advanced by the following percentages: Ordinary labor, 66% per cent; senior grade of labor, 50 per cent;

and skilled labor, 20 per cent.

I had not realized before that there was such a disparity in the rates of advance as between ordinary labor and skilled labor. But when confronted with it, it seems to me that this is in line with the new outlook which we all received from the experience of the war, namely, that a human being was more than an implement of labor—that he was a citizen of the State, and that in the last analysis the safety of the State depended to a greater extent than we had previously realized on the humblest of its citizens. Without our realizing it (at any rate, without my realizing it), the minimum standard

of living has been very greatly advanced.

I have been speaking only of the advance in wage rates. Along with these came other ameliorations of working conditions. I shall speak only of those which have occurred in our own industry, and in some cases I may be referring to changes which have taken place in the particular business with which I am connected, but possibly not in the industry generally. In 1917 the Ontario workmen's compensation act was brought into operation. This registered a great step forward in the recognition of the responsibility of industry generally for the individual on whom misfortune falls in the way of an accident. One of the useful features of this act was the suggestion that industries should organize themselves into groups for the purpose of accident prevention. The outgrowth of this, in the packing industry, was that all the chief plants established hospitals, and nurses were employed to treat the most minor accidents immediately they occurred, thus preventing the development of blood poisoning, of which there is a serious risk in the packing industry. The duties of the nurses were gradually extended from those of first-aid treatment to the visiting of employees and of their families in cases of illness. I think that in the case of our own firm, this service of providing nurses has done more, perhaps, than any other single factor to promote cordial relations between the firm and its workmen. Along with the development of the first-aid and nursing service, there grew up a parallel organization—the Employee's Mutual Benefit Association—which is conducted entirely by the employees themselves. This is run by a board elected by the workmen out of their own number. Each employee pays a fee of 15 cents per week, and in the case of illness he receives free medical attention. free medicine, and \$6 per week during the time that he is off, up to 16 weeks.

So much for workmen's compensation and medical service. In 1917 there was also an adjustment in the hours of labor. (Up until then the regular hours in the industry had been 10 a day). I am sorry to say that this reduction was brought into effect as the result of a strike. The responsibility for this strike is a topic which I shall not discuss. It suffices to say that the strike finished with an agreement to reduce hours from 60 to 48, with time and a half for

overtime. In 1919 a further advance was made, in that each employee was guaranteed a minimum of 40 hours weekly, and that payment for overtime on holidays and on Sunday was increased from time and a half to double time.

In 1925 began the practice of giving holidays to men who had served a minimum number of years with the company. At the beginning, employees with five years' service were granted one week's holiday on full pay, and employees with ten years' service were granted two weeks' holiday on full pay. The scale is gradually being adjusted, and at the present time, we are working toward a plan of granting holidays to all employees with three years' service.

Up to the present time, I have not been speaking explicitly of the stabilization of labor. To be quite frank, I did not realize that each one of the above changes was a step toward the stabilization of labor. It is true that we had, by other means, been working toward stabilization. The chief of these were the following:

(1) Careful selection of new employees from the viewpoint of health. This, of course, needs no explanation. The motive of the company in this selection was entirely to promote its own interests. However, every intelligent employee realizes that this is also in the interest of the employee, for the double reason that an employee who is ill can not bear his proper share of the work, and also that every inefficient employee places a burden on the business which, to some extent, affects the ability of the business to advance wages.

(2) The reduction of overtime. In my opinion the payment of double time for overtime is even more in the interest of the business than of the employee, for the reason that it discourages overtime. I have come to the conviction that, in our business at any rate, overtime is scarcely ever a necessity, and in the main is caused by inefficient planning on the part of the management. The chief penalty is that overtime necessarily reduces the physical strength of the employees so that they are unable to put forth their full effort either during the period of overtime or during the day following it. I can not speak for other industries, but my opinion is that in our own—the packing—industry a large amount of overtime is a sure mark of inefficient management.

Now, how does the elimination of overtime lead to stabilization of employment? In the following way: Where a management plans its operations so as to get the work done by its regular staff within regular hours, it tends to build up its gang to a capacity of something more than its normal requirements. I do not mean that the gang is large enough to do the work at the periods of peak activity, but it tends in that direction rather than toward the cutting down to a minimum. Periods of reduced activity are met by reducing the hours of work of all employees so far as possible to the minimum basis of 40 hours per week. In this way the taking on and laying off of men is reduced to a minimum. The gang is held as nearly as possible on a basis sufficient for the maximum requirements. In our own case, we have gradually felt our way toward this policy. Our motive throughout has been twofold—to turn out the best possible product at the lowest possible unit cost. Throughout all these changes we have kept our attention focussed on these two things, and the result has been an increase in the index of stability.

Index of stability is a new phrase to me. I have come across it only in the preparation of material for this address. It is the ratio between two numbers. First, the average number of employees per month taken over the whole year; second, the highest number of employees in any one month. In other words, if the average number of employees per month over the whole year is 80, and if the highest number of employees for the month of peak operations is 100, then the index of stability is 80 to 100, or 80 per cent. No doubt all of you are familiar with this method of measuring stability of labor. In our own business, without our realizing it, and without our ever having thought of measuring the stability of our labor in this fashion, I find that between 1924 and 1929 the index of stability has advanced from 81.8 to 92.2.

From this I draw a moral, and I do it with absolute confidence. It is this, that in any industry where employers and employees cooperate on terms of mutual understanding, whatever is good for the employees is, in the end, good for the business, and vice versa, whatever is good for the business is, in the end, good for the employees. At first sight that dictum may seem to involve the nervous employer or the nervous employee to a dangerous commitment; but in a large sense, I have the utmost confidence that this is a fundamental principle which will stand the test of experience. It is equally true in other fields of contact. It is true (again citing from our own business) in regard to the relations between the producer of livestock and the packer. The producer and the packer meet on the market, and there superficially it would seem that their interests are diametrically opposed. The producer is trying to get as much as possible for his livestock. The packer is trying to buy it as cheap as possible. In fact, looked at in a large way, their interests are identical. Their debate in the transfer of the livestock covers a range of only 1/4 cent per pound. The producer tries, and tries hard, to get 1/8 cent over that which may be called the current market price. The packer tries to buy the livestock at, say, ½ cent under the current market price. The variation between them at most is about \(\frac{1}{4} \) cent per pound. But both are vitally interested in maintaining the price of livestock on a basis not too high and not too low; a basis that will permit a profit a reasonable working profit—to the producer, sufficient to keep him interested in producing livestock. If the price goes too high, the consumer is not able to buy the products, and the outlet for them is therefore restricted. If the price goes too low, the incentive disappears for the producer. Therefore, the producer and the packer, between them, have a constructive problem to try and maintain the price of livestock on a basis which will show a reasonable profit to the producer and will still provide meats at a cost which the consumer can afford to pay. I have gone into this in some detail, because I think it establishes the fundamental principle that the interests of the producer and the packer, while apparently opposed, when properly understood, are identical.

In the same way, I am convinced that the interests of the employer and of the employee are also identical. It is in the interest of the employer that the wages paid should be sufficient to enable the employee to maintain a decent standard of living. Without such a standard, the work of the employee can not be efficient. On the

other hand, it would be contrary to the interest of the employee to force a rate of wages which the business could not support, for in the end the business would sink under the burden, and the employees would be without employment. I am convinced that the first duty of a business is to maintain the highest possible standard of living for all of its employees, consistent with the preservation of the soundness of the business.

My remarks have not had much to do with stabilization, except incidentally. The point that has filled my mind, in reflecting on stabilization, is that every improvement in the relation between employer and employee and every advance in the standard of living of the employee automatically promote stabilization of employment within the business. This stabilization in turn automatically promotes the welfare of the business, inasmuch as it makes possible the maintenance of high standards in the products produced and of an atmosphere of mutual confidence between employer and employees, which enlists the good will of the employees and thereby tends to reduce the cost of production within the plant.

WEDNESDAY, JUNE 5-MORNING SESSION

Maud Swett, President, A. G. O. I., Presiding

BUSINESS SESSION

Chairman Swett: It has been customary in the past for the president to deliver an address, but after serving in that office for such a short time I think it would be presumptuous on my part to do so, or to attempt to make any recommendations or suggestions. The secretary will read replies she has received from persons who are not able to attend our convention this year.

[Miss Schutz, secretary, reported that in accordance with resolution No. 6, adopted at the meeting of the association in 1928, letters were sent out by Doctor McBride, then president of the association, and by her as secretary, to the governor and the presiding officers of the senate and house of every State in the Union, directing attention to the forthcoming convention, asking that there be representation from the State at the convention and that any restrictive legislation which might prevent attendance be removed. Replies from a number of governors were read by the secretary, who regretted to report that there had been no appreciable increase in attendance as a result of the letters, nor had any restrictive legislation been removed.

[The secretary read letters from State governors and others re-

gretting their inability to be present.]

Mr. Stewart. I may say that the Secretary of Labor wrote to the Governor of each State, calling attention to this meeting and to that of the International Association of Industrial Accident Boards and Commissions; also to the growing tendency to restrict the appropriations so that government officials could not leave their respective States. We received letters that were entirely friendly, from all States except Michigan, which side-stepped it, and Montana, which developed this very peculiar situation. Some years ago a law was passed in Montana creating a labor commission. The attorney general of the States made a ruling that while the law created a labor bureau or a labor commission it did not provide for the appointment of a commissioner, and that the governor had no power to appoint a commissioner until the legislature made good that deficiency. So Montana has a commission without a commissioner. The question has come up at three legislatures since, but has been voted down. About three months ago the legislature refused to amend the bill so that a commissioner could be appointed.

A peculiar situation arises in Oklahoma, where the workmen's compensation law has in it a clause which compels attendance on the International Association of Industrial Accident Boards and Commissions, but forbids the commissioner of labor from going outside

the State. The Governor of Oklahoma said that he was in entire sympathy with the matter and would see what could be done with the new legislature.

These are the only peculiar situations that have arisen.

Report of the Secretary-Treasurer, May 21, 1928, to May 30, 1929

BALANCE AND RECEIPTS

Funds on hand May 21, 1928	
Receipts from dues to July 1, 1928: Louisiana.	10.00
Receipts from dues to July 1, 1929:	10.00
Illinois \$15.00	
Virginia 15, 00	
Minnesota 25.00	
Arkansas 10.00	
Wisconsin50.00	
New Jersey 25.00	
New Hampshire10.00	
Kansas15.00	
Pennsylvania 50.00	
Massachusetts50.00	
Utah 10, 00	
New York50.00	
Ontario 10.00	
Oklahoma 10.00	
Ohio 25.00	
Louisiana 10.00	
Canada (Federal department) 25.00	
Connecticut 10.00	
Georgia 10.00	
	425.00
Total	880. 17
DISBURSEMENTS 1928	
May 15. Telegram to Doctor Dowling, New Orleans	\$0.72
26. Salary, secretary-treasurer	180.00
29. Secretary-treasurer, convention expenses, tips, stamps, tele-	
phone calls, etc	4. 50
31. F. Wood, convention expenses for speakers, etc	10.00
June 2. R. Carroll, stenographic services	11.00
30. Stamps	5.00
July 5. Letter Specialty Co., 200 4-page letters containing resolu-	
tions, etc., mimeographed	10.77
R. Carroll, stenographic services	4.00
14. Letter Specialty Co., 2,000 letterheads	14. 55
30. Earl Christenberry, reporting proceedings at convention	85.70
Aug. 1. R. Carroll, stenographic services for July	3. 50
8. Postage on registered package to Washington, containing	1 10
proceedings of convention	1. 13
Oct. 28. Stamps	3.00
30. Rubber stamp with new name of organization	1.60
31. R. Carroll, stenographic services	3.50
1929	
Jan. 25. Chase Printing Co., 1,000 large envelopes	7.28
28. Stamps	4.00
Feb. 26. Stamps	4.03
Mar. 16. B. Holstrom, stenographic services	5. 00
Apr. 12. Secretary-treasurer, expense of trip to La Crosse to meet	5. 50
Miss Swett, president A. G. O. I	15.06
19. Stamps	3, 00
74930°—30——2	

1929		
May 2.	Telegram, Maud Swett, president	\$0.42
•	Stamps	4: 00
15.	Estelle Barnett, 175 mimeographed letters	2.05
	Chase Printing Co., 500 final programs	25.22
24.	Western Badge & Novelty Co., 100 badges for convention	19 . 50
	Chase Printing Co., 100 additional programs at request of	
	Mr. Ballantyne	7.66
25.	O. Gilbertson, stenographic services	10.00
27.	Stamps	3.00
	-	
	Total disbursements	449, 16
Balance	on hand (checking account, \$115.41; savings account, \$315.60)	431. 01
	Total	880. 17

The report was referred to the committee on officers' reports.

NEW LABOR LEGISLATION

Report of Arkansas (by Mr. Rooksbery).

We have had no new legislation passed; but we have had one of the most bitter fights in the State of Arkansas over our compensation bill, which was sponsored by the department of labor at the last session. We worked for two years, and we thought the bill was going through without much trouble, but we ran against several attorneys and one elevator insurance company, also the administration force with its income-tax bill. Between these two forces the compensation bill was defeated.

A lien law was passed, or amended rather, in our wage collections, but it is a very minor amendment and affects only material dealers. That is the only amendment we have had to any of our labor laws this last session.

Work is now going ahead for our workmen's compensation bill to be presented at the next session of the legislature.

There is also the repeal of the prison or factory law in the State at the present time. I think there will not be any trouble over that.

Report of Iowa (by Mr. Urick).

The last Iowa Legislature enacted but few laws relating to labor. The insurance laws were amended to permit group insurance, which favors labor, especially organized labor. Legislation providing that barbers must pass an examination for a certificate and must have an eighth-grade education was exacted.

Probably one of the most important pieces of new legislation is the law relating to private employment bureaus. Heretofore the right to license such bureaus was delegated to cities and towns. The only two cities to take advantage of this were Sioux City and Des Moines, and the greater part of their real interest was to collect the license fees. That was changed so that the State grants the license after the law becomes effective on July 4. The legislation creates a commission, consisting of the secretary of the state, the industrial commissioner, and the labor commissioner. The right of enforcement of the law, or the following up of the law, will be altogether in the hands of the labor commissioner, who issues the license. The commission must investigate as to the morals and qualifications of the applicants; and all names of individual applicants must be given. In the case of a corporation, it must give the names of its officials, if a partnership the names of the partners, and in all cases the place of operation, and there must be filed with the application

a list of the fees to be charged. This latter provision may seem peculiar to those who have followed the decision of the United States Supreme Court with regard to the regulation of these matters, but we have in Iowa this situation—for several years our statute books contained a section providing that the fees shall be limited to 5 per cent of the first month's salary. That includes all application and other fees. Certain organizations were excepted because of particular interests, and we found that those organizations, instead of charging 5 per cent often charged as much as 20 and 25 per cent.

Owing to the case pending in the United States Supreme Court no case was brought under the present law. The former attorney general was rather lukewarm, so that nothing could be done during that period. The present attorney general when asked for an opinion on certain provisions of the law gave what appeared to be a peculiar opinion. A conference was requested and granted. The attorney general and three of his assistants took part, and all agreed that in their opinion the State supreme court, if called upon in a properly presented case, would not agree with the Federal Supreme Court decision. He expressed a willingness to take a case through the courts of the State of Iowa and to the Supreme Court of the United States, in an effort to get a favorable opinion. He thought the original case might have been poorly presented to the United States Supreme Court. That leaves us in a rather peculiar position.

The only really harmful legislation enacted by the State was in relation to contract convict labor. We have had considerable controversy during the past several years. Four years ago the State adopted the State-use plan, to become effective within two years, and permitting no further contracts. The next legislature extended the time until the first day of July, 1929, for the full application of the State-use plan and abolition of contracts. The last legislature extended the time for present contracts indefinitely. This was advocated by the Board of Control of State Institutions, and had the full and complete support of the governor. This most harmful piece of legislation enacted probably overbalanced all beneficial legislation enacted.

The workmen's compensation law was amended increasing physician and hospital fees from \$100 to \$200, also providing that petition for rehearing of arbitration awards be held at the seat of government, but that petitions for review of payments or settlements shall be held in county where injury occurred.

Report of Kentucky (by Mr. Seiller).

Suction-blower system.—An act requiring a suction-blower system on all grinding and polishing wheels was adopted by the 1928 legislature. The enforcement of this act is placed specifically upon the department of labor. The department reports compliance with the act.

Workmen's accident compensation.—A resolution appointing a commission of six members was adopted by the 1928 legislature to make a complete study of operation and effect of the State workmen's accident compensation law, and to make to the 1930 legislature a complete report thereon, and to submit such amendments to the law as found needed. Public hearings have been held by the commission and the questions so far heard are administration, review by counts on points in law, evidence and facts, and on methods of insuring and the desirability of creating a State fund. The department of labor has urged the commission to study the need and desirability of amending the act and of making the same an all-inclusive act to compensate for accidents and illness arising out of and in the course of employment, and as the result of the worker's exposure in his employment; to provide for safety and hygiene legislation and service; and to require the workmen's compensation board to

make a statistical report in conformity with suggestions and schedules set out in Bulletin No. 276, "Standardization of Industrial Accidents," published by the United States Bureau of Labor Statistics.

We believe our requests will be favorably acted upon by the commission.

Report of Massachusetts (by General Sweetser).

In the legislature this year there has been the usual number of bills relating to labor. Most of them failed to pass or were referred to the next general court.

The law relating to the weekly payment of wages was amended to add to the penalty—imprisonment in the house of correction—so as to read as follows: Whoever violates this section shall be punished by a fine of not less than \$10 nor more than \$50 or by imprisonment in the house of correction for not more than two months, or both.

It is believed that the enactment of this law, providing imprisonment for failure to pay wages, will enable the courts to deal effectively with certain types of contractors who violate the weekly payment law frequently, and pay the wages due employees when the matter is brought to the attention of the court.

There were two bills before the legislature of much interest to the department—one of which has just become a law.

First, the creation of a new commission called the Massachusetts Industrial Commission. This commission is placed in the department of labor and industries. The commission will consist of the commissioner of labor and industries, the commissioner of agriculture, and five unpaid members to be appointed by the governor. The commission is authorized to conduct researches into the industrial and agricultural situation within the Commonwealth, and shall seek to coordinate the activities of unofficial bodies organized for the promotion of the industrial, agricultural, and recreational interests in the Commonwealth, and may prepare, print, and distribute books, maps, charts, and pamphlets, which in its judgment will further the purpose for which it is created. One of the commissioners must be a representative of labor and it is hoped that this commission will render important service both to labor and industry in this Commonwealth.

Second, in some of the industrial centers there has developed a practice of doing business with employees on the basis of the individual contract. In one of the shoe manufacturing cities of the State a number of concerns invited their workmen to buy shares of stock in the business and to cooperate with them on this basis. There was presented to the legislature a bill providing that any written contract of employment shall be void unless at the time of making the same, a copy is given to the employee, or prospective employee, signed by the employer, or prospective employer, or an authorized representative. The second part of the bill provided that any contract of employment shall be void whereby it is included as a consideration for the acceptance of such contract by the employer, the purchase by the employee of capital stock of any nature in the business of the employer.

This bill was submitted to the justices of the supreme judicial court for their opinion on the constitutionality of the same.

The court decided that the first question concerning the delivery of the contract was constitutional. The second question, relative to the purchase of stock, was answered in the negative and declared to be unconstitutional on the grounds that it would be an interference with personal liberty and would not be justified by any constitutional authority reposed in the legislative department of the Government.

However, the fact that it has been declared constitutional to require a copy of the signed contract to be delivered to the employee—otherwise the contract will be void—will be of benefit to the department in its investigations, while it will give to the employee, who enters into a contract of this kind, an opportunity to secure legal counsel as to his rights under this form of agreement. The proposal to enact legislation covering this matter was referred to the next annual session of the legislature.

In the inaugural message of the governor to the legislature of 1929, one of the outstanding recommendations includes raising the school age from 14 to 15 years.

A measure introduced to provide for part-time attendance in public schools of employed minors between the ages of 14 and 16 years, was brought to the attention of the legislature and several public hearings held at which the provisions of each were discussed at much length. After reporting a plan to provide for a system that would increase the number of continuation schools and extend the time now required for attendance therein, the legislature adopted a "resolve" providing for a study by a special commission on the general question of increasing the educational requirements of the Commonwealth and certain related matters.

Report of Massachusetts (by Miss Johnson).

Since the rules and regulations adopted by States having authority to enact such rules have the force of law, it may be of interest to mention a new rule adopted by the five commissioners of the Massachusetts Department of Labor and Industries, that is the rule regarding the common drinking cup and towel in industrial establishments. It provides that such industrial establishments shall not provide a common drinking cup or a common towel for use in the establishment. This was adopted under the statute which requires that all industrial establishments shall be well lighted, well ventilated, and kept free from insanitary conditions, according to reasonable rules and regulations adopted by the board of commissioners of the department. It was held by the board that a common drinking cup and a common towel constituted insanitary conditions. The action was based upon recommendations or requests from various private organizations, including the joint board of sanitary control for the garment trades, the consumers' league, and the antituberculosis association.

Four rules have been adopted by the present department of labor and industries. These are a lighting code, a code for woodworking establishments, a code for power punch presses, and the rules regarding common drinking cups and towels. This is in addition to the revision of the rules for the painting trades which was adopted by the former State board of labor and industries. That makes in all 11 codes adopted—4 by the present department and 7 by the former State board of labor.

There was also a measure which, although not distinctly a labor measure, has an indirect bearing on the subject. It was enacted by the Massachusetts Legislature this year, and provides for the establishment of a children's code committee. It is based on one of the recommendations of the governor, and establishes a commission of five persons, three representing State officials—the commissioner of mental diseases, the commissioner of public welfare, and the commissioner of probations—and two persons appointed by the governor. This commission is required to study and recommend a revision of the laws relating to dependent, neglected, and delinquent children and other children in need of special care.

It is rather difficult to draw the line of demarcation between the premature employment of children and some of the problems connected with juvenile delinquency, dependency, and neglect. The commission is not specifically required to consider child labor, but it is very likely that it will be considered in connection with these matters.

Report of Minnesota (by Mr. McColl).

New legislation in Minnesota, which may be of interest, is the following amendment to the child labor law, and also certain amendments to the compensation law.

According to an amendment to the child labor law, a child under 16 years of age may not legally appear in a theatrical exhibition without a written permit from the industrial commission, which must first investigate the health and school record of such child. Originally, such permit was issued by the mayor of the city in which the performance took place. Under the law of 1927, provision was made for the appearance of children under 10 years of age by authorizing the industrial commission to issue special permits for their performances. According to the amendment of 1929, children under 10 years of age are practically prohibited from appearing in theatrical performances.

An important amendment to the compensation law, in its application to minors who have sustained injuries resulting in permanent total or permanent partial disability, bases the compensation to which they are entitled on the weekly earnings which such minors would probably earn after arriving at the legal age if uninjured. The 90-day limit has now been stricken out of that part of the compensation law which relates to medical, surgical, and hospital treatment, so that the employer is now liable for such treatment for an unlimited time.

It may also be of interest to know that the industrial commission may now refuse to issue licenses to privately operated employment agencies whenever, after due investigation, the commission finds that the character of such applicant makes him unfit to be an employment agent, or when the premises for conducting business are unfit for such use, or whenever the industrial commission is convinced that the number of licensed employment agents is sufficient to supply the needs of employers and employees.

Report of New Hampshire (by Mr. Davie).

Very little labor legislation was passed by the last Legislature of New Hampshire.

The following bills were introduced: H. R. No. 130, relating to employment offices; H. R. No. 230, relating to night work for women and minors; H. R. No. 235, relating to hours of labor; and H. R. No. 292, relating to workmen's compensation; all of which were killed in the house.

H. R. No. 316 corrected an error in the codified laws of 1926 and was passed. This being the only piece of legislation that would affect the interests of labor passed by that legislature.

Report of New Jersey (by Colonel Blunt).

Bureau for women and children.—Chapter 158 creates in the department of labor a bureau to be known as the "Bureau for women and children," the director of which shall be a woman.

This bureau is authorized and empowered to make studies and investigations of special problems connected with the labor of women and children and to perform, under the supervision and control of the commissioner of labor, the duties devolving upon the department of labor or the commissioner of labor

with relation to the enforcement of the laws, rules, and regulations governing the employment of women and children.

Building inspection.—Chapter 207 is a supplement to chapter 92 of the Laws of 1927, and provides that any theater, opera house, grand stand, or building used for the motion-picture purposes or public entertainment, now in use in the municipalities of this State, in which there is no local building supervision, that is not in conformity with the regulations set forth by the commissioner of labor and which is deemed unsafe for such purposes, may be ordered discontinued by the commissioner of labor after a hearing until such time as it is made to comply with the regulations of the department of labor for such buildings.

This chapter further provides that the commissioner of labor shall keep or cause to be kept a complete registry of all such places of public entertainment coming under the provisions of this act and that notice of such registration shall be furnished by the commissioner of labor and kept posted in a conspicuous position in the building or any part of the building used for the above purposes when it complies with the regulations of the department of labor for such buildings.

Compressed-air law.—Chapter 90 amends chapter 121 of the Laws of 1914, "An act relating to the employment of persons in compressed air," by making sections 10 and 11 of the original act regulating the shifts and intervals of work and the rate and time of decompression, respectively, agree identically with the provisions of the New York State law.

Payment of wages by check.—Chapter 235 further amends chapter 38, Laws of 1899, the cash payment of wages law, by clearing up any ambiguity that may have resulted by the amendment of 1928 to that act.

The act as now amended gives the commissioner of labor discretionary power to grant an exception to the act requiring the payment of wages in cash at least every two weeks by providing that "any person, firm, partnership, association or corporation that can reasonably satisfy the commissioner of labor that he, they, or it have a paid-up cash capital invested in this State of not less than \$200,000, and that arrangements have been made with a banking institution for the payment in full of any negotiable check issued for the payment of wages may, with the written consent of the commissioner of labor, pay any such wages by negotiable check instead of in lawful money."

Workmen's compensation.—Chapter 66 provides that no petition hereafter filed under the workmen's compensation act shall be dismissed for want of prosecution or for failure formally to adjourn the cause, until after notice shall be served by the respondent on the petitioner or his attorney that unless the cause is moved for hearing within one month from the date of the service thereof, the claim will be considered abandoned and the petition dismissed.

Report of New York (by Doctor Patton).

During the legislative session of 1929, two laws were passed amending the labor law and 11 amending the compensation law.

The general amendment of the prison law made important changes in the control of prison industries. The changes in the lien law affected contractors and material men directly but were of indirect importance to labor.

Three amendments to the labor law and one amendment to the compensation law were vetoed by the governor. They are discussed below.

Appropriations for the department of labor.—The governor's recommendations for the support of the department of labor were contained in the executive budget as submitted to the legislature. They provided for a lump sum

of \$2,729,000 "to permit the commissioner of labor to reorganize the department of labor." This is in contrast with the usual line-item appropriation by which each item of personal service is fixed, with the exact title and maximum salary specified in the law, and with no possibility of change or readjustment until the following year. The original executive budget also included an item of \$50,000 which might be expended for the formation of a division for junior placement.

The legislature amended the bill to provide that reorganization was to be made "as provided in section 139 of article 8 of the State finance law." They reduced the sum to \$2,700,000 and omitted reference to the division for junior placement. The State finance law provides that the chairmen of the finance committee of the senate and the ways and means committee of the assembly have joint power with the governor in approving items in the reorganization of a department.

In its amended form the governor signed the bill, which became chapter 84, but vetoed the items referring to the State labor department, except one item for \$350,000 for compensation payments to the department to cover the compensation premium for all State employees injured in the course of their employment. The governor held to the view that the constitutional amendment providing for an executive budget superseded the statute law and gave the governor sole responsibility without legislative supervision.

The governor submitted another budget for the labor and other departments which, as amended, became chapter 593. The amount appropriated again stood at \$2,700,000 and the requirement that the itemized budget must be approved by the two legislative chairmen together with the governor was again in force. The question of law between the governor and the legislature is now before the courts for a decision.

In addition to the \$2,700,000 appropriated by chapter 593, chapter 399 appropriates an additional \$47,200 for mandatory increases for factory inspectors. This makes a total of \$2,747,200 exclusive of the compensation premium for State employees and deficiency appropriations for earlier years. The premium for all employees of the State, in chapter 84, is \$350,000. Assuming that one-tenth of it covers employees of the department of labor, this raises the total appropriation for the department to \$2,782,200. The amount appropriated for the department in 1928-29 was \$2,639,000. The department pays back to the State treasury over \$1,000,000 yearly from the assessments levied against insurance carriers, in proportion to the amount of their compensation business, to cover the expenses of administering the compensation law. In 1927-28 the sum repaid to the State was \$1,124,694.04, or over 40 per cent of the total appropriation for that year.

Workmen's compensation.—Chapter 64, effective March 6, adds to the list of occupational diseases for which compensation is payable, injuries from radium, radium emanations, or X rays, but only in hospitals or laboratories. It will be superseded, however, by chapter 702, noted below, effective October 1, 1929. The later chapter omits reference to radium poisoning.

Chapter 298 makes several additions to the list of occupational diseases covered by the compensation law. The list, as amended, includes poisoning by any sulphide, chrome poisoning, methyl chloride po'soning, poisoning from carbon monoxide, sulphuric, hydrochloric, or hydrofluoric acid, and respiratory, gastro-intestinal, or physiological nerve and eye disorders due to contact with petroleum products and their fumes. A former provision for compensation for poisoning by hydro-derivatives of benzene is changed by the addition of hydroxyderivatives. The section providing compensation for dope poisoning or "any

substance used as or in conjunction with a solvent for acetate of cellulose" is amended by the addition of "or nitro-cellulose."

The bill as originally introduced and drawn by the industrial survey commission included a longer list of common and seriously disabling occupational diseases. The bill was amended by the legislature.

Chapter 564 amends the workmen's compensation law by eliminating the word "power" from "power laundries" in the list of industries in which compensation is payable and thereby bringing employees of hand laundries directly under the protection of the law.

The compensation law provides schedule awards of a fixed number of weeks for loss or loss of use of part or all of hands, fingers, legs, and other members, and permanent total disability for loss of both hands, both arms, both feet, or both legs, or both eyes, or any two thereof. Nothing in the law directly covered the case of two permanent injuries to different members listed in the schedule awards except those causing permanent total disability. The courts held that no awards could be made for schedule losses, although two injuries were presumably more serious than one, but that under the law the department of labor must make awards under paragraph "u" of subdivision 3 of section 15, which provided for compensation for "other permanent partial injuries" on the basis of actual impaired earnings. It was sometimes difficult or impossible to determine impaired earnings fairly. Chapter 301 amends the law so as to require the department to make awards for total or partial loss or loss of use of more than one member by awarding compensation for each loss separately, and consecutively.

Chapter 303 amends subdivisions 2, 3, and 4 of section 16 of the workmen's compensation law to provide that children over 18, who are blind, crippled, or dependent through any physical or mental infirmity, are to receive the same share of the compensation awarded to the dependents of a worker killed in industry, as children under 18, and that the award is to continue during the period of dependency.

Chapter 299 provides that when funeral expenses of a worker, whose death occurred in the course of his employment, have been paid by claimants entitled to compensation or by others, the funeral expenses shall be awarded to such claimants or others, and otherwise to the undertaker. Funeral expenses are awarded in all cases where there are no persons entitled to other compensation. Some of the insurance companies had claimed that they did not have to pay funeral expenses under the law when the worker who died left no dependents.

Chapter 304 amends the workmen's compensation law to exclude from its coverage "persons engaged in voluntary service not under contract of hire."

This is an amendment, effective July 1, to group 18 of subdivision 1, section 3 of the compensation law, "all other employments" group. It has been superseded by chapter 702, summarized in the following paragraph, effective October 1, 1929.

Before 1928 the workmen's compensation law did not apply to workers for an organization or employment not carried on for pecuniary gain. The laws of 1928 amended the law to strike out the provision about pecuniary gain and to provide compensation for all employees in organizations where four or more of the workers were "workmen or operatives." This brought all employees of religious, charitable, and educational institutions, including clerks and teachers, under the law, if four workmen were employed, except for municipalities or other subdivisions of the State. Chapter 702 of the Laws of 1929 provides that compensation is payable except for "persons engaged in a

clerical, teaching or nonmanual capacity in or for a religious, charitable, or educational institution" and further adds "a minister, priest or rabbi, or a member of a religious order, shall not be deemed to be employed or engaged in employment under the terms of this section."

The provision of the workmen's compensation law requiring that marriage certificates or other evidence of dependency in foreign countries must be authenticated "by the Secretary of State or other official having charge of foreign affairs" is amended by chapter 300 by the addition of the phrase "or a United States consul."

Section 56 of the workmen's compensation law provides that contractors who subcontract all or part of any contract that includes hazardous employment, or their insurance carriers, are liable for compensation due to employees of their subcontractors unless the subcontractor who is primarily liable has secured compensation. Chapter 302 amends this section to permit such a contractor, or his insurance carrier who has become liable for the payment of such compensation, to recover the amount from the subcontractor, and makes the amount a lien against any money due the subcontractor.

Chapter 305 amends section 54 by providing that no insurance policy issued by a company outside of New York State shall be regarded as covering the liability of an employer to his employees under the workmen's compensation law unless such "foreign" company shall have filed with the superintendent of insurance a bond or undertaking representing 25 per cent of the outstanding reserves for compensation losses upon policies for risks located in New York State. If the superintendent of insurance certifies that the insurance company has become insolvent or defaults payment for 30 days, the attorney general may proceed to enforce the bond. In lieu of the bond, the foreign company may deposit securities prescribed by the insurance law to the amount of one-quarter of the outstanding reserves for compensation losses on policies of the company for risks in New York State.

Labor law.—Chapter 296 amends subdivision 6 of section 270 to permit the use in a fireproof building equipped with automatic sprinklers of partitions of wood or glass in spaces used solely for offices or showrooms.

Chapter 399 amends section 18-a to provide that factory, mercantile, boiler, mine and tunnel inspectors of the labor department shall be divided into 8 instead of 6 grades, and providing that the annual salary of grades 7 and 8 shall be \$2,700 and \$3,000, as against a maximum for grade 6 of \$2,400. Inspectors who serve one year in each grade are automatically moved to the grade above. Safety inspectors of the bureau of industrial hygiene are to receive an annual salary of \$2,500, with increases to \$2,750 and \$3,000 after one and two years' experience. Salaries of supervising inspectors are increased from \$3,500 to \$4,000.

Vocational guidance for school children.—Chapter 407 amends the education law extending the work of the schools of the State in providing vocational guidance for school children.

The school authorities of each school district are empowered to employ one or more people for vocational guidance. The qualifications of these workers are to be approved by the commissioner of education. They are empowered also to establish a guidance bureau to provide information for pupils regarding educational and occupational opportunities. Employment and follow-up service is provided for "minors" and the bureaus are authorized to make research studies of vocational and educational opportunities.

The State education department is authorized to employ a supervisor of vocational and educational guidance to cooperate with the local school authorities.

Industrial education.—Chapter 264 amends the sections of the education law which provide for vocational education and extension boards in counties by requiring that they shall not incur liabilities against county funds in excess of the amounts appropriated by the boards of supervisors. It also provides that the commissioner of education shall apportion State funds not only in proportion to vocational teachers but all other qualified persons serving in a professional capacity recognized by the commissioner of education.

Chapter 267 establishes the classification of industrial teachers in the training departments of State training schools for teachers.

Study of old-age dependency.—Chapter 664 creates a temporary State commission to study "the industrial condition of aged men and women," and the most practicable method of providing security against old-age want.

Employment of prisoners.—Two new laws passed at this session of the legislature make a fundamental reform in the method of employing prisoners sentenced to State's prison.

Chapter 242 adds two new sections, 148 and 149, which provide for a psychiatric and diagonostic clinic at Sing Sing prison to make a full scientific study of all prisoners sentenced to State's prison, and make recommendations for their care, training, and employment. The industries of the several prisons are to be organized so that inmates can be sent to the institutions best suited to their mental capacity.

Chapter 243 is a general revision of the prison law to bring it into conformity with the State departments law. The word "prisoners" is substituted throughout for "convicts" and the phrase "department of corrections" for 'superintendent of State prisons."

Former section 170-a providing for a superintendent of prison industries and sections 200, 201, and 202 prescribing the duties of the prison industries board are repealed in full. Chapter 243 repeals sections 200, 201, and 202 without quoting them. They provided for a board to consist of the superintendent of State prisons, the superintendent of prison industries, and the superintendent of purchase. They were to meet at least once a month to determine the general policy affecting prison industries, to "study the problem of rehabilitating prisoners, particularly with the purpose of preparing them for useful industrial service." They were to report on the industrial record of each inmate applying for parole, to fix the pay of inmates, fix the pay of civilian employees, and fix the price at which prison goods were to be sold.

The new law abolishes the board and makes one man, the first assistant commissioner of corrections head of a new division of industries.

All the sections in the old law after section 179 are renumbered.

Public employees.—A concurrent resolution was passed by both houses of the legislature proposing an amendment to the constitution that any honorably discharged soldiers, sailors, marines, or nurses, disabled in the actual performance of war duty "to an extent recognized by the United States Veteran's Bureau" shall have preference in appointment or promotion from any civil-service list for which they have qualified regardless of their standing on such list.

Pensions and annuities.—Chapter 512 amends the sections of the civil service law providing that employees holding a position in the competitive class, whose positions have been abolished, are to be placed on a preferred list from which appointments are to be made for two years. The law held that preference should apply to any person "holding a position in the competitive class or a position subject to a qualifying examination." The new amendment eliminates the phrase "or a position subject to a qualifying examination," which had been interpreted by the attorney general to include all noncompetitive workers

who had taken a qualifying but not a competitive examination, such as laborers in cities, chauffeurs, etc.

Retirement system for State employees.—Chapter 421 amends the civil service law in relation to pensions for public employees in several particulars. In the description of prior service under retirement plans of city or other public bodies which were taken over by the State system, the word "teaching service" is amended to read "service," as originally intended.

Subdivision 9, which provides that a member who withdraws any part of his funds ceases to be a member, is changed to except those who temporarily borrow part of their contributions under the amendment of last year.

For employees transferred to the Federal service when their offices were transferred to the Federal Government, and retaining their membership in the State system, the clause was eliminated providing that they must pay accumulated contributions to the State system within 60 days. The provisions were brought up to date and made general by eliminating a condition technically applicable only to one department in 1921.

Employees eligible to membership who did not join the system at first date of eligibility may join before January 1, 1930, and obtain credit for prior service if rendered within five years of first date of eligibility by paying to the funds. Employees who have become or become members prior to January 1, 1930, and prior to age 50, may receive credit for hitherto rendered service for superannuation credit only provided that contributions are made to any sound actuarial system to which the State or a municipality is a contributor, equal to the amount payable if they had become a member at first date of eligibility. A member may pay in installments arrears formerly payable in lump sum.

The provision in the law that medical examinations under the act shall be made where practicable by a physician in the service of the State of New York is eliminated.

The provision that members may retire "within 90 days after leaving State service" is amended to remove the time limit, and to add a requirement that they shall have attained the age of 60 "or over while in the State service."

The provision that a retirement allowance shall be suspended while the beneficiary is in receipt of compensation for public service is amended to exempt payments for jury duty, and strengthened to forbid payment to a person receiving a pension or "any emolument or award or judgment paid from direct or indirect taxes."

Mr. Stewart. May I ask Doctor Patton just what the radium law was that was passed by the State of New York?

Doctor Patton. Chapter 64 of the Laws of 1929 merely made an addition to the list of occupational diseases. We now have a list of all such diseases. They have a new provision, No. 20, providing for compensation for injuries following radium emanations or X rays, provided such injuries occur in hospitals or laboratories. The governor in signing the bill said he thought it went only a little way. He characterized it as a "toddling step" in the right direction, an effort which should be encouraged rather than discouraged.

Mr. Stewart. We have a record of two deaths in laboratory work. We have a general record of 18 deaths, and 10 more dying from the use of this stuff in factories.

Report of Pennsylvania (by Mr. Ainsworth).

The 1929 session did not pass much legislation affecting the Pennsylvania Department of Labor and Industry that is of particular interest to this association.

An amendment to the child labor law was passed giving the State department of public instruction or local school boards the duty of designating certain physicians as the physicians who will examine minors between the ages of 14 and 16 desiring to secure employment. The child labor law always required physical examinations, but the minor could have the examination made by any physician. This permitted irregularities to creep in which the recent amendment is designed to correct.

In order that the prosecution procedure will be uniform for all laws enforced by the department of labor and industry several laws were amended to make this possible.

The boiler and elevator laws were amended, principally in reference to inspection fees, and to divorce the laws from the general factory law. In the past the department could only inspect boilers and elevators for the protection of employees. For instance, if a man owned a building that was leased to other parties, and the owner elected to fire the boiler himself instead of employing a fireman, the boiler did not come under the jurisdiction of the department. Now the public hazard is recognized and all boilers come under the jurisdiction of the department. The amendment to the elevator law also prohibits representatives of elevator manufacturing companies from making legal inspections. All inspections must now be made either by inspectors of the department or of insurance companies authorized to do business within the State. There is nothing in the law, however, to prevent an elevator owner from entering into a service agreement with an elevator manufacturer for service inspections.

Report of Alberta (by Mr. Smitten).

A new steam boilers act was passed, bringing into line various amendments passed during the last few years, and providing for an extension of the scope to include the distilling of oil, refrigerating systems and requiring that all persons employed in welding pressure vessels must pass an examination and be licensed.

The workmen's compensation act was amended to provide a longer period for reporting hernia cases, the time being extended from 24 hours to 72 hours. The amendment gives to the workmen's compensation board wider powers to determine rates of earnings for compensation purposes.

An act was passed to provide for old-age pensions. This is similar to the legislation in the other Provinces and is an act based upon the Federal statute, which provides for an agreement to be entered into between the Province and the Federal Government relative to administration and payments to aged persons. The Federal act provides the general basis as to age of person entitled, length of residence, etc. The act has been proclaimed and it is hoped to commence payment of the pensions on the 1st day of August, 1929.

Report of Ontario (by Mr. Ballantyne).

The most important piece of legislation passed by the Ontario Government during the 1929 session was an act providing for the payment of old-age pensions. This act provides that persons of 70 years and over in necessitous circumstances may receive a maximum pension of \$240 per annum. The total amount of income permitted for beneficiaries under this act is \$365 per annum. This sum includes the pension payment, which may be graded so that

the total amount of \$365 is not exceeded. Only British subjects by birth or naturalization are eligible for old-age pensions. All persons claiming a pension must have resided in Canada at least 20 years and not less than 5 years in the Province in which a claim is made. The old-age pension act passed by the Dominion Government provides for the payment of a subvention to provincial governments who enact concurrent legislation. The Dominion authority pays 50 per cent of the total amount of pensions paid by any Province. The Ontario act provides that municipalities shall contribute 20 per cent of the provincial cost of paying old-age pensions. This act has not yet been proclaimed, but it is anticipated that it will be in operation on or about November 1, 1929.

Other amendments to several statutes administered by the Ontario Department of Labor were passed by the Ontario Legislature, but these acts do not contain any new principles with respect to the protection or welfare of workers in industry.

[At the suggestion of John Roach, deputy commissioner of labor of New Jersey, Lewis DeBlois, director safety engineering division, National Bureau of Casualty and Surety Underwriters, was invited to give a paper on the subject of the "Necessity for Safety Standardization in the United States—How Can This Be Brought About?"

[It seems that at a meeting of the Safety Code Correlating Committee, advisory to the American Standards Association, which was held in New York City, April 17, 1929, a spirited discussion arose on the apparent indifference or negligence of State departments of labor and commissions in regard to taking advantage of safety codes that have been prepared for the guidance of industry, and the practice, that has prevailed in many jurisdictions, of compiling safety regulations that conflict with the standard regulations prepared by the American Standards Association. Many States have given but little consideration to the adoption of standard safety rules, and have no well-developed program for the prevention of accidents.

[Mr. DeBlois, therefore, was invited to attend the convention and discuss the work of the American Standards Association to the end that the commissioners might be interested enough to return to their jurisdictions and use the safety codes that are available, provided that these codes are applicable to the conditions in the particular States. It is desirable that there be definite standard rules throughout the United States to enable builders of machinery to safeguard equipment at its source, with the assurance that the methods employed will be acceptable to the several State authorities.]

Necessity for Safety Standardization in the United States—How Can This be Brought About?

By Lewis DeBlois, D'rector Safety Engineering Division, National Bureau of Casualty and Surety Underwriters

I assume that it is not necessary to convince you of the importance of basic safety standards by telling you that they are as essential to those who desire industrial-accident prevention as are textbooks to the school-teacher, law books to the lawyer, or military regulations to the soldier. They are the crystallization of experience—the consensus on what is indispensable for the protection of human life—

the only worth-while by-product of accidental injury. If we did not collect such knowledge and apply it intelligently to the prevention of accidents we would be as irresponsible as children and little better than savages. Such information is virtually priceless, for it has been bought and paid for with blood and suffering and human life itself. Whether it is to be enacted into law, adopted as regulations, or merely embodied in a code for general use is relatively immaterial so long as it is written down and made available to those who need it.

We have in the United States two national bodies concerned in the making of industrial safety standards: The American Standards Association, the structure and methods of which I need not describe, and the National Council on Compensation Insurance, a semigovernmentally controlled body representing the stock, mutual, and Statefund casualty insurance interests. Its code is the industrial compensation rating schedule. (The National Safety Council produces "safe practices pamphlets," but they are not, strictly speaking, standards or codes.) Since, for the most part, insurance interests are represented on the American Standards Association committees by the same men who have to do with the making of the industrial compensation rating schedule and efforts are exerted to keep these two sets of standards as nearly parallel as practicable, their safeguarding requirements are to-day quite similar. Such differences as exist are due in the main to inherent delays in making additions or amendments. In so far as they cover their respective fields, it can be said without gross error that we have only one body of safety standards for guidance which are national and authoritative. They are not, however, and in the nature of things can never be, final or perfect.

Aside from the safety rules or codes of industrial corporations and trade associations, the application of safety standards to manufacturing industry comes about either through the influence of the insurance carriers with the industrial compensation rating schedule as their instrument or by the enforcement of State laws or regulations. While the effect of the insurance effort may vary, it is at least based on a single set of requirements. State enforcement, however, is quite another matter. Granted that it is not always possible to control the action of legislatures and induce the framers of bills and legislative committees to follow accepted national standards, it would seem as though something could be done to bring State departments of labor into line when formulating intended regulations or amending

them.

To what extent are the laws, or regulations, or orders of the States at variance on fundamental requirements? I must confess that I do not know. I have never seen a comprehensive comparative statement of their requirements and doubt whether such a document is in existence. If you wish to understand why it does not exist, try to prepare one; because of the innumerable, detailed divergencies and the differences in phraseology, you will find it an almost impossible task.

With a little time at my disposal I have been able to study the requirements adopted by 13 States for the protection of workers from contact with toothed gearing. I selected gears because they present one of the simplest and most obvious hazards with the least excuse

for variations in protection. The 13 States were merely those whose regulations were on my desk at the time. They are fairly well distributed; six of them are important industrially; eight of them have

a reputation for active interest in industrial safety.

Taking up first the matter of coverage: Two States make no attempt to define it. One State specifically demands protection for "all gears wherever located." Four States agree on "all gears exposed to contact"; one insists that it must be "hazardous contact" (when is contact with gears free from hazard?) and another that they must be "inrunning gears"—an expression reminiscent of "left-handed monkey wrenches" since the direction depends wholly on how one looks at the gears. Another State makes it "all power-driven gears exposed to contact" with disregard for the fact that all gears are moved by power of some sort. Four States, however, agree on the A. S. A. and I. C. R. S. definition: All gears wherever located, except adjusting gears which do not normally revolve. These differences are, however, relatively unimportant.

When we consider the general provisions for protection, we encounter an amazing tangle. There are three well-known methods of guarding the teeth and mesh point: By encasing the gears in a close-fitting inclosure of solid metal or mesh, by surrounding the teeth with a ribbon of metal which has flanges projecting inward beyond the roots of the teeth, or by erecting a fence of mesh or a railing at some distance from the gears. For the sake of brevity, we shall refer to these methods as "casing," "ribbon," or "fence,"

and otherwise ignore the details of construction.

Four of the 13 States require either casings or ribbons and 2 more are willing to have casings or ribbons or will permit fences under special conditions which do not coincide at all. however, is all the uniformity one finds; after that it is each State for itself. One will permit only ribbons; one demands "complete inclosure" without defining how; one demands nothing but "recommends complete boxing." One requires casings but will waive this requirement, if it is impracticable, in favor of ribbons. Another specifies casings or ribbons, but if both of these are impracticable will be satisfied with a fence. Still another specifies casings or fences but can be appeared with a ribbon. The last appears to be wholly indifferent and will accept casing or fence or ribbon without restrictions. And there are other differences. Some require fences to be extended to the height of 7 feet above the floor; others to 6 feet; one permits a 5-foot fence if it is 2 feet away from the gears. One State is willing to accept for small gears located on shaft ends a revolving flange without any other inclosure.

Now we come to the revolving spoke hazard for which the ribbon guard offers no protection, since it is open centrally. As to the existence of the hazard, three States utterly ignore it; one State believes it exists in all gears having spokes or holes in the web, one affirms its existence when these spaces are $2\frac{1}{2}$ inches in size, three ignore it unless the gear is at least 18 inches in diameter, five States demand its protection "where it exists" without telling us where it does exist. Seven States tell us how to guard it and are somewhat at variance; six States do not tell us how. Only one State mentions the

use of a disk guard fastened to the spokes which is permitted in the I. C. R. S. and A. S. A. Power Transmission Safety Code and is

common practice.

This is the story so far as I have been able to interpret these The title of the story might have been "The Thirteen Original States," for I suspect them all of trying to be a little original. There are 19 more States claiming to have power-transmission safety standards, and all of these, I suppose, have introduced their little originalities. But speaking seriously, is it possible that after 15 years of the safety movement we have not yet learned how to protect the gearing which grinds the fingers off a colored mill hand in Alabama in precisely the same way that it mutilates a Swede in Wisconsin, an Italian in New York City, or an Indian in British Columbia? I have seen in motion pictures Japanese workmen protected by first-class gear guards on canning machines in faraway Saghalien; friends of mine have told me of American machinery in shipment to the Soviet Republic which was better guarded than any they had been able to buy for use at home. Are you willing to admit that we are behind the Japanese and Russians in preventing accidents? Is originality and independence in the matter of State regulations more precious than human life?

To a recent inquiry which we sent out for information on the guarding of machine tools, 16 States did not reply, 11 States said they had no regulations, 8 had general provisions only, and 13 had specific requirements. Some of the replies were interesting: One State wrote that its inspectors followed "the codes of the different underwriters and the American Society of Mechanical Engineers"; another that it used no codes but relied on the experience of its inspectors; a third, that it needed neither codes nor inspectors because plant safety engineers were looking after conditions satisfactorily. Another State advised us that it used the regulations of an adjoining State, but I can not imagine for what purpose since it has no inspectors and no power of enforcement. There is absence of uniformity,

you see, all along the line.

What are the results? We have in the first place insurance inspectors and State inspectors working to different ends with consequent embarrassment to plant owners and depreciation of the inspectors' ability. To be forced to change a safety device which another inspector had just informed you would meet every requirement does not help your disposition toward safety inspectors and the safety movement in general. From the insurance angle the situation is not a happy one. We are trying to keep the I. C. R. S. in harmony with the A. S. A. codes, but when we transmit A. S. A. codes to our member companies we can only urge their use "where they do not conflict with local laws, regulations, and ordinances." This materially weakens their value to the companies. Think also of the situation confronting the large corporations which operate plants in many States; their safety departments have not only to bring about the use of their own safety regulations but must see to it that all State regulations are complied with—which is no simple task, as I know from years of experience. It is easier to forget what

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the State wants and quietly damn its inspectors when they come around.

