UNITED STATES DEPARTMENT OF LABOR
W. N. DOAK, Secretary
BUREAU OF LABOR STATISTICS
ETHELBERT STEWART, Commissioner

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WORKMEN'S INSURANCE AND COMPENSATION SERIES

PROCEEDINGS OF THE EIGHTEENTH ANNUAL MEETING

OF THE

INTERNATIONAL ASSOCIATION OF INDUSTRIAL ACCIDENT BOARDS AND COMMISSIONS

HELD AT RICHMOND, VA.

OCTOBER 5-8, 1931

APRIL, 1932

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ANNUAL MEETINGS AND OFFICERS OF THE INTERNATIONAL ASSOCIATION OF INDUSTRIAL ACCIDENT BOARDS AND COMMISSIONS

Annual meetings			President	Secretary-treasurer
No.	Date	Place		
1	Apr. 14, 15, 1914	Lansing, Mich	John E. Kinnane	Richard L. Drake.
(1)	Jan. 12, 13, 1915	Chicago, Ill	do	Do.
2	Sept. 30-Oct. 2, 1915	Seattle, Wash	do	Do.
3	Apr. 25-28, 1916	Columbus, Ohio	Floyd L. Daggett Wallace D. Yaple	L. A. Tarrell.
4	Aug. 21-25, 1917	Boston, Mass	Dudley M. Holman	Royal Meeker.
5	Sept. 24-27, 1918	Madison, Wis	F. M. Wilcox	Do.
6	Sept. 23-26, 1919	Toronto, Ontario	George A. Kingston	Do.
7	Sept. 20-24, 1920	San Francisco, Calif	Will J. French	Charles H. Verrill.
8	Sept. 19-23, 1921	Chicago, Ill	Charles S. Andrus	Ethelbert Stewart.
9	Oct. 9-13, 1922	Baltimore, Md	Robert E. Lee	Do.
10	Sept. 24-26, 1923	St. Paul, Minn	F. A. Duxbury	Do.
11	Aug. 26-28, 1924	Halifax, Nova Scotia	Fred W. Armstrong	Do.
12	Aug. 17-20, 1925	Salt Lake City, Utah	O. F. McShane	Do.
13	Sept. 14-17, 1926	Hartford, Conn	F. M. Williams	Do.
14	Sept. 27-29, 1927	Atlanta, Ga	H. M. Stanley	Do.
15	Sept. 11-14, 1928	Paterson, N. J	Andrew F. McBride	Do.
16	Oct. 8-11, 1929	Buffalo, N. Y	Frances Perkins	Do.
17	Sept. 22-26, 1930	Wilmington, Del	Dr. Walter O. Stack	Do.
18	Oct. 5-8, 1931	Richmond, Va	Parke P. Deans	Do.

[1] Special meeting.

Contents

MONDAY, OCTOBER 5—AFTERNOON SESSION

Chairman, Parke P. Deans, President I. A. I. A. B. C.

TUESDAY, OCTOBER 6—MORNING SESSION

Chairman, Parke P. Deans, President I. A. I. A. B. C.

TUESDAY, OCTOBER 6—AFTERNOON SESSION

Chairman, Walter O. Stack, President Industrial Accident Board of Delaware

WEDNESDAY, OCTOBER 7—MORNING SESSION

Chairman, G. H. Gehrmann, M. D., Medical Director E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Del.

WEDNESDAY, OCTOBER 7—AFTERNOON SESSION

Chairman, H. U. Stephenson, M. D., Chief Medical Examiner Industrial Commission of Virginia

THURSDAY, OCTOBER 8—MORNING SESSION

Chairman, R. B. Morley, General Manager Industrial Accident Prevention Associations, Toronto, Canada

THURSDAY, OCTOBER 8—AFTERNOON SESSION

Chairman, Charles R. Blunt, Commissioner Department of Labor of New Jersey

THURSDAY, OCTOBER 8—EVENING SESSION

Chairman, Parke P. Deans, President I. A. I. A. B. C.

Appendixes

BULLETIN OF THE

U. S. BUREAU OF LABOR STATISTICS

NO. 564 WASHINGTON APRIL, 1932

PROCEEDINGS OF THE EIGHTEENTH ANNUAL MEETING OF THE INTERNATIONAL ASSOCIATION OF INDUSTRIAL ACCIDENT BOARDS AND COMMISSIONS, RICHMOND, VA., OCTOBER 5–8, 1931

MONDAY, OCTOBER 5—AFTERNOON SESSION

Chairman, Parke P. Deans, President I. A. I. A. B. C.

The eighteenth annual meeting of the International Association of Industrial Accident Boards and Commissions convened in the John Marshall Hotel, Richmond, Va., October 5, 1931, Mr. Parke P. Deans, of the Industrial Commission of Virginia, president of the association, presiding. The president delivered the following address:

Developments in the Workmen's Compensation Field

By PARKE P. DEANS, *Industrial Commission of Virginia and President of the International Association of Industrial Accident Boards and Commissions*

I am truly glad to have you, the representatives of the boards and commissions which have the supervision of workmen's compensation in the United States and Canada, on Virginia's soil. Its history, traditions, and associations make us all kin. The pleasant duty of welcoming you has been assigned to others who will do so at another hour.

May I give you this historical setting? It was here that the English-speaking people first landed, and on Friday you will have a chance to visit the cradle of the Republic.

Virginia was among the first of the Southern States to enact a workmen's compensation law. The basis of the act was acquired from Indiana. This occurred in 1918. Georgia followed, accepting our act with some amendments. Then followed North Carolina, the main principles of whose act are similar to those of Virginia and Georgia. In Virginia we pay compensation for all accidents which arise out of and in the course of employment, and the awards made are appealable only to the supreme court of appeals. Our problems are similar to those of a majority of the States.

At the beginning of our association year it was my privilege to name committees on statistics, medical, and safety. In addition to

these, due to the adoption of certain resolutions at Wilmington, I named two other committees, one on rehabilitation and the other on workmen's compensation legislation. On account of the retirement of F. A. Duxbury from the Minnesota commission, I named Abel Klaw, representative of an associate member, as chairman of the committee.

The creation of these two committees showed evidence of the fact that our association realizes the importance of their function. I know of no body of people who should be more interested in rehabilitating the maimed employees of industry than you. I await with a great deal of interest the report of this committee, which is to formulate our part in this great work.

I can not conceive of a more important undertaking than for us to strive to standardize workmen's compensation in the States and Provinces. I realize that the task is a big one, due to the different acts that have become law, as it is hard for one not familiar with the local situations to realize the atmosphere and influence which brought about the individual compensation laws. However, I feel that it would greatly assist the different boards and commissions in the execution of their laws if we could get them in accord. It would be a great aid to those who interpret the laws to receive the assistance derived from opinions of our courts on the interpretation and construction of certain parts of the law. I was impressed with this fact in reading a recent decision of a supreme court, which discarded all of the opinions of the courts of other States cited by counsel with the remark:

> Counsel for the plaintiff has cited many cases from other jurisdictions relating to questions of this general character, but they can afford us little aid because the determination of the issue here raised depends upon the construction of this particular statute, which is not, we think, identical with the statute of any other jurisdiction.