My deepest sympathy, however, goes out to those manufacturers of machinery who desire to make their products complete and safe. Have you wondered why we have made so little advance toward getting machines adequately guarded by their makers? Have you thought of the difficulties confronting them? Permit me to quote from a letter from a man who knows the situation of the machine-tool builders:

I have no doubt whatever that if we can get the different States to agree on uniformity, we shall be able to get the machine-tool builders to conform to these uniform requirements and build guarding devices as essential parts of their machines. They simply can not do it now in some cases.

This, of course, would be particularly true in the matter of guarding the

It is a very good time indeed for us to get the State authorities on to uniform guarding as much as possible. There is no difficulty whatever in getting the machine-tool industry to add the guards and to charge for them what they are worth, but the only trouble up to now has been that they couldn't tell what guards different States would need. Some want openwork, lacy effects in their built guards; others want an absolutely closed-up guard. Then there are varying heights. * *

You can count on us to cooperate fully. Get the regulations going, and we will do the rest in getting the manufacturers to realize the necessity of complying with them.

To obtain uniform protection of machinery by the makers would constitute a very real advancement. It would lift a material portion of the burden from the shoulders of the State inspectors, the insurance inspectors, and the safety engineers of industrial concerns. I know of one large corporation which has been forced to abandon its former policy of specifying on purchase requisitions the inclusion of safety devices because so many inadequate and substandard devices were supplied by the makers that it proved cheaper to build their own. Now they specify "no safety devices to be included." I do not blame them, but it is a move in the wrong direction.

Another thing would be accomplished in time by maker-guarded machinery: we would have more and better guarded machinery in those small industrial establishments which are reached by inspectors rarely, if at all. It is this class of establishment which is most backward in doing the things it ought to do and is the hardest to reach. Let the manufacturers guard the machinery for them and some of our difficulties will be overcome.

I have been surprised to find that Minnesota has a law (sec. 4145, G. S. 1923) prohibiting the manufacture and sale of unguarded machinery. It reads:

Manufacture and sale of unguarded machinery prohibited.—Whenever practicable, the points of danger in any machine or mechanism shall be securely guarded by the maker, and the manufacture or sale of any machine or mechanism not so guarded is hereby prohibited.

I do not know how effective this law is, but it is probably fortunate for the manufacturers of machinery that similar laws are not yet on the statute books of all our States. It will be time enough to discuss legal prohibition when we have cleared up the confusion that exists among our State safety requirements.

What shall we do about it? Surely, something must be done. Probably the most important field for work lies in the protection of mechanical power transmission. It would, I think, be a good place to begin. The American Standards Association code on this subject is now due for revision under joint sponsorship of the International Association of Industrial Accident Boards and Commissions, the American Society of Mechanical Engineers, and the National Bureau of Casualty and Surety Underwriters.

There are some State labor officials on the present committee but not enough to guarantee adoption of a completed code by all of the 32 States using power transmission safety codes. I can not speak for the American Standards Association, but I see no reason why the revised code as prepared by the present committee before adoption should not be submitted for review and final endorsement to a larger reference body on which all States were represented. Such a referendum could be negotiated by mail and every effort used to adjust differences and causes for criticism. It could not be done, however, with the implied purpose of securing State adoption since that is not a function of the Amercan Standards Association.

With this first step done, some interested national body other than the American Standards Association should prepare, on the basis of the adopted code, a set of model State regulations and, for the use of States having no power of enforcement, a model enabling act. It would then remain to secure their actual adoption by as many States as possible. This might be undertaken by the same interested body or by an association of organizations formed for the purpose. If these included trade associations concerned with the manufacture of machines and machinery, we would be killing two birds with one stone.

I am throwing out these ideas only for purposes of discussion—they may be entirely invalid. I am convinced, however, that the situation warrants your very careful attention and perhaps the appointment by your organization of a special committee to give it immediate consideration. Accidental industrial deaths are not decreasing. What we have done may have checked a sharper rise in the curve, but I believe that you will agree with me that a civilized people can not contemplate with equanimity the killing of 24,000 persons a year. In the last decade accidents in the United States have abruptly terminated 830,000 lives, and of this slaughter industry is responsible for at least one-quarter. The time has certainly come for more concerted, positive, and constructive action.

DISCUSSION

Mr. Stewart. May I ask Mr. DeBlois how he makes up his estimate that industry is responsible for one-quarter? That is decidedly low. Is it not responsible for about one-half?

Mr. DeBlois. Of course we do not know. People are guessing, more or less, and the estimates of the number of industrial deaths in a year vary from 18,000 to about 27,000. The National Safety Council's figures for 1928, which are just out, place the number at 26,000. But it is nothing more than a guess. I do not know what we have. We have up to 96,000 total deaths a year, according to the census

reports. Of course the census reports do not tell us how many are industrial deaths and how many are not. We do not know the number of street and home deaths. My own guess is one-quarter on streets and highways, one-quarter (with a question mark) in industry, and one-quarter in public places other than streets and homes, which will embrace the majority of travelers' deaths of which there are a large number. For further figures I refer you to the National Safety Council. They might be higher or they might be lower, no one knows.

Mr. Stewart. You mentioned a standard guard. Do you think it is possible to put a standard guard on a machine used in different places?

Mr. DeBlois. In my experience it is a hard matter to pick out a universal guard and say that they have to put it on this machine, and then say to another man that he has to put on an altogether different guard. I think you can standardize as between States, but I do not think you can standardize as between machines. My quarrel is not with your point at all. There will have to be exceptions made; and there are exceptions made to-day according to the judgment of the inspectors, and so forth. You know that better than I do. My paper did not mention anything about the deviation that lies between the State code of regulations and the actual application of those regulations to industry. There is a field there for "give and take," and I think that is where the answer to your question lies. I can see no reason at all why with such an ordinary thing as tool guides, for example, we can not have uniform regulations in our States.

A Delegate. We have taken this matter up with the manufacturers in Ontario, so that they may deal with the machine before it leaves the plant. We find it difficult, after a machine leaves the manufacturer's plant, to ask the manufacturer why he did not put a guard on it. We have had a great deal of difficulty in getting manufacturers to put guards on. We find the results are better if the manufacturer makes something that completely covers the gears; that is easier than putting a fence around. You must have the gearing practically covered, so that a man can not get inside. We find that we get better results when we ask the manufacturer to put the guards on.

Mr. DeBlois. Guards made by the manufacturer are more likely to stay on the machines when the machines are sold. Are the manufacturers not more likely to stay with a machine when they make guards rather than when the guards are made off the premises?

Mr. Davie. When a State inspector makes an inspection of a plant under the State inspection law, you will find that someone in authority in that department is the fairest to deal with. Of course I realize that you have something to sell in your particular branch of business.

I have always cooperated with the insurance inspector when we have had a problem of that kind, and I find it a good idea before issuing any orders to sit down and come to some understanding or agreement as to what is about right. It is largely a matter of getting along together—with the insurance inspector and the State in-

spector. I always feel that if we work along cooperative lines we

will get better results.

I say quite frankly that this outburst of mine has not come out of any insurance experience or from any issue with the insurance companies. The whole thing has come out of meetings I have attended recently, called by various State commissioners of labor, and by talking with men who have had to do with the enforcement of labor laws in the States and with people connected with American labor associations. There is, unquestionably, a value there to the insurance people; but what I am interested in at the moment is not the benefit to the insurance companies so much as in actually getting at what is one of our fundamental difficulties—that is, getting machinery guarded at the source. We may be sliding a little backwards, especially when we discover that the Pullman Car Co. has ceased requiring guards to be provided.

A Delegate. Inspectors in the business a long time realize fully that at the present time our greatest hazards do not come from what we call machine accidents. Statistics of industrial accidents rather support that. The campaign that has been carried on by the members of this association in particular has been to the end that all modern machines should be equipped with safeguards at the source of supply. That is the proper place for the guards to be put on the machines; but when you get some old warhorse like myself you will have to take the safeguard off, because he can not do the work; in fact, I have seen the whole equipment laid on a bench in the room because it was handicapping the men in their work.

From my point of view, if the insurance inspectors would sit down with fellows like us, we could do much more good than we

have done in the past.

Mr. Ainsworth. As a representative of a State that has taken a great interest in the national code program and from the viewpoint of one with considerable experience in the development of codes, may I say that the national codes have been of vital importance in

the development of Pennsylvania's State codes.

The statement has been made that the national code program as outlined by Mr. DeBlois is no doubt of value to insurance companies in general which he represents. I am of the firm belief that the national codes are of far greater value to the various States than to the insurance companies. Codes are adopted and enforced by labor departments for one purpose only; namely, for the prevention of accidents. Just so long as there are a hundred different legal ways of guarding machines and other equipment, just so long will guards be of substandard design, and just so long will accidents continue to exist. Generally speaking there is only one correct way of guarding mechanical apparatus and that method should be followed by all regulatory bodies if the maximum results are to be obtained.

This system does not destroy States' rights or the privilege of working with local industries in the development of State codes. At least we have found that to be the case in Pennsylvania. For many years we followed the general practice of most States, of calling together a State committee of experts, manufacturers, and employees, for the development of particular codes. Five or six years ago we entered actively into the national code work which meant that we

had to dispense with the State committees. This departure was opposed for some time but I believe it is gradually being overcome. We have not lost the contact with the industries of the State because of our system of public hearings. No code, whether State or National, is adopted in Pennsylvania until it has been presented to public hearings held at various points throughout the Common-This gives industry an opportunity to criticize the proposed regulations and offer to the department the suggestions it would have previously made at the committee meetings. The criticisms and suggestions received at the public hearings, if of an important nature, are referred to a committee for advice. advice is then sent to the American Standards Association for the benefit of the sectional committee that drafted the national code in order that the code may be revised. In this way national uniformity is retained and the State's interests have been satisfied. This procedure has been tested out in Pennsylvania and can be strongly recommended to any State that has not taken up the use of national codes.

The trouble with the national code program as far as this association is concerned is the fact that the representatives of the association on the code committees work as individuals rather than as representatives. If more of the States would become interested in the movement and stand ready to assist the association's representative on the code committees, there would be less likelihood that the codes would need dressing up to make them meet individual State conditions. States should also take advantage of the rules of the American Standards Association which permits any State to have representation on a code committee regardless of whether the States are represented by this association or not.

We certainly hope that more States will take up the national code program. We are convinced that you will find it a vital part of

your accident prevention programs.

Mr. Stewart. I am very much interested in this discussion. It shows, contrary to what we sometimes feel, that we are making a little progress. Twenty-five years ago, I persuaded a Congressman to introduce a bill which provided that no machinery which was not guarded at the place of manufacture should be transported across State lines. A few months afterwards I received a letter from him stating that it seemed I was the only man in the United States that had ever thought of, or was in favor of, such a thing; that the requirements of the different States were such that it was absolutely impossible; and that while he introduced the bill he did not feel justified in urging it.

It is only within the last 15 years that we have even taken up this matter of trying to get uniformity. Dr. De Blois's paper is the most encouraging thing I have heard for some time. I want to say that, as far as this organization is concerned, it has very often lacked a real object of existence—it has been shooting without any mark to shoot at, simply to hear the gun go off. I feel that it would be a very important step to take now; and I shall introduce a resolution that this organization take up as its objective, for a few years at least, the unification of standards with the object of getting the different States to agree on something whereby we can have ma-

chinery guarded at the place of manufacture. I think it is well worth our while to work for it, and I hope that this convention will adopt such a resolution.

Mr. Roach. I think I am largely responsible for getting Mr. DeBlois into this trouble. I represent this organization on the code correlating committee; I also represent the International Association of Industrial Accident Boards and Commissions on several code committees. For eight or nine years the members have put in valuable time on that work. A few months ago the committee had a meeting in New York—Mr. DeBlois was present and began to check up on how many jurisdictions had taken any notice of the work done by the American Standards Association. It was surprising to learn how few of the officials in our country knew anything about it, or had any conception of what an engineering code meant.

Now you can not coordinate and make uniform groups of industrial safety rules unless you know something about them. I am firmly of the opinion that most of the delegates that are representing their States or Provinces in this convention to-day do not know much about these codes. I would not know anything about them myself unless I was on the code committee and made some study of the situation. I would say to all of you that you could do no better service for your people in the promotion of a larger measure of safety in industry than by writing to the secretary of this organization or to Mr. DeBlois and get copies of the 15 or 20 completed safety codes, study them over, and see if they can be made part of a safety program in your respective jurisdictions.

Some of these codes have been drafted after months and years of study and effort on the part of trained engineering experts who have no personal bias whatever in doing the work. If you work on any of these standardization committees, and you have certain peculiar notions of your own, it is surprising how quickly somebody will knock a chip off your shoulder and set you down. In deciding mooted points it is a question of give and take, so that these codes probably represent the best engineering thought in safety circles.

I have visited factories in a number of different States. In some States belts and gears are not safely guarded. In some cases when a factory inspector discovers a break in a passageway floor it is corrected by throwing a board over it. That kind of practice obtains where codes are not adopted by labor departments.

While we have been meeting in conventions as an association for the past 18 years (I think the first meeting I attended was held in Washington), this is the first time I have known this association to take up a definite project of this kind and shoot at a definite mark.

I hope that out of this discussion will arise a greater interest in the adoption of uniform codes, and that every one of the States and Provinces will profit by the work of the American Standards Association.

General Sweetser. I also agree with what Mr. Stewart and Mr. Roach have said. I have served on these committees on codes, or have had a representative there, and I have also had the experience of my friend from Pennsylvania. In Massachusetts we manufacture a great deal of machinery of all kinds, and we are getting new machinery and new methods all the time.

In the consideration of these codes, you have to consider the law in each State. The law varies in the different States, and, as Mr. DeBlois has said, he has considered a standard for a standardized machine.

We insist upon a manufacturer in Massachusetts who manufactures a machine to be used in the State to furnish a guard for

his particular machine.

We also have a blanket law in Massachusetts which provides that all dangerous machinery must be guarded, and we take that up with the manufacturer of machines even in New Jersey and New York when the machines are used in Massachusetts; we correspond with the manufacturer there and try to have every machine safeguarded. Massachusetts has adopted the national code, and uses it. Mr. Roach said he was surprised at the number of States that did not use it. These safety codes are on file and are always considered. Although it is not a code State, Massachusetts has a general law, as well as a blanket law, to cover the subject.

On the other hand, I agree with Mr. Stewart when he says that we ought to have a definite object. I think that is one of the reasons why we do not have a larger attendance and more enthusiasm

at our meetings—we have no definite object.

Doctor Patton. I do not want to prolong this discussion, as the time is going fast. I think we are indebted to Mr. DeBlois for having given us a very interesting and instructive paper on the necessity for safety standardization in the United States, and how it can be brought about.

It may be, as Mr. Stewart said, that we have made some progress. I am not going to anticipate any resolution Mr. Stewart has in mind, although I confess that I had in mind the introduction of a sugges-

tion or a resolution very much along the same lines.

Going back to ground which has been very well covered now, I would suggest that this convention appoint a subcommittee to devise ways and means of coordinating the safety codes. I know that coordination and uniformity have a bad sound these days; both of them are worked to death, but this intolerable confusion must come to an end, or safety work and all the talk about safety will largely evaporate into mere talk, without getting anywhere. This association would have more influence, if it would set up this particular object of trying to unify or coordinate all safety activities now going on in the United States and Canada. Not having anything to sell—because I am in no way related to that part of it—I may say that I think all these safety code activities should be coordinated, right across this continent.

Mr. Davie. Let me say that I certainly am in sympathy with a uniform code. I shall study very carefully the resolution to be proposed by Mr. Stewart, as he is one of the men I have always looked up to in this particular work. I think that we all look at these things too much from our own point of view; and I don't want anyone to leave with the idea that I am not in favor of a uniform code.

Mr. Seiller. I am surprised at the remarks of Mr. Roach when he says that in 18 years there has been no definite program worked out. I agree with Commissioner Stewart in his remarks upon the question of safety standards. The message brought to us by Mr. DeBlois

certainly deserves a great deal of consideration. I have in my library what one almost might call a national clearing house of labor laws, and I have found a great deal of difference in the codes, as Mr. DeBlois has pointed out, as well as in other labor legislation. It seems to me to be one big maze or conglomeration of things put

together which do not work out in either theory or practice.

In the matter of uniformity, let me say that I am heartily in favor of it. We are working to that end in our State, aided by the cooperation of the safety departments and the insurance companies. In fact we are going to organize through our universities and colleges; we have organized a group of instructors who are teaching political science and social science, and we are getting in shape to adopt a national safety code as promulgated by the American Engineering Standards Committee.

I can see no reason whatever, if it can at all be done, why there should not be uniformity of guards adopted by manufacturers of machinery. If it is practicable to do work on a machine here in Toronto, why should it not be practicable to do that work in old Kentucky?

Take as an illustration laundry machinery. I can see no difference between clothes being put into a laundry machine and taken out

again in Toronto and in Kentucky.

Take the standardization of machinery, I think we can work that in on different standards, but on the construction of codes we have

had much difficulty.

I think safety work can be developed successfully. As has been pointed out, I have found differences of opinion between inspectors, where they had no standards set. We have found that that in concrete cases defeats us many times, and handicaps us always.

I am not acquainted with the work of the American Engineering Standards Committee, but one of the first things I will do will be to make myself familiar with organizations of that kind. I have in my library a complete code, and we always urge the adoption of this code by the people of Kentucky. We think they are going to come across in time. You have some things in your code that we do not have in Kentucky—certain textile machinery in Massachusetts is not considered by the code in Kentucky. So there are differences and exceptions. I think there are about four different phases of industry covered there. We do not have anything like cocoa grinding.

If this organization did nothing more than to work out a safety

standardization plan, it certainly would justify its existence.

REPORTS OF SAFETY CODE COMMITTEES

Cyril Ainsworth, of Pennsylvania, was requested to give the report of the safety code correlating committee, as Thomas P. Kearns, of Ohio, the association's representative on that committee, was unable to be present.

Report of Safety Code Correlating Committee (by Mr. Ainsworth):

The safety code correlating committee is the branch of the American Standards Association that supervises the development of safety codes. This committee has held only one meeting during the past year, but it was a very important one. Two subcommittees were appointed. The first committee will

consider the promotion of codes. It will endeavor to encourage the adoption of national codes by the various State and municipal regulatory bodies and by trade associations in order that the codes will come into more general use not only from an enforcement point of view but by manufacturers of equipment that will eventually find its way into industry. The other committee will study the scopes of the codes in order that there will be no omissions and no overlapping and thereby eliminate confusion.

These two committees are in the hands of active chairmen and there is every reason to believe that by the time the next convention rolls around there will be greater uniformity in the make-up and scope, and the codes will be more widely used than in the past. ¹

Building exits: Considerable constructive work has been done during the past year by the building exits code committee along the lines of making the code more practical. The American Institute of Architects through their representative on the committee presented some very pertinent criticisms of the practicability of applying certain provisions of the code. The criticisms have resulted in some vital changes especially in regard to means of egress from auditoriums located in large office buildings. The work of this committee will take years to complete because of the many ramifications of the subject and the large amount of study that must be given to each problem, but the work is exceedingly important and of vital interest to all organizations having the responsibility for protection of occupants of buildings from fire and panic.

Textile code: Last year in my report of the progress of the textile code I presented a rather gloomy picture of the work that had been done. A year ago the picture looked as though we would never get a code. This year I can report that a code has been developed which is now before the members of the sectional committee for letter ballot. The code is not a particularly strong one but it is a practical enforceable code that can gradually be developed as the industry assumes a more favorable attitude toward the code. I am hopeful that the code will be placed before the safety code correlating committee for approval in the very near future.

Walk-way surfaces: The walk-way surface code is another code concerning which we have had considerable trouble. Nearly a year ago a meeting of the sectional committee was held at which time it seemed as though it would be absolutely impossible to develop a code without appointing a new committee and starting work all over again. Through the diplomatic intervention of Doctor Agnew, secretary of the American Standards Association, oil was poured on the troubled waters and it was decided that the work of developing a code should be taken out of the hands of the sectional committee for the time being and should be given to a subcommittee.

This subcommittee met in Philadelphia about two weeks ago and from the material already developed prepared a new code which it is believed will meet with the approval of the sectional committee. It will be necessary for the subcommittee to review the new draft before it is sent to the sectional committee, but there will not be any delay in that respect.

Mr. Stewart. Have you cut out the tables?

Mr. Ainsworth. One table has been retained in the code, namely, the table which specified certain frictional resistances for the walkway surfaces at definite locations. The table which contained information as to the supposed frictional resistance of particular materials

 $^{^{1}}A$ complete report on the safety code correlating committee was given by John P. Meade, of Massachusetts (see p. 35).

has been stricken out, not being essential to the code. Under the code if a particular administrative authority desires information as to the frictional resistance of certain materials instructions are given to the manufacturer to have tests made according to the standard procedure developed by the Bureau of Standards at Washington.

Report on Cranes, Derricks, and Hoists (by Doctor Patton).

The work of this committee has been divided among five subcommittees as follows:

- No. 1. Overhead traveling cranes and gantries.
- No. 2. Locomotive and crawling tractor cranes.
- No. 3. Derricks and hoists.
- No. 4. Slings, chains and hooks, wire rope and attachments, sheaves and pulleys.

No. 5. Jacks.

The status of the work on this code up to June 1, 1929, is as follows:

The work of the subcommittee on locomotive and crawler cranes has been completed and has been in the hands of the general committee for some little time without any criticism. The work of the subcommittee on overhead cranes and gantry cranes has also been practically completed, but there has been some criticism which may delay its approval by the general committee.

Each of the subcommittees dealing with derricks and hoists and with jacks has completed a tentative code. These will soon be released to the general committee.

The subcommittee on wire rope, chains, and slings has not completed a tentative draft.

As will be seen from the above statement, the work of the subcommittees is well advanced. Each of these tentative codes has yet to be handled by an editing committee and then go to the general committee for criticism and approval.

Report on Dust Explosion Codes (by Mr. Burke).

The formulation of safety codes for the prevention of dust explosions has only been undertaken in late years, and, as a matter of fact, safety codes were only tentatively approved as American standards July 2, 1926, by the American Engineering Standards Committee.

Work on the safety codes for the prevention of dust explosions has progressed very favorably since their inception, and at the present time there are five dust-explosion codes which have been adopted as American standards by the American Standards Association and the National Board of Fire Underwriters, and five other codes are under study.

The five codes which have been approved to date embrace the following industries: (1) Flour and feed mills, (2) sugar and cocoa pulverizing systems, (3) technical grain elevators, (4) pulverized-fuel systems, and (5) starch factories; while others under study at the present time are sulphur crushing and pulverizing, spice grinding and pulverizing, hard-rubber grinding, woodworking, and the pulverization and atomization of metals.

As a result of certain regulations in the National Electrical Code affecting the five approved codes, slight revisions were being contemplated and a report on them was made at a meeting of the dust explosion hazard committee of the National Fire Protection Association March 11 of this year, under the chairmanship of Mr. David J. Price, Bureau of Chemistry, United States Department of Agriculture, which department is joint sponsor for these projects,

The code for pulverizing systems for sugar provides, in part, detached buildings at safe distance, or, if near, proper construction of walls, or, if located in plant, to have strong, noncombustible floors and ceilings and light, noncombustible exterior walls, all transmission mediums in fireproof inclosure, dust-proof motors, electrical control outside or properly protected if inside, true alignment of apparatus, unit systems of pulverizers, proper electrical grounding of all apparatus, and complete system of dust collectors.

The code for starch factories, governing the four operations of starch drying, dry starch grinding and grading, pearl and powdered starch packing, and lump starch cooking, pressing, grading, and packing, provides, in part, location in four separate buildings, a safe distance apart, of light fireproof construction with large window area, smooth walls, beams and ceiling, complete separation of floors, easy accessibility to roofs of kilns for cleaning, separate dust-collection systems, explosion-relief panels for hoppers, nonsparking grinding metals, isolation of mills, proper venting of cyclone dust collectors, removal of static dust and slow speed of spiral conveyors.

These codes were prepared by a sectional committee composed of representatives of the Association of Governmental Officials in Industry of the United States and Canada in conjunction with 18 others. A summary of this list shows manufacturers 3, employers 5, employees 1, governmental regulatory agencies 3, qualified specialists 2, insurance representatives 5, giving a total of 19 with no one class in the majority.

As additional proof of the seriousness in which State officials are considering the fire and explosion hazards in industries, I might mention the fact that Miss Frances Perkins, our industrial commissioner, has instigated a survey to be made of the chemical industries of New York State as to fire and explosion hazards, in order that we may formulate codes for their prevention.

[Mr. Burke, of the New York Department of Labor, read a letter from the National Fire Protection Association, in which the attention of governmental officials in industry was called to the need of adequate exit facilities, and the desirability of labor officials supporting legislation relative to the requirement for fire-alarm boxes in hospitals and other institutions.

[With the letter submitted by the National Fire Protection Association was a copy of the building exits code sponsored by that organization, together with a pamphlet covering a fire record of hos-

pitals and institutions.

In addition, a code was submitted in regard to X-ray films, which code was prepared after the Cleveland Hospital disaster. It seems that the hazard of nitrocellulose film has been carefully considered by the National Fire Protection Association committee on hazardous chemicals and explosives. On recommendation of this committee, regulation on this subject were adopted by the association in 1925, and later published by the National Board of Fire Underwriters. Had the recommendations of this pamphlet been complied with no such disaster as that which occurred in Cleveland would have been possible. The primary reason for the large loss of life in the Cleveland hospital fire seems to have been the X-ray film. One very important contributing factor was the arrangement of ventilating equipment or interior communications which permitted the rapid diffusion of the gas through the building. (This report was submitted by Robert S. Moulton, technical secretary, National Fire Protection Association.)]

Report on Code of Colors for Gas Mask Canisters (by Mr. Roach).

A tentative draft of code was made in New York, at a meeting of the committee, in October, 1928. Since that time the code has been sent out for letter ballot on its adoption, and it will then undoubtedly be adopted as submitted.

John P. Meade, director of industrial safety, Massachusetts, submitted a report on the work of the safety code correlating committee, on which committee he serves as alternate to Mr. Kearns, of Ohio. This report supplements that given by Mr. Ainsworth (see p. 31). The report, which includes also reports of other code committees on which Mr. Meade serves, was read by General Sweetser, of Massachusetts.

Report of Safety Code Correlating Committee (by Mr Meade).

Since the last convention of the Association of Governmental Officials in Industry the safety code correlating committee has held two meetings in the city of New York on April 11 and 17, 1929.

The correlation of the various safety codes is a work of considerable magnitude. Its success will depend upon the application of its enactments in the industries of the country. This may be accomplished in many different ways: The agency of the State inspection department; the factor of workmen's compensation insurance; and the support of organized accident prevention work under private auspices.

At the last meeting of this committee on April 17, 1929, it was voted that the activities of the American Standards Association and the safety code correlating committee should be constantly directed to this end. At this meeting, officers of the safety code correlating committee were elected for 1929. Several announcements of changes of personnel were made, including the appointment by the International Association of Industrial Accident Boards and Commissions of Henry McColl, of St. Paul, as alternate, vice G. N. Livdahl. Plans were made for future work in the correlation and promotion of codes in industry, and discussion occurred in relation to the attitude of the various industrial States. Reports were made indicating that in some States an effort had been made to bring the rules and regulations into conformity with the insurance-rating schedules. Complications arising from elaborate provisions in detail were discussed at considerable length. Ways and means were adopted to facilitate the work of the correlating committee.

Announcement was made that the American Institute of Architects had drafted a safety code for construction work, following a request for cooperation from the Workers' Health Bureau. The draft had been prepared after a careful study of all existing codes. Reference was made to a safety code for window washing and attention called to the existence of the Empire State Mutual Insurance Co., which is composed practically entirely of window-washing concerns. Approval of the personnel of the section committee on this safety code for window washing was recommended to the Standards Council, providing that effort be made to secure additional insurance and employee representation.

Codes for mechanical refrigeration; machine tools, including hot metal saws, shears, centrifugal extractors, and wire-drawing machines were considered in the order named.

Other codes considered at the meeting included those for mechanical power transmission; textiles; industrial sanitation; exhaust systems; spray painting; dry cleaning; rock drilling; and the removal of silica dust.

In a memorandum to the members of the safety code correlating committee, prepared by David Van Schaack, its chairman, the status of the work of the

safety code correlating committee was outlined and suggestions made as to future policies. It is presented herewith, in the belief that it will promote greater interest in the work at hand.

MEMORANDUM ON WORK OF SAFETY CODE CORRELATING COMMITTEE

It seems proper at this time to express the thought that the safety code correlating committee may well consider the advisability of expanding its activities so as to undertake some lines of work which have not before seemed practicable. Hitherto the committee has confined its attention to such matters relating to the determination of the advisability of codes, sufficiency of sectional committee representation, and degree of conformity with the rules of procedure in preparation and submission of codes as have been referred to it from time to time by the American Engineering Standards Committee, now the American Standards Association. A considerable number of codes have been started and many of them completed, and the safety code correlating committee is now in a position to devote less of its time to such work as has been mentioned and more to availing itself of the larger opportunities which lie before it.

That these larger opportunities should be realized, if possible, is evident from a consideration of the real value of safety codes to industry. At the present time, manufacturers are subject to uncertainty and often to considerable expense due to the existing and increasing multiplicity of nonuniform safety standards promulgated by the many States and municipalities of the country and various organizations. Such burdens have come to the point of being quite keenly felt by manufacturers, not only on the ground of expense, but by the inconvenience attendant, when plants are located in different places, upon complying with a variegated collection of safety rules differing from each other in many points.

It would seem highly desirable, therefore, that the American Standards Association should not only stimulate the development under its procedure of codes covering fully the current needs in the safety field, but should make a systematic effort to procure wide—if possible general—acceptance of these codes and their use as standard practices in private endeavor. Much excelent work in connection with safety codes has been done by the American Engineering Standards Committee, and we may perhaps be pardoned for feeling that the safety code correlating committee has had a real part in it. At the same time, we can not but feel that much more work remains to be done, especially in fields that have so far been cultivated in only a limited way. The work lying before us in the future would seem to fall under several principal headings:

(1) Furthering the use of completed safety codes: While some of the codes already developed have obtained considerable recognition both from State officials and from industrial concerns, and have, therefore, to some extent come into practical use, this is true only in a very scattering way, and in only one or two instances, so far as I know, has a code come into anything like general use. The policy heretofore followed has consisted chiefly of bringing the codes to the attention of insurance companies, labor departments, industrial commissions and municipal authorities in the hope that the fairness and comprehensiveness of the code provisions would lead to their being incorporated into the work done in the industrial field by those agencies.

All of these agencies, and among them may be mentioned the National Safety Council with its large industrial membership, have cooperated in the most cordial manner, but owing to lack of facilities, this propaganda work has not been conducted and followed up as regularly as would seem desirable. It has appeared impossible to make any systematic effort to reconcile the provisions of codes developed otherwise with those of codes developed under American Engineering Standards Committee procedure. It has also seemed impossible to bring these codes to the attention of many industrial and other organizations in such a forceful way that they would be led to associate themselves with the task of getting general recognition for the codes.

The program for the promotion of the use of codes should include the five general divisions outlined in SC 53, the letter of February 11, 1929, calling the meeting, subsequently postponed, of the safety code correlating committee. And there are other possibilities which might well be followed up. It is generally admitted that the voluntary incorporation of code provisions into their

regular operation by industrial concerns is the most desirable and most effective way of bringing the codes into general use, and much assistance in this direction may be obtained from the members of the several sectional committees working with the industrial concerns with which they are associated, and with the trade associations to which these concerns belong, but this work should be planned, stimulated, and carried out on as systematic a basis as may be developed.

There might well also be a systematic arrangement by which, when a State through its labor department or industrial commission is developing a code for use within its borders, the fairness and adequacy of the American Standards Association code on the particular subject can be forcefully brought to the attention of the State authorities or conference called by them by members of the American Standards Association sectional committee developing that code, who are entirely familiar with its provisions and the practical reasons for them.

In some States it is a practice to hold public hearings on State codes which have been developed, and it would be advisable for the American Standards Association or the sectional committee developing a code covering the same subject to be represented at such hearings by some one or more persons in the particular State who are familiar with the development of the American Standards Association code and who are capable of properly defending it at a hearing. It would also be desirable to have similar representation at meetings of State or trade associations to whose business a particular American Standards Association code is applicable, so that if a place on the program may be obtained for exposition of the advantages of the code such an exposition can be forcefully given.

A number of other promotion activities which could well be conducted on a more systematic basis will readily occur to any member of the safety code correlating committee, such as, for instance, promoting more complete cooperation by insurance companies through their inspectors in the industrial field, securing directly the cordial cooperation of trade associations in industries to which certain American Standards Association codes directly apply, and others too numerous to mention here but which should also be taken into consideration when a promotion program comes finally to be developed on a more comprehensive scale than that which has been followed. Careful consideration of all possibilities of furthering the use of completed safety codes and the development of a systematic plan for realizing all these possibilities as rapidly and fully as may be possible seems well worth the earnest consideration of the safety code correlating committee.

(2) Correlating the codes for publication and use: Codes have been developed, and naturally, by sectional committees concerning themselves each primarily with one particular phase of accident prevention or with safety in a particular field. The result has been that some of the codes, such as power transmission, for instance, apply to conditions which are common to practically all branches of industry and lines of work, and their provisions, partially at least, should really be a part of each of a number of other codes. It seems desirable that some plan should be carefully worked out which will make each code cover fully the field to which it is desired to apply without unnecessarily duplicating provisions contained in other codes, and without, at the same time, referring to other codes in such a way as requires consultation of these codes in order for the full desirable requirements to be evident.

(3) Reviewing codes already prepared, determining the advisability of bringing them up to date and setting the procedure in motion for such codes as seem to need such action.

(4) Stimulating the development of codes which are lacking in preparation.

(5) Considering code projects suggested, determining their importance and which of them should be undertaken first, if at all.

NOTE.—In (3), (4), and (5), attention might as well be given to codes in the order of their importance, devoting effort first to such as affect a wider range of industrial interests.

It is also possibly an open question whether it would not be desirable to have the safety code correlating committee or a subcommittee of it regularly give a general revision of the form and subject matter of safety codes referred to the committee, not in the rôle of an intermediary approving body but in order to take a strong advisory hand in making the codes more effective instruments

and in really correlating them. All formulation and promotion work in connection with the codes should be directed to three ends: (1) Direct use by industry; (2) use in insurance schedules and by insurance inspectors in advice to industry; (3) as a basis for regulation rather than legislation.

Past experience has indicated also the advisability of a review of subject matter in order that attention may be called in an advisory way to inconsistencies or other matters which would seem to require further consideration. It would, of course, be improper for the safety code correlating committee to arrogate to itself the power to approve a code, but a careful review of a code followed by a merely advisory suggestion would not seem to be out of place.

In order to carry out the above program, it would seem advisable to consider dividing the work between several committees, each of which would devote its earnest attention to one or more of the several divisions of the program.

The executive committee should, of course, continue in general direction of the safety code work and act for the safety code correlating committee ad interim. In addition to its present functions, it might take on that of stimulating the development of codes which are lagging in preparation, giving attention to these in the order of their importance and devoting first attention to such as affect a wider range of industrial interests. Under the new American Standards Association procedure, this committee will have the power of sending standards to letter ballot of the standards council and of eventually taking final action on the approval of personnel.

A promotion subcommittee might well be appointed to function more or less independently, reporting its results from time to time to the safety code correlating committee. Its functions would be those quoted on the attached excerpt from SC 53, dated February 11, 1929, and also furthering the promotion of the code provisions in certain other ways which may seem desirable.

A subcommittee on scope also seems desirable. This committee should be small and composed of experienced men including in its personnel perhaps an all-around industrial safety man, an insurance man, a State man, and a man from the Federal Government. This committee might well review codes already prepared, and advise as to the desirability of bringing them up to date. It could also consider code projects suggested, analyzing conditions and the relations of the proposed codes to other codes. In addition, it could correlate the codes for publication in such a way as will make each of them more readily useful without duplicating in any one provisions appearing in others. This would mean examining drafts of codes in order to take a strong advisory hand in making the codes more effective instruments and in really correlating them. This subcommittee should have complete freedom of contact, but in general should report through the executive committee or through the safety code correlating committee itself.

Some of these divisions, if adequate attention is to be given to them, would appear necessarily to involve in detail more time than can well be given them by a subcommittee and its chairman. The detailed work of following up the agencies of promotion and seeing that they are supplied with proper material, and that of corrrelating the codes, must necessarily be done by the staff of the American Standards Association either as the job of one man or otherwise. The plans for making use of agencies of promotion and the methods of correlation can be determined by a committee or committees in charge of these branches of the safety code correlating committee work, but it is doubtful whether the members of a committee could be depended upon to attend to the details involved in carrying these branches of work into practical effect.

Now that the American Standards Association has been organized as the successor of the American Engineering Standards Committee, and there is a prospect of more money being available for the work of the association, it occurs to your chairman that the safety code correlating committee might well consider the desirability of a program for the committee somewhat along the lines suggested, and of submitting this program with the reasons therefor to the directors of the American Standards Association with the request that the development of safety codes on a more practical basis even than heretofore, and the promotion of their use in the widest and most systematic way, be made a recognized part of the work of the American Standards Association, and that an appropriation be made which will equip the American Standards Association secretariat with the necessary facilities in personnel and otherwise to give the safety code correlating committee effective assistance in carrying out the work which it has planned.

The more important features of a safety code program have already been or are being attended to in an initial way, but this program can be of the utmost practical value only when the codes come into general practical use, when the codes are kept up to date, when their use is promoted intelligently and forcefully, and when there is the most careful discrimination between both completed codes and suggested code projects, so that development, revision, and promotion will first be given to the projects which are of major importance to industry, and only subsequently to those of relatively minor importance. The safety codes developed under American Standards Association procedure are built upon the soundest basis—a real consensus of opinion of all those having a proper interest in them and able to make a worth-while contribution to them, and it seems that too much effort can not be made to develop these codes in the best possible manner, to correlate them so they will have potentialities of the greatest usefulness, and to promote them so thoroughly that they will as quickly as possible come into general use as a recognized and important part of the industrial life of the country.

Conveyors and conveying machinery.—No meeting of the safety code for conveyors and conveying machinery has been held since the last convention of the Association of Governmental Labor officials on May 24, 1928.

Head and eye safety code.—In the new revision to extend the scope of the head and eye safety code, it is intended to include protection afforded employees by gas masks and respirators. In February, 1928, the scope of this work was defined as follows in a communication forwarded to the sectional committee on this safety code:

"Project.—The mechanical protection of the head and eyes; optical protection of eyes and skin from light and heat rays; protection from splashing metals and liquids; and from the direct action of fumes and dust, including the type of protection afforded by gas masks and respirators."

This will cover all industrial operators or processes in which there is exposure of employees to injury. It would include dangers from the inhalation of dust fumes and gases and hazards arising from the use of industrial poisons. In the preparation of this code, great difficulties will be experienced in approving suitable types of respirators, where constant use by the employee is necessary. In the 1928 report to the convention, types of employment to which it is proposed to extend protection in this code were given at length. No action has been taken by this committee since that time.

Elevator safety code.—Progress is being made with the preparation of this safety code. A tentative draft of a handbook for elevator inspectors is receiving attention. This provides a plan for routine inspection in elevators and their use. It deals with the specific problems in the operation of elevators. Doorclosing mechanism; car control; emergency release; point of circuit inclosure on door; car gates, including guides and hangers; physical condition of car gate contacts; clearances between car and landings and threshold; floor covering and car inclosure; lighting fixtures and switches; hand-operating ropes; action of brakes and machinery accelerator; counterweights, cable fastenings, and rail supports are included in the inspection program. Most valuable in this tentative handbook is the instruction given to elevator inspectors. Principles of safety are defined and emphasized. Careful inspection of all elevator machinery is given a place in a systematic program. Plan of instruction to make safety code known to operators is included. Thirty-seven pages of well-written material comprise this inspector's handbook.

Constructive accident prevention work must necessarily rest upon the education of workman and employer in fundamental knowledge of hazards and exposures incidental to modern production.

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Under State authority, this can only be accomplished through adequate enforcement of provisions in law which deal effectively with the operating dangers.

Blending their efforts in conserving health and property, workmen and employers will succeed only when requirements are known and understood. Confusing rules and regulations, already reaching into the thousands of these requirements, are not always fully grasped by the forces in industry, and the opinion is expressed by eminent authorities on this work that simplification of existing legislation is necessary.

The work of the safety code correlating committee has this condition to deal with, and the progress made on the elevator safety code committee indicates clearly the tendency to recognize these facts.

The foregoing reports of the various code committees were accepted and made a matter of record by the convention.

[Meeting adjourned.]

WEDNESDAY, JUNE 5—AFTERNOON SESSION

Maud Swett, President, A. G. O. I., Presiding

BUSINESS SESSION

Chairman Swerr. We will take a few minutes to finish the business session so as to clear the decks for the afternoon meeting.

REPORT OF COMMITTEE ON STATISTICS

Chairman Swett. Mr. Hall, of Virginia, chairman of the committee on statistics, is not present; but Mr. Baldwin, of the United States Bureau of Labor Statistics, has something to report regarding accident statistics.

Mr. Baldwin. I am not a member of the committee on statistics, but I have a matter concerning statistics that I should like to present formally for the thought and consideration of the members of this association.

As an official of the Federal Bureau of Labor Statistics, I am a constant user of the statistics furnished by State bureaus of labor and I find them very useful. I find them lacking, however, in completeness and in analysis, because of the fact that in many instances they have not gone quite far enough to cover all the details that are essential, and therefore their full usefulness is somewhat impaired.

While this applies to practically all kinds of statistics, I shall refer only to one class of statistics, namely, the statistics of industrial accidents.

At the present time a large proportion of the States are reporting quite satisfactorily the number of industrial accidents, but some are not, although in some instances they do publish the compensable accidents. While they make a record of each accident and record quite fully the nature of the injury, also the cause of the injury, in a large proportion of the cases, I believe, they fail to report the cause of the accident. Note that I make a distinction between the cause of the injury and the cause of the accident. To illustrate, a large proportion of the accidents as recorded are said to be the result of slips and falls; probably one-half or 60 per cent or more, perhaps of all accidents occurring, result from this cause. In the reporting of an accident, it is recorded in this way—a man slipped, fell, and broke his leg, for instance, and there the record stops. The nature of the injury is the broken leg, the cause of the injury is the slip and fall, but what caused him to slip and fall is not reported. Whether it was the result of a wet walk way or a greasy walk way, whether he stepped on a banana peel which somebody had thrown on the walk way, or whether it was because he was wearing a pair of shoes with the soles worn off and in consequence dangerous, is not given.

Now, a safety engineer needs all this information, and if it is not given he must make a personal investigation of each case in order to find out what warnings to issue to guard against these accidents in the future. He does not know whether to caution the workers against wearing improper shoes or to caution men and women against throwing banana peels on the walk ways, or whether he shall issue an order preventing the washing of walk ways during work hours and leaving them wet and slippery.

I think the requirement should go one step further and specify that the cause of an accident should be reported. The same thing is true of accidents resulting from flying objects. We will say a man has lost his eye by some flying object. What the safety engineer wants to know is, not only what the flying object was but what caused the

object to fly which resulted in the accident.

We also have records of instances of accidental death caused by people coming in contact with electric wiring and being electrocuted. I remember noting one instance in which a man slipped and fell, and upon investigation it was found that he threw out his hand to protect himself from the fall; the walk way was poorly lighted; he did not, and could not, see the electric wire, and he threw his hand on it and he was electrocuted. The record as it was written, showed that the man was electrocuted by coming in contact with a live wire. The cause of the accident was due probably to the poor lighting of the walk way and a wet and slippery surface which caused the man to slip and he was unable to see the electric wire. The accident might perhaps have been avoided if there had been better lighting.

I am not going to continue these illustrations further because I think what I have said clearly indicates what I have in mind—that in the reporting of accidents we should go one step farther than we do and furnish the information necessary to guard against accidents

in the future.

General Sweetser. Is it not true that the question now is, What caused the accident? How would you have it recorded and for what purpose?

Mr. Baldwin. So that the safety engineer may know how to issue orders to prevent accidents in the future.

General Sweetser. Does he not have that in his own State?

Mr. Baldwin. In a good many instances, he does; but in a great many cases, when the accident comes to the attention of the engineer, he does not know what the cause of the accident was. We read that the man slipped and fell, but the reason for his slipping and falling is not given on the record card. I think in Massachusetts you do show that, but in a great many places they do not. What I suggest is that we go further and show what caused the man to slip and fall.

General Sweetser. We have that on our own records. It would be almost impossible for us to tabulate that information. There are dozens of falls, and we classify them as falls. We know what occasioned those falls, but do not give every detail, because we would not have time to elaborate all that.

Mr. Baldwin. I have seen many records of accidents that simply showed, as I have stated, the nature of the injury, that is, the injury was caused by a slip and fall. The cause of the slipping or the

falling is not given on the card at all. The safety engineer when he looks into the case has to go back and find out what caused the slipping and falling.

General Sweetser. If he has to do that work, it will simply be adding that record to the card.

Mr. Baldwin. That is exactly what I am suggesting.

Mr. Burke. My question is in regard to the safeguarding of gears and the uniformity of the code, how we could cover the gearing of machinery. To my mind, you can not get a uniform code, inasmuch as machinery is not always made by a certain manufacturer or a group of manufacturers. Often special machinery is made for their own special use by small firms that are not classified as manufacturers. Again, machines will be useful for 10, 20, or 30 years, and if we get a uniform code now that code would not cover machines that might come on the market as rebuilt machines or machines made over by a special user of machines. Perhaps if we get a code we could have a supplement to the code with sketches, which would help those to whom the code would be given and would be a guide to them in the building and using of machinery. They could use their own common sense in building these guards to suit their machines which are already in use.

Mr. Ballantyne. Might I direct your attention to the fact that this session of the convention is really given over to the question of employment. While I would not want in any way to circumscribe the discussion of the very important questions you have been considering this morning, yet I do feel that if I said probably a word or two you might be satisfied to adjourn the subject if not to close it.

It is my opinion, based upon experience, that everything possible should be done to encourage the development of safety codes along the diversified lines which we find in industry; but I think to attempt to have in any State or Province too rigid an application to industrial safety problems of such codes or rules is a mistake; in other words, the vital factor in making effective labor law administration must always remain with the official himself. I do not think there can be any compromise at all in that regard; no matter how well conceived or how well formulated any code may be, in the last analysis, it can never take the place of the official himself. What it should do is to guide the officials in the exercise of their official prerogatives, whatever those prerogatives may be, and if we can not get it into the minds of our officials that, in the first instance, they are administering the law that has been prescribed for them by the legislatures of their respective States or Provinces; that their powers of administration are limited by the requirements of the statute; that the problems they have to meet and to overcome, if possible, in the workshops and industries generally, call for the common-sense application of their powers under the law and the guidance derived from the codes received from time to time. To my mind it would be a very great mistake indeed, no matter how advanced any safety code would be, to give it statutory authority, in other words, make the code the law. I do not think that any code should be made the law of any State or Province, as I said before; and as Doctor Patton said this morning, aim to make it uniformly applicable. What we should aim at is a better understanding of the questions we have to meet, and a common-sense application of laws and principles.

REPORT OF COMMITTEE ON CALENDAR

Mr. Stewart. I am submitting a resolution, which I will ask this convention to indorse. The resolution probably can be made to cover the whole report. I will submit the material that goes with the resolution for the record without reading it.

Be it resolved, That this association believes that the United States should be represented at that conference, and while not committing ourselves to any specific plan of calendar reform as to its details we are in favor of such adjustment of the present calendar as will give us an equal number of days in each month of the year.

I may add that a congressional resolution requesting the President of the United States to appoint a delegate to the Geneva conference was introduced, and it has been favorably reported upon by the House Committee on Foreign Affairs.

Chairman Swett. You simply wish to have it referred now to the resolutions committee?

Mr. Stewart. Yes.

Chairman Swett. Mr. Ballantyne, yours was the other committee to report, the committee on the constitution.

Mr. Ballantyne. I ask that a report of progress be received, and we will report later on.

COMMITTEES APPOINTED

President Swett appointed the following on the standing committees for 1929:

Committee on the Constitution.—James H. H. Ballantyne, of Ontario, chairman; Dr. Eugene B. Patton, of New York; W. A. Rooksbery, of Arkansas.

Committee on Resolutions.—John S. B. Davie, of New Hampshire, chairman; Ethelbert Stewart, of Washington, D. C.; John Roach, of New Jersey; Miss Mary Anderson, of Washington, D. C.; E. Leroy Sweetser, of Massachusetts.

Committee on Officers' Reports.—Cyril Ainsworth, of Pennsylvania, chairman; M. H. Alexander, of Colorado; Edward F. Seiller, of Kentucky; Frank J. Plant, of Ontario; Arthur MacNamara, of Manitoba.

EMPLOYMENT

James H. H. Ballantyne, Deputy Minister of Labor, Ontario, presiding.

Chairman BALLANTYNE. In order to be consistent I intend to take up just as few seconds as possible in opening this session, which is devoted to the important subject of employment. Last night at our dinner session we had two very able exponents speak on this important question.

There is probably no phase of our industrial life which reflects itself in so many ways throughout our whole social and economic system as that of employment. The session today is primarily associated with the statistical features of our employment situation. While the facts and figures bearing on employment or unemployment may appear to be very cold and flat to those who are unemployed or to those who do not get work or who conceive they ought to get something from industry in the way of remuneration, yet we who are engaged in the practical phases of this question are trying in some way or other to make those engaged in industry realize that statistics are vitally important in order that our perspective may be made clearer, that our judgment may be strengthened, and that our actions no matter what line they may follow will make for the greatest possible happiness, comfort, and security of the greatest possible number of those engaged industrially. I have, therefore, great pleasure in asking Mr. Rigg, director of the Employment Service of Canada, to deliver his address on "Some facts and reflections regarding employment and unemployment statistics." We think with a certain amount of reasonable pride that the Employment Service of Canada is one of the very best on the North American Continent and, we think, will compare very favorably with any employment service that has been developed in continental Europe. That is said without any exaggeration, but with pardonable pride in the results that have already been achieved, and the results that we hope to achieve in the years that are to come.

Some Facts and Reflections Regarding Employment and Unemployment Statistics

By R. A. Rigg, Director Employment Service, Department of Labor, Canada

There are few subjects which during recent years have provoked so much discussion as that of unemployment, and probably no one would care to challenge the assertion that no problem which has succeeded in engaging the thought of interested authorities to such an extent has been left more completely unsolved. Government executives are besieged by requests from representatives of, and sympathizers with, labor that something should be done to cure the evil or at least to alleviate the suffering arising therefrom. legislative session, whether Federal or State or Provincial, is complete that does not entertain a discussion of the subject. Of books published and articles written and reports prepared by economists, statisticians, and sociological experts there is no end. Conferences constituted as the present one invariably devote attention to the problem. Labor organizations have it continually before them. Remembering, then, the widespread attention devoted to the question, it is unnecessary to do more than remark that this present contribution is advanced without expectation that it is going to settle anything definitely and finally, but rather in the hope that it may prove to be provocative of more discussion.

At least one definite accomplishment has been achieved during this century as a consequence of the attention that has been directed toward this problem. No well-informed intelligent person now denies that a problem exists. To use the old form of disposing of the matter by vehement denunciation of the unemployed as being idle, drunken wastrels and bums is to merit and receive contempt for such opinion. To those of us who are in employment service work, and to all who have undertaken any study of the unemployed with any degree of impartiality, it is obvious that the overwhelming majority of those who are out of work are keenly desirous of finding it. Neither is one indulging in any exaggeration nor overstepping the bounds of moderation in emphasizing that the ranks of the degenerate charity mongers are largely recruited from among those who would have been industrious and self-sustaining had reasonably continuous employment been available for them. Idleness has habit-forming qualities quite as pronounced as drug taking. However, we may find comfort in the general appreciation of the fact that it is now commonly conceded that a problem of unemployment does exist, and that there are reserves of labor beyond the legitimate requirements of industry.

Although the primary purpose of this paper is to deal with statistical data relating to employment and unemployment, a few observations regarding unemployment may be quite relevantly made.

Unemployment is a ravaging social disease, both endemic and epidemic in its nature; and, because it is a social disease, it is the duty of society for its own protection, if for no other reason, to reduce it to the lowest proportion possible. The insuring of continuous employment at rates of remuneration that will provide a reasonable standard of living to all who need to work in order to live is admittedly an Utopian dream. Yet, while conceding the improbability of the complete stamping out of this disease, it is the duty of all to aim at the preservation of the highest standard of economic and social health that may be possible. Poverty and pauperism, and their demoralizing concomitants, under famine conditions are understandable. When the means of life are inadequate to supply the needs of all, some must inevitably suffer. Such conditions, however, do not obtain under our modern system of production and distribution; the reverse is the fact. Shortage and need in the form of demand are the very life of industry and the guarantee of prosperity so long as the commodities required are obtainable. Whether the commodities needed are available to the public or not does not depend upon their existence; they do exist. Indeed, the anomaly and tragedy of our present system are to be found in the fact that the most acute suffering from unmet need is coincident with an overstocked market. Trade depressions mean that, because warehouses are choked with clothing, cold-storage plants and grain elevators bursting with food, and coal banked up like black hills, men, women and children must go unclothed, must exist half-starved upon some form of charity, and must freeze in their hovels. In other words, there is no question about there being enough to go around to meet legitimate need.

Thus there are two facts that may be accepted as established beyond dispute: First, both in the United States and in Canada, there is either seasonally or continuously a considerable number of persons whose only legal means of obtaining an independent livelihood is through the medium of their services being employed by others, who are unable to find such employment; and second, the suffering caused by unemployment is not due to the inability of the means

of production adequately to supply a sufficiency of commodities to meet legitimate human need. Wealth which makes Croesus look comparatively poor is possessed by thousands, while unemployment

and the fear of it inflict their black misery upon millions.

Herein lies the challenge, that the efforts of labor applied to the natural resources produce an abundance for all, but through inability to find employment for the labor-power multitudes are divorced from access to the things they need. This condition constitutes the problem which confronts society on the North American Continent, and which is obviously troublesone to our legislators. During the preelection session of the United States Congress last year keen interest in this problem was exhibited. A somewhat popular attitude was that it was useless to attempt to do anything until the extent and volume of unemployment were precisely known. Some persons claimed to possess this knowledge, at least approximately, although the figures quoted by them varied by millions. Commissioner Ethelbert Stewart, of the United States Bureau of Labor Statistics, compiled an estimate of the shrinkage in the volume of employment in the United States from 1925 to 1928, and the figure so derived was 1,874,050.

During the past two sessions of the Canadian Parliament the subject of unemployment insurance has been before the Parliamentary Committee on Industrial and International Relations. The reports of this committee have expressed approval of the principle of unemployment insurance, but the committee has urged that much more complete statistical data should be available to provide a factual basis upon which a scheme might be built. Thus we have in both countries the common factors—the existence of unemployment, practical admission that something should be done about it, and the expressed need for statistical information that will in a comprehensive, accurate, and up-to-date manner vividly reveal the size of the

problem.

Setting aside for the moment the question as to whether it is imperative that such complete data should be available before any practical steps are taken to cope with the unemployment problem, it will perhaps be of interest to indicate what material is presently at our disposal in Canada. I must leave to our friends from the United States the task of stating what data are obtained in that country. There are five principal sources from which data concerning employment or unemployment in Canada are secured by the Federal Government: (1) The decennial census; (2) the annual industrial census; (3) current monthly returns from selected firms showing numbers of persons in their employ; (4) current monthly returns from trade-unions giving total memberships and numbers of members unemployed; and (5) the records of the Employment Service of Canada. Keeping in mind the demand made by authorities for approximately complete, accurate, and up-to-date statistical information as a preliminary to the adoption of practical measures to cope with unemployment, what is the value of any or all of the data secured?

The last decennial census provided for ascertaining the following information: (1) If a person, ordinarily an employee, were out of work June 1, 1921; (2) number of weeks unemployed in the past 12

months; (3) number of weeks unemployed during past 12 months because of illness.

Without attempting to analyze closely the value of the information thus acquired, it is clear that it fails to satisfy the demand. As all who are in any degree familiar with the colossal task of dissecting decennial census data know, it takes years to segregate and compile the immense amount of material collected through that source. Obviously the knowledge that on June 1, 1921, there were a given number of persons unemployed in Canada can not be accepted as an indication of the number out of work in January some years later. Moreover, such a record is seriously open to the suspicion that it would not be compiled with the rigid scrupulousness necessary to indicate how many persons were involuntarily out of work. Would the record not be liable to contain those who were idle on account of strikes and lockouts, temporary shutdowns and lay-offs, and many of those taking voluntary holidays, and so forth? Would the suspicion of such possible dilution escape those who demand specific and reasonably accurate data? And the two columns which aim to chronicle unemployment experience during the preceding 12 months are open to even more severe criticism in that correctness of answer depends upon accuracy of memory and the conscientious truthfulness of the individual.

A comprehensive census of manufacturing industries in Canada is taken annually. By this means data are secured indicating the total numbers of salaried and wage-earning employees in this group, by months. It has been found impracticable to secure complete returns until some months after the expiration of the calendar year. Thus the information relative to even the latest months of the calendar year is usually not available until 12 months or so after they have elapsed. Surveys of certain other industries, such as mining and fishing, are also made annually, which yield figures showing the number of workers employed therein on a given date. These censuses, however, do not cover all industries, nor do they attempt to sample all industries: they fail, therefore, to meet either the requirement of being sufficiently up to date or comprehensive.

We now come to the third form of statistical tabulation bearing on this subject, namely, that made in connection with the returns furnished by establishments employing not less than 15 persons in industries other than agriculture, fishing, and domestic service. These returns are made monthly and show the number of persons on the pay rolls of the reporting firms as at the end of each month. The chart 1 shows the plotting of the curve of employment by the reporting firms from December, 1921, to March, 1929, reduced to index figures. The original base figure of 100 represented the numbers reported as employed in January, 1920, one of the first months of collection, but recently the average for the year 1926 was adopted as the base (100) and the previous figures were adjusted thereto. Although it is perhaps somewhat of an irrelevant interpolation, it is interesting to note in passing that the index numbers pertaining to manufacturing industries exclusively have declined during the past six years in the United States. According to the Monthly Labor Review the index numbers reflecting the trend of

¹ The charts referred to in this paper were wall charts exhibited by the speaker.—Editor.

employment in representative manufacturing industries in the United States showed an average of 108.8 for the year 1923, the first year for which these figures were regularly published, and of 93.8 for 1928. On the other hand, in Canada the averages of the index numbers in manufacturing industries for the respective years were 96.6 and 110.1, that is to say, there was an increase of 13.5 points in the Canadian figures simultaneously with a decline of 15 points in the United States figures. It might be added that both the United States and Canadian figures have as their base (i. e. 100) the average for the year 1926, and they are therefore quite comparable. In these employment indexes we have data that are up to date, and we may assume, reasonably accurate, but not covering the field comprehensively.

The fourth quarry from which we hew material is limited to the trade-union area. There are in Canada some 2,600 trade-union branches or locals, comprising approximately 290,000 members. The latest monthly returns, giving the totals of local memberships and the numbers of those unemployed due to economic causes, were received from 1,727 local unions, representing 194,890 members. Although it is impossible to exclude the element of error in the reporting, there is good reason to believe that these returns, which include two-thirds of the organized workers in Canada, are entitled to be treated as sufficiently reliable for practical purposes. The chart exhibited tells the story of the record on a percentage basis during

the period from December, 1921, to March, 1929.

Since these statistics are limited to the trade-union field, which in a very large measure is representative of the skilled and semi-skilled workers, and as it is highly probable that the percentage of unemployment among unskilled workers is materially greater than that of the semiskilled or skilled, they also, like the employers' payroll figures, fail to meet the test of comprehensiveness. That they are regarded in trade-union circles as possessing considerable value, however, is evidenced by the fact that the American Federation of Labor recently organized a statistical department for the express purpose of collecting and tabulating similar data in the United States. In passing, it may be interesting to mention that the average percentage of unemployment among trade-unionists in the United States during the year 1928, as shown in the published tabulations of the American Federation of Labor, is 13.1, while that for Canada during the same period is 4.5.

Two of the three wall charts positively identify unemployment. The trade-union chart shows that for the period covered the percentage of unemployment among the unions reporting has varied from 2 per cent to 15.1 per cent, the average for the seven and a quarter years being 5.8 per cent. Assuming that the percentage of unemployment among the unions failing to report was the same as that of the reporting unions, in view of the fact that 67 per cent of the union membership is covered, there were on the average approximately 16,800 trade-unionists unable to find work. That much in-

formation is tolerably well established.

The fifth source lies in the record of performance of the Employment Service of Canada, the third wall chart setting forth the story of applications, vacancies, and placements. A glance at this record chart is sufficient to demonstrate the general existence of a substan-

tial army of unemployed persons. In interpreting the significance of this chart, it is necessary that due weight be given to the fact that the Employment Service of Canada enjoys no monopoly of employment work. Many firms hire their own employees, and seldom, if ever, place their orders with the Government Service. Many workers depend on their own efforts or those of friends to find employment, and do not register with our offices. Many labor organizations provide employment office facilities for their members, and we still have some private agencies in Canada, including some 23 of the licensed, fee-charging variety. Since we are unable to determine what percentage of the total employment business in Canada is represented by the employment-service records, it is impossible for us to make the same deduction concerning all the workers of Canada that we have been able to in the case of the organized section of them.

However, some definite facts stand out boldy. Chief among these for our present purpose is the lightning-like stroke showing the relationship of the application or registration curve to those of vacancies and placements. This comparison indicates that the demand for and supply of labor practically match each other about September of each year, that is during the harvest period. It further emphasizes that the reduction of the excess of registered applicants over the opportunities for employment is by no means wholly accounted for by the number of placements made by the employment-service offices, and a considerable percentage of those registering for employment find work through some other means.

You are sure to wonder at the skyrocketing phenomenon exhibited by the registration curve at the beginning of 1922, and to require an explanation as to why at that time applications should bear to vacancies the relationship of almost two to one. The answer is that on account of the distressful conditions existing in Canada due to economic want, many of the governments and municipalities of Canada provided emergency relief for those who were in need and for whom the employment-service offices certified there was no work.

We could dazzle you with statistical demonstration of the romantic progress which Canada is enjoying, but you may refrain from the use of smoked glasses as we shall only turn on the glare for a moment. Our friends from the United States know how bounteously blessed with prosperity their country is. We Canadians hope that your prosperity will continue to increase. The business record of Canada for the past few years has been one of consistently rapid development. The following figures, which constitute a comparison of indexes of various economic activities between the United States and Canada for the period 1926 to 1928, will provide ample demonstration of this fact:

COMPARISON OF VARIOUS ECONOMIC ACTIVITIES IN CANADA AND IN THE UNITED STATES

Economic activity	United States	Canada	Economic activity	United States	Canada
Index of industrial production Employment in manufacturing industries. Steel production Construction contracts	Per cent +2.0 -6.2 +6.0 +5.0	Per cent +12 +12 +58 +25	Railway operating revenue	Per cent -4.0 -3.02 +19.0 +16.0	Per cent +14 +17 +13 +49 +50

Consult once more the employers' return chart, and, bearing in mind the staggering increase of production per worker as a result of the ever-increasing efficiency of the machine, note the ascension of the curve of employment from the index figure of 78.8 on January 1, 1922, to 109.1 on January 1, 1929. What more eloquent testi-

mony of progress could be desired?

Lest we lose our sense of proportion in the enthusiasm created by this picture, let us turn again to the trade-union and the employment-service charts. The space between the curve of tradeunion employment and the 100 line, and the wide distances that for a considerable portion of each year separate curves of vacancies and registrations as shown on the employment-service chart, emphasize the existence of our problem. Here they are only colored lines, projected on a frame. In reality, they represent the degradation, poverty, fear, heartbreak, and misery of thousands of human beings. The pæans of prosperity strike upon the ears of these victims as the dirges of despair. It is not within the sphere of the present opportunity to attempt to discuss the solution of this prob-If anything in the nature of inspiration is responsible for this modest contribution, that inspiration has its source in the very generally expressed dogma that no solution, even in part, is possible until the exact extent and volume of unemployment is known. The time is overdue when this attitude should be challenged and the mind of society disabused of the illusion. The main purpose of this paper is to hazard the opinion that it is unnecessary to possess complete and accurate statistics as to the volume of unemployment in order to begin to grapple with it. To know down to the very last one the number of the unemployed would be academically interesting, but it is difficult to see how it would assist in the solution of the problem.

Perhaps the most common method of avoiding the issue, adopted by many whose efforts should be directed toward the elimination of this evil, is, first, to classify unemployment as a disease, and then having done so, adroitly to proceed to prepare an avenue of escape from a troublesome predicament by insisting that the first act of a physician is to diagnose the disease. This they assure us is the scientific preliminary that precedes the application of the remedy. They construe the diagnosis of this malady as involving the discovery of the number of persons affected by it.

To what degree is this analogy correct? When a patient calls in a doctor does the doctor postpone action until he has ascertained how many others are suffering from the same disease? If an epidemic of black influenza afflicted this continent would the medical fraternity insist that their first duty was to take a census for the purpose of

determining how many victims it had claimed? Answers to these

questions are unnecessary.

It is respectfully submitted that the effects of unemployment upon the individual are quite as baneful, irrespective of whether the number out of work is 2,000, 200,000, or 2,000,000. In other words, the error is all too commonly made of confusing the disease with its extent. The problem is not one of diagnosis or primarily of knowing how many are affected by the disease, but one in which methods of applying the cure should be discovered. And it can not be too emphatically stated that unemployment insurance or maintenance during periods of unemployment, while these may perhaps be desirable temporary palliatives, are after all only palliatives. Unemployment insurance applicable to all industries would yield unchallengable statistical evidence as to the extent and volume of involuntary idleness, but the only cure for unemployment is work. Nothing else will insure the highest standard of social healthfulness and well-being. Herein lies the crux of the whole matter. How shall employment be provided? Efforts directed toward the accomplishment of this purpose are infinitely more likely to produce worth-while practical results than engaging in academic or acrimonious discussion as to the exact number of the unemployed. Incidentally, it is an excellent way to discover how many are unemployed.

Within the lifetime of all who are gathered here and within the memory of a considerable percentage of us, interested parties quarreled about the number of industrial accidents. Those who favored workmen's compensation urged that there were a great many more industrial accidents than their opponents would admit. Both were wrong in their estimates. The administration of workmen's compensation acts has demonstrated that there are many more accidents occurring in industry than the wildest imaginings of compensation advocates could conceive. And had the enactment of legislation been delayed until the extent of the problem was known, our statutes would to-day be barren of workmen's compensation acts.

When Commissioner Ethelbert Stewart appeared last January as a witness before the United States Senate Committee dealing with unemployment, and was giving testimony regarding a census of the unemployed, the chairman of the committee asked, "What would we do with the information when we have it?" Would it have been impertinent for Mr. Stewart to have answered by inquiring, "What do you do with the information you already possess?" If it is sincerely desired to do something about it, is there not sufficient reason

to begin now?

With the enormous resources available on this North American continent, suffering as a consequence of inability to find work is a social disgrace; but there are evidences to be found in the sidestepping of this problem by many which suggest that the priests and Levites are as numerous to-day, and the good Samaritans are as rare, as they were 2,000 years ago. Possessing the material means and being evidently endowed with the genius for invention and organization, so far as the interests of industry, commerce, and finance are concerned, it is inconceivable that the problem of employment should remain insoluble, unless we are to confess ourselves bankrupt of capacity to apply to this question the same effective ability which is apparent in other directions. If anything in the nature of real progress is to be made in stamping out the evil of unemployment, which is more disastrous to human well-being and a much graver menace to our civilization than physical disease, it will be necessary to obey the injunction of Thomas Carlyle "do the duty that lies nearest to thee: the second duty will already have become clearer."

Chairman Ballantyne. In order to conserve our time as much as possible, I propose before throwing the papers open for discussion to request Mr. Hudson to read his paper on "A Decade of Public Employment Work in Ontario."

A Decade of Public Employment Work in Ontario

By H. C. Hudson, General Superintendent Ontario Government Offices, Employment Service of Canada

To condense into the limited time at my disposal the activities of the Ontario Government Offices of the Employment Service of Canada extending over a period of 10 years is no small task. Accordingly, it will be possible only to touch upon the high lights in

a very interesting decade, 1919 to 1929.

Definite pictures make a more clean-cut impression upon the mind than general statements, and I am, therefore, going to ask you to cast your thoughts backward to the years of the Great War and to picture, first, a munition plant engaged night and day, seven days a week, in the manufacture of shell cases. This was in the fall of 1916 when every morning saw the gates of all the munition plants besieged by hundreds of women, actuated by financial as well as patriotic motives, all anxious to obtain the privilege of operating a lathe or some other munition-manufacturing machine.

Under such circumstances, the need for some centralized employment office became imperative, and on November 24, 1916, the women's department of the Toronto Employment Bureau was opened, followed 10 days later by the opening of a section for men. The Ontario Government employment bureaus accordingly commenced operations as a direct result of war-time conditions. The influence of the report of a commission on unemployment appointed by the same Government two years previously also influenced the

opening of the offices.

The scene of the next picture is laid on the athletic grounds of the town of Dundas, eight months after the opening of the first offices. A group of proud young high-school boys is gathered around a roaring camp fire while a representative of the Ontario Government is pinning on their sweater-coats badges indicating the completion of their first month's work as "Soldiers of the Soil," enlisted in the

campaign for greater food production.

The campaign was later extended to include men, who for one reason or another could not join the active militia, and a still later development was the establishment of camps of young women who comprised a veritable "land army," actively cooperating with the farmers of the Province in raising the maximum amount of foodstuffs for the Allies.

An interesting experiment was tried, first, in connection with the cultivation of sugar beets, and later in the flax-growing districts where camps of boys recruited from the industrial schools contributed their part to the work. In spite of the fact that these boys all had police-court records, they responded to the patriotic appeal which was made to them, and not one attempted to escape from the camps.

The employment bureaus were kept busily engaged in recruiting the labor supply for the munition plants and the farms, and at the time of the conclusion of hostilities, offices were in operation in 11 centers in the Province. The records for the 12 months ending October 31, 1919, show 44,786 men and women referred to positions by all the offices. This number represents approximately one-quarter of the number placed last year.

The year 1918 saw an extension of the usefulness of the service when the Federal Government passed the employment offices' coordination act under which, while each Province retained complete autonomy over its own service, the Dominion Government provided uniform methods of recording and bore a considerable share of operating all the offices in Canada. The cooperation between the different Provinces and the Dominion Government has been one of the major

factors in the success achieved by the service.

The following year, 1919, saw flags flying, banners waving, and bands playing as Ontario's heroes, 100,000 strong, returned from overseas. It was one thing for a man to march down Yonge Street amid the cheers of the citizens of Toronto, and quite another thing for him to reestablish himself in a job. In order to assist him to the fullest possible extent, the employment service was rapidly expanded in cooperation with the department of soldiers' civil reestablishment until there were in all, 35 offices in the Province.

Industrial activity was great in this Province, as elsewhere throughout the world, in 1920; but I trust that it will never again be my misfortune to see a repetition of the years 1921 and 1922, when the employment index fell in January, 1922, to 83.4, as compared with the base of 100 in 1920. Ex-service men and civilians alike had the greatest difficulty in securing and holding jobs, and Federal, Provincial and municipal authorities found it necessary to combine their efforts to provide emergency relief work, the cost of which was shared—and rightly so—by the country as a whole.

Brighter months followed, however, as the employment pendulum swung in the opposite direction, reaching a high point in 1923, followed, however, by another bad year in 1924. Consistently since 1925, each year has seen an improvement over the previous 12 months; and June 1, 1929, finds Ontario in the best position from an employment standpoint which it has experienced since employment

records were first commenced.

Having disposed of the historical aspects of the service, let us survey our present position. We have in Ontario 26 public employment offices, located in the principal industrial centers, and comprising the largest single provincial unit in the Employment Service of Canada. Our friends from the United States may be surprised to learn that it takes 33 hours' continuous traveling on a fast train to reach Fort William from Ottawa—the extreme eastern and western limits of our chain of offices.

My first inspection trip out of town took me less than 10 miles from the city hall. Now it is necessary for me to travel, on the average, 1,000 miles each month visiting the various centers where offices are located. I fully expect that it will not be long before many of my inspection trips will be taken on regular passenger air lines.

With such tremendous distances between the various offices, the first essential of successful operation was the development of an employment clearance system, and it is a matter of great satisfaction to me that we are now organized in such a way that information regarding employment opportunities is made available by the use of the mail, telephone, and telegraph services in all the offices with absolute minimum of delay. Vacancies which can not be filled locally are reported to the office of the general superintendent, and from there clearance cards are distributed to all the offices, giving full particulars regarding the jobs. A superintendent who has an applicant or applicants for any of the vacancies loses no time in communicating direct with the office where the job is located and the superintendent of that office can select the required help on the basis of the information which he has received from one or more of the offices. This obviates the necessity for the costly and unnecessary traveling of workers from place to place following up rumors of possible employment at distant points, and accordingly represents one of the greatest achievements of the service.

The cooperation in existence between the Provinces and the Federal Government has enabled us to extend the clearance system literally from coast to coast, a specific example being seen in the recent success of the Hamilton Employment Office in securing from Vancouver, B. C., a roll turner required by the local steel plant. Applications for the vacancy were also received from Regina and Halifax, in the mid-west and on the east coast, but the Vancouver man was considered by the employer to possess the exact qualifica-

tions required and consequently secured the job.

Workers traveling to jobs obtained through the employment service and situated more than 117 miles from the office where they originally registered, are given the benefit of reduced transportation rates, granted by the great transportation systems included in the

Canadian Passenger Association.

If there is one lesson which we have learned, it is the necessity of sending to a job the exact type of man or woman required by the employer. The more information the employer gives us the better chance we have of filling his or her requirements, and if the mistress of any establishment does not want a household worker who wears glasses—as actually happened in one of the cities of the Province—we keep this fact in mind in making the selection of a worker.

The appeal is therefore not, primarily, the need of the man for the job but the ability of the man to fill the job; and while this policy may appear, at first glance, to lack the human touch, actually we find that satisfying the employers' requirements means more business, and a greater volume of business means an opportunity to place the unfit or disabled person as well as the better qualified type of worker.

One man lacking the qualifications desired by the employer, if sent to a job, may mean that we receive no further orders from the employer or firm. We must always keep in mind that the employment service unlike most other departments of government, has no monopoly of its field.

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The newspapers, for instance, carry classified advertisements for help; yet, I am glad to say that we have had the whole-hearted support, through the news and editorial columns, of practically every daily paper in the Province and, stranger still, were it politic to do so, I could tell you the names of at least three newspapers who have applied to us for help for their own establishments. We appreciate the support of the press; and the human interest stories—not the sob stories—which appear from time to time in connection with the work of our various offices do a great deal to offset certain popular misconceptions regarding the service.

Among these misconceptions is the belief that the employment service places only unskilled workers, whereas, the actual facts of the case are that employers now call upon us for men and women possessing every imaginable degree of skill, training, and experience. The list of separate occupations filed in the Toronto office, for instance, within the past few months totals 267 and includes X-ray technicians, die makers, tool makers, organ tuners, civil engineers, plant layout engineers, municipal engineers, electrical draftsmen, secretaries, assistant sales managers, engineering draftsmen, purchasing agents, detectives, platinum art jewelers, first-aid men, and numerous others.

In order to meet the employers' needs we have found it necessary to divide our work into departments which include out-of-town workers, professional and business, metal trades, hotel and institutional help, juveniles, farm, handicapped, etc.

I fully realize how uninteresting statistics may be when presented in a talk of this kind, so I will be content in reducing the number to the absolute minimum and tell you that during the 12 months ending October 31, 1928, the 26 Ontario Government offices of the Employment Service of Canada registered 212,422 applications for work; received 175,870 orders from employers; and placed in employment 153,783 men and women. Incidentally, the statistics gathered throughout the Dominion, when considered along with other related statistical material, provide a reliable picture of employment conditions which is of very considerable value not only to the Governments concerned but also to industrial employers and business men generally.

Charts and statistics are interesting to the student of business and industrial conditions, but the thing that really counts in employment work is the individual employer and the individual applicant. Every transaction narrows down to the basis of personal contact with individuals; and the measure of our success is, to a very large extent, the degree to which we develop the intangible but nevertheless real feeling of confidence in our sincerity. Call it the human touch or what you will, the fact remains that success depends upon a genuine appreciation of the problems of the men and women who use our offices, combined with an earnest desire to put ourselves in their position and, by so doing, endeavor to serve their best interests. Bureaucracy has no place in an employment bureau.

An interesting development of the service has been the extent to which it has become the center for inquiries relating to employment conditions in Canada. During the past six months the head office

has received numerous letters from the United States and Great Britain from men and women interested in the possibility of se-

curing work in this Province.

It is exactly 10 years since I was appointed to my present position as superintendent of the Ontario offices. The outstanding change in employment conditions since that time has been the trend toward large-scale production and the adoption of the policy of never letting a man do what a machine can do better or quicker. Coincident with this policy is the aim of employing as few high-priced workers as possible and the tendency of never giving one man work which another man of less ability can do equally well. The drift toward large-scale production is shown in the experience of one plant (located in the United States) which builds 7,200 automobile frames every day with a total working force of 187 men.

A very prominent American manufacturer is quoted as stating that industry should be so organized that one trained man could direct the efforts of 5,000 unskilled and semiskilled workmen.

Another noteworthy tendency of the times which has a direct bearing on employment is the centralization of the distribution of various commodities, such as food and clothing, for instance. A man who has his own grocery store requires at least an elementary knowledge of the principles of business—purchasing, finance, and sales. A man in charge of the local unit in a chain of stores, for instance, requires no such detailed knowledge. His financing and purchasing are done through the central office and even his selling has been reduced to an absolute minimum with the introduction of self-service methods. His remuneration is naturally affected and we find in him one more addition to the ranks of the wage earner as compared with the actual manager of a business.

That is the dark side of the picture; the bright side is that every industry which raises our standards of living and which transforms into necessities articles formerly considered as luxuries provides new sources of employment to compensate for the loss of the

old ones.

There are pessimistically inclined persons who believe that the excellent educational facilities at present in existence are creating the possibility of an overeducated populace, turning out more trained minds than business and industry can use. A prominent writer in the United States examining the situation claims that there are, in that country, only 176,200 jobs where high-grade mentality is required. On the basis of Canada's population, this would mean less than 20,000 jobs in this country requiring men and women trained in business and in the professions. If these figures were accurate and could be applied to the Dominion, a serious situation would indeed be upon us; but I, however, am convinced that the growth and development which will be seen in Canada in the next 20 years will provide adequate opportunities for all the graduates of our high schools, universities, and business colleges.

It is difficult even for those of us who live in the southern portion of Ontario to appreciate the extent to which employment opportunities in this Province have increased as a direct result of the development of our natural resources, including particularly the water

power and the mines.

Our difficulty is not the surplus of trained men and women. If we have any problem at all of this nature, it is the partially trained clerical worker whose employment horizon is limited by a \$30-a-week outlook on life. As an example of this, one of the border cities recently advertised throughout the entire Province for an industrial commissioner at a salary of \$4,000 per annum. Only 16 applications for the position were received; whereas, I will guarantee that if you place an advertisement in to-night's paper for a book-keeper at \$25 a week, you will receive considerably over 100 replies from Toronto alone.

A review of our work such as I am making to-day would be incomplete without some reference to the splendid staff of workers who have all contributed their part to the upbuilding of the service. At the present time we have just over 100 men and women in our 26 offices, and their interest and loyalty have contributed largely to whatever measure of success we have achieved. Employment office work is not simple; it is difficult. While I do not need to elaborate upon the difficulties before an audience such as this one, I do wish to place on record my belief that few persons who are not actively engaged in this type of work fully appreciate the judgment, the patience, the tact, and the genuine hard work attached to the successful operation of even the smallest of the local offices.

It is hardly necessary to state, also, that the service could not have progressed to its present position had it not been for the interest and support of the three governments which have been in power since its inauguration. The present minister of labor and the deputy minister always endeavor to carry out any reasonable recommendation having as its objective the best interests of the service as a whole.

A character in one of Frank L. Packard's books, referring to the construction engineer, says:

A man does something—he builds. I'm going to be a builder—a builder of bridges and roads and things like that. I want to do something some day—something that will be worth while. That's why I'm going to be an engineer; because, all over the world from the beginning, the engineers have led the way and—and they've left something behind them. I think that's the b'ggest thing they can say of any man when he dies—that he is a builder, that he left something behind him. I'd like to have them say that about me.

We, in the employment service, have not built anything as tangible as a bridge, but we are builders nevertheless; and I sincerely trust that upon the superstructure which we have helped to create will some day be erected an organization, second to none in the world, for serving all classes in the community by bringing together, with the minimum of delay, the jobless man and the manless job.

the minimum of delay, the jobless man and the manless job.

In conclusion, may I express the hope that all of us who are connected in any way with public employment work, either in Canada or in the United States, will keep constantly in mind the necessity for continued effort, realizing that, as a great British statesman said during the war, "We must go on or go under," for if the public employment service is going to survive—as I am sure it will—it will be only as a result of continued, earnest, intelligent, and broadvisioned effort on the part of all of us.

DISCUSSION

Chairman Ballantyne. Mr. Hudson in the course of his remarks referred to the personal satisfaction which men and women feel in recognition of certain achievements that are made during their lifetime. If I may crave your indulgence for a few minutes, it is with the object of providing an opportunity for some of our delegates to show their appreciation of a record of achievement that can be justifiably placed to the credit of one of our number. The way of the world oftentimes is to proclaim our achievements when we go to the land from which there is no return; it is more pleasant, if we can find time to do so, to express in a tangible way what our feelings are. I am going to ask Mr. Rigg, director of the employment service of Canada, to make my remarks a little more explicit.

[At this point Mr. Rigg requested Mr. Hudson to come forward and presented him with a box containing a gift. Mr. Hudson made suitable reply.]

Chairman Ballantyne. We will now proceed with the discussion. Mr. Davie is noted on the program to introduce the discussion.

Mr. Davie. After hearing the very able paper delivered by Mr. Rigg, I have come to the conclusion that he has left very little to discuss; nevertheless, I feel that the Dominion of Canada as a whole and Ontario in particular, has led the United States in employment work, just as the chairman stated at the opening of the meeting. Probably one of the great secrets of their success is that they feel that it is a real service that they are rendering and not the mere filling of a little political job. In other words, I firmly believe that there are three departments that should not be made political footballs; namely, education, health, and labor. I feel that by keeping in the service such men as I have had the privilege of meeting in Canada, and in the United States, who represent these departments, one of the great factors in the solving of these problems surely has been found. This is evidenced by the thought that they have put into the papers to which we have listened to-day.

Speaking of statistics—in the United States we have had quite a lot of trouble securing data from the trade-unions. The principal reason set forth is that as soon as we make the information public it will be used by the employers against the workers. I think there has been some ground for that objection. Nevertheless, we

have some good points brought out in Mr. Rigg's paper.

In regard to the records of employment service—I would like to know how they are going to get anything from the chronic applicants—those who make it a practice of registering for employment in every employment-service office in the Dominion of Canada. They seem to have a chronic disease. How are you going to get anything definite from them when compiling statistics? Does it mean 1,000 people out of work, or does it mean 1,000 people going to a number of offices and applying for jobs, sometimes under an assumed name?

Another thing is the attitude of employers who refuse to hire men and women after they arrive at the age of 45 years; and another which was not brought out in this particular paper—is the displacement of labor by labor-saving machinery, thereby creating a problem of unemployment that the employment service must observe.

I think the members of this association will all agree with me that we have had good reason for a number of years for urging that the National Employment Service Association consolidate with the Government labor officials; and after the great ability shown by the representatives of the National Employment Service Association, Mr. Rigg and Mr. Hudson, I hope that this association will extend an invitation to these officials, so that we may keep in close touch through them with one of the greatest problems that we, as labor officials, can face.

There is one question which I would like to ask Mr. Hudson, because I feel that he can give us some valuable information upon it. How do you work the railroads in getting your people out to jobs that are far distant from the employment offices? That is a subject I am particularly anxious to know something about. Also, what is the best method of handling the physically handicapped?

Miss Johnson. I would like to ask Mr. Rigg if the Provincial Government has any provision for private agencies, and if so, are they required to give reports as to the number of the unemployed?

Mr. Rigg. I think Mr. Hudson can answer that better than I can. I am not very well informed as to the process.

I may say that the licensing of fee-charging agencies exists in Canada, but only in Ontario and Quebec. In those two Provinces there are about 23 licensed fee-charging agencies. In 1914 in Ontario alone there were over 100, or in the neighborhood of 100. Five of the Provinces of Canada have outlawed the private fee-charging agencies entirely—it being illegal for such an agency to exist in them. Every effort is exerted to maintain a minimum number in the two Provinces where they exist to-day. They come directly under the supervision of the labor department of Ontario and under the department of labor of the Province of Quebec. They are required to file some sort of return in respect to the number of placements they make. I think very generally the figures of applications, vacancies, and placements are identical. That I think covers the field so far as that question is concerned.

Mr. Davie wished to know something about the reduced railway fares. I may say that the railways, from the inception of the Employment Service of Canada, have always granted to the employment service officers the privilege of a reduced fare, which amounts to about 75 per cent of the regular tariff rates. This reduced rate, however, is only applicable to placements which are made where the jobs to which the applicants are being referred are at a distance in which the regular tariff rate would be \$4 or more. You will be interested in knowing that 1 out of every 10 of the placements made by the Employment Service of Canada is made at such a distance that this rate is brought into use; that is, that they are sent to distances of more than 116 miles.

The other day I saw some figures which have been compiled by the Province of Manitoba, which would be approximately correct, showing that an advantage of over \$20,000 had been acquired by unem-

ployed persons going to work at a distance to get work. As a definite answer to Mr. Davie's question, I can say that this has been brought about by the presentation of the case on behalf of the unemployed worker, the need that exists in Canda for a mobile force of labor and the good will of the railways yielding to the pressure of such presentation. It has now become automatic; it is renewed every six months automatically, and we enjoy and very much appreciate the benefit that is derived through that reduced rate.

Mr. Hudson can answer the remainder of Mr. Davie's question, which was addressed to him. Mr. Davie wanted to know what was being done in the direction of placing handicapped men in employ-

ment.

Mr. Hudson. The Provincial Government or the municipalities can take action. In the city of Montreal—I am not quite sure that it is the case to-day, but it was until recently—licenses have to be secured from both the Provincial Government and the city.

Chairman Ballantine. Any further questions or discussion?

Mr. DAVIE. There were two more questions; one was, what are you doing with the displacement of men and women over a certain age, and those displaced by labor-saving machinery?

Mr. Hudson. I can answer that very briefly. Ontario is progressing. New opportunities are opening up in this country, which are not probably opening up so fast in the United States as in the years gone by. For instance, an entirely new industry—I am not free to divulge the name of it—is about to commence in northern Ontario, and that expansion in industry and the development of our mines particularly will take care to a large extent of what would otherwise be our surplus population.

It is more difficult to place a middle-aged man or woman displaced by the installation of labor-saving machinery; but that has

not reached the stage of a problem in Ontario.

Mr. Davie. What about placement work for the handicapped? Mr. Hudson. Handicapped-placement work is largely centralized in the city of Toronto, by reason of the fact that hospital provision is available here, and because handicapped cases believe that the large cities provide more opportunities for employment. We have had to engage a staff of about nine workers, canvassers or scouts, to go out looking for jobs for these men, not on the basis of what they have lost but of what they have left. If a man has lost his legs, we make only incidental reference to the loss of his legs when we try to get a job for him. We do not sell anybody on the basis of his handicap but on the basis of his efficiency. I know time goes rapidly—10 years slip around very quickly. We had the case of a chemist in Toronto, who had to meet the public as part of his duties. He became deaf as a result of war service, and he continued to become more and more deaf each year, until it was impossible for him to carry on his work. He became stone deaf. His education seemed of no avail; he could not hear and would stand around looking stupid, although he was a man of very keen brain.

He registered with the employment service, and to make a long story short, in a brief time we were able to link him up with an establishment engaged in the manufacture of soap in which he did not have to meet the public. Otherwise, he would have been, in a few months, one of the "down and outs." Once more he had taken his place in the ranks of real wage earners, engaged in their own line of work for which they had received special training.

[Meeting adjourned.]

THURSDAY, JUNE 6-MORNING SESSION

Ethel M. Johnson, Assistant Commissioner Massachusetts Department of Labor and Industries, Presiding

WAGES, HOURS, AND HOME WORK

Chairman Johnson. The program outlined for this morning's session looks longer than it really is, judging by the title, "Wages, Hours, and Home Work." We had several speakers who were scheduled to come to Toronto, but some of them are unable to be present. That means that there will be a good deal of time for informal questions and discussions. The suggested questions—wages, hours, and home work—are probably in some States assigned for special consideration to the bureau of women and children in industry, appointed especially to study such problems and to make recommendations for dealing with them. Only a few States have established such bureaus. The Federal Department of Labor has a Women's Bureau which is engaged in studying these problems throughout the country. We are fortunate in having at the head of that bureau a woman who has a broad and sympathetic insight and understanding of the problems of women in industry. Miss Anderson is going to speak first, and she will tell us something with regard to the work of the Women's Bureau of the United States Department of Labor.

Relation of Women's Bureau to State Departments of Labor

By MARY ANDERSON, director, United States Women's Bureau

In the act of Congress of 1920 establishing the Women's Bureau its duty was defined as follows: "To formulate standards and policies which shall promote the welfare of wage-earning women, improve their working conditions, increase their efficiency, and advance

their opportunities for profitable employment."

The bureau has no power of law enforcement in the States, its functions being solely those of research and the establishing of standards. However, its field being national in extent and concerned with the 8,500,000 women gainfully employed in the United States—in contrast to the States, whose activities are confined to their own boundaries—it is able to make available to all parts of the country the information which it collects and to supplement the material gathered by the States on the various problems that affect the opportunities of employment for women.

In all States large numbers of women must carry the double burden of provider and home maker. In the endeavor of the bureau to carry out the duties with which it is charged and to see established throughout the United States acceptable standards for the employment of women, the cooperation of the State governments is essential. While some employers provide excellent working conditions, others are negligent and some never would do so unless required by law. States therefore have made an effort to assure to their woman workers better conditions of work in general than would otherwise be attained by standardizing certain conditions of employment by legislation.

Since industrial development varies so widely between States, it is natural that the character, extent, and administration of labor laws also should vary. This in itself creates a need for research by

a Federal bureau.

In all but five States there is a limit to the number of hours a woman may work during the day or week, but these limitations differ greatly. In 10 States, the District of Columbia, and Porto Rico an 8-hour day is the maximum permitted by law in certain industries; in other States a 9, 10, or even an 11 hour day is allowed, and in some industries a 12-hour day receives legal sanction.

There is an even wider range in the maximum of weekly hours found on the statute books, this varying from the 48-hour limitation in certain States to the 70-hour maximum permitted in others.

Eight States have minimum-wage laws which so far have not suffered from adverse court decisions. Those States are California, Massachusetts, North Dakota, South Dakota, Oregon, Utah, Washington, and Wisconsin. Massachusetts' law is nonmandatory and Wisconsin, whose first law was held invalid on the basis of the United States Supreme Court decision in the District of Columbia case, has passed an entirely new kind of law for adult woman workers.

In Minnesota the law as applying to adult women has been held unconstitutional on the basis of the District of Columbia decision, but it still is enforced for minors under 21.

In some States all laws relating to woman workers are under the jurisdiction of one agency, while in others different laws are administered by different bureaus. In three States there is a special division in the State department of labor charged with the duty of research on problems of interest to women, but 12 States have women either on the industrial commission or engaged in supervising the enforcement of some law or laws pertaining to women and children and a few other States have one or more woman inspectors. There are, however, a considerable number of States in which no woman inspects the conditions of employment for women and a few in which no one makes such inspections.

Under such conditions it is natural that State departments of labor and other agencies should turn to the Women's Bureau for information on the standards affecting conditions of work for women adopted by the various States. A bulletin issued by the bureau and entitled, "State laws affecting working women," which outlines all the laws in the 48 States and the District of Columbia that deal with hours of labor for women, night work, minimum wage, and the conditions under which home work is to be carried on, has been used extensively throughout the country. This bulletin has been revised

and brought up to date in its third edition. The data, presented concisely on charts, are of special value to State departments of labor, employers, workers, and others interested, as a source of information concerning the standards of the various States in the matter of

these types of labor laws for woman workers.

While there will probably never be complete uniformity in labor laws for women in the United States, employers as well as workers feel the ill effects of so wide a difference in standards as now exists between some States. The formulation of policies and standards necessitates the collection of facts and figures on the questions that so vitally affect American wage earners, and it is obvious that a Federal bureau must function if all workers and all employers are to be served.

State departments of labor sometimes find that, either because their authority is limited to law enforcement or because their staff is small, they are not in a position to make state-wide surveys of women's employment in industry however urgent the need for such investigations may be. Therefore the Women's Bureau has, on request, conducted the surveys in question, and in 19 States investigations of the hours, wages, and working conditions of women have been made. These surveys have covered 274,000 women in more than 3,700 places of employment. They have been undertaken at the direct request of State officials or other State agencies, and in practically all cases the employers in the State extended the most courteous cooperation. In several surveys State inspectors have worked in conjunction with agents of the bureau in filling out schedules in industrial establishments. The policy of the bureau is never to go into a State for investigatory purposes without first getting the cooperation and advice of the State officials.

While the capacity of the bureau is limited, it has furnished compilations of census data showing the occupational distribution of women in the various States, and in a number of cases the States have been supplied with information not otherwise obtainable. Examples of this are "The family-status of bread-winning women in four selected cities"—a study from the original census schedules for Passaic, Jacksonville, Wilkes-Barre, and Butte—and "The new position of women in American industry," based on records of the War Industries Board. In these cases the bureau has brought to general attention material that otherwise might have remained buried in filing cases, or, at best, might have received little more than local notice. In general, it conducts what amounts practically to an information service on the various problems and phases of women

in industry.

A definitely organized means by which the bureau is functioning as a clearing house of information regarding the activities affecting working women is the News Letter issued periodically by the bureau and sent out to a large mailing list. At the convention in July, 1920, of the Association of Governmental Labor Officials there was found to be a very general demand for the publication of a bulletin which would provide the members of that organization with information as to the activities and findings in matters concerning the employment of women in the United States. It is obvious that in this connection the bureau must rely to a great extent upon the various State

departments for current information on their activities and about court decisions, changes in laws, or other occurrences that relate to or directly affect woman wage earners. I would urge labor officials in the different States to send to the Women's Bureau the information that they feel can be published in this News Letter so that we will have more, and much more up-to-date, information than we now have.

In addition to this organ of information the bureau sends to State officials the statistical bulletins on its general and special studies as they appear from time to time; it lends to them and to other groups its exhibit material; and upon request furnishes information on the drafting of schedules for studies planned by State agencies. While the exhibit material that the bureau can furnish is limited in comparison with that of bureaus of the Government engaged in commercial and agricultural research, it is in great demand and during the past year 512 exhibits were sent by request into 36 States.

There has been effective cooperation on the part of State departments of labor with the Women's Bureau in some of their special studies. A striking example of this is the study of industrial accidents among woman workers, published by the bureau in 1927, for which State officials of New Jersey, Ohio, and Wisconsin placed at the disposal of the bureau their files and records on industrial accidents and compensation. These three States were selected because of outstanding differences in method of insuring compensation to persons injured in industry. The report constitutes a notable example of the value of bringing together comparable information from several States.

Another study and important piece of research conducted by the bureau involving much State cooperation was inaugurated as a result of the decision of the Supreme Court of the United States in 1922 declaring unconstitutional the minimum wage law of the District of Columbia. This decision had far-reaching effects on the application of this type of legislation to adult women in States having similar laws. There was, in consequence, a general demand for a permanent record of the experience in the various States with this type of social legislation, and a research study was made of the history, operation, and administration of the minimum wage laws in the States where such laws were in operation and where the records placed at the disposal of the bureau by the State officials made possible a careful analysis of methods and results.

During the past year a special effort has been made to establish contact with State departments of labor for the purpose of extending cooperation along new lines and making a practical working arrangement for the use by the bureau of information about wage-earning women collected by the States. Sixteen States have been visited for this purpose to date, and splendid response has resulted. While the majority of States collect and publish a considerable amount of labor statistics, each prepares its material for local use primarily and does not present figures intended to have special value as a basis of comparison with other States publishing information on the same subjects. It is highly desirable that a method be adopted for presenting information collected by the States that will furnish data comparable as between States on hours and conditions

of work, fluctuation in employment for women, and the extent and nature of industrial accidents to women. State departments of labor can render great service in the field of social statistics by publishing their figures, by sex and in age groups, in such form that the data will be comparable with those collected in other States.

A number of States have offered to cooperate with the bureau and classify by sex and age the accident data they make public from time to time. Though the development of this project will be slow, and comparable results may not be achieved for two or three years, all such information will be a valuable contribution to the knowledge on this subject.

The bureau is charged with functions that cover a very extensive and complicated field of human endeavor. The past shows the value of close cooperation by the bureau and the States. The development of further projects in the future is important, since the problems of wage-earning women largely affect the social welfare of the Nation.

DISCUSSION

Chairman Johnson. Before going on with the next paper we will take 15 or 20 minutes for the discussion of Miss Anderson's paper. Are there any questions anyone would like to ask Miss Anderson about the work of the Women's Bureau?

Mr. Seiller. I would like to ask one question about uniformity in State laws. I presume that in your opinion we are a long way from uniformity?

Miss Anderson. Indeed, we are a long way from uniformity.

Mr. Seiller. To my way of thinking, there is no reason for any difference in the regulation of hours in Toronto, in Louisville, or in New York. If it is harmful for female workers to work more than eight hours in a laundry in New York, why would it not be the same in Louisville? We have no clearing house, really, where we can go for a standard on women's laws, unless we go to the Women's Bureau. Now, in Kentucky, as the chief enforcement officer of our labor laws, I may say that our department is not satisfied at all with our State women's law. It has very bad language in it—in the matter of enforcement—such words as "suitable," "reasonable," and "proper." Words like these are always creating difficulties in law.

In searching the available labor law data I have on hand, I have not been able really to get a good standard of a women's law. In our law we have the regulation of hours, and proceedings for the enforcement of the law. That is probably more than I have found in most of the laws regulating women's work.

We hope to get a new women's law; we hope to revise thoroughly our present law, and I am going to send to Miss Anderson what we think is a fair standard. I would like to request that she give this matter a little thought and prepare a standard that we can work toward, so as to obtain uniformity in the women's hour law.

Miss Anderson. I shall be very glad to give you what the States consider their best enforcement conditions. We can compile that. We could not, of course, possibly make what you might call a model law for the States; but there are certain features in certain States that are very good enforcement features.

I think the trouble with most laws is that they are very vague in their enforcement features. We can always put information at the disposal of the States that would like to have it.

California has just passed a new enforcement feature in its eighthour law, which takes the burden of proof off the women and puts it upon the records. It will be interesting to see just how it is going to work out. It is certainly a step in the right direction.

Miss Peterson. Two years ago I visited a number of States and found there were adequate and reasonable regulations, and they are being used. I promised some of the commissioners that we would furnish several of the States with what we considered were the best standards in certain States. Take toilet facilities especially—we have sent certain States information of that nature. We have selected the New York code and the Massachusetts code, and we have sent these because they approach the subject from a different angle.

I think in discussing laws for women, we want to be careful not to mix our legislation with these other subjects, because they are so very different from one another.

Mr. Rooksbery. That is what we find in searching these laws, that they are really so different that there is no common basis to work on. In Arkansas we had no safety legislation except what was in the women's law. Our law, I think, is more inclusive along that line. We have a provision for the employer to keep a time book and to register the number of hours, but we find that that is impracticable, because we do not have a sufficient number of inspectors to make at least three checks a year; if we get over our State about once in 18 months we are going some.

Our State is badly unbalanced geographically, in the way of population and industry, so that we have to confine ourselves to certain

spots and complaints in connection with the women's law.

I want to submit to Miss Anderson our proposed standard, and I want her in her department, very thoroughly to go over it and see if we can not arrive at a workable standard. Tennessee, Arkansas, and other States should work toward uniformity. In sections of the Southeastern States it would be easy to work toward a standard law. There is no good reason why Tennessee should not. I think they have 54½ hours a week; we have 60 hours, a difference of four or five hours in the week, which makes considerable difference when people come in and go out of our State. It is also an argument from the employer's point of view, in the matter of competition in the making of his products.

Miss Anderson. I think that in the Southern States, particularly among the employers, there is an agitation to do away with night work, and that is particularly true among the textiles. It seems to me that that ought to be taken into consideration, because I think there will be great support for it among the employers in the South.

Mr. Rooksbery. We in the South find at this time, due to agitation on the part of chambers of commerce and other industrial organizations to promote industry throughout the South, that there is a tendency to do away with women's laws. This is the case in Arkansas. There was an 8-hour bill introduced at the last session of the legislature, which was defeated, and we had a hard

time holding our 9-hour law. It seems to me that southern employers are trying to promote the textile industry throughout the South, especially in Arkansas, Tennessee, Alabama, and North and South Carolina; and those States are having a hard fight at the present time to hold their labor laws. Under the woman and child labor laws there is a tendency to break down, and there is a hard fight at every session of the legislature. It is going to take cooperation on the part of these States to maintain what they already have.

We work successfully through the Women's Federated Clubs and labor organizations and the school authorities. Now, it seems as though they are becoming somewhat educated, especially as to the child labor law, but I believe it is going to take four or five more years before we shall be able to strengthen either our child labor laws or our women's laws in Arkansas. I think the other States have the

same conditions confronting them.

Chairman Johnson. In Massachusetts this year there were no bills introduced to repeal or modify the protective labor laws, which I think is significant. There were a good many measures for progressive legislation, although a number of them failed to pass.

Miss Marsh. I would like to find out a little more about the California provision which Miss Anderson thought had come into existence.

Miss Anderson. I am not sure; but I think they have just passed an amendment—addition—to their 8-hour law, to place the burden of proof of any violation upon the shoulders of others than the employees; the employees do not need to testify. I do not have it in full; but the burden of proof is to be on the records rather than on the employees. How they are going to work it out, I do not know.

Chairman Johnson. There are a number of connected topics which would be interesting to take up, but we will have to pass on to the next topic and leave other questions in connection with the Women's

Bureau for the general discussion later on.

The subject of the minimum wage is of interest, I think, to most of us, particularly since the adverse decision of the Supreme Court of the United States in regard to mandatory minimum wage laws in the United States. That has left only Massachusetts with the type of legislation, which presumably would be considered constitutional by the present Supreme Court, although some of the other States are going on with the administration of their laws. California is enforcing its law with the cooperation of the employers' associations. Wisconsin has adopted a fair-wage law for adult woman workers. Canada has apparently been much more successful in the operation of its minimum-wage legislation than we in the States. And although it followed in the earlier days some of the forms of the minimum-wage legislation in the United States rather than the English minimum-wage laws, it has not been influenced by the adverse court decisions which we have had in the United States. So we are very much interested in having with us Professor MacMillan, of Victoria University, also chairman of the Minimum Wage Board of Ontario, who will tell us about the administration of minimumwage legislation in Ontario.

Administration of the Minimum Wage Law in Ontario

By Dr. J. W. MACMILLAN, chairman Minimum Wage Board, Ontario

I should like to begin with a word of sympathetic greeting from the minimum-wage workers of Canada to the minimum-wage workers of the United States.

Rudyard Kipling has a little quatrain which runs like this:

The toad beneath the harrow knows Exactly where each sharp tooth goes; The butterfly above the road Preaches contentment to that toad.

We in Canada occupy the position of the butterfly, while you in the United States occupy the position of the toad. We, however, are not preaching contentment to you—that is not our attitude. We certainly congratulate ourselves on being bereft of the merciful blessing of a supreme court which can declare a law unconstitutional. Our supreme court can pronounce as to the jurisdiction—on which side of the fence it falls, whether this particular matter appertains to the Federal or to the Provincial authority—but it can not declare any law unconstitutional. We have that advantage.