I sincerely hope that the committee on workmen's compensation legislation will bring to this body recommendations which may strengthen our law and I hope that the several boards and commissions will feel that it is their duty to strive to get favorable consideration from the different law-making bodies.

Evidently, Gov. Gifford Pinchot, of Pennsylvania, had in mind this view when he called together representatives of the Eastern States for a conference on labor legislation. It is interesting to note the recommendations made by that delegation. For your information I herewith quote the recommendations made:

> (1) This committee recommends provisions for coverage of all occupational diseases under the workmen's compensation acts of the several States.
>
> (2) This committee recommends that the workmen's compensation statutes of the several States confer the fullest possible extraterritorial jurisdiction.
>
> (3) This committee recommends that the workmen's compensation acts of the several States bring within coverage all hazardous occupations in which one or more persons are employed.
>
> (4) This committee recommends that the workmen's compensation acts of the several States bring within coverage all occupations in which one or more persons are employed except farm labor and domestic service.[1]
>
> (5) This committee recommends that the workmen's compensation acts of the several States provide full medical service, either by statute provision or procedural permission.

[1] The committee rejected by a vote of 4 to 3 a motion recommending "full coverage of all employments, including farm labor and domestic service."

(6) This committee recommends and advises that the workmen's compensation boards or commissions of the several States be equipped with salaried staff physicians for assistance and counsel in the adjudication of compensation claims.

(7) This committee recommends that the industrial boards or commissions of the several States be empowered to fix, regulate, and control attorney's or representative's fees in workmen's compensation proceedings in all cases.

(8) This committee recommends the adoption of compensation provisions requiring insurance carriers or self-insurers to pay a substantial amount in all compensable no-dependent death cases and that the fund so accumulated be devoted to rehabilitation work, or second-injury payments, or the administrative expense of the several departments.

(9) This committee recommends that the schedule loss tables of the Federal longshoremen's and harbor workers' compensation act be construed as the standard measurement for permanent partial disabilities, and that deductions from such schedule awards for temporary total disability be limited to the healing periods provided in the same act.

(10) This committee recommends that installments on permanent partial disability awards accruing after death shall not be considered vested rights of the dependent in addition to death benefits.

(11) This committee recommends and favors the general principle that the compensation rights of widows and dependents shall be independent of the rights of the injured workman.

(12) This committee recommends that the several States adopt the uniform compensation rate at a maximum of not less than $20, and a minimum of not less than $10.

(13) This committee recommends and favors the general principle of charging against industry the full and necessary administrative expense of the boards and commissions charged with the responsibility of enforcing the provisions of the compensation statutes.

(14) This committee recommends that the industrial boards or compensation commissions of the several States be given sole jurisdiction as to questions of fact and that appeals be permitted only to appellate courts on question of law.

From a study of this paper I agree to many of the recommendations made, but I do consider that the conference exceeded its province when it undertook to recommend legislation which may favor one or the other group of people interested in compensation laws. I feel that it should confine itself to strengthening the basic laws, keeping in mind the organization and function of the boards and commissions. If we will place ourselves upon the high plane of a neutral position in controversial questions before the legislature and strive only to advise and cooperate with the legislatures, our influence would be felt to a greater degree.

After a conference with our secretary and treasurer, we decided that it would be expedient to appoint a committee to develop a plan for bringing the International Association of Industrial Accident Boards and Commissions into contact with Spanish-American countries (including Brazil) having compensation laws. I named Dr. W. O. Stack of the Industrial Accident Board, State of Delaware. He will make his report at this meeting.

It was brought to the attention of the executive committee that Sam Laughlin of the Industrial Accident Commission of Oregon had severed his connection with that commission, and resigned as vice president of this association. This raised the question of filling this office by the executive committee. Section 4 of article 7 of the constitution of the association reads as follows:

SEC. 4. If, for any reason, an officer of this association shall cease to be connected with any agency entitled to active membership before the expiration of his term, he may continue in office notwithstanding until the next annual meeting, but, if for any reason a vacancy occurs in the office of president, the executive committee shall appoint his successor.

I interpret this section to mean that the executive committee has only the right to appoint a president and no other officer. I really believe that this section should be changed at this meeting to meet the exigencies.

General Review of Workmen's Compensation During 1931

Legislation—United States

The legislative year of 1931 has been a progressive one in the field of workmen's compensation. Of the 44 States having compensation laws, all met in regular session this year with the exception of three (Kentucky, Louisiana, and Virginia). Of the remaining 41 States, 31 acted on the subject of workmen's compensation. Those States which took no action during their regular sessions include Arizona, Connecticut, Georgia, Indiana, Nebraska, New Mexico, Rhode Island, Tennessee, Utah, and West Virginia; in this group of States, it may be said, however, that many bills were introduced, but were either lost in legislative committees or failed of final passage in some manner.

Of the four States (Arkansas, Florida, Mississippi, and South Carolina) still without the benefits of workmen's compensation, the legislatures of all but one (Mississippi) met in regular session but took no definite action toward adopting a State workmen's compensation law. It has been reported, however, that an attempt was made and some agitation created in those States, especially in Florida, where a bill providing for a workmen's compensation law passed one branch of the legislature but met defeat in the other. Extra sessions have also been held in several of the States in addition to their regular sessions, but of the States from which legislation is available none acted upon the subject of compensation at the special session.

Since our last meeting at Wilmington, the third session of the Seventy-first Congress of the United States was also held, but no change was made in the basic compensation laws applicable to Federal employees, longshoremen and harbor workers, and private employees in the District of Columbia.

The coverage provision was amended in some respect in 18 States (California, Colorado, Delaware, Idaho, Illinois, Massachusetts, Michigan, Missouri, Montana, New Jersey, New York, Ohio, Oregon, South Dakota, Texas, Washington, Wisconsin, and Wyoming). In Michigan the coverage was enlarged so as to include volunteer firemen. This was the result of a decision by the State supreme court which held that since a volunteer fireman was paid only for each call responded to, and therefore receiving no stated wage, he was not an employee within the meaning of the workmen's compensation law. A volunteer fireman in this State is now definitely classed as an employee, and his average weekly wages are computed at $27. In New Jersey the securing of compensation for volunteer firemen is now mandatory upon municipalities. For volunteer firemen not otherwise employed at the time of injury, compensation is based upon the weekly earnings received in the last employment.

Alabama and Pennsylvania now provide for double compensation in the case of injured children illegally employed, while Texas has placed such minors under the act.

In Vermont only one amendment was adopted, requiring the commissioner to render his decision within 60 days instead of 6 months as heretofore, while in Minnesota the principal amendments merely affect the insurance provisions of the act. In Oklahoma consideration was given to the qualifications, etc., of the industrial commissioners and the employment of administrative assistants. Indirectly affecting the workmen's compensation law in Georgia was a provision consolidating the industrial commission and the department of commerce and labor under the name of the department of industrial relations.