We are glad to recognize that in spite of this adverse decision there are some 13 States of the Union that have effective minimum wage administration, and we owe a very great deal, not only in this region, but in other regions, to the social legislation enacted by you people who are south of the international boundary.

who are south of the international boundary.

These reforms that come from Europe and

These reforms that come from Europe and from Britain, such as the workmen's compensation law, seem to be routed to us through the United States rather than across the Atlantic. We get your literature, and watch your operations in Massachusetts, California, and so

forth, and we gain a great deal from your example.

In Ontario we have under the operation of our orders perhaps 100,000 women and girls, and of this number possibly some 60,000 work in factories. There are several preliminaries of administration that are of the first importance. One is the attitude of the Government. We operate under an independent commission, but we are well aware that if it were not for a correct and sympathetic attitude on the part of the Government in power, our work would not be so well supported.

During the 10 years of our life we have enjoyed from the two governments—namely, the U. F. O., or the farmers' government, and the conservative government—a very cooperative attitude. They have left us entirely independent; they have let it be known that they approve of our work; and they have been ready to provide us with the assistance of any other department of government, in the way of information or of support, as we may require it.

Another thing is that we sought and gained the cooperation of both groups concerned, namely, the employers and the employees; in fact, I think it is an essential of minimum-wage administration that the orders shall carry the consent and the approval of the trades themselves. In Victoria and in Australia they developed along that line, and certainly throughout the world the successful types of minimum-wage administration have always engaged the coopera-

tive assistance of both these groups.

We have met again and again, in the issuing of our 47 orders, with groups of employers and of employees, both together and separately, and in every case we have made a plea that we have found most convincing. We have said to them that we wish to do only a very simple thing—that is, to provide a barrier which shall protect the decent living of the working women of the Province; that all we are asking for is that women shall be able to live from their work, and we have not yet found anyone who has challenged that principle.

In gaining support of the principle, we have been able to gain assistance in framing orders, and thus these orders carry the support

and authority of the trades themselves.

From that follows a third preliminary, which I think is also of first importance; that is, that the entire spirit and method of the administration should be conciliatory. Our attitude has never been that of trying to force upon an unwilling people something that they are reluctant to carry out. It has rather been that of pointing out to them a way in which they can accomplish something that they desire to do. We have taken an attitude, not of anger, but rather of surprise, when we have found orders violated. We have been ready to point out, in the spirit in which a friend would point out to a friend, some inadvertence perhaps; and we have found this method very frequently justified in fact and always in results. When the time has come, as it occasionally has, that we have had to rattle the sabre in its scabbard and have had to proceed to a prosecution at law, then our action has been more impressive because of this antecedent spirit of conciliation.

We have issued 47 orders; 21 of these deal with factories. We have divided the factories into groups, such as paper, leather, textile, the needle trades, and so on. We have other orders for retail offices, stores, laundries, telephone offices, hotels, millinery establishments, elevators, and canneries. There are also several subgroups attached to these orders. Girls who meet the public in various ways, girls in doctors' offices, dentists' offices, ticket sellers, and so on; girls who work in warehouses, not factory workers, not salesladies, are

attached to the office workers' orders.

The several devices and methods of administration may be outlined in this way. The first is publicity. It is obviously desirable that the work should be known about, particularly that those most vitally concerned should be specifically informed as to these regulations. We therefore require that our posters shall, wherever it is practicable, be put up where they can readily be seen by the employees. We have not found it practicable in regard to office workers. In the retail stores, factories, hotels, and so on, these posters are on the walls, and the inspectors of the factory inspection branch of the Province, as they go their rounds, report to us whether these posters are kept displayed or not and whether they have been destroyed or lost. Where they have been destroyed or lost a second lot is supplied, with an accompanying letter. If this thing happens

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two or three times in succession, it is taken up more definitely, and in case of an attitude of recalcitrance or criticism, we are prepared to go a considerable length to see that these posters shall be maintained in a permanent position. We have never had to go beyond

one or two letters, or perhaps a personal visit.

Outside of that, we like to get all the publicity we can, but it is difficult to get. The trouble is that there is no spectacular news. You know, if a dog bites a man, that is not news; but if a man bites a dog, it is news. We have little news to give. There is not much of the spectacular, not much excitement or sensation in our work, and we do not desire that there should be. We want the work to flow evenly and harmoniously along; and for that reason we do not get many headlines in the newspapers. We try to get what publicity we can, and take such opportunities as present themselves to use the public press. We are fortunate in having some members on the board who have an excellent knowledge of the subject. Various clubs will from time to time give us an opportunity to talk of our work, and we find that our story is one which elicits the approval of our audiences. So we take that as another means for gaining publicity—our first method of administration.

The second is dealing with complaints. We got last year 372 complaints, practically 1 per day. They came from employees, from disinterested spectators, from parents of employees, from clergymen, and quite a number from competitive employers; some came anonymously, some came by telephone, some by mail, and some by visit to our office. We dealt with them all, no matter how they came. A number of complaints were not sustained, while others represented some violations of orders. We were able to settle these either by correspondence or by personal visits; and I think, that with only one exception, we settled those 372 complaints in an amicable fashion.

We are fortunate in having one member of our board who is able to give his time very largely to dealing with complaints which require personal attention. Although he represents the labor interests, his attitude on the board is not at all partisan; he is well known and generally accepted throughout the Province as a man who is fair-minded and gifted for conciliation and arbitration. We owe a great

deal to his handling of cases in a personal way.

We have found three kinds of employers that require our attention. There is first what we call the shyster employer, the man who does not play fair; he does not play fair with competitive employers—he wants their employees to buy his goods but he does not want his employees to buy their goods. He wants other people to pay good wages while he pays poor wages. That is his idea of getting a competitive advantage. We find him trying to take advantage of his employees in many ways which I shall not detail. Occasionally we find him lying to us, and in that case we act somewhat severely. We find him sending false reports, or even being reluctant or antagonistic, and it pleases us to take an attitude of compulsion with him. However, the number of employers who may be characterized as shysters is really not large; the larger number may be classed as incompetent.

Employers are like other classes of human beings—superior, inferior, and those that run between. The average is low. In many cases the average in managerial occupations, in my opinion, is not very high. In fact I noticed a recent authoritative statement that 90 per cent of the men engaged in business sooner or later fail, which bears out that observation. In any case, we find a great many who never relate their selling costs to their production costs; they are good selling agents, but not good factory managers.

One by-product of our organization is that we have been able to help many men engaged in business to conduct their business in a better fashion. It is not in our province, but it does happen that we gather a great deal of valuable information about this, that, and the other, and we pass it on. We know of case after case where the working force has been improved in its relationship to the employer,

and vice versa, and also to the business.

Then there are cases where some girl or group is overlooked; as a rule all that is required is to call the attention of the management to the case. Frequently we get a letter of thanks for having called attention to the case. That is the second line, dealing with complaints. Here we enjoy the cooperation of the factory inspection branch in a very direct way.

We have, officially, no inspectors. We have our office force—a small one of three—and we have the time of one member of our board for special cases; but we have no inspection force of our own.

The inspectors of the factory inspection branch report to us as to the posters; and, aside from that, give us a great deal of incidental assistance. Every fortnight we meet with Mr. Burke, the chief factory inspector, and go over all these complaints. Last year we had 26 meetings of that kind, and we dealt with the 372 com-

plaints as they came along.

Our next point is, wage-sheet adjustments. We began at the first to collect annually wage sheets from all the factories, and from many other establishments throughout the Province, but I will confine this talk to the factories. Last year we gathered these wage sheets from 3,000 factories, representing 60,000 workers. We have a regular letter we send out with a question form, in response to which we get about one-half; a second letter brings about one-half of the rest; then we get out a third letter, which gets about one-half of the remainder; and a fourth letter, with ginger in it, brings in all the rest. But not every time.

Take the needle trades in Toronto; they have many foreign born, who do not know the English language, and it requires a great deal of attention to get these wage sheets. But we get them in the end.

Unless a factory has more than 75 employees, we require the name of each female employee; if the number is over 75, we allow them to summarize. Many of the large factories do not take advantage of that. We get lists of 300 or 400. Wage rates are shown—the rates of wages paid to pieceworkers, and the rates of wages paid to timeworkers. Besides that, information is given as to minors—those under 18. The date of hiring of each girl that is receiving less than the prescribed experienced workers' minimum is also given.

We get these sheets year in and year out, and compare them with previous years. We can tell pretty well whether the law is being obeyed or not, since there is a regulation that one-half of the whole force must get the experienced workers' minimum. We can tell at once whether that proportion is maintained or not; we then look at the sheets to see how it is worked out. We have no interest in anything above that minimum. We can also see when a girl was hired. If the wage sheet does not appear to be in conformity with the order, we write a conciliatory, friendly letter. If good wages

are shown in the sheets, we send a congratulatory letter.

Sometimes we call attention to a case like this: Here is Jennie Jones—or Susie Smith—in her first year, who should be getting \$10, whereas she is set down as getting \$9.40. We say that we will be glad if the firm would write us about this employee and make the necessary adjustments to conform to the law. Last year from the 3,000 wage sheets we had over 300 letters of this kind to write, but we were able in every case to make an adjustment. Sometimes there was an explanation to be made. Jennie Jones had been away six months, but had come back again. In that way we could assure ourselves that the standards were being supported; and we were able to do this almost entirely by correspondence. We think that in this device, the use of this question form, we have a method of pretty effectively realizing the intention of the law, which is to protect the standard of living of the working women.

Then there is the question of permits. We enjoy a wide authority indeed in regard to permits—we can issue permits as we wish. We use this authority with a great deal of care. A permit for handicapped workers is issued in connection with the regulation which requires that one-half of the workers must receive the

minimum wage.

We also issue permits to new factories where they have to teach their workers a new occupation. Some are seasonal; sometimes a large force is employed at one season of the year and a very small force at other times in the year. We give permits in those cases. Special apprenticeship permits are issued, for instance, in the printing trade. Many girls in printing plants never learn to be printers. It is only throughout the rural parts of the Province that they are actually taught the trade of printing. They can go anywhere and earn excellent wages as printers. In these cases we have regular apprenticeship forms for the printing trade, worked out with the newspaper association of the Province.

Altogether we have only 97 permits in force in the whole Province. Another matter is the collection of arrears. Last year we collected \$7,400 of arrears from 75 firms; the money was paid to 130 employees. One got as much as \$150, and one got as little as \$2.50; the average was about \$50. We do not regard this as desirable; the ideal is, of course, where there are no arrears collectible. We do not want to develop a class of girls who go around underbidding their competitors, and then come to us a few months afterwards to collect their arrears. We are careful to see that such a girl is not supported by us. Nevertheless, we find it a valuable way of seeing that the law is obeyed.

Occasionally an employer writes in saying that he is required to raise the wages of a girl who is not worth it. In reply we write that he is quite free to discharge her, and kindly send us a statement and we will calculate the arrears he must pay her when she leaves.

Very generally he changes his mind and keeps her. If he does not

keep her, we collect the arrears.

One man in a certain city in the Province said that his business was not paying more than 7 per cent; he cut the wages of his employees, and then he cut them still lower. That man paid \$4,000 of arrears, and almost doubled his girls' wages besides.

We had another case last year where a man failed to carry out a promise he had made by letter, and it cost him about \$1,400 in the way of arrears. It is a valuable instrument of punishment, but not

a desirable thing in the successful administration of the law.

In conclusion let me say that I believe in minimum-wage administrators sticking to their task. I say this because so much of the literature published about minimum wage seems to disregard the fact that the business of the minimum-wage board is simply to enforce the payment of wages, or it may be, if the law permits, of

hours and conditions of labor, too.

One cheap criticism which has been made is that unemployment insurance is not provided. Another mistake which is made (it is a great temptation, of course) is to put the bludgeon of the law in the hands of a person who wants to do as much as he can for the workers. It is a mistake to place the rate above the minimum; it is enough to see that a girl is simply and decently clothed; that she has such ordinary comforts as are recognized as essential to wholesome living. If we do that we will have the public with us. But we do not say that she shall have a fur boa about her neck, or silk stockings on her feet, or a hot-water bag to put her feet on in the winter, or that she shall have money enough to save to get married. These are things that are suggested to us. If we did that we would lose public sympathy, because the vast majority of the people are not rich. The average income is not much above the minimum; and I think we should keep to the minimum.

DISCUSSION

General Sweetser. Mr. MacMillan, these wage sheets you ask for from the employers, are you sure you get the right rates of wages? How do you check that up, or how are you sure that they are correct in each case?

Doctor MacMillan. Well, we have had in our 10 years' experience two or three instances where the information was not correct, but only two or three. You see, we are constantly checking and investigating complaints in dealing with these wage-sheet adjustments, and sooner or later we are certain to find out if false information has been given. The exceptions are negligible. They tell us the truth.

General Sweetser. Do they swear to the wage sheets?

Doctor MacMillan. No; I think it would be a great mistake to insist upon anything like that.

General Sweetser. But you insist upon a check-up?

Doctor MacMillan. If we have any reason to be suspicious, we send a man down.

General Sweetser. Is there no general check?

work of this kind.

Doctor MacMillan. Not necessarily; the evidence which comes to us shows that they are truthful reports.

Mr. Stewart. What do you mean by "arrears"?

Doctor MacMillan. The law provides that a woman shall receive a certain minimum wage. An experienced worker in the city of Toronto must get at least \$12.50 a week. She may have worked for three or six months at \$11 a week, so her employer owes her \$1.50 for each of those weeks.

Mr. Stewart. How can he employ her below that wage—under the \$12.50?

Doctor MacMillan. He can not do it unless he does it illegally. Chairman Johnson. I wish to thank Doctor MacMillan for the splendid exposition he has given of the administration of minimum-wage legislation in Ontario. I am particularly glad that he has emphasized the importance of sane, wise, and sympathetic administration and enforcement of such laws. Enforcement is a very important point in any kind of legislation. It is particularly important in the case of labor laws. I sometimes think that in regard to such laws we could borrow the percentage from a popular advertisement and say that 99₁40 of the success of a labor law depends upon the type of officials who are behind that law. I am glad that Doctor MacMillan emphasized the need of securing the cooperation and support of both employees and employers, and that he pointed out that it is a work of conciliation and arbitration in which he is engaged. I am also glad that he stressed the need for publicity in

Miss Marsh. I would like to ask Doctor MacMillan if there is a maximum-hour week in Ontario; is there a legal limitation to the number of hours per week?

Doctor MacMillan. Our situation in Ontario is rather an unusual one. Our legal maximum is not in the minimum-wage laws. It is 60 hours a week, or 10 hours a day. As a matter of fact, it is a dead letter. There may be one factory somewhere in Ontario working 60 hours a week, but, if so, there is only one; 44 to 48 is the average. The hours get a little longer if you go out into the country places—50 and 54.

Miss Marsh. If the minimum wage applied to a 60-hour week, and a factory worked 44 hours, would they pay pro rata?

Doctor MacMillan. When we began our work we were given authority over wages, not hours of work. As we met with groups of employers, we pointed out the possibility that some might try to plead low output and have a hypothetical 60-hour week, but work 44 hours or part time. We said if that were done we would make our wage rate on an hourly basis. We have found very few trying to do that kind of thing. Since then we have had an amendment to the law by which we can state a specific time for which the minimum wage shall be payable, and require overtime beyond that. In a number of orders we have issued since that amendment came in—as regards hotels, restaurants, canneries, laundries, and a number of

things like that—we set a certain week, say 50 hours usually, for which this wage shall be payable, and overtime beyond that.

Miss Marsh. If they work less than that they are paid pro rata? Doctor MacMillan. They are paid pro rata, according to the normal week in vogue. If a factory works 40 hours, it means forty forty-fourths; forty-fiftieths.

Chairman Johnson. Do you inspect, in the case of a complaint? Doctor MacMillan. Yes.

Chairman Johnson. I understood you to say you got a great deal of information through returns made by the employers.

Doctor MacMillan. In case of a complaint, we have to deal with it specifically. If we receive a complaint from a girl who is holding a job and does not want her name known, we get a report from the employer as to his employees, or someone goes down and looks over the books, and he can suggest some adjustment without saying anything about the complaint. He asks, What about this one, and that one? And then he comes to the one in question. If she has left the place, that is another story; the question of arrears is then taken up

Chairman Johnson. In the case of applicants for exemption certificates, do you investigate them?

Doctor MacMillan. Always, personally. We sometimes give an interim permit, until we have an opportunity to make a personal visit.

Doctor Patton. Did you give permits to 97 employers?

Doctor MacMillan. To 97 firms.

Doctor Patton. Do you know how many employees they covered? Doctor MacMillan. It would be hard to say, because quite a number of permits simply dealt with the regulation that one-half the force must be getting the minimum for experienced help. It might in certain factories cover hundreds. I think I can give you what you want. There are 69 handicapped workers. These are individual workers, who have lost a finger or who are mentally defective, so that they are allowed to work for lower wages.

Doctor Patton. Are you swamped with applications for permits? Doctor MacMillan. No; we have never had any trouble in that way.

General Sweetser. How many have you on your staff?

Doctor MacMillan. We have five. We have two that are supposed to represent the employers—they do not represent the employers more than anyone else—and we have two that are supposed to represent the employees; I sit on the fence, between them. I have never had to cast the vote. The only division is when our board gets at one end and I get at the other.

Miss Peterson. I feel quite sure, but I want to put the question so that it will go into the record. Are all permits granted to firms dated to show when the permits expire?

Doctor MacMillan. Well, no, not all; there are some cases in which permits are given indefinitely. You are thinking about the

proportion of experienced workers; all of those permits are for three months or six months.

Chairman Johnson. We have representatives from other Canadian Provinces where there are minimum-wage laws in effect. I think it would be interesting to hear from them, and to learn to what extent there is uniformity in the Provinces. In the United States there are great variations in the laws in the different States. What is the situation in Canada? Is Mr. McKenzie, of Halifax, here? Do you have minimum-wage legislation in Nova Scotia?

Mr. McKenzie. No.

Doctor MacMillan. There is a law, but it has never been enforced or put into operation.

Chairman Johnson. We would like to hear from Mr. Fester next. Mr. Fester. I do not know that there is much that I can add to what Doctor MacMillan has set forth. He has told us the

story in so far as it applies to the Province of Ontario.

We have been on this job approximately 10 years. In that time we have had two governments, representing two distinct political affiliations. Our commission, in all these years, has remained intact. I think it is a tribute to the success of our commission that it has been maintained.

We owe a lot to our chairman. I am now speaking from the standpoint of the Ontario minimum wage board. It should have been added, and I may add at this time, that we have two woman members on the board, because it is the women who are concerned. We have one representative of organized labor, a woman, and another who was for many years the national secretary for the National Council of Women and a very capable woman.

The problem, of course, is essentially one of appraising human values. I find it so, because I am actively in touch with the job. I am the one who visits this, that, and the other fellow. I am a "strike committee," perpetually in session, and it is not always a

very likable sort of job. Still, it has to be done.

The question was raised with regard to a check-up of the wage returns. That is an interesting point. I do not want you to go away with the idea that we accept these returns at their face value. While it is true that a very great proportion of them are accurate, nevertheless it is part of my job to check up those returns. If I go to Port Arthur, Fort William, Kitchener, Hamilton, or Ottawa, as the case may be, to look into a complaint that may be of more than ordinary complexity, I am not wasting the Government's money by just going down there and looking into that one specific complaint and spending the rest of the day at the hotel and then coming home. Usually I adjust the complaint, and spend several days in the city, generally calling upon 50 or 75 establishments; I look into their books and find out what wages they are paying and make a note of it, file it in a report and check it against the wage returns these people have made. That is a fair barometer as to the accuracy of the returns that are made to our office.

I think that during the course of a year I visit probably from 1,200 to 1,500 establishments of one kind and another. Not all of

them have complaints. I merely drop in, see how they are getting along, and look at the books as a matter of course.

As Doctor MacMillan has pointed out, we believe, the great majority of returns, with a very slight exception, are accurate. After all, there are penalties involved. Those penalties are severe, and the average man has no desire to come into conflict with the law. Even where low wages are paid, they are almost invariably accurately stated on the wage sheets. I can say this—that the chap who pays low wages is the last to make his returns. It takes the fourth letter to make the low-wage fellow produce his wage sheets. Then, of course, explanations are in order. Aside from that, it is merely a question of meeting practical problems as they arise from day to day. We do not prosecute unless we are absolutely sure of our case, and we have never lost a case in this Province. Perhaps I should qualify that. In one, we sought to compromise a case. A girl had actually accepted a compromise, and then, womanlike, she changed her mind. The judge held that she had a right to change her mind; and he made them pay to the last cent.

We have had fine support from the courts, we have also had good support from the Government. They have given us a free hand in our affairs. For that we are thankful indeed. It is difficult successfully to administer the law if you are harrassed by Government interference. Some of you know that. There has never been a member of Parliament, there has never been a cabinet minister, to approach us in regard to our work. I can point to one outstanding case where a personal friend of the Premier was concerned in a matter of arrears of wages. The man appealed to him, and the Premier sent his letter on to us; the fellow paid his arrears just the same. That is the whole story so far as we are concerned. We attribute a reasonable measure of the success we have had in this Province to the fact that there has been no political interference, that we have been given a free hand, that we have an exceedingly capable chairman who has had experience in other Provinces, having been chairman of the minimum wage board of the Province of Manitoba before he became chairman of the minimum wage board of the Province of Ontario.

I could tell you many interesting stories, so far as our administrative problems are concerned, but I have no desire to do that, because there are experiences that many of you have had in your own States or Provinces, and which perhaps you will want to relate.

I trust you will do your best to promote minimum-wage administration and minimum-wage legislation in your respective States in the country from which you come.

I want to add that, if it were not for the Ontario minimum wage board, conditions so far as the employment of women are concerned would not be what they are to-day.

Mr. Stewart. I would like to ask a question here. Do you make any distinction in the mentality of the workers? I am asking that question because, while it is not so serious, except in spots, we have a very distinct movement in the little country to the south of you here. In all probability up here, where you have so much room, you have no morons—you do not have feeble-minded. But we have them

in all walks of life, and they are being utilized in certain industries where the machinery is so automatic that it does not require any more brains to operate it than it does to run an automobile.

As a matter of fact we have organized agencies in the United States whose business, according to their own advertisements, is to break strikes by the use of morons. Their claim, which is defensible from an industrial point of view, is this: If 100 years ago a 10-year old child could be employed in a cotton mill effectively, why can not a 25-year old woman, with a 10-year-old mind, be just as effectively employed? As a matter of fact, they might be very much more effective, because machinery is much more simplified. Do you make the same rate for a moron as you do for an intelligent girl?

Doctor MacMillan. We have granted permits for mental defectives. But we have not gone so far as to have an expert psychological investigation of the intelligence quotient figure. Where we have a girl who was never beyond the second grade in the public school, and where the evidence we get is that such a girl is very satisfactory on some simple job, and we know that they will put the girl on a simple job, permission is given. These defectives are put at some simple thing. We attempt to teach such girls certain work. We then try to teach them millinery, where they have to make each hat different from the other. In a candy factory where they have to fill candy boxes, the same thing the year round, we give them concessions. We find that the employers are pleased with their steadiness; they are competent, docile workers, and the employer raises their wages above the common level.

Again we make an exception in the case of the best workers; if 80 per cent of the best workers are earning the minimum wage, the others take just what they can get. We had a practical case: A girl came to us who was making \$11 a week; she was one of a group of 14 sitting around a table, all getting the same rate. Every other girl was making \$3 or \$4 more than she was. If we had insisted upon that girl's wages being raised to the minimum, the employer would have dismissed her. I think a number of the less mentally equipped are taken care of in that way, without a permit. I think we have morons in Canada, too.

Mr. Stewart. Let me state the question a little differently. Getting away from the individual, how about the factory, how about the plant that deliberately starts out to fill its force up with the feeble-minded? I will take a specific case. There was a strike in a textile mill in New England. Some 80 girls went out on strike, only 14 of whom seemed to have a grievance. This agency I spoke of that advertises to place morons in the place of dissatisfied workers—which means strikers generally—went up there and analyzed the case in this way: That the firm was hiring 14 girls who were too good for the job; and that it is just as bad to hire somebody who is too good for the job as it is to hire some one who is too poor for the job. I suppose John Stuart Mill would not agree to that; maybe Adam Smith would. What they did was to fire the 14 girls, and replace them with morons; and the rest went back. That was not the case of an individual; it was the policy of the firm.

As you say, morons are docile, they do not become dissatisfied, they are tickled to death to earn anything and to work any kind of

hours, or do anything else, because they never had a job before in their lives. Of course, if you are going to live strictly up to the John Stuart Mill idea, the employer is perfectly justified in hiring the lowest stage of intelligence that can do his work. What do you do with a firm whose policy is along that line?

Doctor MacMillan. We have never met anything of that kind here, or it has not come to us yet. The philosophy we have gone on and that we have found prevailing among the better employers of the Province is that they want the best organization they can get.

Mr. Stewart. I am not talking about the better employers; I am talking about the fellows who want to fill their mills with the cheapest labor possible—workers of the lowest intelligence, because they are docile workmen.

Doctor MacMillan. In Ontario, 80 per cent of them would have to get the minimum.

General Sweetser. In issuing that order, is it the same all over the Province? Or does it take into consideration the work in the city or in the country?

Doctor MacMillan. It is based on the cost of living. We have worked out budgets for the different parts of the Province. We find the cost of clothing is practically the same all over, but the cost of board and lodging varies considerably. Take a factory order, for instance, in the city of Toronto; the minimum wage is \$12.50. In four cities next in size or considerably smaller it is \$11.50, although in offices and retail stores it is \$12 in those cities. In cities and towns of between 5,000 and 30,000 population it is \$11, and in the little places it is \$10. I have brought down here a sample of this question form, if anyone wishes to look at it.

Mr. Roach. Miss Anderson, sometime ago a representative of your department called at our office and made some inquiries about conditions in the tobacco industry. I examined our statistics on employment and wages in the tobacco industry in New Jersey and found that we had records from eight plants covering approximately 3,000 workers which showed that the average wage paid was about \$17.50 a week. There is no organization among the workers in the large machine cigar-making plants in New Jersey so that this wage of \$17.50 a week was not influenced by trade-union organization. In view of the extremely low minimum-wage rate mentioned by Doctor MacMillan, it would not seem to me that minimum-wage legislation possessed any great value for the worker. Unless minimum-wage legislation would establish a wage rate higher than the normal rate that prevails among unorganized workers it would seem to me that the effect of this legislation would be to lower and not to increase wage rates. If it has that effect I am not in favor of minimum-wage legislation. Last winter I attended a meeting in New Jersey that was addressed by Mrs. May Murray, who represented a national association of women opposed to women's labor legislation, and she made a strong case against the enactment of legislation that curtails the natural right of a woman to accept employment when and where she pleases. I think the economic dependence of women to-day is not so great as it was some years ago and the need for restrictive legislation has, at least in some measure disappeared.

Doctor MacMillan. This gentleman has started something. I am afraid I have not the time to debate it. We make a very sharp distinction between the minimum wage and the wage that you might get by a trade-union bargain. The strength of the minimum wage is that it sets the standard of decent living, with public opinion behind it. If trade-union wages go beyond that, public opinion will not defend it.

Chairman Johnson. Probably your experience is the same as that of the United States, that where minimum rates have been established the general effect has been to raise wage rates above the minimum?

Doctor MacMillan. Yes.

Chairman Johnson. As well as to bring the lower rates of wages up to the minimum?

Doctor MacMillan. That always happens.

Chairman Johnson. I do not know that there has been any experience where it has leveled wages down; it has leveled wages up. It is simply a level of so much, below which wages shall not go.

Miss Marsh. I may say that the National Consumers' League has been investigating the canning industry in Pennsylvania, where there is no mimimum-wage law and they find the rate is \$10.50 per week. In New Jersey, some comparable wages were found; in New York City the rate was \$12; so that \$17 is not the standard.

Doctor MacMillan. If it were in Ontario, I would suspect something exceptional about the industry. Another thing is that the average is unknown in the minimum wage. These tables are available for certain purposes; but no table can show the variation between one worker and another in the same place and between one plant and another. These variations are great, even between two similar and adjacent plants. The whole scheme of the minimum wage lies right there.

Miss Swerr. I wonder if the \$17 wage affected tobacco and other workers?

Doctor MacMillan. I could not say that. I took it that it covered the whole industry.

A Delegate. A \$12.50 minimum, from our point of view, would be ridiculously low. I would not say that such legislation would be considered a bit helpful.

Miss Swerr. We have the unskilled worker in the tobacco industry, the stemmer and the sorter. Their wages have been materially raised by the minimum in Wisconsin.

Mr. Fester. One tobacco factory within 40 miles of the city of Toronto employs 300 women. By reason of the minimum-wage regulations of Ontario, it increased its wage average 15 per cent. Of course conditions may be different here from what they are in the State of New Jersey. It required a considerable readjustment of wages in that establishment, with some 300 woman employees.

Chairman Johnson. I understand that Mr. Swift of the National Child Labor Committee, New York, will not be here. If you would like to have a little more discussion on the minimum wage, we can take 5 or 10 minutes. I think we should hear from Mr. Stapells, who is the employers' representative on the minimum wage board.

Mr. Stapells. I am prone to suggest when called upon, that we have two talkers on our board among the male representatives, and one worker. You have heard the talkers; I am simply the worker.

I would like to say, however, that there are no two men who have done more, in my opinion, on minimum-wage work on this continent, than Doctor MacMillan, on the one hand and Mr. Fester on the other. Doctor MacMillan has had a wide experience; and he has made a very careful study of this problem. I have not had the privilege of knowing many of your minimum-wage experts in the United States, but I know that as far as Canada is concerned he is the greatest minimum-wage expert in this country. Mr. Fester is a labor man; he has had experience with labor questions all his life; and, as Doctor MacMillan has said, when it is necessary to settle some problem with the employer, Mr. Fester goes out and represents the Province of Ontario in that contest and it is complimentary to his tact and judgment that he invariably succeeds in settling the dispute to the satisfaction of both the employers and the employees.

Our first, our last, and only thought—perhaps not the only thought—is that if there is a question of doubt involved, the benefit of that doubt goes to the employees. We have found that the employer has said that if there is a doubt, give the benefit of the doubt to the girl, because the girl gets a minimum of \$12.50, and is more entitled to the benefit of the doubt than the employer, more than a

successful one at any rate.

Mr. Smitten. Does your minimum-wage legislation apply to men as well as to women?

Doctor MacMillan. It does, in British Columbia. In Alberta there is a provision in the factories act which requires the same rate to be paid to males as is fixed by the minimum wage board for females.

Mr. Smitten. In Alberta, the legislation is slightly different from the legislation in Ontario, in that our board is a legislative board. The board is only responsible for making the order; the bureau of labor administers it. The connecting link is made by myself acting

as secretary of the board.

I was interested in listening to the statements of the gentleman from New Jersey as to the effect of minimum-wage legislation upon wages. In making our orders, the board reached a tentative decision as to the rates they were going to establish. We had collected in the office, data covering wage rates of most of the large concerns in the Province. When I say "large," they are small in comparison with those in Ontario and with those in some of the States. In establishing the rates we had in mind, we found that 35 per cent of the female employees were going to enjoy increases. We also found that 80 per cent of the staff of one concern were going to enjoy increases, while across the street in a plant in the same industry only 5 per cent of the staff would enjoy an increase.

We have come across some peculiarities in connection with our administration. The bulk of our difficulties have come from the small establishment, particularly the restaurant and the ice cream parlor, and the bulk of our adjustments are made for those places. We found on occasion an employer who had issued a check for the correct minimum wage and had cashed it in the till, there having been a discount for cash. In one or two other instances we have found pay sheets signed by the employees—a receipt for wages—where the amount signed for was greater than the amount actually received. Of course that does not go on very long before we get the information.

But in regard to disciplining an employer for carrying on tactics of that description, we find there is great difficulty. The court has in effect said: Here, you were not compelled to sign for what you were not getting, and you have to suffer for what you have done.

Our experience has not been just in line with the experience of the Ontario board, particularly in our highest court. The appellate court has taken the position that minimum-wage legislation is an interference with the individual liberty of the subject to make a contract. Wherever any technicality of law will permit, they are going to rule against us.

We started out by giving authority to the board to make differences in minimum rates as to industries. In our Province, however, the board applied the same minimum to an industry throughout

the entire Province.

We found in going into the question of the cost of living in the smaller places in comparison with the larger places, that while in some of the smaller places the cost might be lower, in some of the others it might be slightly higher, and in fairness to the minimum wage and the minimum cost of subsistence we had to establish a uniform minimum rate throughout the Province. In regard to that, the court said that the board had not definitely stated on its orders the particular location where the order should apply, and the order was declared ultra vires. Again we had to amend our law. I believe we now have, as far as our our law is concerned, one which gives to the board more power than is given to a board in any other place I know of, and that when its orders are made they are a little more difficult for the courts to get around than they were previously.

Miss Swett. How long has your court taken that attitude; is it recent?

Mr. Smitten. Right from the inception of the orders. I was interested in the question of the application of the order fixing the number of hours, as discussed by Doctor MacMillan. We found in the initial stages certain difficulties, particularly in our laundries. Practically all of our orders provided for a maximum of 48 hours a week. A few of our laundries did work 48 hours, and they took the position that as far as they were concerned they would pay a rate which conformed to 48. The board, having authority under the law, made provision for deduction by stating in its orders that wherever the regular hours were in excess of 40 but did not exceed 48, the minimum wage should be paid to a female worker who worked the regular and customary hours; when the regular and customary

hours were less than 40, then the proportion of minimum wage paid should hold the same relationship to the regular minimum as the hours worked bore to 40.

Chairman Johnson. There is one question which Miss Schutz suggested on the program; we might consider that now. It is, "Shall tips be recognized as part of the minimum wage?" You have, in Ontario, occupations where the tipping system prevails, Doctor MacMillan?

Doctor MacMillan. We do not recognize it.

Doctor Patton. I would have liked to ask Doctor MacMillan to make a general statement regarding the philosophy of the minimum wage, but there is no time for that. What we have heard in the United States as one of the theoretical arguments against a minimum wage is a double-headed statement that either the minimum wage would be so low when established that it would do nobody any good, or, if it were high enough to benefit the women it would necessarily mean that they would be discharged. We have had evidence that the first is not true—that the minimum wage, although low, has resulted in raising the wages not only of the lowest paid workers but also of those above the prescribed minimum wage.

I would be glad to hear Doctor MacMillan give his opinion on the question, Does the minimum wage result in the dismissal or discharge

of workers in Canada?

Doctor MacMillan. There may have been an occasional case, but none of any consequence. Where one goes out, another comes in. It has not fulfilled any of those forebodings. It has not meant that the minimum becomes the maximum.

In our statement of 1927 we show the effect on the higher wages. It has been said in opposition that the minimum would become the maximum, that if the employers had to increase the lower-paid employees they would reduce the higher rates. But, it has jacked them all up—the higher as well as the lower rates have increased. It is the protection of a recognized standard of living for a class

of worker which is economically helpless.

Everybody helps in conciliatory ways. As Mr. Smitten knows, the first minimum-wage law which was passed in Alberta was a flat-rate law; then it was altered in several different ways. It is not in averages where the minimum wage tells. Mr. Roach talks about \$17 a week. Is there any place where you will find a uniform rate for all women in a plant? In our 10 years' survey in Ontario we have found only one or two plants that did. If it is an average wage of \$17.50, it is an exceptional thing. I know a little about New Jersey, and I know there are women in that State who are not getting \$17.50 a week. Two factories in the city of Toronto drew their employees from the same market and made the same competitive product, yet in one factory the wages were double those in the Last year we found two factories making a certain product; one was in the eastern part, and the other in the western part of the Province. In the west the lowest wage was higher than the highest wage in the east, and it was the more profitable of the two factories That is the kind of thing we have to face. It is extraordinary, the inexplicable variation in plants. We are meeting within a few

yards of a very large factory, where we found one small group earning below the level of the others. We pointed this out to the

manager, and he corrected the matter at once.

This standard of living is generally approved by the community—that a woman should have respectable clothing and enough to eat. Our work is to help a helpless class. Trade-unionism has protected certain groups, but it has not reached the masses. In Ontario we set out to do that, and we have succeeded.

Miss Anderson. May I say a little about the claim in regard to the

minimum wage?

The District of Columbia set, under the minimum-wage law, perhaps one of the highest minimum wages in the United States—from \$15 in the bindery trades to \$16 in the clerical and restaurant trades. When the rates were put into effect the bindery women, who were organized into trade-unions, had a minimum wage of \$9 a week; when the \$15 rate was set it boosted them up to \$15; and they now have a minimum wage in the District of Columbia, through their organization, of \$19 a week. But the first boost in their organization was through the minimum-wage law.

Then the restaurants, the laundries, and the clerks were set a wage rate of \$16; many of those women were getting \$9 and \$10 a week. It was a fact that probably the majority, at least one-half of them, got a boost of from \$5 to \$6 a week under the minimum-wage law. On the day that the Supreme Court declared the minimum-wage law unconstitutional in the District of Columbia, one of the hotels, which was paying \$12.50 a week and giving the employees certain meals,

immediately cut its wages to \$6.

There is no question that the minimum-wage law raised the

pay of the workers. That is what it was designed to do.

In the District of Columbia, which is small, we are able to get good records, and we find that when the wage was applied to the lower-paid employees the maximum came up all the time—more and more women got above the maximum. That is a fact—it is on record.

In New Jersey, where we made the minimum wage our study—I think it was in 1923—we found that women in that State were getting a little above \$12 a week. I think I am fair in saying that. That took in all the employees, so far as I made a study of it. It was a sampling study; and, of course, we took good employers and bad. The median wage was something over \$12 a week. Now, an average wage means nothing, because we never know where the average starts or where it leaves off; so, we never have the average wage, but we have the median, where one-half are paid above that sum and one-half of them are paid below that sum. So far as minimum-wage legislation in the United States is concerned, it did help the lower-paid women in the lower-paid industries.

Miss Peterson. Anyone who is interested in securing information appertaining to whether or not the minimum becomes the maximum, will, I think, be very much interested in some information which has been compiled by Mrs. Edson, of the Industrial Welfare Commission of California. She has compared the proportion of women in mercantile establishments who receive \$13. I think New York was one

of the States in which she drew a comparison. In California they have a minimum wage of \$16, and for a period of years there was a very noticeable increase in the minimum wage to over \$30. I am quite sure she will be glad to send the information to anyone who desires it.

Reports on Investigation of Home Work

Chairman Johnson. We will now take up the discussion on home work. I am sorry that Miss Carr is not here; she was to give a report of the investigations on home work in Pennsylvania. We have reports from several States where there are regulations regarding home work; and Miss Matthews, of the Children's Bureau, Miss Anderson and Miss Peterson, of the Women's Bureau, who have directed studies relating to home work, are here, we might take about 15 or 20 minutes for discussion of home work.

Miss Matthews. May we hear something from Canada on that subject? Do the Provinces have home work, and if they have it, do they regulate it?

Mrs. Gurnett. In Ontario, in a city with more than 50,000 population, under section 52 of the act, an inspector has to go into a home and give a permit. That would include Toronto, Hamilton, Ottawa, and London.

Chairman Johnson. What lines are covered by home work regulations?

Mrs. Gurnett. Only clothing—wearing apparel.

Chairman Johnson. It is the same in Massachusetts. Our homework regulations are limited to wearing apparel. The establishment of trade boards came about through the conditions in sweated industries and home work in New England.

Mr. Fester. We made a survey, looking into the question of home workers, for the purpose of establishing a minimum wage, but we found so little that we did not think it was worth while. It may become a problem some time in the future, and if it does, we will deal with it, because we have ample power.

There has been so little home work in Ontario that we have not dealt with it.

Mrs. Gurnerr. According to the annual report of the department of factory inspection, about 1,000 permits were issued to home workers last year.

Chairman Johnson. Wisconsin applies a minimum wage to home work. Miss Swett, will you tell us about that?

Miss Swerr. Prior to 1921 our home work law was similar to most laws regulating home work, it dealt mainly with the health of the worker and the consumer; that is, the place where the home work was done was required to be sanitary. We thought that the danger was to the consumer, through the spread of disease. However, the big evil was in the long hours of labor and the employment of small children. It had not become a big problem in our city [Milwaukee], because not so much home work was done there; but we wanted to tackle the problem before it got beyond control.

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There are two kinds of permits which apply to all manufacturers sending out goods to be altered, manufactured, or repaired in a home, one of which is issued by the industrial commission, and permits the manufacturer to send out home work. Before he gets that he must satisfy the commission as to his compliance with the labor laws in his plant. Then we must also be satisfied that the rate he intends to pay his help is such that it will be the same whether the work is done in the home or at the plant. It is an easy matter to test the rate by the pay rolls if the same work is done in the plant as in the home; but if the same work is not done in the plant, we bring a number of the home workers to the plant. Sometimes some of those the manufacturer intends to employ at home work are among those who have been employed in the plant.

The other day I gave a test to 15 workers and found out that the rate was correct; in fact, it more than satisfied our test as to the

adequacy of the rate.

We say that if 75 per cent of the workers can earn 3 cents more than the minimum wage set, then the rate is considered adequate. If anybody falls below the given minimum rate per hour, then the trouble is with the worker, not with the rate. This test which was made on the home-work rate showed that $87\frac{1}{2}$ per cent of the women made 3 cents more than the minimum rate per hour. We had no hesitancy in letting that firm have a permit. This was a retest of a rate, because there had been some complaints that the women were earning only a few cents per hour. The test did not show that, so we felt that the permit could be continued. If we had found that the rate had fallen below the minimum, the permit would have been canceled.

We will not issue permits to children to work at home work. We have made the employer responsible for seeing that there are no children employed in home work. When employers find that out, they often give up the notion of having home work, because they do not want to guarantee that the children in the home will not be

employed at such work.

So far it has not been a big problem with us. I do not know how a law similar to ours in a city the size of New York or Philadelphia would work out, or whether the best thing to do would be to forbid home work entirely in cities of that size. I know some feel that way. We have not felt that we need to prohibit home work, because we are able to control it.

Chairman Johnson. You may be interested to learn that the Massachusetts commission this year voted that the minimum rates should apply to home workers as well as to workers in factories. Previously that had not been so. The National Consumers' League has always been interested in the subject of home work.

Miss Marsh. We withdrew from that field some years ago.

Chairman Johnson. Miss Matthews, will you tell us something about the study of the Children's Bureau relating to home work?

Miss Matthews. The Children's Bureau has not made any study in that department since our meeting in Paterson. Everything we have done has already come before the members of this association. I will be glad to send a copy of the report to anybody who wants it.

I understand that the Women's Bureau has been getting together more recent material than that.

Miss Peterson. We have now prepared a bibliography on the subject, and Miss Brown, who has been doing the work, has brought together a great deal of information on certain studies. New York has made a very thorough study of the subject as it relates to work in that city. We have had the privilege of seeing a copy of the report in typewritten form, and it is now in the hands of the printers. New York will give a copy to anyone who asks for it.

There is also a report from Pennsylvania; and there is a section of Miss Matthews' report contained in the proceedings of this convention two years ago. We have brought them together, and that pub-

lication will be available to anyone who is interested.

Just to summarize: We have tried to keep the subject alive, because we know that home work is going to be a great problem in the future. It is increasing in great strides; employers all the time, are seeking to get work done cheaper than they can get it done now, and the underbidding in factories is very serious.

Miss Swert. I do not think that is true of all employers. There are apparently reputable hosiery companies who do not want to take advantage of a situation which is only temporary. In Milwaukee the home-work rates were very high; women made higher wages than they could earn in a plant. I can see where an employer would not want to increase the size of a plant to accommodate workers, when it is only a temporary situation. I do not mean to say that all employers have had that in mind. I think that the main urge is to get work done cheaply.

I told about only one kind of permit. We still have the employer who gets a license from the board; he gets a license for the premises, for which he pays a fee. That is taken care of by local boards of

health—they make the inspections and grant the licenses.

Doctor Patton. I am not particularly concerned with home work. In a general way I know that in New York City the growth of home work in recent years has been very rapid. It is done of course for economic reasons, not solely because of the lower wages. In New York there is no semblance of minimum-wage regulations of any sort. There is, however, a constant state of chaos in the clothing industry in New York City, among manufacturers of certain kinds of cheap clothing. Rochester makes high grade men's clothing. In New York City for many years there has been an attempt to bring about a state of peace between the union workers and the employers; the more reputable employers joined the organization, erected factories, and had reasonable conditions as to air space, ventilation, toilet facilities, and all the things that go with modern factories. Now, because of intense competition, many employers refuse to join that organization, and instead resort to home work, not because the rate is lower, but because the work is done at the home. They escape the structural and the maintenance requirements in factories. If a manufacturer gets an order for 10,000 blouses of a certain sort, he may put up a sign in his window that he wants employees to make those blouses, and they may take the goods away to their homes. He gets the work done at a lower rate and he saves the expense of maintaining a factory. The rental element on Manhattan Island is great. There are also the structural and the maintenance regulations, which altogether add a burden upon the manufacturer who carries on a business. He is placed in competition with the fly-by-night operator. In New York, the boards of health do inspect premises so far as contagious diseases and all that sort of thing are concerned. The department of labor inspects tenements before it issues licenses. When we have so many hundreds of separate homes, it is impossible, unless we have a home-work inspector on the job all the time, to keep any track of what is going on. Personally I think the home-work situation in New York has become very much worse in recent years, and I am not at all optimistic about developments in the future.

Although this is entirely beside the point, I can not see why any manufacturer wants to open up a place of business in New York City. Why doesn't he go out where there is more space, more air, and so on? Workers, however, prefer to live in New York. I asked a young woman where she was going to spend her vacation, if she was going to the Adirondacks. She told me that she had never been 50 miles from New York City, and could not understand why anybody should wish to get so far from New York City that they couldn't get back the same night. That is one explanation of why our factory workers stay there. It is all part of what appears to me to be a vicious circle. I would like to be more hopeful and more sanguine about the home-work situation in New York than I am at present.

Miss Peterson. It is not confined to the territory around New York City, because with the use of automobile trucks, partly-made garments can be carried many miles. I remember being in Bridgeport one day when two or three large trucks brought work from New York to Bridgeport to be finished.

Doctor Parton. Some of the very largest shirtmakers make only the neckbands.

Mrs. Gurnett. In Ontario there is a great deal of crocheting of babies' jackets done, and so forth, also beading of dresses. One thing I found last year that I had not noticed before was that the women were wearing finer handkerchiefs in their bracelets. They were about six inches square; they were made by the Swiss embroiderers and sent out to be finished. Many girls are employed, but none of them under 14.

Our adolescent act takes care of the child between 14 and 16; during the holidays they do not need a permit. The pay was miserable; I think it was \$1.15, and out of that the women had to pay carfare to get the goods, and back again. One woman said that she made 72 baby jackets for \$10, and she was paying that \$10 a month on her washing machine.

We go into the homes to find out what conditions are. If we find a house placarded for measles, diphtheria, or scarlet fever, we immediately notify the board of health, and they send out and burn up the wool, according to what the regulations are. We also notify the firm which has sent out the work. We have found many workers also on dresses and garters, but the making of dresses and the crocheting seem to be the worst-paid and the slowest jobs.

Chairman Johnson. Has Mr. Ainsworth anything to say on behalf of Pennsylvania?

Mr. Ainsworth. I do not believe that there is anything that I can say that would be important at this time. I regret that there is not a representaive of the women's bureau here to give you first-hand information regarding the Pennsylvania method of handling the home-work situation.

Our general experience is very much the same as that of Wisconsin, and our method of handling the problem, with the exception of the minimum-wage feature, is very much the same. A large part of the home work is sent into Pennsylvania by nonresident firms, and that is the phase of the work which gives us the most trouble. We have had very fine cooperation from Pennsylvania firms, and the regulations were well supported during the public hearings by manufacturers not engaged in home work.

The method of procedure has been to consider the home as an extension of the factory, and every factory regulation, the women's law, and child labor law that are applied to normal factory operations are applied to the homes in which home work is carried on. We do not consider home work as an evil, but as a beneficial industry, if

properly regulated. We believe we have been successful.

How to Cope with the Hazards of Juvenile Employment

Chairman Johnson. I am very sorry that Mr. Antonin Galipeault, Minister of Labor of the Province of Quebec, is not present to tell us how to meet the hazards due to juvenile employment. I was very much interested when I saw that question on the program. One of the methods attempted in some of the States to protect children is to provide for extra compensation to children who are illegally employed, making it something which the employers can not escape. I think Miss Marsh can tell us something about that.

Miss Marsh. The National Consumers' League for the past several years has been studying the question of compensation to injured children and minors. We have been concerned with what minors actually get when they are injured, whether or not they are legally

employed.

There are seven States which prescribe additional compensation for minors injured while employed in violation of the child labor law. The oldest is Wisconsin, which prescribes double compensation if the child is employed without a permit, and treble if employed in a prohibited occupation. New York has a double-compensation provision, so have New Jersey, Michigan, and Maryland. Illinois and Missouri add 50 per cent. Some of the States provide that the employer can not insure against this risk; but in case the employer is insolvent and has insurance, the insurance carrier is required to pay the additional compensation.

Wisconsin, from its recent experience is strongly of the opinion that this provision gives strength to the enforcement of the child labor laws, particularly the section prohibiting employment of chil-

dren in hazardous occupations.

What children actually get when they are legally employed, again is a matter of State regulation. In 14 States, if the injury is a permanent one, such as the loss of a limb, compensation is based not on the wage of the minor but on his earning capacity at 21 years. That is arrived at in a number of ways. Some laws simply provide that a minor's estimated wage shall be determined by the wage of an adult in the occupation in which he was injured. Wisconsin, I believe, gives the maximum for permanent injury; that is, if a child has lost a hand or any portion of his hand, his compensation is based, not on his wage, but on the assumption that when he reached manhood he would have been able to earn a sum which would have entitled him to the maximum. The rest of the States base their compensation on the actual wages of the minor. We have been trying to interest these States in changing their standard and adopting the measure that the 14 States now have. Minnesota and Idaho made that change this year.

In studying the State reports we find that there is a sharp upward curve in the number of injuries, particularly of a permanent character, occurring to minors after the sixteenth birthday. I happen to have a few figures here this morning. In Illinois, in 1928, out of a total of 954 injured minors under 18 only 93 were under 16, or approximately 10 per cent; 347 were minors 16 years of age, and 514 were minors of 17. In reports from other States that same sharp curve occurs.

There are more children over 16 being injured because of the dropping off of protective legislation at that age. We hope that the near future will see States, whose child-labor laws accept 16 as the maximum for the prohibition of employment in hazardous occupations, increase the number of such employments closed to minors under 18. We also hope, as I said before, that for permanent injuries they will adopt the provision that compensation shall be based on the earning power at age 21 and not on actual wages.

Chairman Johnson. We would like to hear whether there are any Canadian Provinces that have such a provision?

Mr. Smitten. In Alberta the maximum amounts continue for life. Mr. Ainsworth. At the last session of the Pennsylvania Legislature two bills were introduced by agencies entirely outside our department. One was to call for double compensation in case of injury to an illegally employed minor, the other was to call for normal compensation according to the general provisions of the compensation law. The one for double compensation got out of committee, but the one for single compensation died on the floor of the house. It is interesting to know that at this session of our legislature we had a concerted drive for raising the standards on the part of groups interested in the question. It was the first time we ever had such a drive, except for the adoption of the women's law. It is a very encouraging thing to look forward to in the history of our State.

Miss Peterson. I would like to ask whether or not a girl of 16 who has had her finger nipped off by a punch press is protected in any of the States with double or treble compensation for accidents

to minors; and whether any of these States protect her, if it is considered legal employment. Can a girl of 16 be legally employed on a punch press?

Mr. Ainsworth. She can not in Pennsylvania.

Miss Swert. I think those specifically listed apply to boys, not to girls. The girls get the short end of it under that provision. A girl is not paid on what she is earning at 16 but on what her probable earnings would be at age 21. Take a laundry worker: A laundry worker does not earn \$30 a week, but that would be what her probable earnings would be. You may have a laundry worker whose aim was something else. In Wisconsin we had a girl of about 16 who was working on a machine and she was trained to become a stenographer. We did not estimate her earnings at 21, because she was only earning money in vacation time to go on with her commercial education.