The waiting period was decreased in some States, notably in Delaware where the period has been reduced from 2 weeks to 7 days, while in Wisconsin it has been reduced to 3 days with no waiting period if disability extends beyond 10 days.

The subject of occupational diseases was treated in six States (Illinois, Missouri, New Jersey, New York, Ohio, and Wisconsin). In Ohio, the list was enlarged so as to include potassium cyanide and sulphur dioxide poisoning and chrome ulceration of the skin or nasal passage, while in New Jersey the term "radium necrosis" is changed to "radium poisoning" in the list of compensable occupational diseases. The Illinois Department of Labor and the Industrial Commission were delegated by legislative fiat to investigate the subject of occupational diseases and submit a report to the next session of the legislature. The New York and Wisconsin amendments pertained mostly to procedural or administrative considerations in such cases. A special committee on public health appointed in New York has recently made a preliminary report recommending that the present schedule of occupational diseases be extended to include all diseases arising out of the employment.

Liberalization of benefits received the attention of 14 States. Medical benefits were increased in Delaware, Kansas, Missouri, and New Hampshire, while funeral benefits were also liberalized in the latter State (New Hampshire), as well as in Ohio and Texas. In several of these States as well as in eight other States (Idaho, Illinois, Iowa, Maine, Maryland, Nevada, North Carolina, and Wisconsin), the act was liberalized either by raising the minimum or maximum weekly payments, by increasing the maximum amount in death cases and the number of weeks for specified injuries, or by other more or less direct methods.

The extraterritorial provision was one of the subjects considered in North Dakota and Texas.

Benefits to a nonresident alien dependent (not including a Canadian) are now limited to 50 per cent of the compensation provided in the Illinois act.

An important change in appeal cases was effected by the legislature in New Jersey. Appeals from the awards of the commission are now taken direct to the State supreme court, instead of, as formerly, by appeal first to the court of common pleas. In Maryland, an employee who has been injured in the State may now, in the event of a second injury, waive any right to compensation to which he would be entitled because of a preexisting disability.

Maryland, Montana, and Ohio legislated on fees for legal services. In the first-named State the industrial accident commission is empowered to hear and determine questions concerning legal services

and may order an attorney to refund any part of a charge deemed excessive. In Ohio the industrial commission is authorized to inquire into the amount of fees charged and to settle disputes relative to such fees, and also may suspend for cause anyone practicing before the commission. The Montana Industrial Accident Board now has the power to fix the amount of attorney's fees. In Texas the board may punish for contempt, and bar persons guilty of fraudulent or illegal conduct from practicing before it.

Naturally it would be impossible to go into the details of all the amendments passed this year by the various State legislatures. From an examination of the amendments made by the various States, however, it is plainly evident that the tendency has been to strengthen and broaden the existing laws and to improve their administration.

Four Territorial legislatures met in regular legislative session in 1931. Alaska made no change in its workmen's compensation law. Porto Rico made several changes, mainly of minor importance. A new provision for "temporary illness" in occupational diseases is provided. The compensation paid in such cases is equal to one-half the wages received when taken sick, limited to a period of 102 weeks. The maximum is fixed at $15 and the minimum at $3 a week. In Hawaii an employee is no longer required to make a report of an injury if the employer has already reported same to the board or insurance carrier. The legislature of the Philippine Islands does not convene until midsummer, and continues for 100 days. No official information has been received as to whether any changes have been made or are contemplated in the basic act adopted in 1927.

Legislation—Canada

All of the eight Canadian Provinces having compensation laws, except the Provinces of Alberta, Manitoba, and New Brunswick, acted on the subject in some respect during 1931.

The only amendment to the workmen's compensation act of British Columbia was that providing for the payment of the salaries of the commissioners out of the accident fund instead of from the consolidated revenue fund. The effect of this amendment is that the industries now pay the salaries of the commissioners, instead of the Government, as heretofore, out of the public funds.

The most important contribution to the cause of workmen's compensation in Canada was the enactment of a new law in Quebec. This law became effective on September 1 of this year, and is similar in many respects to the Ontario law. It provides for a system of collective insurance in a provincial fund for the majority of industries, and is administered by the workmen's compensation commission. In Nova Scotia the act was amended, authorizing the board to extend compensation for spinal injuries under certain conditions, and extending to an injured employee the benefit of any doubt existing in his case. The term "workman" under the Nova Scotia act was amended to include a person who has entered into or works under a contract of service.

Compensation to blind workmen was effected in Ontario, the main purpose being to encourage the employment of men blinded in industry. This is an attempt to deal with the important and far-reaching problem of blind employees who have been trained for

some kind of work but whom the employer hesitates to take back into service. The act provides that in such cases, $50 of the compensation shall be paid by the industry and the entire remaining cost of compensation shall be paid from the public fund of the Province. The Canadian National Institute for the Blind is given exclusive jurisdiction of the work to be performed by the workman, and his proper placement. The Ontario act was also amended by removing miner's phthisis from the schedule of industrial diseases, effective January 1, 1932.

It might be well at this time to refer briefly to another subject which should engage the attention of administrators of workmen's compensation laws—compensation for occupational deafness.

The subject of occupational deafness was discussed last year by Dr. Frank G. Pedley, head of the industrial clinic at Montreal General Hospital, in an address delivered at Washington, D. C. In the course of his remarks, Doctor Pedley stated that—

> Everyone has heard of boilermaker's deafness and perhaps some have heard of riveter's deafness but there are a great many other occupations in which work is carried on amid a most frightful din, and in which workers almost invariably lose their hearing.

Doctor Pedley enumerated a partial list of occupations in which the workman is subject to deafness, and he also discussed the various types of occupational deafness, and other effects on persons working in excessive noise, and concluded that unquestionably compensation "for occupational deafness would stimulate the reduction of noise. The law now provides compensation for loss of vision," Doctor Pedley observed, "and there is no reason why it should fail to indemnify for loss of hearing."

Saskatchewan enlarged the coverage of its act, and made directors of companies liable to the workmen's compensation board for all assessments due by the company.

Several of the Provinces (Alberta, New Brunswick, and Ontario) either have undertaken or are providing for a study and investigation of their respective workmen's compensation acts during the present year, with a view to submitting recommendations to the next session of the provincial legislatures. In this connection it is interesting to learn of the suggestion recently made by the Saskatchewan branch of the Canadian Manufacturers' Association. In order to place the workmen's compensation act "on a stable basis, to prevent continual requests for amendments and the friction which this engenders, and in order to conserve the time of the government and legislature," the association suggested to the provincial government that the workmen's compensation act be opened for revision only once in every 5 years, and that on such occasions, a committee be appointed representing workmen, employers, and the legislature.

Court Decisions

A large number of workmen's compensation cases were decided by the courts during the past 12 months. The Supreme Court of the United States, however, has rendered no opinion on workmen's compensation since the meeting of this organization last year. One case recently decided by a State supreme court is deserving of our particular attention. Major Allen, chairman of the North Car-

olina Industrial Commission, at the 1930 convention at Wilmington, informed the delegates that he had held a witness in contempt for refusing to testify before him. The case was subsequently carried to the State supreme court for determination, and the power of the State industrial commissioner was upheld. (In re Hayes, 200 N. C. 133, 156 S. E. 791.) The supreme court reviewed briefly the creation of the industrial commission and added that "it is primarily an administrative agency of the State charged with the duty of administering the provisions of the North Carolina workmen's compensation act." The courts of North Carolina and of other States, it was said, have uniformly held that "the power to punish for contempt committed in the presence of the court is inherent in the court, and not dependent upon statutory authority." Without regard as to whether or not the North Carolina Industrial Commission is a court (much relied upon by the physician witness in the negative), the supreme court said that—

> We are of the opinion that the commission or any of its members, when conducting a hearing for the purpose of deciding questions upon which the rights and liabilities of an employer and an employee, under the North Carolina workmen's compensation act, are to be determined by the commission or by one of its members, has the power to adjudge a witness who has deliberately and persistently refused to answer a question propounded to him in contempt, and to punish such witness for such contempt by fine or imprisonment.

From the Pacific coast comes a case decided by the Supreme Court of Washington, in which it was held that a radio-station employee is not covered by the State compensation law. According to the decision in this case (Van Dusen *v.* Department of Labor and Industries, 290 Pac. 803), a radio operator or a person engaged in work on an integral part of the broadcasting system is engaged in interstate commerce and if injured can not recover under the State workmen's compensation law.

In Kansas, the supreme court held that a physician making a reasonable charge for services to an injured employee was not bound by the medical-fee provisions of the act. (Ross et al. *v.* Austin Drilling Co., 293 Pac. 757.) The court said:

> Physicians are not within the class of persons who can elect to come under the provisions of the act. The compensation act, therefore, does not represent a contract either between the physician and the injured workman or between the physician and the employer of the workman. There is nothing in the compensation act which prevents either an employer or an employee from making a contract with the physician for services, as such contracts are usually made, and a contract when so made with the physician is free from the terms of the compensation act unless, of course, that act is specifically made a part thereof.

Other cases which may be deserving of mention are as follows: (1) In California the supreme court declared unconstitutional a section in the workmen's compensation law empowering the commission to institute enforcement proceedings against an employer liable for payment into the second-injury fund. (Commercial Casualty Insurance Co. *v.* Industrial Accident Commission, 295 Pac. 11.) It was held in this case that the State constitution does not give the power to the legislature to confer upon the commission authority to settle disputes between an employer and his employee or the dependents of the employee. (2) The Georgia Court of Appeals (McCormack *v.* Shadburn, 156 N. E. 277) upheld the statu-

tory penalty of 10 per cent of the award plus reasonable attorney's fees, in the workmen's compensation law of Georgia, which penalizes an employer who willfully fails to insure as required under the act. (3) The Massachusetts Supreme Court on June 1, last, affirmed a decree of the State industrial accident board, holding that "tips" received by a waitress constituted part of her "earnings" within the meaning of the "average weekly wage" provision of the compensation law. (Ethel Power's case, 176 N. E. 621.) As to whether tips constituted part of the "average weekly wages," the supreme court said that the question was a new one before that court, and further that there were only a few American decisions "pertinent to this point." The court said:

> It seems plain that from the standpoint of the employee the tips in the case at bar were in the nature of wages or earnings. The stipend paid to her by the employer was the smaller part of the actual income received by her as a consequence of her labor for him.
>
> The situation was fully understood and freely assented to by the employer. There was no deception. No divided duty was thereby created on the part of the employee. Her loyalty to the employer was not alloyed by the courtesy and efficiency rendered to patrons which were the basis of their gratuities to her. As to each customer of the employer the tip to the employee was a gift and not founded on an obligation, but the aggregate thus received was dependable although fluctuating according to the amount of patronage coming to the employer.
>
> Service may be rendered upon a reasonable expectation of reward without forming the basis of a debt. The tips were in the nature of part payment for the service received by the patrons at the place of business of the employer. Payments made to his employee by his patrons with the approval of the employer, under the protection of his place of business and for his benefit, bear a close analogy to wages paid by him.
>
> There was nothing illegal in the retention of tips by the employee in these circumstances. If the employer had established a rule of his restaurant forbidding tips, the direct wage expense to him probably would have been increased to make up in substance for the loss in revenue to the employees and that doubtless would have been reflected in an increase in the prices charged to patrons. The employer, in effect, saved in direct outgo for wages the amount received by the employee in tips.

Literature

Among the large number of articles published during the past year on the subject of workmen's compensation and related subjects, both in extended book form and in short or detailed articles, issued in law, insurance, compensation, and statistical journals, several are deserving of mention. Mr. Herbert W. Heinrich, who delivered a paper at the convention in Wilmington on Accident Costs to the State, the Employer, and the Man, has recently issued a comprehensive book on accident prevention, in which he approaches the subject of accident prevention in industry from a scientific viewpoint. Is It Safe to Work? is the title of a book by Edison L. Bowers, containing the results of a study of industrial accidents and workmen's compensation.

The Money Value of a Man, by Louis I. Dublin and Alfred J. Lotka, is a handbook tabulation of the dollar-and-cents value of the head of a family to his dependents. The workmen's compensation law of several States is reproduced in detail, showing the workings of the law, with the procedure and forms set forth. In Illinois, the

subject selected by Mr. Thomas G. Angerstein was The Employer and the Workmen's Compensation Act of Illinois. In Ohio, Harold F. Adams and Robert H. Edwards, of the State industrial commission, have compiled a publication on The Workmen's Compensation Law of Ohio, while in Massachusetts, Practice and Procedure under the Massachusetts Workmen's Compensation Law, with Forms, by Samuel B. Horowitz, adds to the contribution for the furtherance of education in workmen's compensation.

Appeals in Workmen's Compensation Cases

At the present time in the United States, of 44 States which have adopted workmen's compensation laws, all but 6 have recognized the desirability of an administrative agency charged specifically with the supervision of the compensation laws. The States of Alabama, Louisiana, New Hampshire, New Mexico, Tennessee, and Wyoming administer the compensation laws through the instrumentality of the courts. In the commission-administered States, however, appeals to the courts (usually limited to questions of law) are provided for in practically all jurisdictions.

In the commission form, those States having the better practice provide that settlements may be opened for review by the full commission and are not to be considered final until approved.

In some States, special arbitrators or arbitration boards are provided and power is vested in such tribunal to hold hearings and procure evidence. The findings of the board are usually binding as to questions of fact, though appeals may be taken to the courts on questions of law. The review of both questions of fact and law by the courts is allowed in some of the jurisdictions.