Chairman Johnson. It might be interesting to know that the Massachusetts child-labor committee is making a study of accidents to minors, especially to minors illegally employed, considering in that connection the possibility of introducing legislation later on as a means of checking illegal employment.

Miss Swerr. If you are going to have double or treble liability, along with it you must have a strict enforcement of the law, or you are not going to do the child much good. You will have to check up the accidents and the ages of the children, or you are not going to do much good to the children by having that feature in the law. You must teach the employers how to comply with the child-labor laws, and they will do it.

[Meeting adjourned.]

THURSDAY, JUNE 6-AFTERNOON SESSION

Gen. E. Leroy Sweetser, Commissioner Massachusetts Department of Labor and Industries, Presiding

Chairman Sweetser. Factory inspection is something that all heads of departments are very much interested in, because we rely upon our factory inspectors to give us the results of facts which exist in our districts or in our States. They are the eyes for the department head; they are like the patrols in the Army, we learn from their reports conditions as they exist in the establishments they inspect; and a great deal depends, it seems to me, upon the type of factory inspectors we have, and the kind of instruction, education, and training we give them while they are in the service, in order to bring about the results and to secure the information our departments desire.

I am very much interested in factory inspection, especially in the promotion of safety work. I think the most important work of the department of labor and industries, as it is constituted in Massachusetts and in most of the industrial States, is industrial safety. It reaches everyone, not only those actively engaged in industry, but those in the homes; it affects the wives and children, and it affects us as individuals in a State or a Province. I consider the most important work of the department of labor and industries in my State that of protecting workmen, workwomen, and minors from injury and suffering occasioned while engaged in industry. That work in our State (and I suppose it is the same in all States) is accomplished mainly through our factory inspectors.

Part of our work is safety education—teaching not only the employer and the employee, but the public as well, the need of safety practices and protection from industrial injury and industrial

disease.

In Massachusetts we count an occupational disease as an industrial accident—an injury in industry. While we are proud of our industrial accomplishments and our big plants and our factories, we can not forget the accidents and the injuries; we must protect the worker from his own carelessness. One method of accomplishing this is through our factory inspection, while another is through one of the various safety promotion and safety education programs.

We have delegates here from the State of Ohio. I have been particularly interested in Ohio lately, because they have been sending to me reports of their safety work and their safety contests. They are desirous of cutting down, this year, the number of their

accidents.

We are fortunate in having Mr. W. T. Blake, the director of the department of industrial relations of Ohio, present. He will tell

us something about the "Promotion of safety education through State departments of labor," a subject in which we are all vitally interested.

Mr. Blake. I intimated to your presiding officer that I approached this assignment with some misgivings because I had been a State official only since January 14th. Fortunately for me, however, Mr. Miles, of the division of statistics and employment agencies, Mr. Evans, our superior of the division of actuarial accounting, and Doctor Obetz, of the safety and hygiene department, have also come. Because I think it may be of interest to you, I would like to say that Doctor Obetz gave his personal attention to the inspection of the Cleveland clinic disaster; that Mr. Miles, a native of Canada, during the years he has been officially connected with the division of stastistics and employment agencies, has made a real contribution to the State of Ohio; and that Mr. Evans is considered in our State, and in other States I believe, to be an expert in his line of determining risks and of fixing premiums to meet those risks. I mention these gentlemen just informally, so that if this paper should be disappointing, you may refer to them for information along the lines with which they are identified.

Governor Cooper asked me to bring to you his greeting and his tremendous interest in the work that this group, individually and collectively, has done, and is doing, for the various Commonwealths and districts which you represent.

Promotion of Safety Education Through State Departments of Labor

By WILLIAM T. BLAKE, Director Department of Industrial Relations, Ohio

The alleviation of suffering, the conservation of man power, and the preservation of economic resources are the principles underlying accident-prevention work in the industries of Ohio, as carried on by the department of industrial relations, its various inspection bureaus, and the industrial commission of the State under the immediate direction of its division of safety and hygiene.

Inspection work in the industries of Ohio has been carried on for many years by the various bureaus operating under the immediate direction of the department of industrial relations and splendid work has been accomplished in the way of inducing employers to install proper safeguards for the preservation of life and limb of the workers.

Some years after the adoption of workmen's compensation the employers and workers of the State realized that, if it be true that more than 90 per cent of accidents are preventable, it was the course of wisdom to carry on an additional safety campaign in Ohio industries with a view to eliminating accidents which were unprofitable for both. The culmination of this idea was the organization of the division of safety and hygiene and it entered the fight against industrial mishaps with the express purpose of appealing to the human element largely responsible for accidents, as well as supplying the incentive for the installation of mechanical safeguards and the encouragement of safe practices. To defray the expenses of this work a constitutional amendment set aside 1 per cent of the premiums paid into the State insurance fund.

The slogan of the industrial commission, "Safety is better than compensation," exemplifies recognition of the fact that compensation was in no sense designed as a substitute for wages. No employee who is the victim of a lost-time accident can escape inroads on his income. The law and resultant benefits were designed simply to provide against dependency on the part of the injured or the families of those who might be victims of fatal accidents. Thus it will be readily apparent that no worker in Ohio industry can hope to profit by being on the compensation roll. On the other hand, industrial accidents are equally unprofitable to the employer. Compensation and medical expense are only a small part of the economic loss he sustains. Accidents necessitate the substitution of unskilled help and are demoralizing to personnel and retard production, all factors in determining whether business is conducted at a profit or at a loss.

After years of surveys, statisticians of national repute have arrived at the conclusion that the indirect costs to the employer, of industrial accidents, are four times those of the direct costs. On this basis it is estimated that accidents in industry cost Ohio employers in 1928 the stupendous sum of over \$90,000,000. This does not take into consideration a conservatively estimated loss of over \$5,500,000

in wages to workers.

The tribute levied against the ranks of Ohio workers annually is equally as startling and far more important from a humanitarian standpoint than the monetary loss. In 1928 a total of 229,233 injury and occupational-disease claims were filed with the industrial commission. Of this number 1,108 were fatalities, 27 were permanently and totally disabled, and 2,023 workers lost some member or members of their bodies. The havoc is more frightful than that wrought in war. Last year alone Ohio workers lost 186 eyes, 44 arms, 31 hands, 30 legs, 9 feet, 1,590 whole fingers, 737 parts of fingers, and 76 toes. A total of 53,847 workers lost an average of 27.3 days' time, 34,727 lost an average of 3.8 days' time and 137,501 received minor injuries requiring medical attention; while 35,807, or 15.6 per cent, of all injuries resulted in infection.

The problem of reducing this heavy toll is the deep concern of the department of industrial relations, its various inspection bureaus, the Industrial Commission of Ohio, and the division of safety and

hygiene.

The last-named is an educational safety agency engaged in the work of attempting to inculcate the spirit of safety consciousness into the minds of both employers and workers. It exercises no regulatory functions and issues no mandatory orders, this being the province of the State agencies having to do with various phases of industrial inspection. Its safety survey service, given without cost or obligation, is purely suggestive and designed to appeal to humanitarian instincts and economic interest. Periodically it issues bulletins and posters emphasizing the safety message, and these are available without cost to any employer interested in the welfare of his employees and in the maintenance of the margin of his own profits. The system is cooperative and inspires confidence. It is idealistic as well as practical and appeals with equal effectiveness to the executive and to the man on the job; and the mutuality of that appeal makes safety work the most valuable contact system in modern industry,

levels prejudices, engenders good will, and advances humanity a long stride toward that ultimate goal of the common brotherhood of man.

Since the entry of the human element into industry, few of us would be sufficiently hardened to say we do not believe in safety from a humane standpoint; but there are still many employers who are not thoroughly sold on the idea that it is profitable, and who still are unable to see further than the original expense of providing the necessary safeguards for protecting the lives and limbs of their employees. On this point there is neither the time nor the necessity for specious argument. Let the facts speak for themselves.

The Buick Motor Car Co. saves \$70,000 a year by safety work; the Eastman Kodak Co. reduced its accident costs from \$35,000 a year to \$3,500 a year; the American Car & Foundry Co. gets back \$1.70 for every dollar it puts into safety; and the United States Steel Corporation reports \$14.60 return for every \$9.70 spent for

safety.

In our own State—Ohio—we find some amazing results from safety efforts which are properly organized and systematized in

plants that keep at it eternally instead of spasmodically.

The Columbia cement plant division of the Pittsburgh Plate Glass Co., at Zanesville, worked a total of 1,094,070 man-hours without a lost-time accident, having a clear record of 473 days; and the Ironton plant of the Alpha Portland Cement Co. is well into its third year of no lost-time accidents.

The Hamilton Foundry & Machine Co. reduced its average annual wage loss from \$13.80 in 1927 to \$8.12 in 1928, despite a greater ac-

cident exposure.

The sheet-mill department of the Armco plant, at Middletown, with an average of 1,037 men employed, went 88 days without a lost-time accident, while the maintenance department with 637 men went 152 days.

Since the inauguration of safety work in 1924, the Indiana, Columbus & Eastern Traction Co. increased its mileage per accident 7,529

nıles.

The American Can Co.'s Toledo Plant, with 217 punch presses in use decreased its accidents 48 per cent in 1928 and has operated more than two years without a single amputation.

The Ashtabula works of the American Fork & Hoe Co. went eight

months with one lost-time accident.

The Goodyear Tire & Rubber Co., Akron, made 33.9 per cent reduction in accidents for the first 10 months of 1928 and estimates workers saved \$70,000 in wages as the result of safety efforts. In October, 1928, 11,140 employees of this company went through the month without a lost-time accident.

The American Bridge Co., Canton, went 348 consecutive days without a lost-time accident; and the efficacy of safety work is shown by the fact that the number of days worked per day of disability was 78 in 1924, 69 in 1925, 471 in 1926, and 2,027 in 1928.

Hundreds of similar records of plants that have taken up safety work seriously might be cited; but those mentioned from widely separated sections of the State should be sufficient to show that safety is not only an indispensable factor in welfare work but that it is good business and gives returns in dollars and cents as well as in the

increased amity it inspires among employers and workers.

Industrial accident-prevention work is closely allied with public safety. The safe man in the shop is apt to be the safe man on the street or in the home; and the inspiration he gets through the educational safety efforts of the State and shop committees is calculated to find reflection in the attitude of his family and friends toward the problems of universal safety. Viewed from any angle, the perpetual effort for accident reduction in Ohio industries is well worth the time and money devoted to it; and while the coveted millennium in preventive measures may be far into the future, there are manifold evidences that the leaven is working and that the day will come when every employer will associate safety with production and every worker will realize that safety is an individual responsibility and individually profitable.

The employer who teaches safety in his plant is not only protecting his own personnel and his own profits but he is making safe workers as well, who may pass on and sow the seeds of safety-thought in other fields of endeavor. It is an endless chain and, no chain being stronger than its weakest link, every employer is faced with the individual responsibility of creating an atmosphere of safety in his own plant, for his own benefit, for the benefit of his workers, and for the benefit of other employers who may later claim their services.

Safety is one of the ideals of industry. Its past is useful only as a basis for comparisons. Practically speaking, it is a thing of the present. But infinitely more important than the past or the present is the future of safety in its universal sense. It should be instilled into the mind of youth in the plastic period of childhood. It should have a prominent place in the curriculum of every school. Children should be persistently taught to care for their own safety and for the safety of others, so that safety-consciousness may become instinctive with the next generation and the generations to come.

Safety is one of the highest ideals of society, perhaps difficult of attainment in its fullest sense but equally as gratifying and profitable as any of the other idealistic motives which prompt us to plan and strive for the betterment of mankind. It is a personal inspiration, all-pervading and soul-satisfying, destined to be one of the most potent influences in the changing fabric of modern life and in shaping the trend of modern industry. It is the spirit of service personified. It is the will of the Master exemplified. Let us all, therefore, visualize it, grasp it, and stick to it, making it one of the tenets of our faith in mankind.

DISCUSSION

Chairman Sweetser. I am sure Mr. Blake will be glad to answer any questions anyone may be prepared to ask him concerning the State of Ohio. You stated, Mr. Blake, something about \$90,000,000 as the cost of safety. Was that for the State of Ohio alone?

Mr. Blake. That seems a rather stupendous figure, but it is based on the facts gathered from employers themselves in their industrial conventions.

Chairman Sweetser. For the State of Ohio alone?

Mr. Blake. The State of Ohio only.

Chairman Sweetser. It costs \$90,000,000?

Mr. Blake. They save that much. I was rather indiscreet in saying that the expenditures and costs, according to the best figures compiled by the manufacturers themselves, and according to their statements, amount to something like \$90,000,000 a year; that much is lost to them by their industrial accidents.

Chairman Sweetser. At the present time?

Mr. Blake. Yes.

Mr. Stewart. I suggest to Director Blake that a report of no lost-time accidents does not mean that there were no accidents. When a man is hurt so that he can not work at the machine he was working with, but he is not seriously hurt—nevertheless it is an accident—a great many firms now put him at something else and he does not lose any time in a wage sense. That practice, while I am not objecting to it from a certain point of view, simply knocks our statistics of accidents all out of kilter. We used to get a report of an accident, where a man lost time for more than one day. Such accidents are still being reported, but they are not being reported when the men do not lose any time.

Unless we can in some way get into our accident schedules the idea not only of lost time but of an accident where a man has to be shifted from his job, we are not getting a full report of accidents. I have made some investigations into this thing, and I find that the firms that go an enormous length of time without accidents—when pinned down, have not gone that length of time without any accidents, but that the men have been shifted to do some other work

without losing any time.

From an accident-prevention point of view, the accident that is not serious and in which a man can be shifted to some other work is just as important as the other, because after all the results of any accident is apt to be another accident. What I mean by that is; if a man gets one-eighth of his forefinger cut off by a buzz saw, it is only an accident that it did not take off the whole finger; in other words,

you have two accidents there instead of one.

It sounds well for the concern, it makes less business for the compensation board, and all that sort of thing; if a man is hurt and does not lose any money, he is not reported to the compensation commission. Even an accident where nobody is hurt at all is important in the study of accidents and accident prevention. If a grinding wheel breaks in two, flies across the building, and goes up through the roof but does not hurt anyone—that is not reported as an accident. Because it didn't knock some man's head off as it went through is simply another accident; that is, while we may be dazed at the number of accidents which are reported, I think this system of shifting a man to another job so that he loses no time is camouflaging the situation, and many more accidents are occurring than are reported.

An accident which hurts nobody, from an accident-prevention point of view, should be reported just as much as an accident that does hurt somebody.

Chairman Sweetser. It gives me pleasure now to introduce to you as the next speaker on this very important subject, Walter Smitten, commissioner of the bureau of labor, Alberta, who will tell us something about the promotion of safety education in that Province.

Promotion of Safety Education Through Provincial Departments of Labor

By Walter Smitten, Commissioner of Labor, Alberta

Being one of the youngest Provinces in the Dominion, and largely agricultural in character, accident prevention under Government supervision is of recent origin, the Alberta bureau of labor, which provides for coordinated inspections, being organized less than seven years.

Manufacturing represents only a small portion of our activities and provides employment for approximately 12,000 workers, while distribution provides employment for approximately 25,000.

Our manufacturing establishments are very small, the general range of employees being from 5 to 50; while our large establishments, of which we have only four, employ approximately 400 each.

The majority of our firms operate in rented premises. These, in most instances, were constructed for purposes other than those for which they are now used, and do not permit the creation of ideal conditions for lighting, ventilation, and safety.

Having in mind the gradual growth of manufacturing industry under these conditions during the years prior to our organization, our task can be appreciated. However, the work had to be performed and the methods we adopted can be described under two granted had in gradual computation.

general headings: Compulsion and cooperation.

Compulsion.—With a view to an understanding being had of the causes of accidents from the operation of machinery, an examination was made of all accident records which revealed that certain types of machines were the cause of an unduly large number of accidents. From this information we were able to draft specific regulations prohibiting use of certain types of machines and providing for proper guards in others. The following will illustrate some of the steps taken:

- 1. Jointers in woodworking shops were causing heavy loss of members. Heads other than cylindrical were prohibited. This has brought great relief.
- 2. Eye accidents from operation of emery wheels were very frequent; employers were required to provide goggles which must be used by operators. Our experience under this has not been so good, sometimes only one pair of goggles was provided and employees refused to use community goggles; in other cases, where each employee was supplied with the goggles, they were kept in his tool box and when they were needed the employee would not take the trouble to go for them. An ingenious employee in one of our larger shops worked out a glass guard which could be attached to the machine, which is working out very well in the few shops where it has been installed.

- 3. The operation of Humphrie, or man-lift elevators, used in flour mills and grain elevators brought a number of accidents from two causes; the first was due to the person who rode forgetting to step off at the top floor, which meant he was thrown off when the belt reached the top pulley. The second was due to familiarity, the person desiring to ride would take hold of the handgrip without ascertaining whether it was the unit with the foot rest and would invariably be thrown off when an error was made. Our inspectors worked out two devices which have operated very successfully. For the first, a tripping device is located 1 foot above the top floor, which operates if weight is on the foot rest when it reaches that level, automatically stopping belt travel. For the second, a cover for each handle was provided, hinged to the belt in such a manner that gripping of the wrong handle was impossible. This has been so acceptable that this type of elevator is now equipped with these devices when manufactured.
- 4. Operation of freight and passenger elevators gave us some concern. Regulations providing for safety devices were put into operation, which has brought good results. Prior to their adoption we had at least one fatal accident from operation of elevators each year; since their adoption over four years ago we have not had a fatal accident.

5. Protruding set screws, pulleys, and belts received attention, and

employers were required to provide suitable guards.

At the initial stage of our work we met with serious opposition from employers. We were informed that this was a new Province, industries were young and struggling; that machinery was secured from regular manufacturers, and was not made specially for our Province; that the condition in which it came from the manufacturers as to guards was undoubtedly acceptable to State departments in other localities, and consequently we were imposing an added burden. This attitude has now largely disappeared and our inspectors are welcomed at most plants and their advice sought.

We now require plans of buildings to be used for manufacturing purposes to be submitted to us for approval; and we can now have provision made for proper lighting, ventilation, exits, and location

of machinery.

We exercise one form of compulsion with some employees. It has been deemed advisable in connection with certain types of work to require the person performing the work to pass an examination and secure a license.

Failure to observe all safety regulations by a licensed workman

may involve suspension or cancellation of his certificate.

Cooperation.—A continued review of accident records revealed that the majority of accidents were not caused by machinery, but were due to what is usually termed "the human element."

To meet this situation we had to consider the psychology of employer and employee and endeavor to create an attitude of mind which would at all times place prevention of accidents first. This we found was a difficult task and one that could not be accomplished without the expenditure of considerable time and energy.

One of the first steps taken was to require the establishment of accident-prevention committees in all plants where 10 or more per-

sons were employed. This brought results only in those plants where the foreman or employer took an active interest in the work of such a committee.

We also turned our attention to an educational campaign with workmen and employers. To carry this out various methods have been adopted. Inspectors, on their visits to plants, talk with foremen and individual workmen, calling attention to particular hazards; meetings are held with associations of employers and organizations of workmen. Noon meetings are being held in the larger plants.

Tabulations are made each month of certain types of accidents which are considered preventable and a circular is sent to employers and workmen in the industry affected calling their attention to this,

with a statement of time loss and costs.

Posters are prepared and placed in conspicuous places in the various industrial establishments.

We are convinced that a large percentage of the accidents which occur can be prevented, but before we can get to the position where it can be said that we have reduced accidents to the minimum the cooperation of employers and workmen must be whole-heartedly given.

DISCUSSION

Mr. Clarke. Mr. Smitten has spoken of a shield in front of the emery wheel to protect a man's eyes. In Ontario, we have not adopted that as part of our specific regulations, but a glass guard reinforced with metal. We have had a great deal of trouble in days gone by with wheels breaking, and found it necessary to put a metal guard over them besides having the glass. We find that the number of accidents has been reduced.

There is another thing in regard to punch presses which might be a good thing to mention. When investigating some accidents on punch presses last week, we found that some of them had happened in a very simple way. In one instance, when the man got up to adjust the timer, he had jumped down and tripped the press and smashed his finger. We have had to make a saddle for those presses, instead of having a man come down in the old way.

Miss Johnson. What is the method of making regulations in Alberta; are they made directly through the board?

Mr. SMITTEN. In making our regulations, we do not have a board; it is a bureau with one individual in authority. In conjunction with the inspectors I get the regulations drafted; then I have to get the lieutenant governor to approve those regulations.

Miss Johnson. Is that done in cooperation with the employers and the employees?

Mr. SMITTEN. We discuss it with employees and employers and make a rough draft first; and we discuss it again with the employers and employees before we reach the final draft; then we go to the lieutenant governor for his approval.

Chairman Sweetser. Safety education gives everybody, both worker and employer, a knowledge not only of safety work but of the number of accidents that are happening, not in their own plant

alone, but throughout the district, and teaches means and methods of preventing accidents. The result is that safety education is bringing about a habit in the individual of looking out for safety, just as is done in the Army, where men are drilled so that under any circumstances they will have the habit of doing that which they have been taught.

The object of safety education, therefore is to inculcate a safe

habit among the workers.

I don't want to say too much about Massachusetts, but we evidently have the same system of reporting accidents as you have in Canada. We have a department that pays the compensation, while the department of labor has the duty of preventing accidents, and the two

boards or departments work very nicely together.

Personally I find in this matter of safety education that the more we can get the employer and the employee interested in that work, the better it is; we have succeeded in doing this by interesting them in safety work and giving them credit for it. We may organize methods in the department and we may issue propaganda; they read it; it comes from a State department. But if we can get the employers and employees to do it themselves, it seems to me we have

accomplished the best results.

Besides the organization of safety committees, using the radio, the circular, the picture, and other well-known methods, we have organized three safety councils in Massachusetts, one in the eastern part, one in the central part, and one in the western part of the State, located in Boston, in Worcester, and in Springfield. These have been organized with the help of the department. I am a director in one, and on the executive committee in the other two. The councils are doing wonderful work in interesting both the employer and the employee in the work through the safety meetings which are called in the different plants. This year they are having a safety contest among the three councils, and they are sending in monthly reports. The Boston council has taken an interest in the concerns where the liability to accident is greater, and each month reports on 155 firms having 83,578 employees; the council at Springfield reports on 66 firms including 24,372 employees, and the one at Worcester, 44 firms with 24,950 employees. What I want to call attention to is the success of the employers doing the safety work themselves, paying for it themselves, and creating their own enthusiasm, while the department does not get any credit. It is the accomplishment of results that counts. It is bringing about fine educational work among the industries in our State.

In connection with the safety council in Boston, called the Massachusetts Safety Council, a few years ago we found, as possibly you have found, that the largest number of accidents at that time occurred among our transportation utilities. We had a meeting of the heads of all the railroads and went to work. To-day transportation does not contain the largest number of accidents. What I am leading up to is that the president of the Massachusetts Safety Council is the president of the elevated railroad in the city of Boston, which shows the time and interest he is giving to safety work.

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Last year we took up the number of accidents in the building trades. You know how dangerous those trades are, and how reckless the men are who work at them. We had a contest among the building trades of the Commonwealth. It has been very successful. We got up a circular—I have a copy of it here—showing the construction of a building; we put that out among all the employees in the building trades, those in the union trades and all that we could get in touch with outside the unions. The building trades are pretty well organized in Massachusetts. We gave prizes in money to the ones who could find in the picture the things that were wrong, the things that were dangerous. As a matter of fact, the winners and a number of others found more dangerous practices in that picture than the committee had planned.

Last year we completed the new North Station in Boston, a very dangerous building because in connection with it there is a big amusement garden, seating 17,000 people—something like the Madison Square Garden in New York. About 80,000 people passed in and out of that station daily; the men worked day and night on that building; we had safety committee meetings there, and we had our

inspectors on the job all the time.

We completed that building without the loss of a life—and two other big buildings at the same time—which is a fine record compared with 30 years ago, when the South Station was built before they had

any safety department and 28 men lost their lives.

I am sorry the Commissioner of Labor of New York is not able to be here. However, New York has sent a good representative, and I want you people, especially in Canada, to meet and to know the next speaker, Dr. Eugeue B. Patton.

Doctor Patton. Before I say anything about the topic under discussion, I would like to mention one or two things. I would like first to refer to the statement made by Mr. Blake, of Ohio, which seemed to occasion some comment, namely, his figure of \$90,000,000 lost in the State of Ohio by accidents. The way that particular figure and other similar figures get around, is this: Some seven years ago Mr. Heinrich, of the Travelers' Insurance Co., made an investigation into 5,000 accidents which had been reported to the Travelers' Insurance Co., endeavoring to ascertain the incidental, or indirect, costs of industrial accidents. If a ladder slipped and the man fell and fractured his leg, so much compensation was awarded. But Mr. Heinrich went further than that and tried to discover how much loss was occasioned to the employer, other than the specific compensation awarded, and that he called the indirect cost. Without going into the details, he came to the conclusion that the indirect costs were four times the direct costs, that for every dollar of direct compensation and medical aid awarded there was \$4 additional cost consisting of items which in themselves individually did not amount to very much, but which in the aggregate bulked very large; so his general conclusion was that if in a given State the actual compensation awards amounted to \$1,000,000 the indirect costs were \$4,000,000. making a total of \$5,000,000.

Among the factors of incidental cost, Mr Heinrich listed the

following:

(Excluding compensation and liability claims; excluding medical and hospital cost; excluding insurance premiums; excluding cost of lost time except where actually paid by the employer.)

1. Cost of lost time of injured employee.

2. Cost of time lost by other employees who stop work (a) out of curiosity; (b) out of sympathy; (c) to assist injured employee; (d) for other reasons.

3. Cost of time lost by foremen, supervisors, or other executives as follows:
(a) Assisting injured employee; (b) investigating cause of accident; (c) arranging for injured employee's production to be continued by some other employee; (d) selecting, training, or breaking-in new employee to replace injured employee; (e) preparing State accident reports, or attending hearings before industrial commissioner.

4. Cost of time spent on case by first-aid attendant and hospital department staff, when this time is not compensated by insurance.

5. Cost due to injury to the machine, tools, or other property or to the spoilage of material.

6. Incidental cost due to interference with production, failure to fill orders on time, loss of bonuses, payment of forfeits, and other similar causes.

n time, loss of bonuses, payment of forfeits, and other similar causes.

7. Cost to employer under employee welfare and benefit systems.

8. Cost to employer in continuing wages in full of the injured employee, whereas the services of the employee (who is not yet fully recovered) may be worth only about 50 per cent of their normal value.

9. Cost due to the loss of profit on injured employee's productivity and on

idle machines.

Then in regard to the comments Mr. Stewart made (in speaking of the paper which had been read) as to the failure to report accidents to men who had not lost time, medical experts tell me it is a growing practice. Not over a month ago a plant medical director told me that every accident to an employee in his establishment was attended to by him personally. If a man hurt his hand, he would immediately walk to the doctor's office and get proper medical treatment. The medical director would attend to the injury, and then go through the plant and direct the foreman or supervisor to give the man with the injured hand some job or task-it might be that of a watchman—which would not require him to use the injured hand. The doctor would do that rather than see the man go on losing his wages, losing more than one-third of his wages, because we can pay only a maximum of \$25 a week as compensation. He keeps the injured man at that light work while his hand is healing, at his full wage, therefore he is much better paid than he would be under compensation.

The difficulty, aside from the one Mr. Stewart spoke of, is that it would be unsafe to intrust the ordinary workman or plant manager with such responsibility because he might not be able to anticipate or to diagnose properly the result of that injury to the hand; even though the man did not lose the injured hand, it might result

in a loss of mobility or some other function.

I do feel, as Commissioner Stewart says, that to the extent the practice grows of not reporting accidents it will tend to weaken the validity of our accident statistics; secondly, there is great danger that the workman injured in that way may not get the rest and treatment and attenion he really needs.

I am perfectly well aware, although it has not been told to me, that the program committee of this association gave the invitation for these remarks primarily, not because they wanted to know what New York was doing in regard to safety work, but to see and hear Commissioner Perkins herself. I regret that she is not here; I did

not know until just before I left that she would not be able to be here. To those of you who have met her it is unnecessary for me to try to recount to you the advantages and qualifications she possesses for her present position. There comes to my mind here her vivid personality, which impresses everyone who comes in contact with her, also the boundless fund of enthusiasm and the very intense interest in safety work she possesses. I think that is easy to understand, when it is considered that her interest in this field of work antedates her connection with the New York State department of labor. It dates back to the factory fire of 1911 in New York City, when 146 girls were burned to death. That interest she has continued to retain from that day to this.

I merely intimate to you that whatever may be the specific nature of the problem which arises, we are sure that Commissioner Perkins will consider it always from the safety point of view, and will leave nothing undone to bring about the greatest possible degree

of safety.

It is entirely unnecessary for me to go into detail concerning the

various branches of safety work New York is undertaking.

The inspection activities cover a wide range, including factories, mercantile establishments, tenement houses, construction work, boilers, mines, quarries, explosives magazines, tunnels, and subway and caisson construction. In the month just ended—May, 1929—there were, in round numbers 18,000 factory orders issued, and during the same month there were more than 16,000 compliances by employers with factory orders. Similarly, there were approximately 1,000 orders issued relating to mercantile establishments and a nearly equal number of compliances. The orders issued in the other fields were naturally not so numerous, but the same policy of inspection was pursued in each.

The inspection orders may be classified under the following gen-

eral headings:

Administration, sanitation, accident prevention, fire protection, children, women and minors, day of rest, and payment of wages.

The bureau of industrial hygiene, with its sections of inspection, special research, accident prevention, and education is continually engaged in safety research and special studies, particularly in the

field of prevention of industrial diseases.

You will be more interested, perhaps, in a brief statement as to a new method of attack upon the industrial accident problem which Commissioner Perkins now has under way. Realizing that accident-prevention work to be successful can not depend alone upon the efforts of employers, but must enlist the active interest and cooperation of the workers, she has invited all central labor bodies in the State to send delegates to the office of the governor on June 26 to discuss plans with the governor and herself for the formation of a committee of workers to conduct a safety campaign.

Following is the text of the letter of invitation sent out on

May 28:

My Dear Sir: The prevention of industrial accidents is a subject which has for many years engaged the attention of His Excellency Governor Roosevelt and of the undersigned, and we are quite sure that any movement designed to attain this object will both deserve and receive your approval and active support.

Study of the causes of industrial accidents shows that only the active leadership of the workers themselves can substantially reduce accidents and injuries in industry. Governor Roosevelt wishes to receive the assistance of organized labor in a labor unions' safety campaign, appealing directly to the unions and the individual workers, for systematic efforts to reduce industrial accidents and injuries.

To this end Governor Roosevelt has requested me to invite your organization to send delegates to a conference to be held in the executive chambers at Albany, on June 26, at 12 noon. At that time the governor will invite discussion as to the nature of the campaign, the means by which it may be made effective, and will place at the disposal of the unions all the facilities of the labor department.

I confidently count on the cooperation of your organization in making this campaign effective. Please send me before June 15 the names of the delegates

who will attend.

Very truly yours.

Frances Perkins, Industrial Commissioner.

This was followed shortly after by a letter from the president of the State Federation of Labor to all who had received such invi-

tations urging cordial cooperation in the project.

Commissioner Perkins has also, during May, appointed a permanent advisory council, including 23 men and women prominent in the fields of social service, industrial relations, labor organizations, and industry, to consider employment problems. A report of findings and recommendations is asked for by December 1, so that any recommendations of interest may be available by the time the legislature convenes in January.

There might also be mentioned here the pronounced activity of the department in the matter of drafting industrial codes. A special committee is at work upon hazards arising from the use of chemicals in industry, both as concerns their own manufacture and their uses

in the manufacture of other materials.

Chairman Sweetser. I am sure Doctor Patton will be glad to answer any questions anyone may desire to ask him.

In formulating these codes, Doctor Patton, did you follow the

national safety code, so called?

Doctor Patton. No, not directly; our code committees act independently. A committee is formed by selecting certain representatives. Suppose it is the problem of dangerous machinery. We will appoint manufacturers of dangerous machinery to sit with that committee; we will appoint safety inspectors from private organizations, insurance companies, for example, or accident-prevention associations; and we will appoint somebody within the department who has particular and specific knowledge of such a problem. The committee may consist of from 12 to 20 members. The State does not pay any salary, but it pays the expenses of attending these codecommittee meetings.

After considering the matter thoroughly, and drawing up tentative suggestions, a plan is evolved which secures the acceptance of this committee. It is then turned over to the board, which makes further changes, perhaps, and finally adopts it as a tentative code. Public hearings are then held throughout the State, which are widely advertised in the newspapers, at which the interested parties are urged to attend—manufacturers, workmen, employers, and people

generally interested in the safety movement. After these public hearings have been held the board goes over the matter and finally adopts the code and formally promulgates it by filing it with the secretary of state. When it is filed with the secretary of state it becomes law, and is binding in its effect. The department of labor can issue an order under it, just as though it were a specific labor law.

Chairman Sweetser. There was some discussion yesterday of a national code, an American engineering code, and the question was brought up as to some changes and additions that were made in it. The information I wanted was, whether or not you followed that code, and whether or not you used it. I suppose you used it in your investigation?

Doctor Patton. Yes. Copies of the code are always in the hands of the committee. I feel very strongly in this matter of coordination of codes. I am in hopes that the resolution Mr. Stewart will introduce to-morrow will look in the direction of giving this organization a greater interest in this matter. Without knowing what he is going to recommend, what I have thought about it is this: That this body should have a committee of not more than five members, to whom any code, when it has once been drafted, should be submitted. If that committee would then go over such code, and, as representing this association, recommend its adoption by every State, I believe such recommendation would have some weight. I do not see any reason why the guarding of a similar machine in Arizona or in New York State should be materially different.

When a code has been adopted by the American Standards Association or by any specific State, let this committee consider such a code, and then recommend to each State which is a member of this body, with the indorsement of this association, the adoption of such a code.

Miss Johnson. Have you a code for the protection of window cleaners, and if so, is it effective in protecting such workers?

Doctor Patton. I think that is in the code now. Anyway I know it is under consideration, but I am not so sure that the committee has actually adopted it.

Chairman Sweetser. It is being considered by the American Standards Association also.

Doctor Patton. We had an instance in which a man fell from the fourteenth story of a building near our department and collided with a fruit-stand man, both being killed. The following week there was a window cleaner at work in my office. I asked him if he had heard about the accident; he said that he heard about it, but did not seem interested. He went to work to clean my windows; I looked for him in a minute or two, but he was not in sight. I was afraid to look out the window. He had chosen to walk along the narrow ledge along the outside to get to the adjoining window. I asked the next window cleaner who came in if he tested his hooks; he said he did now, but did not until lately, because one of his hooks had recently given way and left him suspended by one hook dangling on the outside of a window 10 stories above ground. A window-cleaning code is needed.

Chairman Sweetser. Are there any other delegates here who desire to say anything or ask any questions, or who can give us something that will be of benefit, upon the subject of safety education?

Mr. Ainsworth. Pennsylvania has been carrying on a campaign of safety education this year which may be of interest to the delegates. We have, of course, been carrying on the usual safety work of all State departments such as code development and routine inspection work, but through the instigation of Mr. Immel, the director of the bureau of inspection, it was decided to change the system for the year 1929 and stage a safety campaign similar to that which any industrial establishment might wage, but apply it to the entire State for an entire year. Mr. Immel in starting the campaign took the precaution to gather together in Harrisburg all the safety engineers of industrial establishments in order to obtain their reaction to the campaign and get their criticisms and suggestions. He also discussed the campaign with the executive committee of the Pennsylvania Federation of Labor and secured its indorsement and suggestions.

For inspection purposes the State is divided into nine districts, each in charge of a supervisor. The first step in the campaign was to furnish each of these supervisors with a monthly list of the plants in his district having accidents. This information is transferred to a card-index system, so that the supervisor can keep an accurate record of all the plants over which he has jurisdiction. During the campaign, instead of carrying on the usual block method of inspection, the inspectors were to pay particular attention to the plants having accidents. Development of safety organizations within these plants was discussed with plant managers, shop meetings were held, and individual conferences conducted with men who seemed to be

key men in the accident record of the plant.

In addition to the routine inspection work, community safety rallies were held, local safety councils organized, speeches made before Rotary, Kiwanis, Lions, and other similar service clubs, and every opportunity that presented itself was grasped in order to put across the safety message. A special feature of the campaign consisted of the preparation and distribution of safety pledges among employees of industrial establishments all over the State. The department was successful in having 2,500,000 employees sign this pledge in which they promised to do everything they could during the year 1929 to prevent accidents from happening to themselves or their fellow workmen.

We believe the campaign has played a vital part in holding in check the rising tide of accidents. We are very hopeful that before the year is over the campaign will have caused the pendulum to

swing the other way.

The carrying on of the campaign does not mean that general inspection work is being neglected. Inspections to eliminate violations of the general factory laws, women and child labor laws, and departmental regulations are being carried on just as strong as ever, but they are being made on an educational basis rather than on an enforcement basis in order that the work will fit into the educational safety campaign.

Chairman Sweetser. May I ask whether you pay compensation for occupational diseases in Pennsylvania?

Mr. Ainsworth. We do not; we have no occupational disease taw. The only occupational disease which has been recognized and compensated for is anthrax, and then only when it was proven that the disease was incurred through an accident.

Mr. Urick. I was called out on a matter of business and missed a great deal of the discussion with relation to factory inspection and the educational movement going on among employers. We know, for instance, that there is a safety committee, but there is no need for it if the management of the concern is in sympathy with the movement and is encouraging the movement. I have had some practical experience in that line; for instance, the cement manufacturers through their national association are doing quite a bit of work in the prevention of accidents. We have five cement plants in Iowa. At the regional safety conference a year ago, one of the firms admitted that it had not paid the attention to it that it should have, but agreed that it would do so. At the last meeting it was pretty much the same story. As a matter of fact that firm is having a greater number of accidents than the other firms in which the managers are taking an active interest.

I do not know whether this feature has been mentioned or not. I refer particularly to foremen, because in Iowa we have recently been attempting to do some educational work. However, the question is dependent upon the management to a considerable extent. Under the Smith-Hughes vocational plan, and through the inspection department we have been carrying on a number of forementraining classes. We go into the city two or three days a week, locate the foremen, and ask for information with regard to their duties and the handling of their men, and point out to them the particular attention necessary to be paid by them in the training of men in accident prevention. Keokuk, Iowa, for a small town of 15,000 people, has an unusually large number of manufacturing plants. I was there twice with Professor Baird, of the university extension department. At the conclusion of their discussion, the employers gave a banquet to all those who had been taking part in the work; and we had in that little town of 15,000 people 125 men who had taken advantage of the foremanship training. A good part of the work related to the interest that was manifested in the safety and protection campaign, keeping the men satisfied, explaining the codes, and so forth.

Newton, for instance, a great washing-machine center of the Nation, is a small town of some 5,000 people. All of the plants there—one plant with about 1,800 people, one with 500, another with 250, and so on—all of these plants have their foremanship-training classes, in which the duties of the foremen and the interest the foremen should manifest in the prevention of accidents is pointed out and explained to them time and time again; and it is having its desired effect.

Chairman Sweetser. We will now take up that part of the program set for this evening. Our secretary-treasurer, Miss Schutz, was to speak to-night on the history of the association—to tell us

some of our deficiencies as well as some of the things she thinks we ought to do. If she is ready, we will go into committee of the whole for a few minutes, while Miss Schutz gives the history of this association.

History of Association of Governmental Officials in Industry

By Louise E. Schutz, Secretary-Treasurer

The first printed record in the office of the Association of Governmental Officials in Industry of the United States and Canada regarding the activities of the association, known for years as the Association of Governmental Labor Officials, is a bulletin published by the United States Department of Labor, primarily to give an account of the fifth annual convention of the association held in Des Moines, Iowa, in 1918. This bulletin contains as an appendix a brief account of an informal meeting, by courtesy called the fourth convention of the Association of Governmental Labor Officials of the United States and Canada, held in Asheville, N. C., in September, 1917, to which nine States and one Province sent representatives, as follows: Arkansas, Connecticut, Iowa, Kansas, Massachusetts, Michigan, New Hampshire, North Carolina, Pennsylvania, and Quebec. This convention was the by-product of a conference of labor commissioners and other members of labor departments called by Secretary of Labor Wilson, July, 1917, to confer on the problem of child labor in the United States.

Due to the fact that most of the officers who had been elected in 1916 were men whose terms of office had expired and who had not been reappointed, it seemed likely that there would be no convention in 1917. However, Miss Bresette, of Kansas, was asked to start correspondence with State labor departments with a view to a convention. She did so, and as a result the fourth annual convention of the Association of Governmental Labor Officials of the United States and Canada was held at Asheville in September, 1917. I believe that Mr. John S. B. Davie, commissioner of labor of New Hampshire, and Mr. A. L. Urick, of Iowa, are the only persons in attendance at the present convention who attended that informal convention held in 1917.

There are several items in the report of the fifth annual convention in which I believe the members and friends of the organization here to-day will be interested. The first pages of the report contain a history of the association prepared by Linna E. Bresette, who acted as secretary-treasurer of the association for five years. In this report she states that she finds from reference to old files (which by the way are not now in our possession) that the Association of Governmental Labor Officials of the United States and Canada resulted from an amalgamation of two organizations, one called "Chiefs of the Bureaus of Labor Statistics," organized in 1883, and the other the "Association of Factory Inspectors," organized in 1887.

In 1883, 46 years ago, the labor commissioners of six States, Massachusetts, New Jersey, Pennsylvania, Ohio, Illinois, and Missouri, met and organized the "Association of Chiefs of the Bureaus of Labor Statistics." The purpose of that organization, to quote at random from the opening address at the first convention, was "To secure

information in all departments of labor in its relations to the commercial, social, industrial, educational, and sanitary conditions of the * * * The best methods of obtaining and syslaboring classes. tematizing are to be devised, discussed, and formulated. It is not the duty of the labor commissioner to attempt an adjustment of the relation of the laboring and manufacturing classes with the capital of the country. It is his office to furnish such reliable statistics and data to the law-making power as will furnish the basis of an intelligent comprehension of the complex features of this great * The establishment of a safe and proper equilibrium between the great forces of this country—labor and capital is of vital import, and is worthy the best efforts of the statesmen, to the end that such laws shall be enacted as shall relieve labor of unjust burdens and encourage capital in the development of other avenues for the profitable employment of labor." The Commissioner of Labor of the Federal department at Washington held the position of president

of the association for 20 years.

The first meeting of factory inspectors occurred in Philadelphia in June, 1887—42 years ago—through the efforts of the chief inspector of Ohio, who corresponded with other chief inspectors in the country and brought about this meeting at Philadelphia, which was attended by factory inspectors from three States, Massachusetts, New Jersey, and Ohio, and a representative of the State Board of Education of Connecticut. In the opening address delivered at the first meeting of factory inspectors a statement was made to the effect that "the purpose of this organization is to take counsel one of another as to the best means of accomplishing the object for which the office of factory inspector was created." Mr. Dorn, of Ohio, in this opening address, mentioned the fact that the office of factory inspector is of comparatively recent origin, and that because of the limited knowledge of its designs people must be made acquainted with the importance of the necessity of thorough inspection before factory inspectors can expect to succeed in their undertaking. Mr. Dorn made the following observation, which again I quote somewhat at random: "Make our workshops and factories comfortable and healthy and secure those employed therein against the accidents that are now a daily occurrence, and one great source of discontent and consequent strikes will be removed. The greater the interest the employee takes in his work, the greater the profit of the employer. The fact has been established that the workman cares for his employer just in proportion as the employer cares for his workman. Good and humane treatment on the part of capital should receive a proper and profitable reward from labor. It is a paying investment. On us devolves the important duty of ascertaining whether children under a certain age are employed in workshops and factories. Our business requires of us the careful examination of all kinds of structures and all kinds of machinery and mechanical appliances. Opposition to inspection is fast disappearing. We are welcomed or not, just in proportion to the manufacturer's knowledge of our purposes and the results effected by It would perhaps be well if we could have more our examinations. uniformity both as to the laws and the manner of carrying them out in the different States. We are here for the purpose of comparing notes, and of each one availing himself of the experience and suggestions of others. * * * We are endeavoring to restore the child to the schoolroom. * * * We are endeavoring to protect the working people of the country in life, health, and limb, that they may be able to rear their children in such manner that they shall become intelligent and healthy men and women, the possessors of sound minds, of good morals, and of unbroken constitution."

It is of interest to note that the aims and purposes which were enunciated at the first convention of the two organizations, later amalgamated into the one to which we now belong, have been reiterated at every succeeding convention. The two organizations maintained their separate entity for a number of years, until at a meeting of factory inspectors at Toronto, Canada, in 1908, a committee was appointed with a view to bringing about amalgamation of the two organizations. How history repeats itself! Difficulty had been met in securing appropriations to defray the expenses of delegates attending the conventions. The solution seemed to be amalgamation, which would mean one convention to attend, rather than two. Through the ingenuity of a few members of each organization, both held their meetings in Rochester in 1909. Some sort of arrangement was effected, and the two organizations met as one at the county courthouse at Hendersonville, N C., in 1910. At that time a reslution was adopted at the meeting of factory inspectors in which the statement was made that since the purposes, aims and objects, and scope of work of the factory inspectors and commissioners of labor statistics were identical, a committee should be appointed to confer with a like committee of commissioners looking to the merging of the two associations under an appropriate name and workable consti-The factory inspectors, however, were not ready to amalgamate, as they feared that their identity might be lost if the two associations were merged.

Formation of Present Association

Finally, in 1914, this opposition was overcome. The two associations were merged under the name "Association of Governmental Labor Officials of the United States and Canada" at Nashville, Tenn., June, 1914, at which time a constitution was adopted. constitution stated that the purpose of the new association should be the promotion of the welfare of industrial workers, the securing of uniform labor legislation, better laws for factory inspection, laws creating State employment bureaus, laws promoting industrial hygiene and accident prevention, and to aid in every way possible to secure better provision for the industrial development and protection of the workers of the various States and Provinces. Membership in the organization was restricted to employees in Federal, State, provincial, county, or municipal departments having to do with the enforcement and supervision of labor laws. Other than the fact of amalgamation and statements of officers elected and place of meeting each year given in the printed proceedings there is no printed record of what occurred at the first, second, and third conventions of the Association of Governmental Labor Officials of the United States and Canada.

At the convention held in Des Moines, Iowa, in 1918, the Federal Government at Washington was represented by Mr. Ethelbert Stewart, who was delegated to attend by the Secretary of Labor Miss Bresette's observation in this connection is as follows: "His presence at once added zest to the meeting and restored the spirit

of cooperation between the Federal department and the departments of the various States." As a result of the attendance of Mr. Stewart at the convention at Des Moines in 1918 a very great benefit accrued to the Association of Governmental Labor Officials of the United States and Canada in that the United States Department of Labor undertook to print the proceedings of the conventions. Mr Stewart's observation, as stated in his letter of transmittal to the head of the Department of Labor at Washington, is worthy of mention at this time. Again I quote: "Convinced that this association, composed as it is of the labor officials and factory inspectors of the various States, is one with which the Department of Labor could most effectively work and of which it should, so far as the law permits, be a member, I have the honor to transmit herewith a copy of the proceedings of the fifth annual convention of the Association of Governmental Labor Officials of the United States and Canada, together with the papers and reports submitted to that convention."

The report of the auditing committee of the fourth convention stated that at that time the association had liabilities which exceeded its assets in the amount of \$14.87. In other words, the association was insolvent. In the treasurer's report, which Miss Bresette submitted in 1918, a statement was made that the treasurer had on hand then, at the time of the convention, \$61.04, but that the association had outstanding debts contracted by the former secretary, which amounted to \$263.68, to cover printing costs, stenographic service, etc. These debts were never paid. My purpose in mentioning these facts at this time is to indicate what a boon it was to the association to have the Federal Department of Labor undertake to print the proceedings of the succeeding conventions. It is because of this generous arrangement that the association has been able to keep solvent since 1918.

State Representation at Meetings

In preparation for this paper, I have read over the reports of the proceedings of the various conventions beginning with the fourth and extending through the fifteenth. I have been interested to note that Quebec was apparently the first Province to affiliate itself with the association. Since that time Alberta, British Columbia, Manitoba, and Saskatchewan have sent representatives to the various conventions, though not so continuously as has Ontario. The Federal Department of Labor of Canada affiliated with the organization in 1923, through the attendance of the secretary at the Richmond convention. It has maintained membership ever since and has sent representatives from the employment service and the labor intelligence branch to conventions. The Children's Bureau, the Women's Bureau, and the Employment Service of the United States Department of Labor affiliated with the organization as they were established. The Bureau of Mines was made an honorary member in 1927 though none of these bureaus pay dues to the association, the expense of printing the proceedings, borne by the Department of Labor, far exceeds any liability any of these bureaus might otherwise have in the matter of dues. Furthermore, they are prohibited by law from pay-The records have not always been clear each year as to what States paid dues, but the following States and Provinces, which

have sent representatives at some time to the conventions, are not represented this year: Alaska, Arizona, California, Connecticut, Delaware, Indiana, Kansas, Michigan, North Carolina, North Dakota. Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota,

Texas, Utah, Virginia, Washington, Wyoming, and Quebec.
The question immediately arises, Why is it, when a State has once sent representatives, that it does not continue to do so? In some instances, as revealed by letters read at the business session Wednesday morning, the State will pay neither the expenses of attendance of a delegate nor dues to the association. In some instances the new commissioners have not become interested, and so it goes. although a very special effort was put forth to enlist membership and attendance at the convention by the Secretary of Labor, Hon. James J. Davis, by Doctor McBride, who resigned as president of the organization in March, and by the secretary-treasurer, only 26 departments paid dues, as against 28 in 1926. There are representatives in attendance from 13 States and 4 Provinces, and from various bureaus of the two Federal departments—the Bureau of Labor Statistics, the Women's Bureau, and the Children's Bureau, of the United States Department of Labor, and the intelligence bureau and the employment bureau of the Canadian Department of Labor. Altogether 22 bureaus are represented this year.

It is interesting to note that the year of largest attendance was 1924, when the convention was held at Chicago; at that meeting representatives of 34 departments registered. The Association of Public Employment Services met at the same time and place, and thus helped to augment the attendance at both conventions. In 1925, at Salt Lake City, representatives of 24 departments registered for the convention of the Association of Governmental Labor Officials; that year the International Association of Industrial Accident Boards and Commissions met immediately after our convention. Twenty-four departments participated in the convention at Harrisburg in 1922, 23 at Richmond in 1923, and 19 at Columbus, Ohio, in 1926.

A perusal of the reports indicates that in some instances States and Provinces which have sent representatives to the meetings, who have reported on new legislation, taken part in discussions, etc., have not The association has apparently been interested primarily in participation of many representatives in the meetings regardless of whether or not the persons in attendance found it possible actively to affiliate with the organization by paying dues. In some years we have had reports on new legislation from as many as 19 States. Last year we had such reports from but three States. Although we had a small convention at New Orleans, it was one that was very much worth while.

At the New Orleans convention, in 1928, the name of the association was changed by constitutional amendment from Association of Governmental Labor Officials to Association of Governmental Officials in Industry. The change was made for the purpose of removing a misunderstanding that then existed regarding the nature of the association and for the purpose of assisting in securing the cooperation and support of such organizations as chambers of commerce and other employers' associations. It was also felt that this change in name more aptly defined the status of the personnel of the members of the organizations.

Subjects Discussed

In looking over the proceedings of the last 13 conventions, I have noticed with interest the subjects which have been given consideration, i. e., industrial hygiene, industrial fatigue, factory inspection, accidents and accident prevention, occupational diseases, industrial rehabilitation, mine safety work, migratory children, minimum-wage legislation, conciliation in labor disputes, and how to make statistics uniform. Our organization has had participation in the formulation of a number of safety codes, notably those concerning which we had reports at the business session Wednesday morning. It has had the privilege of participating in the work of the National Association of Legal Aid Organizations in its attempts to work out a satisfactory and uniform law for the collection of wage claims. organization had a representative at the industrial accident prevention conference, called by Secretary of Labor Davis, in Washington in July, 1926. We admitted to membership, by changing the constitution in 1925, the Washington representative of the International Labor Office.