The legislature of the State of New Jersey made an important change in the law governing appeals in workmen's compensation cases at the recent session. The committee which had been investigating the subject after hearing the statements of those interested in administration and procedure concluded that there were too many trials possible before a compensation claim could be definitely decided in that State. The former procedure in New Jersey was by informal hearing in which many of the claims were disposed of. Then there was a formal hearing to which it was claimed about 10 per cent of the claimants resorted. Following this was the appeal to the court of common pleas, then to the supreme court, and finally to the court of errors and appeals for review. It was the conclusion of the investigating commission that there were far too many appeals taken on insufficient grounds.

By chapter 280, New Jersey Laws of 1931, it is now provided that any judgment of the workmen's compensation bureau shall be reviewed only by the writ of certiorari to the supreme court. (This has been the law in Virginia since 1924.) This amendment it is believed will reduce the number of appeals and shorten the time now required for the final disposition of a case.

In Table 1 is shown the administrative body in each of the compensation States, and also the court to which an appeal may be taken. The cases cited on questions of appeal are also listed. An interesting table (Table 2) is also submitted of workmen's compensation appeals decided by the courts in the 44 compensation States for the

12-month period from July 1, 1930, to June 30, 1931. The cases for the 12-month period were selected from the Reporter System, published by the West Publishing Co. of St. Paul, Minn.

The largest number of workmen's compensation cases decided by the courts was by the Supreme Court of Oklahoma. In that State the supreme court passed upon 107 such cases. In Vermont no case was reported in the Atlantic Reporter System as being decided by the courts of that State during the selected period of 1930-31.

TABLE 1.—*Appeals from decisions of workmen's compensation commission or other administrative agency*

State	Administered by court or commission	Court to which appeal is taken	Cases on question of appeal
Alabama	Courts (circuit court)	Supreme court; court of appeals.	117 So. 914; 117 So. 52; 116 So. 514; and 116 So. 365.
Arizona	Industrial commission	Supreme court	267 Pac. 203; 266 Pac. 11; and 252 Pac. 512.
California	Industrial accident commission.	Supreme court or district court of appeal.	277 Pac. 497; 22 F. (2d) 574; 275 Pac. 844; and 267 Pac. 321.
Colorado	Industrial commission	District court; supreme court (on law only).	275 Pac. 903; 274 Pac. 742; 271 Pac. 115; and 252 Pac. 361.
Connecticut	District compensation commissioner.	Superior court or supreme court of errors.	142 Atl. 745; 140 Atl. 124; 140 Atl. 114; and 137 Atl. 26.
Delaware	Industrial accident board	Superior court	138 Atl. 903; 125 Atl. 462; and 109 Atl. 881.
District of Columbia.	U. S. Employees' Compensation Commission.	Supreme court of district; court of appeals.	46 F. (2d) 837.
Georgia	Industrial commission	Superior court; court of appeals; supreme court.	149 S. E. 55; 148 S. E. 764; 147 S. E. 533; and 142 S. E. 189.
Idaho	Industrial accident board	District court; supreme court.	271 Pac. 459; 253 Pac. 132; 243 Pac. 824; and 242 Pac. 314.
Illinois	Industrial commission	Circuit court; supreme court.	167 N. E. 80; 161 N. E. 115; 157 N. E. 206; and 156 N. E. 796.
Indiana	Industrial board	Appellate court	161 N. E. 647; 153 N. E. 816; and 146 N. E. 216.
Iowa	Industrial commissioner	District court; supreme court.	208 N. W. 709; 211 N. W. 413; 201 N. W. 420; and 199 N. W. 323.
Kansas	Commission of labor and industry.	District court; supreme court (on law only).	274 Pac. 233; 271 Pac. 279; 253 Pac. 570; and 243 Pac. 301.
Kentucky	Workmen's compensation board.	Circuit court; court of appeals.	17 S. W. (2d) 718; 10 S. W. (2d) 809; 7 S. W. (2d) 1037; and 5 S. W. (2d) 1042.
Louisiana	Court	Proper appellate court or supreme court.	120 So. 777; 120 So. 246; 109 So. 538; and 92 So. 561.
Maine	Industrial accident commission.	Proper law court; supreme court.	138 Atl. 628; 138 Atl. 310; 134 Atl. 450; and 132 Atl. 129.
Maryland	do	Circuit court or common law courts of Baltimore; court of appeals.	145 Atl. 197; 144 Atl. 696; 144 Atl. 345; and 144 Atl. 339.
Massachusetts	Department of industrial accidents.	Superior court; supreme court.	151 N. E. 91; 149 N. E. 409; 137 N. E. 831; and 137 N. E. 384.
Michigan	Department of labor and industry.	Supreme court	219 N. W. 721; 214 N. W. 401; 206 N. W. 490; and 204 N. W. 689.
Minnesota	Industrial commission	do	225 N. W. 889; 218 N. W. 550; 212 N. W. 415; and 208 N. W. 18.
Missouri	Workmen's compensation commission.	Circuit court; court of appeals; supreme court.	14 S. W. (2d) 470; 10 S. W. (2d) 916; and 8 S. W. (2d) 897.
Montana	Industrial accident board	District court; supreme court.	277 Pac. 615; 273 Pac. 294; 270 Pac. 634; and 269 Pac. 403.
Nebraska	Compensation commission	do	225 N. W. 770; 199 N. W. 530; 195 N. W. 466; and 181 N. W. 146.
Nevada	Industrial commission	Determined under reasonable and proper rules adopted by the commission.	See 207 Pac. 1104.
New Hampshire.	Courts	May petition any justice of the superior court.	135 Atl. 24.
New Jersey	Workmen's compensation bureau.	Supreme court; court of appeals.	142 Atl. 433; 135 Atl. 775; 132 Atl. 297; and 127 Atl. 169.
New Mexico	Courts (district court)	Supreme court	261 Pac. 811.
New York	Industrial board	Supreme court, appellate division; court of appeals.	225 N. Y. S. 148; 221 N. Y. S. 76; 144 N. E. 625; and 142 N. E. 442.
North Carolina	Industrial commission	Superior court; supreme court.	

TABLE 1.—*Appeals from decisions of workmen's compensation commission or other administrative agency*—Continued

State	Administered by court or commission	Court to which appeal is taken	Cases on question of appeal
North Dakota	Workmen's compensation bureau.	District court; supreme court.	218 N. W. 215; 209 N. W. 364; 209 N. W. 972; and 207 N. W. 551.
Ohio	Industrial commission	Common pleas court; court of appeals; supreme court.	166 N. E. 376; 165 N. E. 535; 164 N. E. 510; and 164 N. E. 509.
Oklahoma	do	Supreme court	277 Pac. 265; 273 Pac. 212; 273 Pac. 887; and 271 Pac. 237.
Oregon	Industrial accident commission.	Circuit court; supreme court.	273 Pac. 337; 253 Pac. 1053; 246 Pac. 741; and 244 Pac. 319.
Pennsylvania	Workmen's compensation bureau.	Common pleas court: superior court; supreme court.	144 Atl. 89: 144 Atl. 819; 135 Atl.. 652; and 133 Atl 498.
Rhode Island	Commissioner of labor	Superior court; supreme court (on law or equity questions).	120 Atl. 321; 98 Atl. 103; 98 Atl. 109; and 111 Atl. 766.
South Dakota	Industrial commissioner	Circuit court; supreme court.	221 N. W. 84; 216 N. W. 850; 212 N. W. 864; and 194 N. W. 835.
Tennessee	Courts	do	12 S. W. (2d) 529; 290 S. W. 975; 289 S. W. 519; and 283 S. W. 447.
Texas	Industrial accident board	Court in county where injury occurred; supreme court and appeals court.	18 S. W. (2d) 712; 18 S. W. (2d) 695; 15 S. W. (2d) 1077; and 15 S. W. (2d) 594.
Utah	Industrial commission	Supreme court	273 Pac. 311; 273 Pac. 306; 247 Pac. 490; and 247 Pac. 298.
Vermont	Commissioner of industries.	County court; supreme court (law only).	134 Atl. 640; 118 Atl. 520; 119 Atl. 517; and 119 Atl. 422.
Virginia	Industrial commission	Supreme court of appeals.	142 S. E. 400; 133 S. E. 663; 135 S. E. 21; and 132 S. E. 177.
Washington	Director of labor through division of industrial insurance.	Superior court; supreme court.	275 Pac. 66; 255 Pac. 385; 251 Pac. 877; and 249 Pac. 789.
West Virginia	State compensation commissioner.	Supreme court of appeals	143 S. E. 109; 138 S. E. 111; 137 S. E. 229; and 96 S. E. 790.
Wisconsin	Industrial commission	Circuit court of Dane County; supreme court.	46 S. Ct. 491; 204 N. W. 576; 201 N.W.768; and 200 N.W. 775.
Wyoming	Courts (district court)	Supreme court	271 Pac. 876; 263 Pac. 619; 244 Pac. 135; and 237 Pac. 253.

TABLE 2.—*Workmen's compensation appeals decided by State courts July 1, 1930, to June 30, 1931*

State	Supreme court	Court of appeals	Other court	State	Supreme court	Court of appeals	Other court
Alabama	7			Nevada	1		
Arizona	3			New Hampshire	3		
California	20	18		New Jersey	20	[3] 4	[4] 2 [5] 1
Colorado	10			New Mexico	1		
Connecticut	14			New York	[6] 39	8	
Delaware			[1] 2	North Carolina	16		
District of Columbia	16	2		North Dakota	3		
Georgia	5	29		Ohio	8	12	
Idaho	6			Oklahoma	107		
Illinois	30			Oregon	2		
Indiana		14		Pennsylvania	2		
Iowa	4			Rhode Island	4		
Kansas	19			South Dakota	2		
Kentucky		25		Tennessee	20		
Louisiana	3	62		Texas	2	[7] 41	[8] 11
Maine	9			Utah	9		
Maryland		8		Vermont			
Massachusetts	[2] 20			Virginia		[9] 2	
Michigan	25			Washington	7		
Minnesota	19			West Virginia		[9] 18	
Missouri	2	45		Wisconsin	27		
Montana	4			Wyoming	3		
Nebraska	7						

[1] Superior court.
[2] Supreme judicial court.
[3] Court of errors and appeal.
[4] Circuit court.
[5] Court of common pleas.
[6] Appellate division of supreme court.
[7] Court of civil appeals.
[8] Commission of appeal.
[9] Supreme court of appeals.

BUSINESS MEETING

[The president appointed the following convention committees:]

Committee on resolutions.—Wellington T. Leonard, of Ohio, chairman; George A. Kingston, of Ontario; Hal M. Stanley, of Georgia; D. D. Garcelon, of Maine; and Joseph A. Parks, of Massachusetts.

Nominating committee.—Fred W. Armstrong, of Nova Scotia, chairman; C. E. Baldwin, of Washington, D. C.; G. Clay Baker, of Kansas; Leonard W. Hatch, of New York; and A. J. Bailey, of Connecticut.

Auditing committee.—W. H. Horner, of Pennsylvania, chairman; E. B. Patton, of New York; D. R. Morton, of Delaware; Joel Brown, of Idaho; and H. B. Myers, of Illinois.

Committee on officers' reports.—F. M. Wilcox, of Wisconsin, chairman; O. F. McShane, of Utah; W. O. Stack, of Delaware; Lee Ott, of West Virginia; and Frederic M. Williams, of Connecticut.

President DEANS. Next is the report of the secretary-treasurer, Mr. Stewart.

[A motion was made, seconded, and carried that the report of the secretary-treasurer be accepted without being read, and that it be referred to the proper committee.]

REPORT OF THE SECRETARY

During the year since the Wilmington convention we have lost three of our active members, the Minnesota Industrial Commission, the Oklahoma State Industrial Commission, and the Oregon State Industrial Accident Commission, the active membership now being 34, as follows:

United States Bureau of Labor Statistics.
United States Employees' Compensation Commission.
Arizona Industrial Commission.
California Industrial Accident Commission.
Connecticut Board of Compensation Commissioners.
Delaware Industrial Accident Board.
Georgia Industrial Commission.
Idaho Industrial Accident Board.
Illinois Industrial Commission.
Indiana Industrial Board.
Iowa Workmen's Compensation Service.
Kansas Commission of Labor and Industry.
Maine Industrial Accident Commission.
Maryland State Industrial Accident Commission.
Massachusetts Department of Industrial Accidents.
Montana Industrial Accident Board.
Nevada Industrial Commission.
New Jersey Department of Labor.
New York Department of Labor.
North Carolina Industrial Commission.
North Dakota Workmen's Compensation Bureau.
Ohio Industrial Commission.
Pennsylvania Department of Labor and Industry.
Utah Industrial Commission.
Virginia Industrial Commission.
Washington Department of Labor and Industries.
West Virginia Workmen's Compensation Department.
Wisconsin Industrial Commission.
Wyoming Workmen's Compensation Department.
Department of Labor of Canada.
New Brunswick Workmen's Compensation Board.
Nova Scotia Workmen's Compensation Board.
Ontario Workmen's Compensation Board.
Quebec Workmen's Compensation Commission.

The above list includes three organizations, the United States Bureau of Labor Statistics, the United States Employees' Compensation Commission, and

the Department of Labor of Canada, which are given full powers of membership by the terms of the constitution itself and are exempt from the payment of dues.

One associate member, the Republic Steel Corporation, dropped out during the year, the list now standing at 9, as follows:

George E. Beers, attorney and counselor at law, New Haven, Conn.
Walter F. Dodd, 33 North La Salle Street, Chicago, Ill.
E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Del.
A. Gaboury, secretary general, Province of Quebec Safety League, Montreal.
I. K. Huber, The Empire Companies, Bartlesville, Okla.
Industrial Accident Prevention Association, Toronto, Ontario.
Leifur Magnusson, American representative, International Labor Office, Washington, D. C.
Porto Rico Industrial Commission.
J. F. H. Wyse, General Manager, Canadian National Safety League, Toronto, Ontario.