Questions for Consideration

In conclusion, I wish again to consider some of the questions which

have been issues in the past, and which are not yet dead.

1. Would it be advisable for this organization to amalgamate with some other? My own connection with the organization leads me to believe that if this organization amalgamated with some other for the purpose of securing a larger attendance at the conventions, we would not accomplish the purpose that might be intended. It is my belief that for the most part we would still have only one representative from a State in attendance at the convention; for example, four people from Minnesota now attend the two conventions of the A. G. O. I. and the I. A. I. A. B. C. Were the two amalgamated, I have reason to believe that but two people would be permitted to attend the one convention, and that the situation which we meet in Minnesota would be duplicated elsewhere. In other words, I doubt that amalgamation would increase our attendance.

2. How may we augment our treasury? If we had more money in the treasury, the expenses of the executive board might be paid to a meeting which I believe should be held some months prior to the convention, in order that complete plans might be laid by the board (which is the program committee) for the next convention. Tentative programs could be sent out early to enlist interest, and we might then hope to know definitely, before the final programs are printed just who are coming to take part in the program and who are not In my opinion, the organization is of such value that a greater amount of time and thought should be given to the making of the programs than seems possible now, when it is arranged each year largely through correspondence between the members of the executive board.

3. Would it not be advisable to elect to office persons whose terms of office do not expire the year of the convention? The executive board did not begin to work definitely on the program this year until after the resignation of Doctor McBride, which was held in abeyance

for some time and did not finally go into effect until March.

- 4. In any event, is it not advisable to begin making plans for the convention six or seven months before it is to be held? Last year, although every effort was made by the secretary-treasurer to bring about concerted action on the program at an early date, the executive board did not begin to arrange the program until after March 15, and the convention was held in May. Such an arrangement places entirely too much responsibility on the secretary, who is sometimes compelled to fill in gaps and make last-minute decisions without the sanction of the executive board, which constitutes the program committee.
- 5. How may we secure more members who will affiliate with the organization and keep membership in it over a period of years? If that problem could be solved, the problem of an adequate budget would automatically be solved. Although a full coffer is not our primary consideration, certainly any organization which hopes to be effective ought to be able to meet legitimate expenses without embarrassment.

May I say, again in conclusion, that it has been gratifying to me to note from my vantage point of secretary-treasurer, that people of national prominence, not members of the organization, have expressed themselves as feeling it a privilege to be invited to address the organ-I have attended conventions of this association every year since 1918. During the years of association with the organization I have heard many expressions of opinion to the effect that the conventions are of lasting benefit and inspiration to all who attend.

DISCUSSION

Chairman Sweetser. Before we close I think we should call upon another speaker—relative to bestowing the benediction—one who attended the first convention and has attended practically every convention since that time. I refer to John S. B. Davie, the commissioner of labor of New Hampshire. We will close this meeting when he is through. To-morrow after the business session we will continue this discussion on factory inspection, when those who have not had a chance this afternoon, may discuss the question.

Mr. Davie. I will make my remarks very brief. I was very much interested in the history of this association as recounted by our secretary-treasurer, but there are a few loose ends that I would like to straighten out.

The first association of men following our line of service was known as the Association of Officials of Bureaus of Labor Statistics of America. The record of my office shows that in 1904 this organization was entertained by the State of New Hampshire.

The first convention I had the privilege of attending was held in Washington, D. C., in 1912, the delegation being made up of fellow commissioners of labor throughout the country. At that time there was some agitation for an amalgamation with the National Association of Factory Inspectors. The factory inspectors thought, if such an amalgamation was made, they would be submerged in the commissioners' organization, as nearly all of the labor departments had supervision over factory inspection. This point seemed to be well taken by the factory inspectors.

Then I remember the Asheville convention. The old organization seemed to be dead from its feet up and its head down. Those who attended that convention decided something would have to be done to save the organization. It was my privilege, at that time, to serve on an auditing committee composed of Miss Linna Bresette and Louis Palmer (of Pennsylvania). Our investigations showed the organization was absolutely dead, financially, owing to some mismanagement of the funds prior to the Asheville convention. A plan for reorganizing the association and putting it upon a firm financial basis was submitted by that committee and adopted by the convention. It has been very gratifying to me to note that since that time the organization has finished each year's work with a balance in the treasury. Some of you have been calling this a small attendance at this convention. You should have been at that one.

Although I was authorized to go to the Des Moines convention, owing to a matter that was pending and required my personal attention, it was my misfortune not to be able to attend. Later on I understood some negotiations were carried on at that convention

to amalgamate with another association.

At the Nashville convention it was my privilege to work with Brother Urick nearly two whole nights with the thermometer standing at about 124° in the shade to bring about such an amalgamation.

It is my opinion this association has done so much good for those who are members of it that we just can not bear to see anyone kill it. No matter what happens, through changes in the political situation in the various States of the Union, you can take it for granted from us who have known and who have made this association what it is that we are going to see that it lives on; it is our intention to pass on to our colleagues and successors the great benefit the association has been to every one of us while engaged in our class of service.

My own experience with members of this association has been so absolutely fine that I will treasure it so long as life lasts. I can never forget the many things I have been able to learn and the many advantages I have gained from being a member. Should it be my lot never to attend another convention I sincerely hope those who are left behind will have the same spirit of loyalty, the same spirit of cooperative effort and service given by former members. I am confident this association can not be wiped out if that be true.

In conclusion may I say this association will be just as strong as its weakest link, so let each of us appoint himself a committee of one to do his part to assist in carrying out the aims and objects of this association in every way he can in his respective district and by so doing make this association second to none in the United States and Canada.

Mr. Plant. I was greatly interested in the paper our able secretary-treasurer presented to the meeting. I am sure that it would be of keen interest to others who have not had an opportunity of hearing it read. While it will take the usual course and be printed in the report of the proceedings, I was just wondering whether or not it is desirable to have it printed separately. We know that the proceedings are late in being available for distribution, so if the cost of having it printed separately would not be prohibitive I would

suggest that a copy of it be forwarded to each of the State departments, as well as to the departments of the Provinces of Canada, also to the Federal Bureau. I was going to make that as a motion, but I do not know the state of our finances.

Chairman Sweetser. The secretary tells me that they are pretty low. We could leave that to the discretion of the executive board, and they would do it, if possible.

Doctor Patton. I think it should go out with next year's invitations.

Miss Swerr. We might stand the expense of mimeographing it, and send it out now.

We all feel that we do not want the association to die. As was said yesterday, we have to go on or go under. While Miss Schutz as secretary is in a position to realize better than anyone else what she has spoken of in her paper, yet anyone on the executive board will realize what a responsibility is placed on the secretary.

While we are considering the time and place of holding our next convention, I wonder whether we could not consider meeting just before the gathering of the International Association of Industrial Accident Boards and Commissions. Mr. Wilcox asked me to give that message to you. I said I thought that was what ought to be done, and he thought so, too.

[Meeting adjourned.]

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FRIDAY, JUNE 7-MORNING SESSION

Maud Swett, President, A. G. O. I., Presiding

BUSINESS SESSION

The secretary reported that, as directed, she sent resolution No. 8, passed at the meeting of the association in 1928, to the Director of the Bureau of Census. This resolution requested the Bureau of Census to consider the making of separate classifications in the census of occupations of 1930 as follows:

1. Married women living with husband.

2. Women widowed, divorced, or otherwise separated.

3. Single women.

4. Women whose status is not reported.

She reported that the Director of Census implied that the recommendation would be considered, together with a host of others that had been received.

On motion of Mr. Seiller, of Kentucky, Ethelbert Stewart, United States Commissioner of Labor Statistics, was reappointed to represent the A. G. O. I. on the American Standards Association Committee.

The president appointed Mr. F. J. Plant, of the Department of Labor of Canada, to prepare a report of the proceedings of the Friday meeting, to be used by the Toronto papers.

Report on Safety in Spray Painting Industry.

The Secretary called the attention of the delegates to the fact that a motion was adopted at the meeting of the association in 1928, recorded on page 145 of Bulletin No. 408, to the effect that the incoming president call a joint conference of delegates from as many States as possible for the purpose of taking up the question of establishing safety in the industry of spray painting. She further reported that there was considerable correspondence in regard to this contemplated conference with various members of the organization, but that finally she was advised, by Doctor McBride, then president of the association, that it seemed to him impracticable to call the conference this year.

Report Regarding Resolution No. 7, Relating to Building Construction Safety Code, Adopted in New Orleans in 1928.

Mr. John Roach, deputy commissioner of labor of New Jersey, submitted a statement to the effect that Doctor McBride, then commissioner of the department of labor of New Jersey, attended a meeting at the Engineering Building in New York City, Friday, June 29, 1928, which meeting was called as a result of the receipt by the American Engineering Standards Committee of resolution No. 7, adopted at New Orleans by the A. G. O. I., relating to the matter of

a building construction safety code. About 40 people attended the meeting representing industry, labor, and the general public.

The Master Builders' Association was opposed to the formulation of safety rules. A committee was appointed to draft a code, which committee, at the time of Mr. Roach's report, had apparently done nothing. Some time later, representatives of the Master Builders' Association consulted with Doctor McBride in the Jersey City office of the New Jersey commission. It was apparent at this meeting that the master builders were very much opposed to the formulation of rules for the construction industry. There seemed nothing further to report at the time in regard to the status of the matter.

Report on Committee of Officers' Report.

The report of the secretary-treasurer has been examined, found to be correct and prepared in accordance with the constitution of the association. The report discloses one fact that should be brought to the attention of the association. An increasing lack of interest on the part of the various member States and Provinces is evidenced by the large number of member organizations that have not paid their dues. While the present condition of the treasury may be such that the work of the association can be carried on during the coming year, the lack of interest mentioned, if allowed to increase further, will seriously threaten the existence of the association.

The committee therefore recommends that the incoming officers and executive board institute a campaign of publicity among member organizations as to the desirability of keeping in contact with the association and to encourage non-member organizations to become affiliated with the association.

Report of Committee on Resolutions.

- 1. Resolved, That the association extend its sincere thanks to the Department of Labor of Ontario and the Hon. Dr. Forbes Godfrey, Minister of Health and Labor, for the many attentions accorded the delegates in convention at Toronto.
- 2. Resolved, That the association extend sincere thanks to the Hon. George Howard Ferguson, K. C., Premier of Ontario, the press, and all others who have contributed so much to the pleasure and comfort of the delegates.
- 3. Resolved, That the association extend sincere thanks to His Worship, Samuel J. McBride, mayor of Toronto, and to the board of control, for the many favors shown the members during our stay in Toronto.
- 4. Resolved, Whereas, It has pleased Almighty God to remove from our midst Frank Hoffman, a past president of this association, formerly deputy commissioner of labor and at the time of his decease director, The Compensation Division of the State of Minnesota; and

Whereas, he had by his many manly qualities endeared himself to the members of this association: Therefore be it

Resolved, That we, the delegates to the sixteenth annual convention of the A. G. O. I., extend to his bereaved family our sincere sympathy; and be it

Resolved further, That this resolution be spread on the minutes of this convention and a copy be sent to his family.

5. Resolved, That the incoming administration (executive board) shall appoint a committee of five to encourage and urge the various States to adopt the safety codes of the A. S. A. to so harmonize State laws and regulations that it will be possible for machine-tool builders to safeguard equipment at its source.

6. Resolved, Whereas, a conference on the subject of calendar reform is to be held in Geneva, Switzerland; and whereas a congressional resolution requesting the President of the United States to appoint a delegate to that conference has been favorably reported out of the House Committee on Foreign Affairs: be it

Resolved, That this association believes that the United States should be represented at such conference.

Resolutions Nos. 1, 2, 3, 4, and 6 were adopted. Resolution No. 5, however, was referred back to the committee on resolutions to be in turn referred to the incoming executive board.

Memorandum: Resolution No. 6.—In 1928, Ethelbert Stewart, United States Commissioner of Labor Statistics, E. Leroy Sweetser, of Massachusetts, and James A. Hamilton, of New York, were appointed a committee of three to make a study of the proposed change in the calendar, which is now being studied throughout the world, and to report to the next convention.

In urging the adoption of this resolution, Mr. Stewart submitted

the following statement:

I will introduce my report on the revision of the calendar by submitting a resolution which I ask this convention to indorse. As you will remember, the matter came up in the closing minutes of the last convention when there was no time to discuss it, and a committee

was appointed to report to this convention.

When I first began taking an active interest in calendar reform I didn't suppose there would be any opposition encountered, and for over a year I didn't hear one word of objection or criticism except from individual workmen here and there who wanted to know if it meant that they would have to pay 13 months' rent in a year. My reply was, "Yes; but you get 13 months' pay in a year." The adjustment of contracts for a stipulated sum, as yearly rental, to be paid in 12 monthly installments is a mere matter of detail of changing such contracts to read in 13 equal installments. This would, of course, be taken care of by legislation.

In the first place I want to say a few words about the attitude we sometimes find toward a change of the calendar as though we were attempting to interfere with the order of the universe. There is but one natural measure of time—if you call it time; I prefer to call it duration. That is that the earth revolves upon its axis in 365 and a fraction days. This of course is fundamental, and any attempt to ignore it would call down upon our heads the whole science of astronomy and in fact all other sciences. However, the scientists have made it perfectly clear that so long as we retain the 365 and a fraction days as the base they do not care what division we make of it. Any and all divisions of this basic figure are purely arbitrary

The sole purpose of subdivision is for human convenience, and this

subdivision has been changed innumerable times.

The Gregorian calendar, which we now propose to change, was first announced by Pope Gregory XIII in 1577 A. D. It was first accepted by four countries, Italy, Spain, Portugal, and France, in 1582. England did not accept it until 1752, when under the calendar new style act the Gregorian calendar was made to apply to England and all of her colonies. George Washington, for instance, was not

born on the 22d day of February according to the present calendar, but he was born something like 10 or 12 days before that. The French, after the revolution, started an entirely new calendar in which September 22, 1792, was made the year one. This calendar had 12 months of 30 days each with five supernumerary days at the end of each year. Weeks were abolished and the months divided into three decades of 10 days each. It was not until 1804 that this French calendar was abandoned.

The first really sensible calendar was proposed by Auguste Comte in 1849. That calendar had 13 months of 28 days, with blank days

to fill in the gaps.

I do not want to spend any more time on the historical side of this question. Every labor statistician realizes the inconvenience of our present system, which has 7 months of 31 days each, 4 months of 30 days each, and 1 month which in some years has 28 and in other years 29 days. If you are collecting your wage data on the basis of monthly wages there is always a question of which month, and even on a semimonthly base there is always a question of how many Sundays there were in that month and how many Sundays fell within your pay-roll period. Some of you don't take time to figure this out, with the result that you never know whether the wage-rate statistics of the various States are comparable or not.

In business a man finds that his sales in April, 1928, fell below those of April, 1927. He proclaims an era of panic without waiting to ascertain that there were five Sundays in one of the months that he is comparing, while the other month had but four Sundays in it.

His statement for March shows an increase over the preceding month, when, as a matter of fact, there is 11 per cent difference between the length of February and the length of March, and if you count working-days only—which is the most important factor in all businesses—there is over 8 per cent difference. The same is true of quarterly and of semiannual reports, with the result that a great many business firms for their own bookkeeping now use the 13 months of 28 days as the basis for their business calculations.

This question was more or less smoldering until some two or three years ago, when it was taken up by a man named Cotsworth, who is of that type that when he gets an idea into his head he throws his whole life into putting that idea into practice. Not being a man of great means, he interested George Eastman, of the Eastman Kodak Co., who has furnished the money to get the American and English

speaking people interested in this matter.

Practically every nation in the world except the United States has agreed to attend this Geneva conference. You can readily understand that a calendar change which is not agreed to by the United States Government would be exceedingly difficult to effect. It is all right to say that the world was years in coming to a final agreement on the Gregorian calendar. For instance, it was adopted in Turkey since 1927. But the interrelationships in the world today are very different from the centuries between the launching of the Gregorian calendar and its final acceptance by Turkey. Besides, a calendar which is not accepted by the United States is not likely to make much headway no matter what the desires of the rest of the world may be.

Now, I have been telling you what I think and what I believe in regard to the calendar reform. As I said, for two years I found no opposition to it and could not imagine any serious opposition to it. As the Pope had already agreed to a fixation of the date upon which Easter Sunday should fall I supposed that the religious question had been eliminated. However, when Congressman Porter, Chairman of the House Committee on Foreign Affairs, proposed public hearings on his resolution there was a perfect storm of protest from the Jews and the Seventh Day Adventists. These hearings lasted at intervals for months. I sat in at two sessions of the committee and listened to the arguments against this resolution—which, after all, simply asks that the United States be reprecented at the conference—and one would have supposed that the very existence of religion depended upon the defeat of this resolution. I am not aware that religion was particularly affected by the adoption of the Gregorian calendar, and the principal argument that I heard was that if you make a movable Saturday you split the religious world in two and one group will have one day for its Sabbath and another group another day, and with two Sabbaths we would be in danger of both sides ultimately ignoring the fact of a Sabbath The opposition stubbornly refused to answer the question as to whether or not that is not true now, and whether or not there is any inclination on the part of the Jews and the Seventh Day Adventists to ignore their Sabbath because there is another Sabbath. Your representative discreetly stayed out of the religious squabble, but was interested to know whether or not there was a real religious problem involved or whether it was all bluff. Never before was I so impressed with the slavery of a Sabbatarian institution to its Sabbath, nor with the far-reaching significance of what He said, and the bitterness of mind and soul with which He said it, when He said "The Sabbath was made for man, not man for the Sabbath."

In moving that this resolution be adopted I want the convention to be thoroughly advised that we are absolutely ignoring Sabbatarian institutions; that we believe that a uniform calendar which will make every month begin on Monday and every month contain four weeks of seven days is, as a statistical and commercial proposition, a great convenience; and that we are looking upon the calendar as a purely human institution to be regulated as best suits our human needs. Upon this ground I recommend its adoption.

Report of Committee on Constitution.

Mr. Ballantyne, chairman of the committee on constitution, submitted changes in Section 1 of Article II, and Section 3 of Article V. These sections as changed are given below.

ARTICLE II

Section 1. Objects.—To encourage the cooperation of all branches of Federal, State, and Provincial Governments who are charged with the administration of laws and regulations for the protection of women and children, and the safety and welfare of all workers in industry; to maintain and promote the best possible standards of law enforcement and administrative method; to act as a medium for the interchange of information for and by the members of the association in all matters pertaining to the general welfare of men,

women and young workers in industry; to aid in securing the best possible education for minors which will enable them to adequately meet the constantly changing industrial and social changes; to promote the enactment of legislation that conforms to and deals with the ever recurring changes that take place in industry, and in rendering more harmonious relations in industry between employers and employees; to assist in providing greater and better safeguards to life and limb of industrial workers; and to cooperate with other agencies in making the best and safest use of property devoted to industrial purposes; to secure by means of educational methods, a greater degree of interstate and interprovincial uniformity in the enforcement of labor laws and regulations; to assist in the establishment of standards of industrial safety that will give adequate protection to workers; to encourage Federal, State, and Provincial labor departments to cooperate in compiling and disseminating statistics dealing with employment, unemployment, earnings, hours of labor and other matters of interest to industrial workers and of importance to the welfare of women and children: to collaborate and cooperate with associations of employers and associations of employees in order that all of these matters may be given the most adequate consideration; and to promote national prosperity and international goodwill by correlating as far as possible the activities of the members of this association.

The following change in section 3, Article V, of the constitution, was made as the result of a report unanimously adopted at the meeting of the association in 1928 (see p. 150, of Bulletin No. 480), which reads in part as follows: "The committee has considered the suggestions made by Mr. Stewart, and the question of increasing the salary of the secretary-treasurer was unanimously reported out with the recommendation that the secretary-treasurer's salary be made \$300 a year."

ARTICLE V

SEC. 3. The secretary-treasurer shall have charge of all books, papers, records and other documents of the association; shall receive and have charge of all dues and other moneys; shall keep a full and complete record of all receipts and disbursements; shall keep the minutes of all meetings of the association and the executive board; shall conduct all correspondence pertaining to the office; shall compile statistics and other data as may be required for the use of the members of the association; and shall perform such other duties as may be directed by the convention or the executive board. The secretary-treasurer shall present a detailed written report of receipts and expenditures to the convention; shall pay out no money until a voucher has been issued and signed by the president. The secretary-treasurer shall publish the proceedings of the convention within four months after the close of the convention, the issue to consist of such numbers of copies as the executive board may direct. The secretary-treasurer shall receive such salary as the executive board may decide, but not less than \$300 per year.

Life Members.

The following were proposed as life members of the association, by Miss Johnson, of Massachusetts: Andrew F. McBride, M. D., of New Jersey; Miss Charlotte Carr, of Pennsylvania, and Mr. A. L. Urick, of Iowa. Action was deferred and names referred to the executive board for action as provided for in the constitution.

Election of Officers.

The following officers were elected for the ensuing year:

President.—Maud Swett, field director woman and child labor, industrial commission. Milwaukee. Wis.

commission, Milwaukee, Wis.

First vice president.—James H. H. Ballantyne, deputy minister department of labor. Toronto, Ontario.

of labor, Toronto, Ontario.

Second vice president.—W. A. Rooksbery, commissioner, bureau of labor and statistics, Little Rock, Ark.

Third vice president.—E. Leroy Sweetser, commissioner, department of labor and industries, Boston, Mass.

Fourth vice president.—Eugene B. Patton, director bureau of statistics and

information, department of labor, New York, N. Y.

Fifth vice president.—Judge T. E. Whitaker, industrial commissioner,

Atlanta, Ga.

Secretary-treasurer.—Louise E. Schutz, superintendent division of women

and children, industrial commission, St. Paul, Minn.

Place of Meeting.

Louisville, Ky., was selected as the place for the next annual convention.

[The secretary was instructed to write to the individuals or organizations from whom invitations were received to hold the next annual meeting, but whose States by statute prevent delegates from attending this convention, and say that those States had been ruled out.]

FACTORY INSPECTION

[Dr. Eugene B. Patton, of the New York Department of Labor, took the chair. Doctor Patton called on James T. Burke, chief inspector of factories in Ontario, to read a paper on the subject of the history and administration of factory inspection.]

Factory Inspection—Its History and Administration

By James T. Burke, Chief Inspector of Factories, Ontario

The different conditions relating to factory inspection have been so thoroughly covered that I find it difficult to touch upon any phase of industrial life that has not received attention. It, however, is a well-known fact that practical legislation, together with its proper enforcement, is the channel through which great reforms are secured. It may be claimed, and very properly so, that under certain circumstances general legislation would not provide equal justice to all parties concerned; but, I think, where State and Provincial laws are drafted on as uniform a basis as possible, improved results will follow. It is also well known that Europe is the home of labor legislation; but in the European countries with good laws well enforced. and equipped as they are with modern safeguards, I find that many of their diseases and accidents compare with our experience in America and Canada. It seems to me that with the advent of civilization diseases have increased, particularly those arising from industrial processes, and I suppose we must submit to the inevitable. When man ranged the prehistoric hills the maladies that beset him were few and simple; in fact, it is claimed that he knew nothing of such ills as pneumonia or tuberculosis on account of being immune to

cold, dampness, and exposure. Nourished by simple food and accustomed to occasional enforced fasts, he was a stranger to Bright's disease and to appendicitis, as well as to the long train of nervous and mental diseases; and, instead of fearing microbes and bad air and drainage, he generally died from other causes, such as being destroyed by wild animals, drowning, or being annihilated by men of other tribes. As civilization advanced specialization came into being, life grew complex, and bacilli began to play a part in human affairs. The man who displayed unusual capacity for chipping flint arrow heads, spent his entire time at the task and his customers, the hunters and warriors, brought him his share of meat and drink. This form of specialization developed groups of arrow makers. Their work began to tell on them because all day they crouched over their flints and inhaled the dust. In the course of time there arose among them a tendency to grow hollow-chested and they began to expectorate blood. This brought the human race face to face with that terrible disease known to-day as the white plague. When the stone age melted into the bronze age, new diseases developed. Workers in copper began to be afflicted with sores, and so on. There came into being many diseases. It became necessary for one whole class of wise men, known as soothsayers, charm sellers, and magicians to cope with these diseases; but instead of destroying the old diseases, it appears their doses and concoctions sometimes served to create new ones. To-day we have inherited an unlimited store of ills, with the result that in modern America it is a meek and lowly organ that can not show two dozen fatal maladies peculiar to itself. It is said that the brain has a thousand, and that the heart has fifty. As civilization becomes more complex new diseases are being evolved. I might refer to stonecutters, knife grinders, brass workers, and all other wage earners who have to inhale dust of any sort day after day, who suffer from disease. It is also said that city dwellers are victims more or less. The lungs and bronchial tubes of a man in the country are generally bright and rosy in appearance, whereas the city man's are usually dark and dull. Again, workers in chemicals are subject to afflictions; take, for example, those who are employed in the manufacture of rubber—they are often badly injured by the inhalation of vapors, litharge, etc., but later they seem to become immune to this poison.

In addition to this there are special forms of palsy affecting wood sawyers, gold beaters, and clothing cutters, whose daily toil compels them to use one particular group of muscles to excess. Men who handle hides, wool, or cattle are sometimes infected with terrible diseases peculiar to the lower animal. One of these is anthrax, a malady common among all the herbivorous animals, but especially so among sheep and among hoof cattle. This disease has been known to cattle breeders since the dawn of history, but not until 1849 was anything definite learned about it. In that year Pollender, a famous bacteriologist, pointed out that the blood of animals that had died of anthrax contained numerous minute cylindrical rodlike bodies, which were found to be bacteria. That these bacteria passed through the two stages of bacillus and spore was later proved by Koch, who also demonstrated that while the bacillus itself had a low power of resistance, the spore might retain its vitality for a

year or more. Furthermore, the spore could be immersed in boiling water for five minutes without apparent damage while boiling water kills the bacillus quickly. Drying destroys the bacillus but hardly affects the spore. Any chemical capable of killing the anthrax organism is more than a match for all other germ eggs. Normally anthrax is not a human disease, but men who come in contact with animals suffering from it sometimes become infected, and the result is almost always fatal. There are said to be three varieties, corresponding to three methods of infection—through the respiratory tract, through the intestinal tract, and through the surface blood vessels that is, the disease may be acquired by breathing the dried germs into the lungs, by taking them into the stomach, or by introducing them into a cut or scratch upon the skin. The last-named is reported to be the most common and the second the most rare. Thus we pass on from one occupational disease to another and finally reach the advent of the twentieth century conditions.

The history of the International Association of Factory Inspectors originated in 1886 when the late Henry Dorn (then chief inspector of workshops and factories in the State of Ohio) began, with the view of organizing the factory inspectors into a compact body, a correspondence with the late Rufus R. Wade (then chief of the Massachusetts district police and chief inspector of factories and public buildings, Boston, State of Massachusetts), L. T. Fell (chief inspector of factories and workshops, Orange, State of New Jersey), James Connolly (chief inspector of factories, Albany, State of New York), and Harry Seibers (State inspector of factories and shops, Milwaukee, State of Wisconsin). Their object in so organizing was to throw around labor every possible safeguard in industry. Employers and employees can not help but honor and admire the sturdy little body of men that met in the year 1887 in the city of Philadelphia and organized with little ado an association that was to influence States and Provinces to adopt the most practical labor laws.

However, at that time many well-meaning men looked upon factory inspectors with a certain amount of curiosity and sometimes distrust owing to the fact that the work of such branches of government was not understood. Captains of industry with vision discovered that a compliance with laws lessened agitation among their employees and that contentment followed; that it was a mistaken idea not to cooperate with the factory inspector; and that a few dollars expended for the purposes of protecting their employees against injury was a good investment. This organization also aimed at uniformity both as to the laws and the method of carrying them out, and generally, objections met with were dispelled. To-day it is a noticeable fact that legislation in favor of our industrial workers has been the logical outgrowth of scientific knowledge applied to practical experience.

Administration-How Shall the Inspector Act?

It would not do for the inspector, although having the power under the statute, arbitrarily to condemn certain safety devices since most of the devices which are claimed to conform with the law must be thoroughly tested. As a consequence an inspector must move

cautiously in the matter of safety devices until he can see what in his experience will prove to be the best, because from the beginning of the safety movement a large number of those so-called "safety devices" have been introduced and the inspector subsequently asked

to approve them.

It is not, however, difficult to create a mechanical device that will operate under favorable conditions but when subjected to unfavorable treatment will not work. Therefore it is possible under the adverse tests to compare its failure to operate with such tests as it might pass through at the time of an accident to the employee. The neglect of oiling, the lack of proper adjustment of parts, the wear and tear of continual use, the poor workmanship or material in the scramble of competition to satisfy a false economy with a lowpriced product, and the placing of equipment in some dark out-ofthe-way poorly lighted place to avoid using some valuable floor space—all these factors must be carefully considered by the inspector when administering the law. It has been said that the duties of a factory inspector are distinct from those of any other officer, and the qualifications necessary for the successful discharge of those duties are of a different caliber, involving as they do mechanical knowledge, good judgment, even temperament, and diplomacy, leaving their legal powers in the background to be used as a last resort. To become a success in his work the factory inspector must gain the confidence of those with whom he has dealings. He submits many times with patience and forbearance to the irritation of agent overseers, master mechanics, or other executive officers. He knows that these officials are busy men and to be called from their regular duties, perhaps at a time when it is almost impossible for them to leave the work they have in hand, is, to say the least, often very annoying. It is therefore not at all surprising that, when they drop their work and accompany the factory inspector, they act a little crusty or dis-The common-sense manner in which such instances are handled by the inspector affords such a contrast to their own manner that these officials soon recognize the difference and, before proceeding far with the inspection their good will returns and a courteous bearing is maintained throughout the inspection. The inspector can without difficulty or much delay secure such changes and improvements as are deemed necessary. Suggestions and advice should always be made in a pleasing and persuasive manner, keeping in mind that he is dealing with a class of men having immense cares and responsibilities, and having constantly to grapple with perplexing problems, an irritated mind often being the result. Only tact on the part of the inspector will prevent friction when he comes in contact with such a man. He must at all times, under all circumstances, be self-possessed, dignified, and deliberate; as an intelligent and profitable inspection of any large factory can not be made when the inspector or his executive escort are not working in unison. Again, when the inspector approaches one of the employees for the purpose of asking questions he must exercise the greatest care and use the best judgment. Most employees are rather timid and liable to become more or less excited when spoken to abruptly by a stranger, and such inquiries may result in injury to them or cause damage to the work on which they may be engaged.

The life of the factory inspector is not always a happy one; he continually lives between two fires; yes, many fires—the employer of labor, labor itself, and other critics. The employer—and I am glad to say there are few of the class to which I allude—feels that he is subjected to some laws which he terms unjust and finds it convenient to add to the inspector's troubles by expressing in language more questionable than polite his opinion of the law and the law-makers making the factory inspector the target for such tirades.

Here again tact can perform wonders. No department of endeavor affords a better opportunity for study of human nature than the branch of factory inspection where the factory inspector comes in close touch with people in all walks of life. The inspector when he meets a man of the order mentioned, can succeed through his knowledge of human nature and by tactful methods in changing such antagonism into a complete acquiescent and loyal support.

The employee who finds fault because the factory inspector is not enforcing some law, which, in fact, does not exist can also learn his mistake through the inspector. These attacks are sometimes discouraging to the inspector who carries anxieties for the safety of those employed in dangerous occupations. In fact, the work of the factory inspector is that of the humanitarian.

How Factory Inspectors Can Best Assist in Accident Prevention

By ARTHUR MACNAMARA, Assistant Deputy Minister of Public Works and Chief Inspector Bureau of Labor, Manitoba

My subject to-day is "How factory inspectors can best assist in accident prevention," and it was with a great deal of diffidence that I accepted Mr. Ballantyne's suggestion that I talk on this question, because this is the first time I have had the pleasure of attending a convention of your association and I felt that my brief should be a listening one.

Factory inspection and accident prevention, however, are problems which have occupied a great deal of my time and thought during the last 15 years; and I hope that my talk will have the effect of starting discussion, because I feel that the value of a convention such as this lies mainly in the exchange of ideas.

New government positions are being made each year because of the demands on governments for new services, but we who are factory inspectors can boast of a history or background because our occupation has been in existence for at least a century.

Perhaps the most ancient mention in history of provision being made with regard to the care of those in industry is furnished by the Roman writer, Pliny the Elder, who was born in the year 23 of the Christian era, and lived through the reigns of the Emperors Caligula, Claudius, and Nero.

This ancient writer makes note of certain diseases and injuries to which the slaves employed in the metal-working trades were subject, and the provisions that were made to prevent those diseases and injuries, the motive being not so much humanitarian as economic—in the interest of the owners of the slaves, and in the interest, too, of the importance of the metal trades to the State.

If my object to-day was to lay the foundation for a family tree for the occupation we factory inspectors follow I might claim relationship to inspectors in the employ of the old Roman Emperors, possibly driving 6-horse teams from job to job in chariots of brilliant hue—however, I simply leave the suggestion with you and make no definite claims.

From the day of the charioteer many centuries elapsed before there came into the world manufacturing establishments which could even begin to compare with those of to-day. The year 1802 is marked by the passing of the first of the long series of statutes of the Parliament of Great Britain known as the factory acts, and it was not until some 30 years later, 1833, to be exact, that factory inspectors were appointed for the purpose of inspecting factories. We, therefore, know that our occupation has a background of close on to 100 years.

Surely we have good grounds for congratulating ourselves that there is this background for our occupation as factory inspectors, even if it is on the ground of the saying we often hear that "the first hundred years is the worst." However, I think we have good reason for feeling proud of our occupation when we compare the conditions as they existed when the first factory act was passed in 1802 with what they are to-day, and I have no hesitancy in saying that factory inspectors have had much to do with effecting these

improvements.

Contrast, for example, the condition reported as existing in the Shrewsbury House of Industry in Great Britain in the year 1732. A report I read recently speaks of children at the work of picking oakum as working from 6 a. m. to 6 p. m. daily, and also of children being set to work in the spinning room soon after they are 5 years old, and in regard to another industry as follows: "The children are at school from 3 to 5 years old and from that age they are allotted hours in the workroom; these are busy scenes of cheerful industry, whilst content smiles on every countenance."

Picture any employer in this day and age attempting to employ

a child of 5 years of age!

In 1801 we read of an employer being sentenced to a year's imprisonment in Birmingham, England, for working children on an apprenticeship system under such conditions and for such long hours that they became deformed and disabled for life; and under Sir Robert Peel, in 1802, we read of legislation being introduced lowering the hours of work for apprentices to 12 hours a day and providing that separate sleeping apartments were to be provided for different sexes and that not more than two were to occupy one bed.

Picture any employers trying to get away with something of that nature at this time!

Down through the years I contend that factory inspectors have not only seen to it that the existing laws were complied with but they also have had a great influence in bringing about new and better legislation through reports to their respective governments and through the influence they had among employers in bringing about a feeling that better conditions were absolutely necessary. Because of these reasons I think we have good and sufficient cause to be proud of our occupation, and of the work done by those who preceded us.

It is well for us to think of the creditable accomplishments of factory inspectors of the past because such knowledge can not but inspire us to renewed efforts when it seems we are making little progress in remedying some of our problems, the most serious of which, in my opinion, at the present time is that of the frequency of industrial accidents.

I am so seized with the seriousness of the industrial-accident problem that I feel it is the greatest challenge facing employers and employees to-day, and that it is a challenge not only to employers and employees but also to factory inspectors because it is our concern.

You are all, I am sure, fully aware of the seriousness of the waste;

and I intend dwelling on this only for a moment.

The Labor Gazette gives the total of industrial-accident fatalities for 1927, as 1,378 people in Canada. In our Province of Manitoba, which is comparatively small industrially, we spend \$1 for workmen's compensation for every \$60 of pay roll and our total cost is over one million each year. The National Safety Council estimates between 23,000 and 25,000 deaths each year in the United States from industrial accidents.

My conviction is that industry can be carried on without this wholesale destruction of workers, and that while the problem is of

great magnitude it must be solved.

Now what can the factory inspector do about it? We can give lots of alibis for ourselves, for example, we can point out that a very small percentage of these accidents are due to faulty machinery and in most cases, if this is the cause, the guard has been removed since the inspector's last visit and was not replaced; oh, yes! we can find alibis aplenty!

If we follow this line and stop at protecting ourselves from blame, we, in my opinion, have stopped far short of carrying out our full

duty and we are unworthy of our job.

The great majority of these accidents, as you well know, are caused by some oversight or lack of thought—either some action or lack of action by employer or worker, or both—or are due possibly to a desire for speed, to be just a little quicker than the next fellow—shall I say just a little more daring, to unskilled men attempting skilled jobs, or to ignorance or lack of instruction. Many of them appear afterwards to be due to some foolhardy action of either employer or employee.

The factory inspector's obvious duty is to see that the provisions of the statute he is working under are carried out—that machinery is properly guarded, that children are not employed, that maximum hours are not exceeded, that licensed men are used when the law calls for such—and to look after the many other matters which

are usually clearly defined for us.

He has, I feel, a far greater work beyond these routine duties in so far as industrial accidents are concerned—he should, if you will allow me to say so, become a missionary in preaching the gospel of safety and so bring about a general realization of the appalling loss and the cure for it. Let me mention specifically some of the things he can and should do in addition to his routine duties:

Organization of safety committees.—There are few I think who do not agree that in plants where there is an efficient safety organization accidents are reduced. My experience has been that this is the one best cure and that safety-first organizations should be a part of every industrial concern; and where safety committees have not been inaugurated by the management, the factory inspector should be active in forming such a committee. The type of organization suitable for the various classes of industry should be carefully studied so that when organized they will have the greatest success. There is nothing so damaging to this phase of accident prevention than to have a committee formed only to die a natural death.

No matter what form this committee takes there should undoubtedly be a place on it for the factory inspector. He will, by attending all meetings (which he should) be of great assistance in settling problems with his wide experience behind him. He will be somewhat of a neutral between the employer and the employee. By having access to all reports of accidents he can readily call attention to the danger points in a particular plant and be able to spread from plant to plant any valuable suggestions or plans he has seen or heard. The very fact of his regular attendance will keep the matter alive and so avoid the apathy which so often follows the initial enthusiasm.

I know of no way in which a factory inspector can fulfill the high object of his office so well as he can by being an enthusiastic member of every safety organization in his territory. His activities in this connection will be too numerous and varied to attempt a full outline of them.

Accident investigation.—A factory inspector is usually called upon to investigate accidents in his district, or in any case he should do so. In most cases an inspector could find out all the particulars about an accident in a very few minutes, write a meager report, and wash his hands of the affair; this would be the easy method, and an indifferent inspector could no doubt "get by" in this way, for a time anyway.

It is not the method which I think should be followed. My experience is that the regrettable circumstances of an accident can be used toward preventing further accidents if the inspector takes full advantage of them.

The more thoroughly an inspector inquires into the facts of an accident in a formal way the more important does it appear in the eyes of the management and workmen. If you call all those who know anything about the case before you either in the shop, office, or better still to your own office, and take a formal statement from them, the more their minds will dwell on how accidents could have been avoided. In taking statements it is often a splendid thing to put witnesses under oath.

Another suggestion—seize the time shortly after an accident to approach a reluctant manager about safety-first organization, or to give you an opportunity to address the staff on accident prevention, or to have some one else do so, such as your chief or the minister in charge of your service. This is a good time also to get that improvement made in the shop which you have hesitated about ordering.

Special plant rules.—Factory inspectors should see that each firm has its own safety rules which are specially applicable to their plant. These should be printed and every employee be supplied with a copy. New employees should not receive their full status until they have an intelligent understanding of these rules, and they should be required to sign a statement that they will observe them fully. The inspector should be instrumental in initiating such a system and should act in an advisory capacity in framing the safety rules.

First aid and first aiders.—We all want accidents avoided, but there should be in every shop men or women who know how to treat an injury pending the arrival of a doctor. A factory inspector should be a competent first aider. He should induce managers to interest themselves in having a number of employees instructed in first aid. He should make an intelligent check of first-aid kits and be able to advise on what should be ordered. He should inquire into the arrangement for the treatment of the injured, that is, the location of the first-aid kit, how the first aider is called in the event of emergency, and how quickly a doctor may be located. First aiders in a shop naturally become leaders in safety work; in fact, my experience is that they come to be looked upon as very valuable employees and are often given promotions which they might not otherwise have obtained.

Relationship of inspector with employer and employees.—An inspector should strive to make himself a real influence in shop life so that his opinions on safety work will have weight. This he can do by extending his acquaintanceship among the employees and so conducting himself that he will be trusted and respected by them. He can do much in giving advice on personal matters such as compensation claims. He can also make himself valuable to employers in many ways, such as advice on special machines, improvements in methods, etc. Much of the cooperation sought from employers and employees in accident prevention must be given on a voluntary basis and the inspector's success will depend to a great extent on the value placed on his opinion, so he must see to it that he builds up a feeling of confidence.

Clothing and methods of work.—Unsuitable clothing is often the cause of accidents—loose sleeves, gloves with fancy gauntlets, and unsuitable shoes are some of them. The inspector should be on the watch for matters such as these and should not hesitate to approach the men and management about them. Not long ago I had occasion on a large construction job to hold a boot examination and to ask a number of men to go home and change their footwear. We were having frequent foot injuries from nails and I found the trouble was principally due to the kind of shoes worn. The action taken brought

about the necessary improvement.

Some men seem to have the knack of using the wrong method of doing a job—the way they put on belt dressing, for example, or do their oiling, or a hundred and one things, and an inspector can do a great deal in the correction of such accident-producing methods.

Conclusion.—In conclusion let me say that the matters I have mentioned are only a few of the things directed toward accident prevention that a factory inspector can find to do. The main thing is to be

up and doing some of these things because the industrial accident frequency must be reduced, and no man or body of men are in a better position to help reduce them than factory inspectors. It is "up to us" to show that we are worthy occupants of our classification.

Factory Inspection as a Profession

By ETHEL HANKS VAN BUSKIRK, Special Investigator, American Association for Labor Legislation

Exactly what governmental supervision through industrial inspection will accomplish in protecting employees in any State depends first of all upon the industrial character of that State and the laws which the legislature has passed to protect the workers. If you have in your State important mining industries and only definite comprehensive laws regarding the hours of work for women, you are not going to protect your miners to any great extent; or if you have many textile industries that are exempted from the application of the laws it is evident that many of your woman workers are not

going to be protected.

Assume, however, that the laws do apply and give adequate protection there still remains the all-important job of administering them. The proper administration of laws enforced by inspection methods depends as do all other types of laws upon an appropriation ample enough to permit establishments to be visited with sufficient frequency and the premises and operations to be examined with such satisfactory thoroughness as to insure complete and continuous legal protection, and to employ men who are aware of the educational aspects of their work. Just what amount is adequate for these purposes no one yet has been able to point out conclusively. And before it can be done several factors which affect the operation of an inspection system must be considered and weighed carefully.

The effectiveness of an inspection system is based primarily upon the organization of a department of labor. A strongly centralized system in which the different divisions cooperate so that the inspection forces have the benefit of all research work; so that they are informed of all contacts made by any other division with the firms which they visit to enforce laws; and when in addition, the inspector is the sole individual to deal with an employer, except in highly technical matters upon which a specialist alone is competent to advise, several advantages result. Such a system saves the employer the annoyance of frequent special visits; gives him the feeling of coordinated action by the department; and enhances his respect for the inspector as a responsible person. To the inspector it gives a responsible "man-size" job to which he must give considerable thought and attention. Thus, more intelligent and uniform protection is secured to the worker. In the long run, a system, in which the inspector is qualified to represent fully the department of labor is more economical.

If you ask any group of people to-day what a factory inspector is, the chances are you will be told that he is a policeman who patrols the factories and prosecutes employers whom he catches violating the laws. Most of us who lack the experience "on the

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job" fail to realize the many different factors which constitute the inspector's work. Also because of this lack of realization, we do not consider that it may well be an interesting and attractive pro-

Let us inquire exactly what is expected of a representative of the factory inspection bureau of a department of labor in discharging his duty of securing compliance with the law and codes. In practically all countries and States he has to be familiar with two types of laws—those relating to a plant's physical equipment and those to its operating conditions. Laws and codes relating to plant equipment include the guarding of machinery; protection from fire, which involves a knowledge of the construction of buildings; proper sanitation and ventilation, including humidity of workrooms; proper lighting facilities; adequacy of exhaust systems for dust or fumes; safety of elevators and other hoists; safety of walk ways and passages; and numerous other devices or conditions all designed for a specific productive purpose. Laws relating to operating conditions include regulations of the employment of women and children, smoking regulations, clearance of fire exits, and provisions for comfort devices not precisely classified as working equipment.

To enforce the laws and codes relating to plant equipment, the inspector must have accurate and ready knowledge of their application, limitation, modification, and exemption for different industries and processes. His specific job is to look for points of hazard. He must therefore, first of all, be able to discover or "see" a hazard. He must recognize, for instance, that the high-heeled shoes worn by a certain woman at work which requires constant standing fatigues her unnecessarily and is a constant contributing cause for an injury; that a winding passageway to a fire exit constitutes an obstructed passageway in case of fire. This done, he must then study out the best and most practical means of eliminating or protecting against the hazard and by "practical" is meant so to guard or protect the worker as not to interfere with production. In this second step he may need to call in expert help, which, of course, should be available. Later when protection has been accomplished according to his instructions, he must scrutinize it to see if the protection really protects—i. e., he must again be on the alert for danger points.

During the performance of his legal duty of prescribing the means of protection, and in addition to it, the inspector has the responsibility of demonstrating the advisability of his instructions to the employer and, quite frequently, to the employee. He must show or teach the employer both "how" to protect against injury and "why" to protect against it. These instructions should usually be accompanied by warnings as to the results in case of failure to follow them. The educating of an employer is the inspector's opportunity to "put over" certain safety principles. Teaching and educating the employer may easily become the most vital part of an inspector's work as well as the most painstaking and, in some instances, the most tedious. It can be seen readily that an inspector should—in fact, must—become an educational force if he is to secure effective compliance or protection. It also should be obvious that his ability must extend beyond mere literal knowledge of the law

and codes and the issuing of orders to comply therewith.

To discover violations of laws relating to a plant's operating conditions requires a different type of "seeing" ability—as these are hazards, so to speak, which are easily hidden and from which no immediate danger can be clearly shown; compliance is often inconvenient and unprofitable, or at least the profit therefrom is difficult to demonstrate. Under these laws the inspector must become conversant with repeatedly tried means of evasion and be alert to discover new ones. Once a violation is discovered, there is no involved task of studying out the best method to guard against it nor of teaching anyone the "how" and "why" of compliance. It is a clear case of securing evidence from records, interviews, or both, of ordering compliance and perhaps resorting to the final recourse, court procedure. In enforcing laws of this character the inspector is a police detective with the same power to enforce his demands as any other policeman.

Although laws relating to a plant's operating conditions are simpler in their application than those relating to its physical equipment, continuous compliance is more difficult to enforce for the simple reason that noncompliance is not manifest after its occurrence. Compliance with this type of laws does not stay "put" and the duty of rediscovering the same violation must be repeated often in the

same plants year after year.

From the foregoing account of his duties let us next inquire into the essential qualifications of the man to whom they are intrusted. In addition to his knowledge of the law and codes, which in many States means memorizing several voluminous textbooks, he must be able to "sell" himself and his goods, namely, law compliance. To start with, therefore, he must believe in his law and be sympathetic with its requirements. He must be enthusiastic about his work and he must have "approach." He must be able to teach anything from the proper way to pile empty cartons or the necessity of keeping an exit door unlocked to the proper way of looping cables or chains over material on a crane or the necessity of an exhaust for fumes from some specific process. He must also be able to teach such diverse matters to anybody from the president or safety engineer of a corporation with world-wide ramifications to a Polish baker whose 1-room shop occupies the rear of his home lot. In addition, he must be the kind of a man who can assert his authority, when the occasion requires, in enforcing laws which are police measures and yet understand how to "handle" this authority so as not to mitigate against his educational work. To do his best for the workers of the State whom he is sworn to protect he should have time to study all subjects which bear directly or indirectly on his work. Finally, he must be honest in his work and his reports. To sum up, the industrial inspector must be a man of character with the combined ability of a research student, a teacher, and a policeman.

So far as I am aware, no parallel of an industrial inspector's job exists. In other law-enforcing agencies, such as health and fire departments, reliance is placed largely on educational measures. Inspection by casualty insurance companies is concerned solely with the safety of a risk. Though their methods of safety inspection may be somewhat similar yet with no mandatory laws to enforce, their

attitude is very different. Within limits, an industry can "take or leave" their suggestions and pay accordingly. The methods of safety supervision and inspection practiced by large corporations can teach labor departments a great deal. Yet in none of these similar tasks is there the combination of teacher and policeman.

Passing over any discussion of the necessary prerequisite qualifications for this work—a fertile field for consideration in itself—I wish to call attention to the desirability of training an inspector after he has entered the State service. Some large manufacturers regard the training of a new employee, even in a minor process, so important from the standpoint of production and safety as to compel him to attend a school for several weeks. The foreman is not allowed to do this work because he is rarely ever a teacher, and most certainly he can not be a specialist in every operation in his department. In addition, the new employee often is carefully instructed as to his environment in the shop and his responsibility in keeping the shop safe and sanitary. If a man is employed by an industry for any work as responsible as that to-day placed upon a factory inspector, there is no doubt that he would be put through a long, ardous, intensive training before he would be adjudged capable of undertaking the work. Regardless of his previous training or experience, he would in all probability be a capable safety engineer for that industry by the time his training was completed. Certainly the work of inspection which, depending upon the specific State's laws, admittedly takes a man from six months to two years to "feel at home in "-i. e., to feel confident he can meet any emergency which may arise during the day—requires special training in some division of the department's organization set aside for that purpose alone; and the man's training should not interfere with the inspection work of the bureau. An inspector should become familiar with the many industries and processes to which the various legal provisions apply. He should be taught the "how" and "why" of his inspection duties just as he is expected to do later with employers whom he meets. The inspector who understands both the "how" and "why" of his job is more likely to become interested in it, to turn out a better quality of work, to be able to meet emergencies, to suggest valuable changes in administrative regulations, and usually requires a minimum amount of supervision.

I have attempted in this brief discussion to present the case of the man (still regarded by many as the policeman who climbs the stairs) upon whose ability and personality the State depends to do the most basic work in all industry, namely, the preventive work. Through this man as the representative of the department of labor, the State must demonstrate its ability to protect workers not only legally, but adequately, and its fitness to decide in a specific instance the best protective measures, not the minimum. Through the inspector a State labor department must prove whether or not it is qualified to become a conscious, effective and far-reaching educational force for making places safe for the employment of human beings, and thus justify the expenditure of public moneys for inspection work.

Shall the inspector, therefore, upon whom all this responsibility rests be regarded merely as a cog in a machine of whose efficiency the best measure is that "he does what he is told" or shall his status be placed on a professional basis with its accompanying dignity?

DISCUSSION

Miss Johnson. I would like to ask Mrs. Van Buskirk about the training she would suggest for inspectors. She spoke about training after appointment; would she suggest special training before appointment, and if so, what training?

Mrs. Van Buskirk. I do not feel qualified to say just what preliminary education an inspector should have. I think we can ultimately arrive at some adequate standards of qualifications an inspector must have before he is qualified to enter. We must first study the various methods of inspection in different States and countries. As to whether we can establish standards now, I am not qualified to say.

Miss Johnson. Would you say that they should have experience in industry as compared with other special qualifications?

Mrs. Van Buskirk. Yes; they should have some industrial experience. I can not say what it should be. If you have worked in a manufacturing industry, you will have secured an experience unequaled elsewhere. I have heard heads of labor departments state that they preferred men with some industrial experience, chiefly mechanical. Every inspector should be an industrial hygienist, and for that reason I think he should have some mechanical training, some training in hygiene, and I should also go so far as to suggest normal training.

The inspector to-day has not yet come into his own, and I believe he will be recognized as a potent force in preventive work only through his own efforts. In the recent increase in salary the inspectors of New York received, most of the fight was put up by the inspectors themselves.

Chairman Patton. We have several inspectors present. Do they wish to be heard, or, will they complacently pat themselves on the back and say "We are it?"

Mr. Burke. In Ontario we do not call our factory inspectors policemen; they are not in the same category as policemen—they do not carry badges. As a pioneer factory inspector covering over a quarter of a century, my observations have been these: I have had university-trained people, but I can take a mechanic with a moderate education and often he will accomplish a great deal more than the university-trained men. Then I have had experience with captains of industry who are not usually university-trained men, and I have to try and use shop terms. If I can use shop terms, I can put anything across much quicker than if I use technical language.

I know some of the pioneers in New York State, and I do not think you will call them policemen. I know we don't do that here.

Mr. Stewart. I think, for the purposes of the record, that no matter what you call an inspector, he must have some authority.

When you get right down to bedrock, he is a policeman; in other words, his function in the shop is what a policeman's function is on the street, and his powers are the same. What you call him is,

after all, a mere quibble.

The point Mrs. Van Buskirk makes about the inspector is his essential ability to understand himself and his job, the law, and the power behind it, and his ability, as she terms it—I don't like that way of putting it, but it is the modern way—to sell himself to the other fellow. I wonder if that can be taught—poets are born, not made—the ability to put across, to make the other fellow see it; I want to put an interrogation point there, as to whether that can be taught before employment or not?

Mrs. Van Buskirk. Quite true. But the natural-born salesman or teacher needs to be trained in his specific line of work.

Mr. Stevenson. In regard to this paper on factory inspection, I would like to say that this lady has presented a very fair paper. The factory inspector in Canada is in no way recognized as a policeman. While he has authority to enforce orders and even to go to court, he very seldom goes there unless he is sure of his ground. In my estimation, the factory inspector has to be more than that—he must in all cases put things across and get what he wants, and make a study of human nature. You go into a workshop and find a dangerous condition; you want some machinery guarded; the employer or the superintendent is opposed to you when you go into the place; you have to study that man and find out whether you can make better headway with him by sitting down and discussing the matter with him for a while than by putting a peremptory order on him.

My idea of factory inspection is that if you can sit down with a man and talk the thing over, you will get results eight times out of ten. That man will call the superintendent in and say that he wants these repairs made right away, that he wants such and such a machine guarded, or anything else along that line. You can do more by sitting down and talking with a man in authority in a plant than by trying to force him through the law, because if you force him through law, you get exactly what the law calls for and no more.

In the Province of Ontario, in our big foundries, the law calls for shower baths and so forth for the employees. Go at a man in a hostile manner, and he will say, "All right, I will comply with the law," and he will put a couple of shower baths in a corner, where nobody will see them, whereas if you sit down and reason the thing out with a man, what will be the result? Eight times out of ten you will get a nice large room, white enamel shower baths with curtains between them, and very often a smoking room for the men when they are not at work.

A factory inspector should, in my estimation, come from the mechanical force. For a commissioner of labor and that sort of thing we generally get a university-trained man, but a factory inspector, in

my estimation, to be a success has to be trained.

Of course I have had no experience south of the line, but I know that when we start out in this country (in Ontario) we get training. If the inspectors are composed of a printer, a machinist, perhaps a couple of machinists, a foundryman, a polisher and buffer, and so on,

the chief generally sends you out with a man who instructs you from the practical standpoint of his own business.

I want to say for the chief of this Province that he does his best

to instruct his men before he sends them on the road.

I happen to be an unfortunate printer who 10 years ago undertook this work. I did not know very much about elevator work, or anything of that kind, but I was never afraid to ask questions.

Take the question of elevator construction and safety; the chief sent me to one elevator company. They kind of showed me over an elevator, but it was not satisfactory to me. I went back and told him so, and he sent me to another place where they had a wheel erected right on the floor. The superintendent had his mechanics show me the thing and explain it to me. That enabled me to go and talk with the man and tell him what improvements I wanted, and why.

Then there is the man you have to meet in the factory who will take a suggestion. Some men absolutely abhor a written order to do this or that within 30 days, but sit down and talk with them in a friendly way, and in an hour or two, before you leave the office, the superintendent is called in and told to make the repairs desired

throughout that plant.

I was glad that Mrs. Van Buskirk referred to the fact that the factory inspectors in the State of New York had received a raise. I want to say that the factory inspectors I have come in contact with throughout the United States and Canada have salaries which I would term as "rotten."

[Meeting adjourned.]

FRIDAY, JUNE 7-AFTERNOON SESSION

W. A. Rooksbery, Commissioner, Arkansas Bureau of Labor and Statistics, Presiding

WORKMEN'S COMPENSATION

Chairman ROOKSBERY. We have put in considerable work arranging this program, and I am sorry that it comes at the end of the session, because many of the delegates had to leave last night, and others are leaving this afternoon. The subjects that are on this program should have more consideration than they will receive. The papers to be presented will be of much benefit, especially to those of us who live in the South and Southwest. Throughout that section of the country we have started laying the groundwork, which will be of great benefit in the future.

We have with us this afternoon a gentleman who has been of much benefit to us especially in Arkansas, and in North Carolina, in compensation work. It is through his efforts that a campaign has been started in the South. North Carolina enacted its compensation law at the last session. It is a pleasure to me to present Dr. John B. Andrews, secretary of the American Association for Labor Legislation, New York, who will speak to us upon the subject, the "Suggestive Trends of Workmen's Compensation Laws."

Suggestive Trends in Workmen's Compensation

By John B. Andrews, Secretary American Association for Labor Legislation

In speaking of trends of workmen's compensation in the United States and Canada one might mention merely the most obvious developments

velopments.

It is clear that the movement has been in the direction of covering the whole map with this most important of all modern labor legislation. All Provinces of Canada and all States and Territories of the United States except four laggards in the South (Arkansas, Florida, Mississippi, and South Carolina) have joined the procession since 1911. It marks a truly revolutionary adoption of a modern principle in law and administration.

Beginning first with accidental injuries in extrahazardous employments the trend has been slowly but steadily in the direction of recognizing that occupational diseases should also be included, and that any industrial employment out of which a personal injury arises is to the particular worker thus incapacitated distinctly a hazardous one.

Meanwhile, step by step, in the light of experience, compensation laws have been made more nearly adequate. The compensation scale has been raised, although much too slowly and not enough in many jurisdictions. Medical care has likewise been "liberalized" to a considerable extent, although still one of the most inadequate but im-

portant compensation services. There is still to come full recognition by employers that the best medical care may be the most economical.

All of these obvious trends in workmen's compensation legislation, observed over a period of nearly 20 years on this continent, offer grounds for encouragement—particularly since there is every reason to expect further continuous progress in perfecting existing legislation. There is even hope, since North Carolina this year adopted the compensation system, that Florida (despite her sawmill lobby), that Arkansas (despite her coal operators and "ambulance-chasing" attorneys), and that Mississippi and South Carolina (despite their appalling indifference) may yet join the procession of civilized Commonwealths and furnish to their industries this measure of modern protection that is almost universally recognized as beneficial both to the workers and to the employers.

However, for the present purpose, I wish to turn from the more obvious trends in this legislation and to consider briefly the less obvious, the less talked about, but in my judgment the no less important trends and influences of compensation law and administration. These are perhaps the most significant trends for the consideration

of those who enforce our labor laws.

There has been a tendency in most States, during the experimental years of putting workmen's compensation into effect to let it overshadow in public interest and in financial support the other important phases of labor-law administration. The time has come for the independent services of labor boards, departments, and commissions to assert themselves and to take their proper position of importance

in the administrative picture.

No one familiar with the facts—as you most especially are—will doubt that there is need, for example, of a much greater development of a high-grade industrial inspection service. Mrs. Van Buskirk, from her exceptional opportunity for observation, has made a plea for public recognition of the qualifications of efficient factory inspectors. In another related inquiry into labor-law administration, in which I have been especially concerned, I have noted the importance of the various systems of organizations of labor departments that have been set up. Later on, in another year or two, with the continued indispensable cooperation of the Governmental Officials in Industry, we hope with our associates in the inquiry, to submit a number of reports of findings.

What are some of the most significant trends in compensation laws that appear suggestive for the use of those primarily interested, let

us say, in factory inspection?

First. Compensation-law administrators have learned how to finance their work without depending upon appeals for appropria-

tions from the legislatures.

In my own State (New York) the cost of administering the compensation law alone is approximately \$1,500,000 yearly. In recent years, since 1918, in fact, this administrative cost has been divided by the department of labor among the insurance carriers in accordance with the compensation paid, so that this part of the accident burden also falls upon industry, where it of course belongs. Ten

of the other States already follow a similar practice. It is significant that the latest two laws enacted have embodied this method.

That this device is capable of extension to the industrial inspection field is shown by practical experience in the Province of Ontario. Here much of the work of accident prevention is carried on through inspectors selected by the various industrial groups under the workmen's compensation board. The board supplies the funds for the payment of the inspectors, and then the board levies the expense of such work upon the respective classes of insured employers as a part of their compensation insurance rates. In New York the competitive State compensation fund has 25 safety inspectors who are paid a total of \$56,100 in salaries, in somewhat similar fashion, although they are selected directly through civil service like other employees of the New York Labor Department. These are but illustrations, which could be multiplied if time permitted. Under the exclusive State compensation fund in Ohio, for example, 1 per cent of premiums is set aside for accident prevention.

Without stopping to weigh the advantages or disadvantages of these newer plans, they are submitted as a challenge to the resourcefulness of administrators of all other labor laws. Even the United States Supreme Court has decided that the expense involved in the vocational retraining of industrial cripples is a legitimate part of compensation cost. It is only a step to bring the prevention of

accidents into the same category.

Second. Compensation law administrators have shown how to

impose effective penalties for the violation of labor laws.

In Wisconsin, since 1917, and in a number of other States more recently, extra compensation must be paid directly by the employer in case a child worker is injured while illegally employed. If it is in violation of the working permit provision, double compensation is to be paid; if a violation of the prohibited employment provision, the normal compensation is trebled. The extra compensation must be paid by the employer from his own pocket, without insurance. Dr. E. E. Witte, chief of the Wisconsin State legislative reference service, reports that: "Considered as a penalty for violations of the child labor laws, the extra compensation provision of the Wisconsin compensation act is by far the most effective penalty ever devised." (American Labor Legislation Review, June, 1923, pp. 123-129.)

Here again, in compensation law trends, is a social invention in American labor legislation which, in my opinion, is worthy of careful study to determine its possibilities of wider usefulness as an

aid in labor-law administration.

Third. With the coming of workmen's compensation there developed also a widespread use of the "administrative order having

the force of labor law."

These regulations grow out of a recognition by the legislature itself that it is not equipped to deal in technical detail with many problems of safety and health arising out of complex modern industry. Authority is delegated to the labor department to investigate, confer, hold public hearings, and then issue administrative

Delaware, 1919; Georgia, 1920; Kentucky, 1916; Maryland, 1917; Missouri, 1926;
 New Jersey, 1918; New York, 1918; North Carolina, 1929; Tennessee, 1919; Texas, 1925;
 Virginia, 1918.

orders under a broad authorization to help make work conditions safe.

This is a most important development in the United States since 1911. More than 20 States have authorized this procedure, which, of course, has likewise been in operation in Canada. It has accompanied or closely followed the operation of workmen's compensation

with its emphasis on accident prevention.

This order-making practice is highly important and very useful in some States. My special study of this subject during the past year, however, leads me to challenge anyone to say he knows or can readily find out what the labor law is in the United States to-day. Many of these orders are being issued without due regard to important procedure. They are often "out of print" if, in fact, properly printed at all. There is, after 18 years of this development, no general index or summary annually published to guide the anxious seeker after truth through the mazes of conflicting records and sometimes undated publications of such legal regulations.

I have been working on a plan for a periodical index of these administrative orders, and I hope that in due course it will be made available. At this point I wish to suggest that each labor department might render an important service by giving special attention to these orders, which when properly developed may be of great service, not only in accident prevention but in the whole field of

labor-law administration.

There is not time enough for me to recount numerous other interesting trends in compensation practice. I must conclude with one more point, which I respectfully submit for your earnest consideration.

Fourth. Compensation-law officials have furnished a suggestive

example of continuity of administrative office holding.

Most of the compensation laws are administered by a commission of at least three members with 6-year terms, expiring one every other year. This has some advantages over the hazard of complete change

of administration with change of governor.

I have not yet made detailed comparison of the tenure of office among State labor and compensation officials to determine how much longer, if any, State officials in this field are permitted to serve during the past 20 years than they were prior to 1910. It is my impression, however, that there is a tendency to give such men an opportunity for longer service. Of course, in this connection one must take off one's hat to the Canadian Provinces, where, as in Ontario, the commissioners "hold office during good behavior" unless they are removed for cause or reach the age of 75. We in the States have much to learn from the Dominion.

I shall deeply appreciate having any comments on these four points which I have so briefly set up for criticism and suggestions.

DISCUSSION

Chairman ROOKSBERY. There is no question that Doctor Andrews has given us plenty to think about.

Mr. BALLANTYNE. Like yourselves, I have only had the opportunity of listening to the very excellent paper that has been read by Doctor Andrews, and just as you may appreciate the difficulties

there may be in making up your minds what the most salient features or factors in connection with this paper are, I ask you to bear with me in whatever judgment I pronounce on the several aspects of the

problem he has presented to us.

You will realize that the subject of workmen's compensation is primarily founded on whatever conceptions we may have of what is termed in legal parlance "common law." It has always been held to be the right of the individual under certain specified conditions to find through the medium which society has provided legal redress for any wrongs that may have been inflicted, and it is a reasonable hypothesis that if a person is injured in the course of his employment through no fault of his own he is entitled to obtain legal redress in a manner that is prescribed by law.

Now, it is also a tribute to the different opinions which we hold as individuals, and also which we hold collectively, in our various Provinces and in our various States that the forms of legislation which provide for workmen's compensation, while showing certain degrees of uniformity, show the local influence by the varia-

tions which are presented in the legal enactments.

In Ontario we believe that we have a law which protects the injured person to the greatest possible extent, although it is a condition of this law that once a workman has agreed to place his interests in the hands of the workmen's compensation board, by so doing, whatever rights he may have under common law are subrogated

entirely to the board that administers the act.

As you know, the case is not altogether dissimilar to the forms of compensation or organization that have been created in the United States, and quite lately in the Province of Quebec. There are many features which compromise the interests which injured persons have under what we term the common law. But leaving that aside for the moment, although it is always important to remember as the basic thing or one of the basic things upon which laws operate—if we leave that aside for the moment we may be able to get on general lines what is the trend in workmen's compensation.

To my mind the most important trend in the work of compensation laws is focusing the attention of employers on what is clearly pre-

ventable in carrying on productive functions.

Prior to the passing of compensation laws, State government officials found it extremely difficult to secure complete cooperation of employers in making effective the various safety recommendations that emanated from them from time to time, but since the adoption and the enactment of compensation laws, I think it may be said without any equivocation that State officials in the enforcement of factory acts or similar legislation for safeguarding workers in industry, have found at least that part of their work is much easier to administer, because the employer is beginning to realize more and more that the Government inspector, or the inspector that may be engaged by the association which he himself creates, either individually or collectively, can and does give very valuable advice not only in the prevention of accidents within industry itself, but in reducing to the lowest possible minimum the rate of assessment which employers are called upon to pay.

It does not make very much difference, such is the point of view I take, as to whether the rate of compensation assessment on an employer is levied by the workmen's compensation board for the purposes of building up a State accident fund, or whether it is levied upon him for the purposes of paying premiums to approved insurance companies, the result in the last analysis is the same, that the employers will cooperate if the rate of assessment can be cut to the minimum. It is an open question in my own mind, as to whether the results from the operation of a State accident fund, or from the handing over certain forms of compensation work to approved insurance companies is the best possible plan. I will be quite candid in confessing to you that I have a great admiration for the type of medical service that is provided by insurance companies in the United States in matters of workmen's compensation. I realize that in a very great degree the preference of the injured workman is for his own medical adviser to give him the necessary medical services; nevertheless, while I appreciate the preference which the injured workman is justly entitled to exercise, I feel that for his own good and for the good of the country, that the more we can do to encourage the injured workman to engage the medical specialist to look after his injury, the greater is the benefit conferred upon the injured workman to industry itself.

It ought to be quite apparent to most of us present that if one's bone is broken through engaging in industrial enterprise, it is far better to secure the services of the medical man or woman, as the case may be, who is well versed in the technique that applies to the setting of bones, or of making broken bones better. It is better to engage the services of a specialist in that line than to call upon the ordinary everyday physician who attends to most of our ills.

I might enumerate many instances which would clearly demonstrate that the engaging of a specialist to lessen the severity of injuries to limb or eye, or any other part of the anatomy is the best way to proceed, in reducing the severity of accidents as much as possible and I think to a very great extent the insurance companies who carry the insurance for industries do follow this practice and probably to a greater degree than we do in the Province of Ontario. I say this because while I appreciate the very great advantages that accrue to injured workmen or their dependents by giving to them the greatest amount of monetary consideration that is possible in lieu of the injuries received, and while I agree that, whether it is through a State accident fund or from an insurance company, the rate of compensation should be kept at the highest possible point, yet that in itself in my opoinion is not the only way to deal with the problem of treating an injured workman. It is vitally important from the point of view I hold, that the most adequate provision be made, in order that the highest forms of specialized medical service be available for injured workmen.

Doctor Andrews in the course of his paper, referred to the differences that may arise in methods of administration relative to compensation laws. May I point out to you that in the Province of Ontario under the compensation act permission is given under statutory authority for employers to form safety associations within their own establishments or for their own industries, and that it is to the credit of the employers in this Province that to a very great extent they have taken advantage of the privilege afforded them. Active safety associations in the respective industries have been organized to a great extent, and Mr. Morley is the general manager of such associations. The avowed object is primarily to reduce the assessment under the compensation act to employers for the purpose of augmenting the State accident fund, and while employers are perfectly frank—and I rather admire their frankness—in so stating, yet you can not very well reduce the rate of assessment for the State accident fund without being inequitable. If you can not reduce the frequency, you must reduce the severity of accidents.

I am not unduly alarmed as to whether the rate of frequency goes higher or lower; as a matter of preference I would rather it should go lower than higher. But one must not be unduly alarmed if the rate of frequency is inclined to increase rather than decrease, because those of us in this line of endeavor know that changes are ever taking place in industrial processes, and it is only reasonable to assume that men who may have been engaged for instance in the making of roads, using almost exclusively the pick and shovel in order to achieve the ultimate of good roads, must of necessity, on the principle of adaptation, find sometimes a little difficulty in applying themselves to the new methods that are constantly being introduced, not only in the making of roads but in a great many other industrial enterprises. I think that is apparent to all, simply because of the fact that new kinds of appliances and different methods are constantly being applied to industrial processes of many kinds, and I am of the opinion that the rate of frequency of accidents is not likely to decrease to any great extent. Recognizing the problem from the other point of view, that is, of lowering the level of severity to the lowest possible point, I think the problem assumes a different aspect altogether, depending upon one's conception of the problem from the viewpoint of severity and depending upon what we may regard as the inevitable trend in regard to matters of workmen's compensation.

The point to emphasize in regard to the trend of workmen's compensation is this, that when accidents occur, as they do occur, the utmost should be done, either by the State or the board appointed by the State, or by approved insurance companies, to provide highly skilled or specialized medical service, in order to reduce to the lowest possible minimum the severity of the accident. It falls as a natural conclusion that automatically you reduce to the lowest possible degree the severity of the accident. The economic benefits that accrue are self-evident. That appears to me to be the greatest line of endeavor along which workmen's compensation should develop. I care not whether it is administered through a State board or through an insurance company. I stress the point because I think it is important that adequate specialized medical service should be given to the sufferer, in order to reduce the severity of the accident to the lowest possible minimum, and I repeat, with all due regard to the preference of the injured workman to engage the services of the family physician, I believe the education of the workman along such lines will be of immense benefit, not only to

himself, but to industry in general.

Another feature which I think is developing more and more, arising from the work of compensation laws and boards, is the recognition that is being given to the tendency in industry to contract certain diseases, which formerly were recognized as coming from a congenital origin. I think Doctor Cunningham, a man who has a great knowledge of medical matters, will be able to show you later on in this session that within industry there arise to workers great organic dangers to which they are subject, which formerly The same may have been ascribed to the causes I have mentioned. attention should be paid by insurance societies, insurance companies, State compensation boards, or, under exclusive State control, to the problem within industry of workers contracting certain diseases due to the nature of their occupation. The recognition of this fact will not only induce employers in particular and State officials as well as all others who are interested in matters of workmen's compensation to pay more attention to the actual working conditions of employees in industry so that the organic hazard to which they are continually subjected in certain occupations will become fully Employees themselves will become cognizant of the dangers to which they are subjected during the course of their employment, and employers and workmen's compensation boards generally will take adequate means to reduce to the lowest possible minimum the hazards to workers in industry from occupational diseases.

Mr. Stewart. I would like to add one word. This year the Navy Department of the United States has been empowered to use 1 per cent of its appropriations for safety purposes. That is an entirely new departure. It is the only department of the Government that is doing any safety work, and it is the only one in which the safety record or the accident record is anywhere near similar to that in work on the outside.

There is one more point I wish to make in regard to the number of States that are out in the cold. There are only four States that have not passed some sort of compensation law, and I want to go on record right here and now in saying that I consider that a State which has a court administration form of workman's compensation law is in a worse fix than the State that has no law at all. We do not want longer to ignore that fact. When Arkansas was considering a compensation law I wrote to Mr. Rooksbery and said that unless he could get a commission form of administration he should withdraw his bill; and I again say that we should add to the States that have no effective compensation law all of those States which are operating under court administration.

Doctor Patton. I would like to say that I agree that the four States which have no compensation laws should have them. I regret that they do not have them. I would almost go so far as to say that a State with a court administration is worse off than if it has no law, but the recognition of the principle is worth something. I also wrote to Mr. Rooksbery and said that if they could not get a commission-administration law through the first year they should wait until they could.

I think one reason why the Southern States, where wage rates are low, have no compensation laws is that a large percentage of the employees are negroes. There is not the same burden resting upon employers in damage suits as there is in the East and North, where wages are higher, and in certain sections the sky is the limit. It depends upon the jury as to how much damage a man is going to get; and these verdicts reach such high levels that employers welcome workmen's compensation in order to avoid these large verdicts. That is not the case in the Southern States; it is due to the low wages, and to the very large number of negro employees. That, however, is no excuse for the absence of compensation laws.

Chairman ROOKSBERY. We will now hear from Mr. Victor A. Sinclair, K. C., chairman Workmen's Compensation Board of Ontario.

Some Aspects of Compensation Work in Ontario

By Victor A. Sinclair, K. C., Chairman Workmen's Compensation Board, Ontario

It is a great pleasure to address such a distinguished body of experts on these subjects, also to renew acquaintances made in the

past, and to make new acquaintances at the present meeting.

I have not prepared a set paper. I desire that my remarks shall be informative, and I think the best way is to give some account of the workings of the Ontario act, then leave it to you to ask any questions which may be of interest. In that way the meeting will get the information it desires in connection with compensation work. I think the paper or the address which brings out the most questions is probably the most effectual in spreading information.

I may say with regard to the Ontario act, that this is the pioneer act in the Dominion of Canada, under which the first workmen's compensation board in the Dominion was formed, and the act has been in force since January 1, 1915; so that we have been in operation over

14, and nearly 15 years.

Our system, which has been known as the Ontario system, has been adopted in most of the Provinces of the Dominion. All the Provinces except Prince Edward Island, which is not industrial, have now adopted legislation for workmen's compensation, of which a board is in control. Quebec has adopted the system of a compensation board, but not a system of State insurance. This is the first year of its existence, and it is carrying on through insurance companies. The other Provinces are all carrying on under the Ontario system, except the Province of Saskatchewan, which only recently, after having the matter inquired into carefully by a commission, has recommended the adoption of the Ontario system in that Province. Such legislation has been passed, but not brought into effect in Saskatchewan. So the Dominion will be pretty well under compensation law and compensation boards from one side of the continent to the other.

I may say also that the Labor Party in England at the present election and prior to the present election have been recommending the adoption of the Ontario system in England, and the principle of establishing a compensation board. Now that they have a labor

government in power, the probabilities are that the question will be brought up for decision within the next year or two.

There are certain things we are proud of in connection with the Ontario system. We give probably the most liberal benefits which

are given under any system.

While we started out with a good deal of suspicion and disfavor so far as employers were concerned, I think at the present time we can say that our work is being regarded in the most friendly way, and we are receiving undivided support from employers as well as from labor.

Organized labor put itself on record about two years ago, after an investigation of complaints in Ontario, as finding that less than 3 per cent of the cases handled by the board gave rise to causes of complaint, so that we feel that if, with ordinary human frailty, we have been operating with less than 3 per cent of trouble and dissatisfaction, we are not doing badly for ordinary human beings.

When you consider the expanse of territory which this board covers, when you consider that our operations extend pretty nearly as far west as the western boundary of Minnesota and very nearly to the eastern boundary of the State of New York, you will understand that we have a very wide jurisdiction. We have to deal with accidents happening 1,200 miles to the west of us, 500 miles to the north of us, and 300 miles to the east of us. That means a problem in administration which prevents that close touch with all cases which a State like Ohio, operated very much like our own system, can carry on in an area of about 250 miles square. I think I am not very far off in that estimate. You can therefore see that the problems we have in regard to distances are much more serious in Ontario than in some of the smaller States of the American Union, which of course also adds to administration expense.

Ontario has also, I think, established a fair reputation as to economy of administration, although we may possibly have to take our hats off to Ohio on an administration percentage. Ohio's cost of administration is probably a little lower than that of Ontario, but it has a very much bigger field to operate in, a greater pay-roll exposure, and a great many more accidents than we have in Ontario

over which to divide the overhead.

During the past year our percentage of administration costs to benefits awarded was about 4.49, or a little less than 4½ per cent, divided into two classes—4.76 in Schedule 1 and 3.33 in Schedule 2.

I was in England during the present year, and that was one of the questions asked by the Government department in England, How could we operate on such a low basis of administration costs? They were very much interested; that was one of the wonders there, where they operate with about 50 per cent going toward administration and payment to insurance companies.

There are other questions I thought you might be interested in, and one of them is, on what points do we differ from your own States? First, the board is composed of three commissioners appointed by the government of the Province of Ontario; and, as Doctor Andrews said, they are appointed during good behavior or until they reach the age of 75 years, and can be removed only for cause.

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The only changes we have had were two, one by death and one by resignation and death a short time afterwards. So that we have continuity of management in connection with the board in the Province of Ontario.

Again I do not suppose there is any more absolute tribunal in any country than the Workmen's Compensation Board of Ontario, because there is no appeal from our decisions. We are protected from any legal proceedings; it is especially provided in the act that we are not bound by any legal precedents, that we can deal with any particular case according to the justice and equity of facts in each case. If you can imagine any more extensive powers given to any court, I would like to receive the suggestion. The board feels that with this power given to them, the responsibility on the board is just as great as the expanse of the powers given to it. The act provides that every decision the board gives can be reviewed or rescinded at any time, so that no decision of the board can be considered as absolutely final. All decisions are open to review by the board, and the board does review cases time and time again, giving the workman every chance to submit further evidence or submit himself to specialists for opinion. The board tries to keep an open mind, and has no hesitation in reopening a case of any kind and giving to the workman the benefit of any evidence he can produce. So that while there is no appeal except to the board, the board is very free in granting appeals.

Any workman can write the simplest letter in the world, and as much attention will be given to his case as will be given if he comes before the board with the best counsel in the land. We try to get at the facts in the most informal and complete manner pos-

sible. In that way, we are a most democratic board.

You will also be interested in the benefits provided. We first pay full medical aid to all workmen entitled to it. That does not mean simply the least he can get along with. We try to give the workman the best medical skill we can give him, in case of difficulty. We have full control of the medical aid furnished the man, if we want to exercise it; but we endeavor to let the workman have his own choice, subject to agreement between the workman and his employer, if possible or feasible. A great many plants have their own doctors, specially skilled in industrial medicine, and we encourage the man to go to the doctor skilled in industrial medicine; but if he does not like the doctor he can appeal to the board, and the board decides whether he shall continue with that doctor or whether another shall be employed. We do not get many appeals to be relieved from the care of the surgeons in these large industrial plants. If we do have an appeal it is usually from some other doctor in the town who thinks the industrial doctor is getting too much of the practice. The board only favors him to the extent that he is a special plant doctor, always reserving the right to change the doctor or give the workman such other attendance as is required.

In addition, we give the workman the best specialists in serious cases. We have no hesitation in bringing a man 1,000 or 1,200 miles to Toronto to give him the best surgical attention we can get if his case demands it, or if it is in the extreme western part of the Province, we may send him to Winnipeg, where he gets the care of the best specialists, if this appears better than bringing him to

Toronto. We give him the best surgical assistance to treat his case, so as to get him back to his work again at the earliest possible date.

This medical aid inures to all, even if off for only one day.

We have temporary total disability, which applies to the man by way of compensation when he is under medical care; we pay two-thirds of the man's average wage during that period; when he has completed his period under the doctor's care, he can have permanent disability, provided these awards are then made. When the injuries are in the nature of a definite amputation, such as the loss of an eye, the loss of fingers, and so forth, something definite of that kind, we have definite standards and definite percentages of disability which we award in all such cases. If a man loses sight of an eye, he gets 16 per cent disability; if a man loses his hand, 37½ per cent and so on. The loss of two eyes, two feet or two hands, means double disability for life.

In addition to that, at the end of the time, if we have workmen in a condition where rehabilitation may be of some benefit to them, the board is authorized to spend up to \$100,000 a year for rehabilitating seriously injured workmen. That may not appear to be a large sum, but it has turned out in actual practice to be more than sufficient. The reason for that will appear when we realize that it is a very small percentage of workmen who are more than 20 to 25 per cent disabled, probably not more than 300 or 400 in a year who will be more than 25 per cent disabled and require

rehabilitation.

Then we have a large proportion of others who may have been workmen without education, foreigners and others, incompetent to take any rehabilitation into other employment. The only rehabilitation open to a workman of that kind is work, and we have the best assistance of many employers, upon whom we impress the responsibility for the workmen injured in their plants; we press upon them to take the handicapped men back. In that way we try to look after a man until he is able to proceed with work on a

regular scale again.

We have others who are competent to take training; we give them business college courses, training in electrical work, radio work, telegraph operating, and other particular lines of occupation where training can be given to young people especially, so that they can be put back into work. We also use the services of the Government employment agencies, and we try to get our men back to work in probably 75 per cent of the cases. In probably 75 per cent of the cases which we have, of this limited number who are seriously disabled, nothing but work is open by way of rehabilitation. We have tried occupational therapy; we have tried physiotherapy, and that seems to be attended with more or less success. We find occupational therapy has two effects: Sometimes it improves a man greatly, at other times it indicates to us whether a man really wants to work or not, because if you put him at some work which is ordered by a medical man as suitable and he refuses to do it, we know that he is not anxious to get better.

In making our awards we have regard to how he behaves himself under that treatment; so that we have rehabilitation after we have

given him his total disability, and made his final award.

Then we have death cases; we award to the widow \$40 a month as long as she lives, or if she marries, two years' allowance—\$960—is paid in a lump sum. We also give a child \$10 as long as that child is under 16 years of age, but payment ceases when the child is 16 except that in case of an invalid child payments may continue. The limit of these payments is that the woman and children shall not receive more per month than the husband would have been paid on

the basis of two-thirds of the husband's average wage.

It is very necessary in the eastern part of the Province to see that they should not exceed that limit. The only limitation we have on the amounts paid is that we do not pay on a basis of over \$2,000 earnings per year. That is the highest award we can make—\$25.64 per week, which represents a weekly earning at the rate of \$2,000 per year. We do not exceed that in any case. The other limitation I have given you on the widow's provision. These are practically the only limitations we have. All awards which are over 10 per cent disability are pension payments for life, and we do not willingly commute into a lump sum, where the sum is over 10 per cent, because the spirit of the act is that the benefits shall continue to a disabled man just as long as the disability lasts and that is during his lifetime; otherwise we would have a man getting his money and losing it through some business difficulties or poor management, and he would become a burden on the public. When he gets the money regularly he has some offset to the disability he suffers.

Our act is something like other English acts, in that it was born in the spirit of compromise. You can not legislate just as you want to. While the principle established is the collective responsibility of industry for all accidents and losses in industry, that was not logically carried out in the Province of Ontario, because we have two classes of employers in this Province who are described in the act as Schedule 1 and Schedule 2 employers. Schedule 1 is the class which has collective liability—a collective liability and responsibility to all workmen in that class; and Schedule 2 is the class of self-insurers. That arose because our big railroad systems, the Canadian Pacific Railway and the Grand Trunk as it was then, and other express and steamship companies said that they wanted to be rated by themselves because they had a great many provisions for safety and they did not think it was fair that they should be classed with other industrials who did not have regular systems of their own for accident prevention. The result was that to avoid such opposition as could be brought against the passage of the workmen's compensation act, they were permitted to become self-insurers. In that class are the express companies, the railway companies, telegraph companies, municipal corporations, and hydroelectric commissions.

We have that illogical condition. In class 1 the awards are paid by the board out of the accident fund, while in the other case we notify the employer that he has to pay so much money, and it is

paid by the employer direct.

There is another difference, and that is that the medical aid in class 2 is furnished by the employers themselves. That is very largely because the railroad companies, for instance, have their own doctors all over the country and they have the right to supply medical aid to the workmen in that class. The board has authority, if a man complains of not receiving proper medical care and proper

hospitalization, to make changes if it sees fit; so that in the end they are all under the compensation board, except that the method of

paying the money is different in the two cases.

The act as drawn originally applied to all industry except farming and domestic service, which were and still are expressly excluded by the terms of the act. The board itself is given the power to make regulations; and by such regulations a number of other classes have been excluded from the operation of the act, that is, classes where the hazard is very small, such as the wholesale and retail business—there is seldom an accident in the business of running a store. They may come in by application, and we give them a very low rate if they do so.

There are also a number of small industries from which it would be impossible for the board to collect assessments. The only ones we would hear of would be those that had accidents. Other industries are excluded according to the number of men employed—if they do not have more than four workmen in some cases or six in other cases. The Province of Quebec, I may say, can exclude all industries which have not seven employees or over. The rights of the workman under the act are absolutely independent of whether his employer has reported to the board; every workman who has suffered an accident in the course of his employment or any workman who is disabled by reason of the industrial diseases enumerated in the act is entitled to get his compensation from the board, whether or not his employer has reported to the board. The only limitation is that he must have been disabled seven days, and that his disability must not have been due to his own willful misconduct. Those are the only two exceptions.

The employer who has not reported his operations to the board is in bad shape, because he has to pay the usual assessment as well as penalties for not reporting; he is also liable to pay the full costs of the accident. We have many cases of serious accidents coming up, involving thousands of dollars, and we have to get after employers who have not reported to the board; sometimes it is worth while, sometimes not. I may say that we do not usually exact the full pound of flesh where the amount is over \$100; we assess them about 50 per cent of the cost of the accident in addition to the usual

Another point where our act has not been entirely logical is that safety work has been reserved by the employers to themselves. Most of the jurisdictions have it under the board's control. The Ontario board has no control over accident-prevention work, other than the power of the purse. It makes the levies for the work on the employers in Schedule 1; for convenience they are divided into 24 classes, that is, 24 rating groups, and we get in each one of these groups a sufficiently large exposure pay roll, so that an exceptional number of accidents will not cause the rate to teeter up or down. Each of these 24 classes has the right to call a meeting of the employers in that class, and if they get a sufficiently representative number of that class the board may recognize the association which has been formed by that meeting for accident-prevention purposes, and requirements for money for accident-prevention work in that particular class will be met by the board.

assessment.

As a matter of fact, 18 of the 24 classes have this safety work and are carrying out the work. Mr. Morley is the general manager of 15 of these and he asks for subventions for each of these classes. They are all governed by directors; these directors bring in their budgets for the year, and the board levies on the particular classes their share of the cost of the accident-prevention work.

Last year the board spent \$115,000 in subventions, in this accident-prevention work. The Lumbermen's Safety Association represents the lumber class. It is a very active association, carrying on work under great difficulty, because the employers in this group usually have a very shiftless class of workers who are hired in the cities and sent out to the lumber camps; these workers have no sense of responsibility, they have not been brought up to observe safety rules, and they meet with pretty serious difficulties getting into and out of the lumber woods. The Lumbermen's Safety Association is carrying on very effectively; and having due regard to the number of accidents being paid for, the lumber class is about as good as any we have.

Then the pulp and paper makers have an association of their own; the electrical workers have an association of their own; and the mine owners, who compose a very extensive class which had a very bad accident experience a year ago when the Hollinger accident took place costing the board \$150,000, have formed an accident association since that disaster.

Another class continually in trouble is the construction class, which is constituted of some 12,000; they are in class 24, and it is absolutely impossible to get a class of that size to form an accident-prevention society which could be approved. We have power to subdivide this class and we are taking those with pay rolls of \$30,000 or over.

In our general construction class a safety association is being formed; this class has gone to the extent of having a meeting held and of being recognized, so we hope to get safety work under way in

the general construction class.

We have another class with a very bad accident experience, the structural steel workers on high buildings in our cities. They are a very fruitful source of accidents. The cost during the last year was so great that we had to raise the rate of that class from \$4 to \$9 to cover their expenses. I am now in communication with prominent members of that class who desire to form a safety association, so that we expect to have a safety association in that class shortly. That work is entirely under the control of each class. The board simply has the power to award compensation, and it is up to employers to prevent accidents if they can. There is some very enthusiastic work being done by these accident prevention associations. Take the Accident Industrial Prevention Association, of which Mr. Morley is the head—they have meetings with 1,000 or 1,200 in attendance, representing those in charge of compensation work in connection with these classes. The annual meeting this year was held in Windsor, which is in the western part of Ontario, and they had present from 600 to 800 delegates, who went to the extreme end of the Province to attend the meeting.

I feel that the enthusiastic and unselfish service employers are giving to these associations must result in some decrease, if not in

numbers, at least in extent of severity of accidents.

You will be interested to know something about our accident experience. I may say that when I came on the board in 1925 we had 60,000 accidents that year. In 1927 we had 72,000 accidents, and in 1928 we had 80,000 accidents, and up to June, 1929, we are 20 per cent over the number of last year at the same time. As a consequence of that, we know there is an increase in the pay roll. Our pay rolls last year increased 14 per cent, which was a higher percentage than the percentage of increase of accidents. We have a pay-roll exposure in Ontario of \$503,000,000, which we assess in Schedule 1; so that we feel that we are getting into the billionaire class, as regards our pay roll. Taking the question of the rate levied as an index in our provisional figures, this year there has been a slight increase in Schedule 1 to pay the accident costs in 1928; we would have to levy a flat rate of \$1.33 per hundred of the pay roll to pay our accident cost. In 1927 our rate would have been \$1.20. Our adjusted rate for 1928, when we come to the end, may be slightly less than our provisional rate, but that would rather indicate that the accident cost had gone up somewhat but not to any great extent.

Take the accident cost to the board in money; awards were made last year amounting to \$7,068,000 in round numbers. Our figures are going up again somewhat this year, but that is due largely to an

increased labor employment.

My time is very nearly up. There was one other question I wanted to take up, namely, industrial diseases. We have the industrial disease list which was in the original English act, but we have from time to time increased it. That can be done under our act, either by legislation by Parliament, or it may be done by the board itself by passing a regulation which is approved by order in council. We do it both ways. To give you an instance, we had legislation passed by Parliament which brought into effect compensation for silicosis as an industrial disease, a little over two years ago. We have had to levy over \$300,000 on the mining class in connection with silicosis, and we are now examining every miner who goes into employment in the mines. He must produce a certificate that he is free from diseases of the lungs before he can be employed in the mines, and he must renew that certificate every year.

We had employers come to us in connection with deep sewer work; their men were refusing to work unless they were given compensation—the board added caisson disease by their own regulation. We had requests from the department of health owing to investigations made by the industrial medical department, that we should put chrome poisoning on the list. The regulation was made and sent to the Government for approval. If not objected to, within a certain time it becomes law and chrome poisoning is added. So that our work is progressive in that way. We assess the cost of all this upon our employers. We have pay rolls of \$503,000,000, with 24 classes; we try to make them self-supporting for all accidents and all the costs of accidents during the year; we levy 368 rates in proportion to the hazard and experience in these different classes in the past year. Out of these 368 classes, 117 are increased, 100 decreased, the other 151 remain the same.

If there are any questions you desire to ask before I take my seat, I will be glad to answer them if we have time.

DISCUSSION

Mr. Stewart. I would like to ask Mr. Sinclair one question to clear up a matter that I did not quite understand. In the first place, he said that coverage was complete, and that the board had the power and that it had excluded some small plants which were impossible to reach, and then he said that a man injured in employment under the act would come in for compensation whether or not the employer paid his premium. Is that so?

Mr. Sinclair. Yes; where he reported his operations.

Mr. Stewart. What I want to know is, is the workman who works for a man employing three or so, excluded; in other words, does he come in, and if not, does he have the benefit of the exclusion of the liability defenses in case he sues?

Mr. Sinclair. He has the right given him by the act as amended, to proceed against his employer.

Mr. Stewart. You do not proceed against the small plant?

Mr. Sinclair. We do, except in the excluded cases, which are very few.

Miss Johnson. Are the excluded ones included in the small subcontractors—builders?

Mr. Sinclair. They are excluded if they have only one workman. Miss Swett. We have three other speakers on the program. Mr. Roach had to leave, so Mr. Urick is to read his paper.

Mr. URICK. Before reading this paper, I would like to take this occasion to thank this organization for their kindly treatment during this morning's session. Many of those who have been identified with this association during the latter years probably have not known me, and the action taken was, I consider, not because of my activities, but because of peculiar circumstances. I trust that in former days when the organization was having hard work to exist I may have merited some of the confidence reposed in me and have been entitled at least to a part of the recognition at the morning meeting.

In connection with compensation, I want to speak for half a minute. Miss Anderson and Miss Peterson were compelled to leave during the afternoon session. They were specially desirous of appealing to the representatives of the States for more complete records, publications, and analyses of accidents occurring to women in the United States. I will refer to the number of States that have taken recognition of this fact: 13 States report accidents by sex in their regular annual or biennial reports, 8 States formerly reported by sex but discontinued in later reports; 7 States report by age and sex, 4 others formerly reported by age and sex but not in late reports; 7 States report by sex and extent and disability, but 4 other States have discontinued so doing; 4 States report by sex and cause, while 2 States have at some time reported in this way; 11 States report by sex and industry, but 5 others have discontinued these reports; 4 States report by sex and wage; 2 States report by sex and time lost, while 2 others formerly reported in this way; and 3 States report by nature of injury, 1 other State formerly did. The Women's Bureau is decidedly interested in these statistics, because they have recently, as some of you are aware, made a special investigation of the causes of accidents, the extent of disability, and the justness, really, of the compensation made under the compensation laws. Such an investigation has been conducted in Iowa, and I am free in saying that I think it will disclose at least some things which will make toward more perfect administration of the compensation law with relation to injuries to the female workers.

Industrial Poisons

By John Roach, deputy commissioner of labor, New Jersey Department of Labor

[Read by A. L. Urick, of Iowa]

While the presence of industrial poisons presents a perplexing problem that is more difficult to solve to-day than ever before because of their wider use, the general experience of departmental enforcement officers, on the other hand, would probably support the theory that preventive measures are sought more eagerly by plant managers now than at any other time in the history of our country. The potential hazards introduced by chemicals are of a very different type than are those that are caused by machinery because machine hazards are visible and are generally understood by the supervising forces in a plant, while the dangerous elements involved in a chemical itself may not be known, or, again, it may in combination with other chemicals develop poisonous properties that were not heretofore understood. For the student of occupational-disease causes in the ordinary range of chemical processing a large number of standard works have been printed outlining processing methods in industries that require the use of trade poisons, describing symptoms of diseases, and in many instances advising measures of precaution that experience and usage have shown to be helpful in preventing workmen from injuring their health by causes arising out of their employment. Departmental officials should take advantage to the fullest extent of the facilities afforded by this type of information and if possible a bureau should be established under the direction of a technician trained in this branch of industrial supervision to direct the inspection service and, if necessary, make special studies and surveys when occasion would seem to require them.

The ancient practice of permitting operating conditions in industry to destroy the health of workmen and then attempting to restore the workmen to their original conditions by curative methods has been entirely discredited in intelligent circles. Where industrial plant medical practice has been organized in accordance with the humane opinions of the present day, private industry has taken great strides in the work of improving the technique of plant practices so that injurious effects may not be suffered by those employed because of vapors, dusts, gases, or contact with harmful substances. Despite all the precautions that may be taken, however, injuries do result: and it is a cause for congratulation that, in many of our States, workmen's compensation laws have been passed either to compensate workmen for every physical injury arising out of their employment or for specific groups of occupational causes that experi-

ence has shown to be the most important ones in the particular Commonwealth affected by the legislation. In New Jersey an occupational disease law has been placed on the books that provides compensation for occupational injuries for the following group of causes: Anthrax; lead poisoning; mercury poisoning; arsenic poisoning; phosphorus poisoning; mesothorium or radium necrosis; benzene, and its homologues, and all derivatives thereof; wood-alcohol poisoning; chrome poisoning; and caisson disease.

For the fiscal year ending December 31, 1928, 150 occupationaldisease cases occurred, causing the deaths of 9 people, permanent partial disability to 19, temporary disability to 122, with 78,790 days lost, and \$85,000 paid to the victims for compensation. This record for 1928 was double that of 1927, which would seem to indicate that we enjoyed an improvement in the reporting of occupational-disease cases. These occupational-disease cases are as follows:

POISONOUS AND CORROSIVE SUBSTANCES AND OCCUPATIONAL DISEASES, BY CAUSES: COMPENSATED CASES CLOSED IN NEW JERSEY, 1928

Causes		Number of cases of—					Medical cost	
	Total number of cases 1	Death, or per- manent total dis- ability ¹	partial disa-	Tem- po- rary disa- bility	Total number of days of disability (weight- ed)	Total amount of com- pensa- tion	Num- ber of cases report- ing	Amount
Poisonous substances								
Arsenic All other (N. O. C.) (including gasoline fumes and indefinite gases)	2			2	28	\$32	2	\$4 0
(poisonous substances in water or materials handled)	60	7	7	46	48, 543	64, 434	22	852
same, etc. (handling material) Illuminating gas (including coal	4		- 	4	179	370	1	22
gas)	3 28 2		i	3 28 1	67 593 3, 614	92 973 6, 510	14 1	299 17
Corrosive substances								
Acids (i. e., nitric, hydrochloric, sulphuric, carbolic and picric). Alkalies (i. e., soda and potash). Cement burns. Lime burns. Irritant but not corrosive	125 48 15 60 26	1	17 9 3 13	107 39 12 47 25	19, 994 5, 200 846 12, 209 602	35, 153 7, 399 1, 428 14, 861 1, 074	39 17 7 31 11	2, 273 1, 036 402 1, 853 281
Occupational diseases	İ							
Anthrax Arsenic Carbon monoxide Compressed air (bends) Chrome ulceration Dust Handling and preparing hides, furs,	2 8 7	1	1 4	4 2 6 3 5	6, 093 98 7, 010 1, 865 117 28	2, 832 206 6, 730 3, 770 198 44	3 2 4 3 2	68 83 680 260 37
etc	1			1	16	22		
asphalt—not burns) Lead poisoning Benzol, its homologues and deriva-	(1) 77	(1) 3	6	3 68	40 24, 221	77 23, 602	41	3, 571
tivesOccupational activity 2 (cellulitis,	(1) 18	(1) 4	6	8	36, 159	43, 973	8	2, 419
etc.)	23		2	21	3, 143	3, 630	9	647
Total	(2) 523	(2) 17	70	436	170, 665	217, 410	217	14, 840

Figures in parentheses show the number of permanent total included.
 Cellulitis cases due to cuts and bruises from falls or handling objects.

According to this table, it can readily be seen that benzol and lead were the chief offenders and that the number of days' disability lost from the other items in the occupational-disease group are comparatively nominal as measured against these two. The reason for this probably is that benzol and lead are used in a larger number of occupations than are any other of the substances for which compensation is paid. The very serious character of the risk that results from the use of benzol in the industries in New Jersey is due to the fact that it is commonly used as a diluent in compounds that are often exposed in the open workroom and that permit the vapors therefrom to pollute the breathing atmosphere. In the textile and animal leather trades during the past three years 13 fatal cases were reported to the State authorities. As benzol has been used in large quantities for a period of 18 years in the State of New Jersey, it is only fair to assume that these 13 cases are but a small percentage of the actual fatalities that have resulted from the use of this substance and that during all these previous years physicians, unaware of the toxic properties of benzol, did not diagnose poisoning cases properly.

During the Great War the Department of Labor established definite rules governing the production and use of nitro and amido compounds, but it was not aware that it was slighting an industrial menace that must have been taking its toll with regularity. The use of benzol in wood and metal finishes has greatly increased the scope of its use, while the practice of applying lacquers and finishes containing this fluid by means of the spray gun has greatly in-

creased the risk that is ever present.

I can not see that we are going to get very far in prevention work if we approve as sound from an engineering viewpoint the practice of first polluting the breathing atmosphere of a workroom and then by mechanical means attempt to purify the air and conserve the health of the workmen who are employed therein. This method has been suggested in many instances in the textile and animal leather industries and in spray-brush operations. I am sure, however, that when the final page has been written in the book of health conservation in the chemical industry this practice will not be approved, but rather, if means can not be provided for the prevention of the pollution of the breathing atmosphere of workrooms, mandates will be issued forbidding the use under such circumstances of this or other similar poisonous fluids. In the lead trades during this past year an intensive investigation of operating methods, coupled with a check on health conditions that obtain among workers who are exposed has revealed the fact that poisoning cases that formerly were not discovered are coming to light; and we are just beginning to realize that something radically more effective than the installation of a fine wash sink, the maintenance of a brilliantly clean lunch room, and the supervision of men by a doctor who may or may not know much about the possibility of lead poisoning is absolutely necessary if we are to give labor that protection contemplated by legislatures when departments of labor were created.

The hazards that surround industrial occupations where trade poisons are used are of such a nature that factory inspection in its ordinary form is not sufficient in any sense of the word to protect labor during the course of its employment. An instance of this came to light recently in a silk plant, where a cleansing preparation was being used that contained a quantity of benzol. The plant manager had been informed that the fluid was a petroleum product and he did not know the difference between benzine and benzol. Two men were taken sick, one died and the other was in a very serious condition when I saw him in the hospital. The manufacturer of the cleansing fluid in selling his goods had simply cautioned the plant manager to keep the workroom well ventilated, an admonition which in the absence of more definite information was utterly value-The cleaning operations in this plant had been noted by inspectors, but had occasioned no comment from them as they evidently had considered them comparatively harmless. The experiment, however, which resulted in one fatality and one case of almost total disability would seem to show that unless inspection service is based on such training and experience as would enable it to detect the presence of a menacing occupational disease cause it has no value. I am of the opinion that poisonous trade compounds should be labeled with a statement that they are poisonous. This kind of labeling in the case cited would have prevented the loss of a human life.

Proper chemical control is one of the things that is needed badly in the administration of this business and coupled with it should be a more profound knowledge of the toxic properties of chemical substances that are now used in many instances recklessly and without proper discrimination. While many of the large employers of our country have surrounded their processing methods with health safeguards, expert medical protection, and safety engineers whose duty it is to enable the industry to operate without loss of life or health, it would not be safe to permit the work of protecting labor from the consequences of dangerous chemical operations to be placed in private hands.

In a number of our States, the State health departments have broad powers that enable them to investigate and carry on research work and supply industries with much needed information, while in other States, departments of labor are charged with the exclusive jurisdiction of supplying industry with proper health safeguards. In New Jersey, about four months ago, an occupational-disease clinic consisting of a skilled surgeon, a consulting chemist, a laboratory technician, and a deputy commissioner of labor (who was to act as a liaison officer and make contact with industry) was created to extend this work of protecting the health of the workers in our poison trades.