During the year the association continued its cooperation with the American Standards Association in its work of drafting national safety codes. Your representatives have participated actively in the preparation of several codes now under consideration. Since the last meeting a revision of the Safety Code for the Use, Care, and Protection of Abrasive Wheels, for which the association was a sponsor, has been issued and printed as Bureau of Labor Statistics Bulletin No. 527. Copies can be secured by request from that bureau.

The secretary now has on file in his office 15,653 forms containing data relative to widows' compensation cases, for use in compiling an American remarriage table. The committee on statistics and compensation insurance cost has, because of work which it already had on hand, been unable to take up the compilation of an American remarriage table. It is again suggested that work on this material should begin. It is understood that the Casualty Actuarial Society is now working on a table along this line.

Incidentally, I will say that the Bureau of Labor Statistics has during the year secured a copy of the Dutch remarriage table, which it has on file. This is in the original language and has not as yet been translated into English.

On April 1, 1931, the membership of Hon. Sam Laughlin on the Oregon State Industrial Accident Commission was discontinued, leaving a vacancy in the vice presidency of this association. It was decided to leave this position vacant until the Richmond convention and give the association as a whole a voice in the selection of its next president.

Hon. F. A. Duxbury went from the membership of the Minnesota Industrial Commission at about the same time. Mr. Abel Klaw was appointed chairman of the committee on workmen's compensation legislation in his place, and will submit a report to this convention for that committee.

In conformity with the resolution of the Wilmington convention relative to the best methods and most convenient time for calling a convention on all-American workmen's compensation law administration, the secretary took the matter up with the State Department through the Secretary of Labor, and received the following reply:

Inasmuch as the secretary-treasurer of the International Association of Industrial Accident Boards and Commissions states that the growing industrial interrelationship between the United States and Latin America makes such a convention desirable, the Department of State perceives no reason why such a meeting should not be held.

It may be pointed out, however, that if this assembly is to be held in any country other than the United States, it would not be appropriate for this Government to take any action in the matter.

If the meeting is to be held in the United States the situation is somewhat different. Apparently the proposed convention is of a private and not of an official international character. In such a case it is entirely proper for the organization concerned to send out its invitations directly to the organizations in foreign countries which it desires to have represented at the conference. If, however, the Department of Labor considers the conference to be of sufficient importance, this department could arrange to transmit, on behalf of the inviting organization, the invitations through the medium of its representatives in Latin America, making it clear, however, that these invitations come from a private organization and not from the Government of the United States.

A short article presenting the plan for the contemplated convention was sent to the Director General of the Pan American Union on January 16, with the request that it be published in the Spanish and Portuguese editions of the Bulletin of the Pan American Union. In some way this failed to reach the attention of the official in question, and at his request another copy was forwarded to him on September 15. This will probably appear in a forthcoming issue of the publication.

After consultation with Director General Rowe of the Pan American Union it was decided that not only was Mexico City, Mexico, more central as a location for such a conference but, in view of the fact that the 23 State laws in Mexico have been taken over by the Federal Government under recent legislation, the Government of Mexico would probably be more interested than any other Latin American Government in such a convention. Accordingly the matter has been taken up with the Mexican ambassador at Washington to ascertain the attitude of the Mexican Government.

Dr. Walter O. Stack, of Wilmington, Del., was appointed by President Deans as a committee of one to carry on preliminary work relative to the intended conference, and he will make a report to this convention on the subject.

In accordance with the instructions of the Wilmington convention the secretary forwarded a number of copies of the report of the medical committee to that meeting to each of the members of the association, with the request that they distribute this report to the medical colleges in their States.

On June 18 and 19, 1931, a conference of representatives of the labor departments of 10 East Central States was called by Governor Gifford Pinchot at Harrisburg, Pa., to discuss the differences in the labor laws of the several States and to consider the possibility of putting them on a similar basis. Approximately 50 delegates were present, representing Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, West Virginia, and the United States Department of Labor.

The recommendations of the committee on workmen's compensation, while representing the consensus of the committee, were in several cases adopted only by a divided vote. The committee rejected a motion recommending full coverage of all employments, including farm labor and domestic service. The complete report of the committee as read by the chairman was adopted by the conference. The recommendations contained in the report are set forth in the president's address to this convention.

The meeting also voted to recommend to the governors of the respective States that a continuing committee be appointed, and that a date be determined upon, approximately six months later, to consider further the topics discussed at this conference and also to consider other topics which were originally proposed for discussion by the conference of governors held in Albany, N. Y., on January 23 and 24, 1931.

Under date of September 4, 1931, the following letter was received from Mr. W. F. Roeber, general manager of the National Council on Compensation Insurance:

At the present time there is considerable lack of uniformity in the various forms required by the various State industrial accident boards and commissions in connection with the administration of workmen's compensation claims. This variance runs not only to size and numbers of report blanks but to subject matter as well. Realizing the desirability of uniformity in forms and the economies resulting therefrom, the casualty companies writing compensation insurance, acting through the National Council on Compensation Insurance, have instructed me to address this communication to your association.

It is our opinion that a special committee of the International Association of Industrial Accident Boards and Commissions, working with a special committee of insurance carrier representatives thoroughly familiar with claim procedure and practices, could accomplish much in the way of standardizing all forms relating to the administration of workmen's compensation claims in the various States.

The following special committee of insurance carriers has been appointed: American Mutual Liability Insurance Co.; Maryland Casualty Co.; Liberty Mutual Insurance Co.; Travelers Insurance Co.; Lumbermen's Mutual Casualty Co.; and United States Casualty Co.

We respectfully urge that your association appoint a committee at an early date to meet in joint conference with our committee. Your early advices will be appreciated.

This communication is presented to the association for such action as it may see fit to take.

On March 27, 1931, Prof. John W. Hallock, head of the department of industrial engineering of the University of Pittsburgh, called on me in my office to inform me of a course in safety engineering which they were offering for the first time. He stated that they would be glad to cooperate with the association in any way possible.

The proceedings of the Wilmington convention have been published by the United States Bureau of Labor Statistics as its Bulletin No. 536, and copies are available at the headquarters here or will be sent from the bureau upon request.

Respectfully submitted.