Henry H. Kessler, M. D., has made the following statement of the scope and purpose of this clinic:

The purpose of this occupational-disease clinic is to study scientifically the cases of occupational diseases and to spread its knowledge among physicians. Secondly to contact with all workmen apparently or decidedly affected by occupational diseases in order to establish the diagnosis as well as to examine systematically all workmen engaged in industries that are exposed to health hazards. With the exception of those physicians who are engaged in industrial practice the rank and file are unfamiliar with the unhealthful conditions that obtain in industry and the diseases resulting therefrom. This

results in occupational diseases being called by other names making treatment unsatisfactory because of the lack of diagnosis. Furthermore, compensation rightfully due workmen affected by occupational diseases is often denied them because of the lack of information on the part of the attending physician in

ascribing the symptoms to conditions outside their employment.

The clinic acts as an educational means of informing the medical profession as to the existence of health hazards and by calling attention to the same stimulates further interest in their recognition. Through the systematic examination of workers exposed to unhealthful trade conditions such as exist where benzol and lead are used, cases of incipient industrial poisoning are weeded out before conditions are so far advanced as to make remedy impossible. Diagnosis is alone attempted, treatment not being given. The patient is referred to his family or attending physician for treatment with the report of the findings made by the occupational-disease clinic.

The past few years have seen the onset of new occupational poisons or new forms of old occupational poisons such as tetraethyl lead, benzol and radium. The presence of such a technical bureau as the occupational-disease clinic is of considerable help in initiating control investigation to ascertain the exact cause of specific industrial illness. Furthermore, through the use of a proposed library in which the entire medical literature is made available to the general medical profession through the use of a museum with plaster models, specimens, tables, charts, and photographs available to the public, a popular propaganda is thus instituted to educate the public, the exposed worker, and the medical profession to the dangers of their trades and to the hygienic measures that

should be instituted to overcome these dangers.

Two studies undertaken recently by the occupational-disease clinic brought out in the lead-color industry, the marked degree of lead absorption to lead dust, and the total inadequacy of the ordinary type of respirator to the respiration of these injurious dusts. In another instance, in the case of workers exposed to benzol fumes in the artificial leather industry, the use of the blood count per se was shown to be inadequate in assisting one in making a diagnosis of early benzol poisoning. Such studies are part of the routine of such a clinic and through the information obtained through these studies clearer information concerning the nature, prevention, and treatment of occupational diseases will be forthcoming.

We are enthusiastic about the possibilities that are contained in the kind of work that will be attempted by this occupational-disease When the radium cases first appeared in the New Jersey industrial area the department of labor communicated with leading authorities on radium poisoning in this and other countries and was unable to obtain any definite information that would even lead to the suspicion that radium paint was responsible for the diseased condition of the victims. If we had had an occupational-disease clinic to which we could have referred these early cases, undoubtedly a great deal of information would have been available that might have helped in protecting workers in this industry.

DISCUSSION

Doctor Obetz. I think you will all agree that the paper which we have just heard read is very interesting and brings up a number of questions along this line. I think the outstanding sentence was the one which states that it is of far greater importance to eliminate the hazard and prevent the man becoming ill than to spend a lot of time and energy effecting a cure after the illness has been started. The great question, therefore, is to anticipate the real hazards, find out what they are, and institute some means of eliminating them, as was mentioned in the case of benzol in the artificial leather industry.

There seems to be no doubt in the minds of all that if a man's occupation is responsible for his illness, he should receive compensa-

tion the same as if he had sustained an injury.

Just what occupational diseases should be compensated seems to be quite a question. Ohio has a list of 15 different subheads, under which occupational diseases are listed. The last legislature has added three more, and those will become additions to the list during the coming month; they are manganese dioxide, radium poisoning, and tenosynovitis.

Mr. Roach in his paper mentioned 150 cases filed during 1928, for various occupational diseases. In Ohio we had 1,215 claims filed during 1928 for occupational diseases; 84 were for conditions not covered by the law, leaving a total of 1,131 compensable disease

claims filed.

Our statistics are gathered from the reports as they come in, on the claims when filed. There were 148.273 compensable days lost in this group; 30 of the claims were death claims, but only 20 were in

the compensable list. Ten of the 84 were not compensable.

The probable reason for the large number of cases is that Ohio pays for dermatitis (diseases of the skin). There were 886 cases of dermatitis reported. There were also 180 claims for lead poisoning, which claims were credited with 89,672 days lost. There were only 9 benzol claims filed, 2 of which were classed as fatal; but those did not occur in the artificial leather industry. Four cases were found in rubber plants, 2 in furniture factories (probably from spraying in different lacquers), 2 were found in paint-manufacturing establishments, and 1 in aircraft (a man was cleaning a benzol tank).

About a year ago Doctor McBride wrote to our department stressing the danger of benzol poisoning in the leather industry. We decided to make a little investigation to see what hazard was existing in Ohio. With that in mind we sent out a questionnaire and found some plants in Cincinnati and a few along the northeastern boundary that were coating leather with japan, in which benzol was used as a solvent. In Cincinnati we found several large plants employing a large number of men and their exposure to benzol was quite extensive. I believe one plant used some 490 gallons per week. Those of you who are familiar with the artificial leather industry know that hides are spread upon a large rack and a quantity of coloring is spread out on the hides; then they take a brush like a whitewash brush and spread it evenly over the leather. The men bend over the hides, and are subjected to the fumes of the benzol. I could find no cases of benzol poisoning having developed in the Cincinnati plants or, for that matter, in the State.

Another source of danger was from the effect of the benzol on these hides after being coated. In some plants the hides are dried in ovens but in others they are hung in a part of the workroom to dry and the

employees are exposed to the evaporating benzol fumes.

In Cincinnati I visited Doctor McCord, and found that about four years ago he had taken occasion to examine 33 men exposed to benzol in these plants; these examinations included blood counts. These men had been employed from a few weeks up to nearly 30 years; one man, I believe, had been employed over 30 years. The lowest count for leucocytes was 6,200 and the highest 13,600.

When I went to Ashtabula, I was surprised to find that they had a number of employees who had been exposed to this benzol hazard for a number of years without any cases being reported of benzol poisoning. We also found that women, as well as men, were exposed. In Cincinnati only males were exposed, but in these other places there were a number of women. It has been shown that women are probably more susceptible than men, and for this reason special care was taken to inquire regarding all forms of illness; but from my investigation I could find no history of any illness that could be attributed to benzol among any of these employees.

Mr. Roach in his paper speaks of an occupational-disease clinic. I believe that is a step in the right direction, because the hazards of these occupations must be studied and a diagnosis made, and measures adopted to combat them when they are found, just as it is necessary to have cogent rules covering various dangerous occupations. The chemist and the laboratory diagnostician are of the utmost importance, because it often becomes necessary for urinalyses and blood counts to be made in connection with these various investigations.

I think Mr. Roach's paper is a very excellent one. There are a number of questions mentioned there which call to mind a line of work which can not but be beneficial to all engaged in disease-

prevention work.

Yesterday Mr. Blake mentioned the disaster at the Cleveland clinic. We have found that it is going to be necessary, in order to solve the mystery regarding the origin of that fire and to find what prevention will be necessary in the storage of films, to do a lot of research work. There was a great loss of life from a rather unusual hazard. I was informed just as I left the office that 27 death claims which had been filed by dependents of people who lost their lives in that disaster are to be heard by our industrial commission to-day. We are proud to think that these claims have been completed to such an extent that they are ready for the commission in less than three weeks from the time of the disaster.

Mr. Stewart. I think we should get away from the assumption that nothing exists, because it has not been reported. I think Doctor Andrews will bear me out in this statement—that when we undertook the investigation of phosphorus necrosis in the match industry in the city of Oshkosh, where the match company had its biggest concern and employed the most women, there was not a dentist in the town who had ever heard of such a thing. A girl would go to have her teeth fixed, the dentist would yank out a tooth, and the jaw would collapse. The dentist would say that that was hard luck; but he had never heard of phosphorus necrosis. Not one case of "phossy" jaw was reported in Oshkosh.

Doctor Andrews. I realize the importance of this subject from the standpoint of practical legislation, and also from the standpoint

of real preventive work.

I do not find anyone who studies occupational-disease compensation who does not say that logically there can be no distinction between a disability caused by an accident arising out of occupation and a disability arising from an occupational disease. Industry is just as much responsible in the one case as it is in the other; and the disability is equally disastrous to the worker. A distinction, moreover, can not be based upon the cost of compensation as has been asserted by some, because the compensation of all victims of occupational diseases would increase the cost of workmen's compensation by only 1 to 3 per cent, according to the insurance rate makers.

If it is illogical to draw a distinction between occupational diseases and accidents in workmen's compensation laws, it is also illogical to distinguish between different occupational diseases. Justice, as well as logic, requires that there be no discrimination in occupational-disease compensation. And yet only 10 American compensation laws use the "all-inclusive method."

Advocates of the "limited list method" admit that those who are incapacitated by certain well-known occupational disease hazards should be compensated. But they want to discriminate against the helpless victims who, without knowing the hazards of their employment, are struck down by occupational disease and death. The house painter knew the danger of lead colic. The inexperienced girl taught to point her brush with her lips as she painted luminous dials in a New Jersey watch factory knew not the lurking danger of death from the so-called "radium poisoning" that crept upon her. The first was compensated in New Jersey—the other was not. Was that just? Commissioner Wilcox, of Wisconsin, says that he has never been able to discover why anyone opposes all-inclusive coverage unless it is because he doesn't want the victims of occupational diseases compensated.

The case of England is sometimes cited by those who defend the "specific schedule." But they fail to note that England has also a universal system of health insurance which takes care of a large part of the burden of illness in that way. If all our States and the Provinces had universal health insurance, they might have some defense for singling out certain diseases, the entire burden of which industry would bear. But compulsory, universal health insurance does not exist in America; so at present the only method of protecting workmen against occupational disease is through workmen's compensation laws. If we are to follow closely England's example in workmen's compensation, we should also follow her in health insurance. Otherwise our compensation laws should be framed to meet our own problem of diseases due to employment and include all occupational diseases under workmen's compensation.

We all agree that we desire information about occupational disease disabilities as well as about accident disabilities. Only so can the disease danger points in industry be discovered. It is well known that until we had workmen's compensation laws for accidents, probably not half of the total number were reported, even under the best State reporting law. In New York, one of the most experienced and efficient labor statisticians on the North American continent found, as I remember it now, that while some 90,000 accidents were reported the year before the workmen's compensation law went into effect, the number jumped to 225,000 the first year of the law's operation. Similarly, more information is to be expected from the enactment of a law compensating occupational diseases.

Such information will contribute to the prevention of occupational diseases, which is one of the most important consequences of all workmen's compensation laws. Until we know where the disease hazards are, and until the employers are made to feel an economic pressure to prevent occupational diseases, we can not hope to get very far in safeguarding workers from these most insidious

dangers of modern industry.

Progress is being made in the direction of all-inclusive occupational disease compensation. Commissioner Frances Perkins has announced that the New York department, after several years' experience with the limited, inadequate schedule method, will ask the New York Legislature to extend the law to protect all victims of occupational disease. America's leading authority on industrial poisons, Dr. Alice Hamilton, although once receptive to the schedule plan, has recently branded it as a mistake. She now heartily advocates all-inclusive protection.

These are but examples of a growing recognition that the all-inclusive method alone is logical and just; and that it alone will provide the information and the pressure that will make it possible to check the growth of occupational disease in industry. And those State and Federal officials who have had the widest practical experience with occupational-disease compensation are emphatic in saying that in practice the difficulties of such administration are no greater than are certain features of accident compensation administration. Government labor officials in every State need not hesitate to cooperate with compensation administrators, health officials, and other public-spirited citizens in asking for the compensation of all occupational diseases.

Mr. Stewart. Along the line of radium poisoning, let me say that the doctors do not know anything about it, hence the cases are not reported. Let us face the situation. Some years ago I made an investigation of phosphorus necrosis in the use of white phosphorus in the manufacture of these things the boys throw on the sidewalks on the 4th of July. Two-thirds of the cases had never been reported at all. We have now as a result, years afterward, two cases in the Johns Hopkins Hospital. One girl died there, and another is dying. The records of the hospital show syphilis. When this radium poisoning came up the answer of the doctors was "syphilis." It is up to the labor departments, if they have any control of occupational diseases at all, not to wait until 12 girls are dead and 6 more dying from radium poisoning, to do something.

The National Health Service called a convention in Washington. There was a doctor there with the bones of a girl who had been dead for seven years, and they looked like a firefly. They were still radio-

active, but he was not permitted to show that.

Now, you fellows in the medical profession who do know are handicapped; and we can not afford to wait until somebody reports a benzol case, when we know that wherever benzol is used it is dangerous. We have to look for it on our own and not wait until some doctor, who never heard of a benzol case or who doesn't know any of its symptoms, reports it.

Miss Johnson. I think Doctor Andrews' suggestion is a good one. I think it will be well to try to get uniformity in the laws, since one of our objects is to get uniformity in legislation. I wonder if it would not be possible to pass a motion to that effect or to recommend

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to the incoming executive board the appointing of a committee to investigate the matter, and as far as the organization is able to do so, to get the cooperation of the various State labor departments. I think we should take some action. I will move, therefore, that this organization make every effort that can be made to bring the matter to the attention of the various State departments and the Provinces, urging that occupational diseases be included in the legislation under their compensation boards.

[Motion carried.]

Miss Swerr. The last paper on the list is the Best Methods to Prevent Injuries from the Use of Industrial Poisons. We will now hear from Doctor Cunningham.

Best Methods to Prevent Injuries from the Use of Industrial Poisons

By Dr. J. Grant Cunningham, Director Industrial Hygiene Division, Department of Health, Ontario

Exposure of wage earners to poisonous substances used in industry generally occurs in the form of repeated small doses. The effects produced upon the body are often very different from those encountered after large single doses of poisonous substances such as occupy the attention of the medical profession in medico-legal cases. The defenses of the body attempt to neutralize and excrete or otherwise deal with them. This may be successful for a time but eventually the protective mechanism is worn out or some intercurrent condition disturbs the balance and damage is done, often remote but no less disastrous in its effects.

Because of the great variety of poisonous substances, their widely scattered uses and in many cases the comparatively few persons exposed, little is known concerning the effects of many of those

substances recently introduced.

Certain information is necessary if emphasis is to be placed where it belongs in the prevention of poisoning: (1) What poisonous substances are being used and where they are being used; (2) what degree of exposure exists and what exposure under industrial conditions produces poisoning; and (3) what effects are produced to

enable us to recognize poisoning.

With reference to the first, the knowledge of industrial processes will frequently indicate at once that known dangerous substances are in use—fumes or dust of lead, arsenic, mercury, chromium, and most of their compounds, free silica, benzol, and carbon bisulphide are major hazards and should be fully guarded against. With reference to the less common substances and particularly many of the organic substances in use the problem is more difficult. The labelling of materials which produce fumes or dust in the course of processing would be very desirable and might not be impracticable. In the light of past experience with provisions of this type in drug and patent medicine legislation the matter might receive some consideration. Or, the onus might be placed on the employer to have knowledge of the contents of the substances used as an alternative to providing adequate preventive measures against poisoning, assuming in the absence of such knowledge that all substances are poisonous.

These suggestoins are made in an attempt to avoid the necessity of requiring the installation of expensive equipment or other provisions for the control of hazards which full knowledge or more

detailed inquiry might show to be of little or no importance.

With reference to the second point, in the case of many of the poisons in use, knowledge of methods for determining the degree of exposure and the amount of exposure which will produce poisoning is lacking and should be acquired as far as it is reasonably possible to accomplish this.

The third factor, namely the diagnosis of poisoning, is of first importance as a final test of the efficiency of other preventive meas-

ures adopted.

Regarding the preventive measures themselves, it is obvious that poisoning will not occur if nonpoisonous substances are used. It may not be practical under many circumstances to substitute nonpoisonous substances for poisonous substances, but this has already taken place in isolated instances, for example, the partial substitution of toluol and its higher homologues for benzol; the use of zinc oxide, zinc sulphide, and barium sulphate to replace lead for interior painting; and the use of low solubility glaze, bisilicate of lead, in pottery manufacture.

One is impressed by the fact that sustained effort along such lines is likely to produce results, not different from those accomplished in other directions. For example, the enormous development of the paint industry in the past five years in the use of solvents and diluents in the manufacture of lacquers has brought into commercial use many substances which were chemical curiosities a short time ago. New sources of supply and methods of preparation have been evolved to meet a demand in commerce previously nonexistent and

therefore not met.

Such studies will at times involve fundamental considerations which render their solution doubtful in a reasonable time. Special staff and equipment must be maintained for such work which may yield results in a short time, a long time, or not at all. An undertaking of this kind is hardly practical for the individual plant but might well occupy the attention of national research organizations. In case of new substances introduced into industrial processes the "toxicity" might well be added to the specifications required to be met before these substances are adopted for general use. There are some indications that manufacturers would use facilities for determining this were they available.

Granted the substances in use are dangerous, the most common source of poisoning is their inhalation in the form of dust or fumes. Of mineral dusts the presence of free silica is all-important; the metallic dusts act in a similar way to metallic fumes, although less

rapid in action in producing systemic poisoning.

The control of dust is accomplished either by wet process or by exhaust ventilation. Wet processes reduce very considerably the amount of fine dust which enters the air breathed but can not be depended upon to reduce the amount to below the danger line. An instance occurred in northern Ontario mines where air samples taken in the immediate vicinity of dry drilling operations showed counts of over 200,000,000 particles per cubic foot, whereas counts

of 2,000,000 to 6,000,000 particles per cubic foot were found at the

same operation with the wet drill in use.

We are all familiar with the importance of effective exhaust ventilation in the control of dust fumes and how commonly it is ineffective either because of improper installation or inadequate maintenance. It is suggested that there is room for a careful survey of existing information upon which is based the installation of exhaust ventilation equipment.

Improvements are constantly being made but the comparatively recent development of the spray-painting machine emphasizes how inadequate the best ventilating equipment is for the control of dust and particularly of fumes. These are trying conditions under which to apply tests but it will probably be conceded that spray booths do not control the hazard. This is tacitly admitted in the provision of legislation whereby men exposed to operations using certain poisonous substances like lead or benzol are required to be examined periodically to determine whether poisoning is taking place and to remove them from exposure to substances, for the control of which, at the same time, is required exhaust equipment, protective clothing, and so on.

The use of initial and periodic physical examination as a means for prevention of industrial poisoning is under present conditions very important. Obivously, the value of physical examinations is tremendously reduced if they result in the detection of poisoning only after disability supervenes. To be of value, it must be possible to recognize the earliest indications of poisoning. For a few of the better-known poisons this is possible. For many it is not possible, largely because under conditions of medical practice physicians do not see patients until some time after symptoms have arisen. In industry, it is possible to bring the physician and worker together frequently, for physical examination, whether the worker complains of ill health or not, which enables the physician to detect changes in his physical condition which are more significant than the findings of a single examination and to recommend his removal from exposure before disability ensues.

The prevention of poisoning by the stimulus provided through compensation for industrial disease is very important in some of these but seems to be a small factor in others. Industrial poisonings which are associated with prolonged disability and death are extremely costly and result in real efforts for prevention. Silicosis is the outstanding one of these. On the other hand, a case of lead poisoning accompanied by symptoms short of paralysis, where a few days' rest with elimination treatment enables the man to get on his feet again and while in still poor physical condition to return to some other kind of work, has little influence on the control of the hazard if the employer by tolerating such a condition shows no appreciation of what it means to his employee and himself.

This is no argument against compensation for such industrial diseases as lead poisoning. Indeed, such well-recognized medical conditions arising out of industry should be compensated if we are to be consistent in the social attitude upon which workmen's compensation for accidents is based. However, the compensation of all medi-

cal conditions which might arise out of industry would no doubt be attended by serious difficulties. There are many cases of illness wherein it is impossible to determine the importance of industrial exposure either because the degree of exposure which would produce poisoning is unknown or the changes in the substances after they enter the body or the effects they produce are indistinguishable from clinical manifestations due to many other causes.

This situation is unlikely to improve until physicians come into closer contact with industry generally. It is in marked contrast to poisoning from a substance like chromium and its compounds, the effects of which have long been recognized, but the use of which has recently been introduced into another process, namely, electroplating, apparently without any warning to the workmen exposed, resulting in painful persistent ulcers and rashes which cause marked inconvenience and frequently loss of time and wages. This is hardly excusable.

In the absence of information regarding the poisonous effects of many substances in use, all should be regarded as dangerous involving the installation of expensive equipment or some attempt should be made to find out the facts. Distinction should be made between what is important and what is not important. It is not reasonable to require elaborate precautions against substances such as ethyl acetate or cobalt oxide, the toxicity of which is slight, while men are being incapacitated by exposure to substances like lead, silica, benzol.

It is interesting to note that in the investigation recently conducted by Smyth and Smyth in Pennsylvania, out of 10 solvents and diluents used in paints and tested for toxicity, 1 stood out as being of first importance, namely, butyl alcohol. Information of this kind will go a long way toward indicating where the emphasis should be laid.

[The following paper was not read at the convention, but is included here because of its interest and bearing on occupational diseases.]

Specific Occupational Diseases

By Dr. A. J. Lanza, Assistant Medical Director, Metropolitan Life Insurance Co., New York

To attempt either to list the specific occupational hazards or to describe them at length would be quite outside the possibilities of a

paper such as this.

Taking it all in all, the actual mortality and morbidity from specific occupational poisonings are small, however dramatic and tragic individual cases or groups of cases may be. The absence of accurate reporting of occupational poisonings makes the estimation of their prevalence difficult, but when compared with the great bulk of disability from accidents, that from occupational disease must be quite small. For reasons of cost, therefore, there should not be any undue apprehension in including the specific occupational hazards within compensation laws. Certainly from the standpoint of logic and justice there can be no reason for depriving the victim of a specific occupational poisoning of the compensation he would have received had his disability been due to an accident. In either case he suffers

from an injury. It is unfair that in many cases legal interpretation confers an identical meaning on these two words—accident and injury. I believe that it was on the occasion of the last annual meeting of your association that the statement was made that to include the occupational poisonings in compensation acts would not mean an increase of cost of more than 1 per cent on premiums paid. If this is so, and I am inclined to believe that the statement is correct in its implications, if not in precise accuracy, it should be given

wide publicity.

There are other factors than cost which enter into the reluctance which is evidenced to enlarge the scope of compensation laws by including these occupational diseases. The difficulties of diagnosis are at once apparent. When a man has a broken leg, and the X-ray picture defines the point and extent of injury there is little room for argument. But when the claimant says he is sick and presents a variety of symptoms, and one set of medical evidence is presented to prove that these symptoms are due to the dust or fumes he has inhaled while at work and other medical evidence is forthcoming that no such relationship could possibly be the case, Solomon might be at a loss.

If we are going to compensate for occupational illness, there should be set up a medical referee or board of referees who would determine whether the claimant has or has not the disease for which he claims compensation. To leave the matter to ex parte medical evidence presented before a lay tribunal is to cause unmitigated

confusion and defeat the ends of justice.

There is much argument at the present time as to whether occupational diseases should be scheduled for compensation or whether all such compensation should be encompassed in one blanket law. Personally and for practical reasons I am inclined to believe that the schedule is preferable; I believe that the schedule tends to promote the efficiency of the law and to facilitate its enforcement. As far as abstract justice is concerned there should be no discrimination as between occupational diseases. But there is a wide gulf between passing a law and having it enforced so that it will fulfill the intentions of those who drafted it.

Compensation laws for occupational diseases are not going to be administered in a satisfactory manner until the State officials, the employers, the employees, and last, but not least, the physicians, know a great deal more about the subject than they do now, and there is nothing in the history of this country to warrant the assump-

tion that people are educated by legal enactment.

Let the States schedule such occupational diseases as the experience of the State department of labor and industry, of industrial physicians, and of other interested parties indicates as occurring in that State with relative frequency. To adopt in toto the schedule of another country or that of another State, as has been done in some of the States and Provinces, is to stultify the law and negative its enforcement. There are diseases scheduled in some of the States and Provinces that never have occurred and probably never will occur there.

If schedules of compensable diseases are to be successfully administered, it is imperative that provision be made so that additional diseases may from time to time be added to the schedule without the necessity of going to the State legislature for authority. The State official charged with the responsibility of administering the law should be clothed with authority to add to the schedule diseases which are found to be occurring in his State, otherwise the schedule will lag hopelessly behind the needs of present industrial conditions.

Let the State bureaus interested devote reasonable time and study to determine the extent of these scheduled diseases in their communities or the incidence of other specific diseases which should be added to the schedule and let them publish their records annually in such form that it may be possible to ascertain how much was paid in compensation for occupational diseases, how many cases occurred, and the various diagnoses. In that manner only can we build up a knowledge of the situation with which we are trying to cope. This implies cooperation with State boards of health so that when an occupational disease is recognized, as occurring in the State, the board of health may put it on the list of reportable diseases.

The American Public Health Association has a committee on standard practices in the compensation of occupational diseases. This committee is endeavoring to establish standards of diagnosis of the more important and more prevalent occupational poisonings. Later the committee hopes to establish standards of disability. The personnel of the committee consists mainly of State officials who come into contact with compensation and its problems. But the committee is hampered by the lack of information, which, while contained in the various State records, is not in such form as to be readily available.

SUMMARY

Compensation for specific occupational disease is just and necessary, and should be so recognized by law regardless of the fact that the total amount of compensation involved would probably be relatively small.

Compensation laws for occupational diseases need to be carefully thought out and require special machinery for their administration

if they are to be enforced with efficiency.

There should be available in State records annually the number and nature of cases of occupational disease reported, the number compensated, the amount of compensation, and the extent of disability.

Acts scheduling occupational diseases which are compensable should be worded in such a way that the list of these diseases may be added to or modified through some suitable procedure when need arises without the cumbersome and prohibitive method of enacting new legislation.

Finally every effort should be made to make possible comparison of methods and results as between States which have the blanket law and those which have schedules of occupational diseases so that the advantages and disadvantages of each system may be thoroughly appreciated.

[Convention adjourned.]

HONORARY LIFE MEMBERS

GEORGE P. HAMBRECHT, Wisconsin,
FRANK E. WOOD, Louisiana.
LINNA BRESETTE, Illinois.
Dr. C. B. CONNELLEY, Pennsylvania.
JOHN H. HALL, Jr., Virginia.
HERMAN WITTER, Ohio.
JOHN S. B. DAVIE, New Hampshire.
R. H. LANSBURGH, Pennsylvania.
ALICE MCFARLAND, Kansas.
American Representative, International Labor Office.
Dr. Andrew F. McBride, New Jersey.

A. L. Urick, Iowa.

Appendix A.—Association of Governmental Officials in Industry Representation on Safety Code Projects

The Association of Governmental Officials in Industry has representation on the following 22 safety code projects, 9 of which have been completed and approved by the American Standards Association.

A 9—Building exits code.

Representative.—Cyril Ainsworth, department of labor and industry, Harrisburg, Pa.

Approved as American tentative standard, 1927. Further sections are to be added, and work is proceeding on section 11, fire-exit drills, and section 25, places of public assembly.

A 10-Safety code for construction work.

Representative.—(Vacant.)

Owing to an impasse due to lack of cooperation on the part of the Association of General Contractors, the National Safety Council resigned as sponsor early in 1928. General demand for code evidenced. Association of General Contractors and Association of Governmental Officials in Industry invited to assume sponsorship. No reply received from the Association of General Contractors.

A 12—Safety code for floor and wall openings.

Representative.—Edward E. J. Pierce, department of labor, New York, N. Y. Last meeting held February 20, 1929.

A 17-Safety code for elevators and escalators.

Representative.—John P. Meade, department of labor and industries, Boston,

Approved as American standard; 1925. The subcommittee on research, interpretations, and recommendations has been called to make several interpretations during past year. Material is being accumulated which will be available when the new addition is undertaken.

A 22-Safety code for walk-way surfaces.

Representative.—Cyril Ainsworth, department of labor and industry, Harrisburg, Pa.; Harry E. Mackenzie, department of labor and factory inspection, Hartford, Conn.

Code-draft committee appointed to prepare a new draft code. Work now progressing under new chairman, Mr. Ainsworth.

B 8—Safety code for the protection of industrial workers in foundries.

Representative.—(Vacant.)

Approved as American tentative standard; 1922. No revision contemplated at present.

B 9-Safety code for mechanical refrigeration.

Representative.—M. H. Christopherson, New York State insurance fund, New York, N. Y.

Compromises have at length been worked out on a number of important matters by the sectional committee, and the resulting draft code was submitted by the sponsor for the approval of the American Standards Association as American recommended practice on January 25, 1929. It is now in the hands of the executive committee of the safety code correlating committee for recommendation. The sponsor has instructed the sectional committee to proceed immediately with the consideration of multiple installations. No action on approval has yet been taken.

B 20—Safety code for conveyors and conveying machinery.

Representative.—John P. Meade, department of labor and industries, Boston. Mass.

No revision contemplated at present.

B 24—Safety code for forging, etc.

Representative.—(Vacant.)

Approved as American recommended practice; 1927.

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B 28-Rubber mills and calenders.

Representative.--E. Leroy Sweetser, department of labor and industries, Boston, Mass.

Approved as American recommended practice; 1927. No revision is contemplated, and no further work on rubber machinery is expected at present.

-Safety code for cranes, derricks, and hoists.

Representative.—Eugene B. Patton, department of labor, New York, N. Y. Four subcommittees are working on drafts, and good progress has been made.

C 2-National electrical safety code.

Representative .- (Vacant.)

Approved as American standard; 1927. No revision to be undertaken immediately.

C 4—Safety code for electrical power control.

Project material has been distributed among other electrical projects.

K 13-Code for colors for gas-mask canisters.

Representative.-John Roach, department of labor, Trenton, N. J.

Tentative draft of code made in New York at meeting held in October, 1928. Mr. Roach reported July 5, 1929, that Le had voted by letter ballot affirmatively on code and anticipated it would be adopted.

L 1—Safety code for textiles.

Representative.—Cyril Ainsworth, department of labor and industry, Harrisburg, Pa.

Meetings of sectional committee on this code to consider a third draft were held in October and December, 1928. This code has been published by the Bureau of Labor Statistics as Bulletin No. 509.

X 2-Safety code for protection of heads and eyes.

Representative.—John P. Meade, department of labor and industries, Boston, Mass.

Approved as American standard; 1922. Revision and enlargement of scope is proposed by the sponsor, Bureau of Standards. Statement clarifying proposed expansion of scope has been requested, but has not been received from the sponsor.

Z 4—Safety code for industrial sanitation.

Representative.—Thomas C. Eipper, department of labor, New York, N. Y. Lately reported by the Public Health Service that a draft has been formulated and is soon to be submitted to the sectional committee.

Z 8-Safety code for laundry machinery.

Representative.-C. B. Connelley, Carnegie Institute of Technology, Pitts-

Approved as American tentative standard; 1924. No revision contemplated at present, apparently, but proposed with a view to advancement of the code to the status of American standard.

Z 9-Safety code for exhaust systems.

Representative.—John Roach, department of labor, Trenton, N. J. After years of inactivity it is believed that plans for work will soon be sufficiently developed in some sections of this field. This will necessitate probably several subcommittees for special work in different industries.

Z 12-Safety codes for prevention of dust explosions.

Representative.-W. J. Burke, department of labor, New York, N. Y.

Approved as American standard; 1927, 1928. No immediate official revision of the five codes completed is in view at present.

Z 13—Safety code for amusement parks.

Representative.-Thomas C. Eipper, department of labor, New York, N. Y. Subcommittee work is progressing satisfactorily.

Z 16-Accident statistics.

Representative.—John Hopkins Hall, jr., department of labor and industry, Richmond, Va.

No report in 1929 from chairman, Mr. Hall. In 1928 it was recommended that committee be continued until revision of Bulletin No. 276, of the United States Bureau of Labor Statistics, which has been placed in the hands of the American Standards Association.

Appendix B.—List of Persons Who Attended the Sixteenth Annual Convention of the Association of Governmental Officials in Industry

Canada

Federal Department of Labor

F. J. Plant, chief of labor intelligence branch. Ottawa. R. A. Rigg, director, Employment Service of Canada, Ottawa.

Alberta

Walter Smitten, commissioner of labor, Edmonton,

Manitoba

Arthur MacNamara, assistant deputy minister of public works, bureau of labor. Winnipeg.

Nova Scotia

Norman McKenzie, deputy minister of public works and mines, Halifax. M. MacDonald, Dominion Iron & Steel Co.

James H. Ainsborough, factory inspector, Ontario.

Thos. B. Angrove, factory inspector, department of labor.

Edith L. Appleton, director women's employment office, Ottawa.

N. N. Arnold, Industrial Accident Prevention Association, Toronto. James H. H. Ballantyne, deputy minister of labor, Toronto. W. T. Brennagh, factory inspector, department of labor.

James T. Burke, chief factory inspector, department of labor.

William Burns, safety engineer, department of labor.

H. A. Clarke, factory inspector, department of labor.

A. J. Cooper, superintendent employment office, Windsor. J. W. Dayes, Industrial Accident Prevention Association, workmen's compensation board.

H. A. Desjardins, superintendent employment office, North Bay.

W. S. Dobbs, superintendent employment office (men's division), Toronto.

T. E. Dowse, superintendent employment office, Cobalt.

W. C. Ferris, ex-superintendent employment office, North Bay.

H. G. Fester, Ontario Minimum Wage Board.

Marion Findlay, senior investigator, department of labor. W. S. Forster, factory inspector, department of labor. F. Francis, employment and safety supervisor, Bell Telephone Co.

H. C. Garner, superintendent employment office, Timmins.

L. F. Green, superintendent employment office, Belleville.

Mrs. E. Gurnett, factory inspector, department of labor.

Rae Halliday, superintendent employment office, Ottawa. George Hamilton, superintendent employment office, Oshawa.

Nellie Hamilton, factory inspector, department of labor.

G. E. Hornell, factory inspector, department of labor. H. C. Hudson, general superintendent, Employment Service of Ontario. W. E. Hunt, superintendent employment office, Sault Ste. Marie.

Irene S. Johnson, superintendent employment office (women's division), Hamilton.

A. S. Johnston, superintendent employment office, Fort William.

L. O. R. Kennedy, superintendent employment office (women's division), Toronto.

W. H. Lott, superintendent employment office, Sarnia.

H. Mabson, inspector, Industrial Accident Prevention Association.

E. H. Manor, superintendent employment office, Sudbury.

John Monteith, factory inspector, department of labor. Tom Moore, president, Trades and Labor Congress of Canada.

R. B. Morley, general manager, Industrial Accident Prevention Association.

M. H. MacBride, superintendent employment office, Brantford.

J. W. MacMillan, chairman, Ontario Minimum Wage Board, Toronto.

Miss E. M. McKay, employment office, London.

E. W. A. O'Dell, representative Boot and Shoe Workers' Union, Canada and United States.

Miss Ogilvie, factory inspector, department of labor.

H. J. Peacock, superintendent employment office, St. Thomas.

V. C. Phelan, employment office, Ottawa.

M. H. Phillips, superintendent employment office, Kitchener.

Hugh Robertson, superintendent employment office, Peterborough.

George H. Ross, superintendent employment office, Pembroke.

John Ruggle, research, Toronto.

Mrs. Ellen Scott, factory inspector, department of labor.

W. A. Selkirk, superintendent employment office, Hamilton.

J. C. Spencer, superintendent employment office, London.

R. A. Stapells, Ontario Minimum Wage Board.

Hugh Stevenson, factory inspector, department of labor.

W. A. Stroud, superintendent employment office, Kingston. A. W. Taylor, superintendent employment office, Guelph. H. A. Winnett, factory inspector, department of labor.

A. C. Wood, superintendent employment office, Port Arthur.

A. J. Wright, factory inspector, department of labor. J. F. H. Wyse, general manager, Ontario Safety League.

United States

Federal Department of Labor

Mary Anderson, director Women's Bureau, Washington, D. C. Charles E. Baldwin, assistant commissioner, Bureau of Labor Statistics, Washington, D. C.

E. N. Matthews, director industrial division, Children's Bureau, Washington, D. C.

Agnes L. Peterson, assistant director Women's Bureau, Washington, D. C. Ethelbert Stewart, commissioner, Bureau of Labor Statistics, Washington, D. C.

Arkansas

W. A. Rooksbery, commissioner, bureau of labor and statistics, Little Rock. Mrs. W. A. Rooksbery, Little Rock. Miss Louise Rooksbery, Little Rock.

Colorado

M. H. Alexander, deputy labor commissioner and chief factory inspector, Denver.

Delaware

C. W. Dickey, manager, compensation division, Du Pont de Nemours Co., Wilmington.

Georgia

H. C. Carrington, administering workmen's compensation act, Atlanta. Judge T. E. Whitaker, commissioner, department of commerce and labor. Atlanta.

Tarna

A. L. Urick, labor commissioner, Des Moines.

Kentucky

Edward F. Seiller, chief labor inspector, department of agriculture, labor and statistics, Louisville.

Massachusetts

Ethel M. Johnson, assistant commissioner of labor and statistics, Boston. Gen. E. Leroy Sweetser, commissioner of labor and statistics, Boston. Mrs. Sweetser, Boston.

Minnesota

Henry McColl, chairman industrial commission, St. Paul. Louise Schutz, superintendent division of women and children, industrial commission, St. Paul.

New Hampshire

John S. B. Davie, commissioner of labor, Concord.

New Jersey

Charles R. Blunt, commissioner of labor, Trenton. John Roach, deputy commissioner of labor, Trenton.

New York

John B. Andrews, secretary American Association for Labor Legislation. W. J. Burke, chemical engineer, bureau of industrial hygiene, department of

Lewis A. DeBlois, manager safety engineering division, department of labor.

Marguerite Marsh, research secretary National Consumers' League.

Dr. Eugene B. Patton, director bureau of statistics and information, department of labor.

Mrs. E. H. Van Buskirk, special investigator, American Association for Labor Legislation.

Ohio

William T. Blake, director of industrial relations, Columbus.

E. I. Evans, actuary Ohio State fund.

George F. Miles, director of employment service, Columbus.

Dr. W. E. Obetz, medical director division of safety and hygiene, department of industrial relations, Columbus.

Pennsylvania

Cyril Ainsworth, director bureau of industrial standards, department of labor and industry, Harrisburg.

John S. Spicer, chief accident investigator, department of labor and industry.

A. Lyle Linderman, member industrial board, department of labor and industry. Harrisburg.

Wisconsin

Maud Swett, field director, woman and child labor department, industrial commission. Milwaukee.

LIST OF BULLETINS OF THE BUREAU OF LABOR STATISTICS

The following is a list of all bulletins of the Bureau of Labor Statistics published since July, 1912, except that in the case of bulletins giving the results of periodic surveys of the bureau, only the latest bulletin on any one subject is here listed.

A complete list of the reports and bulletins issued prior to July, 1912, as well as the bulletins published since that date, will be furnished on application. Bulletins marked thus (*) are out of print.

Conciliation and Arbitration (including strikes and lockouts).

- No. 124. Conciliation and arbitration in the building trades of Greater New York.
 [1913.]
- *No. 133. Report of the industrial council of the British Board of Trade on its inquiry into industrial agreements. [1913.]
- No. 139. Michigan copper district strike. [1914.]
- No. 144. Industrial court of the cloak, suit, and skirt industry of New York City. [1914.]
- No. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City. [1914.]
- *No. 191. Collective bargaining in the anthracite-coal industry. [1916.]
- *No. 198. Collective agreements in the men's clothing industry. [1916.]
- No. 233. Operation of the industrial disputes investigation act of Canada. [1918.]
- No. 255. Joint industrial councils in Great Britain. [1919.]
- No. 283. History of the Shipbuilding Labor Adjustment Board, 1917 to 1919.
- No. 287. National War Labor Board: History of its formation, activities, etc. [1921.]
- No. 303. Use of Federal power in settlement of railway labor disputes. [1922.]
- No. 341. Trade agreement in the silk-ribbon industry of New York City. [1923.]
- No. 402. Collective bargaining by actors. [1926.]
- No. 468. Trade agreements, 1927.
- No. 481. Joint industrial control in the book and job printing industry. [1928.]

Cooperation.

- No. 313. Consumers' cooperative societies in the United States in 1920.
- No. 314. Cooperative credit societies in America and in foreign countries. [1922]
- No. 437. Cooperative movement in the United States in 1925 (other than agriculture).

Employment and Unemployment.

- *No. 109. Statistics of unemployment and the work of employment offices in the United States. [1913.]
- No. 172. Unemployment in New York City, N. Y. [1915.]
- No. 183. Regularity of employment in the women's ready-to-wear garment industries. [1915.]
- *No. 195. Unemployment in the United States. [1916.]
- No. 196. Proceedings of the Employment Managers' Conference held at Minneapolis Minn., January 19 and 20, 1916.
- No. 202. Proceedings of the conference of Employment Managers' Association of Boston, Mass., held May 10, 1916.
- No. 206. The British system of labor exchanges. [1916.]
- No. 227. Proceedings of the Employment Managers' Conference, Philadelphia, Pa., April 2 and 3, 1917.
- No. 235. Employment system of the Lake Carriers' Association. [1918.]
- *No. 241. Public employment offices in the United States. [1918.]
- No. 247. Proceedings of Employment Managers' Conference, Rochester, N. Y., May 9-11, 1918.
- No. 310. Industrial unemployment: A statistical study of its extent and causes [1922.]
- No. 409. Unemployment in Columbus, Ohio, 1921 to 1925.

Foreign Labor Laws.

- *No. 142. Administration of labor laws and factory inspection in certain European countries. [1914.]
- No. 494. Labor legislation of Uruguay. [1929.]

Housing.

- *No. 158. Government aid to home owning and housing of working people in foreign countries. [1914.]
 - No. 263. Housing by employers in the United States [1920.]
 - No. 295. Building operations in representative cities in 1920.
- No. 500. Building permits in the principal cities of the United States in [1921 to] 1928.

Industrial Accidents and Hygiene.

- *No. 104. Lead poisoning in potteries, tile works, and porcelain enameled sanitary ware factories. [1912.]
- No. 120. Hygiene of the painter's trade. [1913.]
- *No. 127. Dangers to workers from dusts and fumes, and methods of protection. [1913.]
- *No. 141. Lead poisoning in the smelting and refining of lead. [1914.]
- *No. 157. Industrial accident statistics. [1915.]
- *No. 165. Lead poisoning in the manufacture of storage batteries. [1914.]
- *No. 179. Industrial poisons used in the rubber industry. [1915.]
- No. 188. Report of British departmental committee on the danger in the use of lead in the painting of buildings. [1916.]
- No. 201. Report of committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions. [1916.]
- *No. 209. Hygiene of the printing trades. [1917.]
- *No. 219. Industrial poisons used or produced in the manufacture of explosives. [1917.]
- No. 221. Hours, fatigue, and health in British munition factories. [1917.]
- No. 230. Industrial efficiency and fatigue in British munition factories. [1917.]
- *No. 231. Mortality from respiratory diseases in dusty trades (inorganic dusts). [1918.]
- *No. 234. Safety movement in the iron and steel industry, 1907 to 1917.
- No. 236. Effects of the air hammer on the hands of stonecutters. [1918.]
- No. 249. Industrial health and efficiency. Final report of British Health of Munition Workers' Committee. [1919.]
- No. 251. Preventable death in the cotton-manufacturing industry. [1919.]
- No. 256. Accidents and accident prevention in machine building. [1919.]
- No. 267. Anthrax as an accupational disease. [1920.]
- No. 276. Standardization of industrial accident statistics. [1920.]
- No. 280. Industrial poisoning in making coal-tar dyes and dye intermediates. [1921.]
- No. 291. Carbon-monoxide poisoning. [1921.]
- No. 293. The problem of dust phthisis in the granite-stone industry. [1922.]
- No. 298. Causes and prevention of accidents in the iron and steel industry, 1910-1919.
- No. 306. Occupation hazards and diagnostic signs: A guide to impairments to be looked for in hazardous occupations. [1922.]
- No. 339. Statistics of industrial accidents in the United States. [1923.]
- No. 392. Survey of hygienic conditions in the printing trades. [1925.]
- No. 405. Phosprorous necrosis in the manufacture of fireworks and in the preparation of phosphorous. [1926.]
- No. 425. Record of industrial accidents in the United States to 1925.
- No. 426. Deaths from lead poisoning. [1927.]
- No. 427. Health survey of the printing trades, 1922 to 1925.
- No. 428. Proceedings of the Industrial Accident Prevention Conference, held at Washington, D. C., July 14-16, 1926.
- No. 460. A new test for industrial lead poisoning. [1928.]
- No. 466. Settlement for accidents to American seamen. [1928.]
- No. 488. Deaths from lead poisoning, 1925-1927.
- No. 490. Statistics of industrial accidents in the United States to the end of 1927.
- No. 507. Causes of death, by occupation. (In press.)

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Industrial Relations and Labor Conditions.
     No. 237. Indústrial unrest in Great Britain. [1917.]
     No. 340. Chinese migrations, with special reference to labor conditions. [1923.]
     No. 349. Industrial relations in the West Coast lumber industry. [1923.]
     No. 361. Labor relations in the Fairmont (W. Va.) bituminous-coal field. [1924.]
     No. 380. Postwar labor conditions in Germany. [1925.]
No. 383. Works council movement in Germany. [1925.]
     No. 384. Labor conditions in the shoe industry in Massachusetts. 1920-1924.
     No. 399. Labor relations in the lace and lace-curtain industries in the United
                 States. [1925.]
     No. 483. Conditions in the shoe industry in Haverhill, Mass., 1928.
Labor Laws of the United States (including decisions of courts relating to labor).
     No. 211. Labor laws and their administration in the Pacific States. [1917.]
     No. 229. Wage-payment legislation in the United States. [1917.]
     No. 285. Minimum-wage laws of the United States: Construction and operation.
                 [1921.]
     No. 321. Labor laws that have been declared unconstitutional. [1922.]
     No. 322. Kansas Court of Industrial Relations. [1923.]
     No. 343. Laws providing for bureaus of labor statistics, etc. [1923.]
     No. 370. Labor laws of the United States, with decisions of courts relating thereto.
                 [1925.]
     No. 408. Laws relating to payment of wages. [1926.]
     No. 444. Decisions of courts and opinions affecting labor, 1926.
     No. 467. Minimum-wage legislation in various countries. [1928.]
     No. 486. Labor legislation of 1928.
Proceedings of Annual Conventions of the Association of Government Labor Officials of the
  United States and Canada. Name changed in 1928 to Association of Governmental Officials
  in Industry of the United States and Canada.
     *No. 266. Seventh, Seattle, Wash., July 12-15, 1920.
      No. 307. Eighth, New Orleans, La., May 2-6, 1921.
     No. 323. Ninth, Harrisburg, Pa., May 22-26, 1922.
      No. 352. Tenth, Richmond, Va., May 1-4, 1923.
     *No. 389. Eleventh, Chicago, Ill., May 19-23, 1924.
     *No. 411. Twelfth, Salt Lake City, Utah, August 13-15, 1925.
      No. 429. Thirteenth, Columbus, Ohio, June 7-10, 1926.
      No. 455. Fourteenth, Paterson, N. J., May 31 to June 3, 1927.
      No. 480. Fifteenth, New Orleans, La., May 15-24, 1928.
Proceedings of Annual Meetings of the International Association of Industrial Accident Boards
  and Commissions.
      No. 210. Third, Columbus, Ohio, April 25-28, 1916.
      No. 248. Fourth, Boston, Mass., August 21-25, 1917.
      No. 264. Fifth, Madison, Wis., September 24-27, 1918.
     No. 273. Sixth, Toronto, Canada, September 23-26, 1919.
      No. 281. Seventh, San Francisco, Calif., September 20-24, 1920.
      No. 304. Eighth, Chicago, Ill., September 19-23, 1921.
      No. 333. Ninth, Baltimore, Md., October 9-13, 1922.
      No. 359. Tenth, St. Paul, Minn., Septemberf 24-26, 1923.
      No. 385. Eleventh, Halifax, Nova Scotia, August 26-28, 1924.
      No. 395. Index to proceedings, 1914-1924.
      No. 406. Twelfth, Salt Lake City, Utah, August 17-20, 1925.
      No. 432. Thirteenth, Hartford, Conn., September 14-17, 1926.
      No. 456. Fourteenth, Atlanta, Ga., September 27-29, 1927.
      No. 485. Fifteenth, Paterson, N. J., September 11-14, 1928.
Proceedings of Annual Meetings of International Association of Public Employment Services.
      No. 192. First, Chicago, December 19 and 20, 1913; second, Indianapolis, September
                 24 and 25, 1914; third, Detroit, July 1 and 2, 1915.
      No. 220. Fourth, Buffalo, N. Y., July 20 and 21, 1916.
      No. 311. Ninth, Buffalo, N. Y., September 7-9, 1921.
      No. 337. Tenth, Washington, D. C., September 11-13, 1922.
      No. 355. Eleventh, Toronto, Canada, September 4-7, 1923.
      No. 400. Twelfth, Chicago, Ill., May 19-23, 1924.
      No. 414. Thirteenth, Rochester, N. Y., September 15-17, 1925.
      No. 478. Fifteenth, Detroit, Mich., October 25-28, 1927.
      No. 501. Sixteenth, Cleveland, Ohio, September 18-21, 1928.
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Productivity of Labor.

- No. 356. Productivity costs in the common-brick industry. [1924.]
- No. 360. Time and labor costs in manufacturing 100 pairs of shoes, 1923,
- No. 407. Labor costs of production and wages and hours of labor in the paper boxboard industry. [1926.]
- No. 412. Wages, hours, and productivity in the pottery industry, 1925.
- No. 441. Productivity of labor in the glass industry. [1927.]
- No. 474. Productivity of labor in merchant blast furnaces. [1928.]
- No. 475. Productivity of labor in newspaper printing [1929.]

Retail Prices and Cost of Living.

- *No. 121. Sugar prices, from refiner to consumer. [1913.]
- *No. 130. Wheat and flour prices, from farmer to consumer. [1913.]
- No. 164. Butter prices, from producer to consumer. [1914.]
- No. 170. Foreign food prices as affected by the war. [1915.]
- No. 357. Cost of living in the United States. [1924.]
- No. 369. The use of cost-of-living figures in wage adjustments. [1925.]
- No. 495. Retail prices, 1890 to 1928. (In press.)

Safety Codes.

- *No. 331. Code of lighting: Factories, mills, and other work places.
- No. 336. Safety code for the protection of industrial workers in foundries.
- No. 350. Specifications of laboratory tests for approval of electric headlighting devices for motor vehicles.
- No. 351. Safety code for the construction, care, and use of ladders.
- No. 375. Safety code for laundry machinery and operations.
- No. 378. Safety code for woodworking plants.
- No. 382. Code of lighting school buildings.
- No. 410. Safety code for paper and pulp mills.
- No. 430. Safety code for power prosses and foot and hand presses.
- No. 433. Safety codes for the prevention of dust explosions.
- No. 436. Safety code for the use, care, and protection of abrasive wheels.
- No. 447. Safety code for rubber mills and calenders.
- No. 451. Safety code for forging and hot-metal stamping.
- No. 463. Safety code for mechanical power-transmission apparatus—first revision.

Vocational and Workers' Education.

- *No. 159. Short-unit courses for wage earners, and a factory school experiment [1915.]
- No. 162. Vocational education survey of Richmond, Va. [1915.]
- No. 199. Vocational education survey of Minneapolis, Minn. [1917.]
- No. 271. Adult working-class education in Great Britain and the United States. [1920.]
- No. 459. Apprenticeship in building construction. [1928.]

Wages and Hours of Labor.

- *No. 146. Wages and regularity of employment and standardization of piece rates in the dress and waist industry of New York City. [1914.]
- *No. 147. Wages and regularity of employment in the cloak, suit, and skirt industry. [1914.]
- No. 161. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913.
- No. 163. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913.
- *No. 190. Wages and hours of labor in the cotton, woolen, and slik industries, 1907 to 1914.
- No. 204. Street-railway employment in the United States. [1917.]
- No. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915.
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