ETHELBERT STEWART, *Secretary-Treasurer.*

FINANCIAL STATEMENT OF THE TREASURER

BALANCE AND RECEIPTS

1930			
Sept.	15.	Balance in bank Sept. 15, 1930	$2,294.96
		Unexpended postage and telegraph fund	.11
	19.	Idaho Industrial Accident Board, 1931 dues	50.00
Oct.	2.	Montana Industrial Accident Board, 1931 dues	50.00
	15.	Interest on registered Liberty bonds ($700)	14.88
		Interest on coupon Liberty bonds ($1,000)	21.25
	21.	Interest on Paterson Mortgage & Title Guaranty Co. certificate ($1,500)	41.25
		Amount credited to association by maturing of Paterson Mortgage & Title Guaranty Co. certificate No. 6296, Series 221, on Oct. 19, 1930	1,500.00
	24.	Oklahoma State Industrial Commission, 1931 dues	50.00
1931			
Jan.	15.	Kansas Commission of Labor and Industry, 1931 dues	50.00
Mar.	23.	Interest on Canadian bond ($1,000)	22.50
Apr.	15.	Interest on registered Liberty bonds ($700)	14.87
	21.	Interest on Paterson Mortgage & Title Guaranty Co. certificate ($1,500)	41.25
	23.	Interest on coupon Liberty bonds ($1,000)	21.25

1931			
May	7.	Delaware Industrial Accident Board, 1932 dues	$50. 00
June	10.	I. K. Huber, 1932 dues (associate)	10. 00
July	1.	Interest on account with Perpetual Building Association	1. 67
	8.	George E. Beers, 1932 dues (associate)	10. 00
		Georgia Industrial Commission, 1932 dues	50. 00
		J. F. H. Wyse, general manager, Canadian National Safety League, 1932 dues (associate)	10. 00
		Walter F. Dodd, 1932 dues (associate)	10. 00
		Quebec Workmen's Compensation Commission, 1932 dues	50. 00
		E. I. du Pont de Nemours & Co., 1932 dues (associate)	10. 00
	13.	Nova Scotia Workmen's Compensation Board, 1932 dues	50. 00
		Virginia Industrial Commission, 1932 dues	50. 00
		Connecticut Board of Compensation Commissioners, proportionate share, fifth district, 1932 dues	10. 00
		New Brunswick Workmen's Compensation Board, 1932 dues	50. 00
		Ontario Workmen's Compensation Board, 1932 dues	50. 00
		Wyoming Workmen's Compensation Department, 1932 dues	50. 00
	20.	Connecticut Board of Compensation Commissioners, proportionate share, first district, 1932 dues	10. 00
		West Virginia Workmen's Compensation Department, 1932 dues	50. 00
		Arizona Industrial Commission, 1932 dues	50. 00
		Kansas Commission of Labor and Industry, 1932 dues	50. 00
	23.	Maryland State Industrial Accident Commission, 1932 dues	50. 00
		Industrial Accident Prevention Associations, 1932 dues (associate)	10. 00
		Connecticut Board of Compensation Commissioners, proportionate share, third district, 1932 dues	10. 00
	30.	Connecticut Board of Compensation Commissioners, proportionate share, fourth district, 1932 dues	10. 00
		Wisconsin Industrial Commission, 1932 dues	50. 00
		North Dakota Workmen's Compensation Bureau, 1932 dues	50. 00
	31.	Utah Industrial Commission, 1932 dues	50. 00
Aug.	7.	A Gaboury, secretary general, Province of Quebec Safety League, 1932 dues (associate)	10. 00
		Illinois Industrial Commission, 1932 dues	50. 00
		Massachusetts Department of Industrial Accidents, 1932 dues	50. 00
		New Jersey Department of Labor, 1932 dues	50. 00
	11.	Connecticut Board of Compensation Commissioners, proportionate share, second district, 1932 dues	10. 00
		Maine Industrial Accident Commission, 1932 dues	50. 00
	15.	North Carolina, Industrial Commission, 1932 dues	50. 00
		Leifur Magnusson, 1932 dues (associate)	10. 00
	24.	New York Department of Labor, 1932 dues	50. 00
		Idaho Industrial Accident Board, 1932 dues	50. 00
Sept.	2.	California Industrial Accident Commission, 1932 dues	50. 00
		Porto Rico Industrial Commission, 1932 dues (associate)	10. 00
	8.	Indiana Industrial Board, 1932 dues	50. 00
		Montana Industrial Accident Board, 1932 dues	50. 00
	14.	Ohio Industrial Commission, 1932 dues	50. 00
	15.	Interest on bank account to July 1, 1931	31. 83
			5, 645. 82

DISBURSEMENTS

1930			
Sept.	15.	Postage and telegraph fund	. 11
Oct.	3.	Lillian Brown, services at seventeenth annual convention	25. 00
		Emma Derrickson, services at seventeenth annual convention	25. 00
		Mildred Major, services at seventeenth annual convention	25. 00

1930			
Oct.	7.	Maryland Casualty Co., bonding secretary-treasurer for 1 year from Oct. 23, 1930, for $10,000	$25. 00
	10.	Master Reporting Co., reporting seventeenth annual convention	318. 48
	15.	Postage and telegraph fund	5. 00
	21.	Purchase of Paterson Mortgage & Title Guaranty Co. certificate No. 8478, Series 435, maturing Oct. 19, 1933	1, 500. 00
Dec.	2.	Gibson Bros. (Inc.), printing 2,000 letterheads	27. 50
		Parke P. Deans, postage expense in office of president	5. 00
	19.	Ethelbert Stewart, partial payment of honorarium 1930–31	225. 00
	20.	Glenn L. Tibbott, partial payment for clerical services, 1930–31	100. 00
1931			
Jan.	2.	Gibson Bros. (Inc.), printing 500 envelopes	4. 25
Feb.	26.	Postage and telegraph fund	[1] 5. 00
Apr.	23.	Perpetual Building Association, deposit	200. 00
	27.	Parke P. Deans, expenses attending program committee meeting	15. 40
Apr.	30.	Ethelbert Stewart, partial payment of honorarium, 1930–31	300. 00
		Glenn L. Tibbott, partial payment for clerical services, 1930–31	125. 00
July	1.	Gibson Brothers (Inc.), printing 1,000 envelopes	8. 25
	8.	Parke P. Deans, expenses attending program committee meeting	15. 40
	13.	National Savings & Trust Co., exchange on Canadian dues	1. 50
	17.	National Savings & Trust Co., exchange on Canadian dues	. 53
	30.	Perpetual Building Association, deposit	200. 00
	31.	Glenn L. Tibbott, partial payment for clerical services, 1930–31	100. 00
Sept.	1.	Gibson Brothers (Inc.), printing 1,000 programs for Richmond convention	52. 50
	3.	National Savings & Trust Co., exchange on Canadian dues	. 15
	8.	Ethelbert Stewart, balance of honorarium, 1930–31	375. 00
		Glenn L. Tibbott, balance for clerical services, 1930–31	75. 00
			3, 759. 07
Sept.	15.	Balance, bank deposits	1, 885. 08
		Interest on book of Perpetual Building Association	1. 67
			5, 645. 82

Summary of Receipts and Disbursements

RECEIPTS

Cash in bank, Sept. 15, 1930	$2, 294. 96
Cash in postage and telegraph fund, Sept. 15, 1930	. 11
Membership dues	1, 640. 00
Interest:	
Securities	177. 25
Bank deposits	33. 50
Matured certificate of Paterson Mortgage & Title Guaranty Co	1, 500. 00
	5, 645. 82

DISBURSEMENTS

Postage and telegraph, secretary's office	10. 11
Postage and telegraph, president's office	5. 00
Printing	92. 50
Reporting proceedings, seventeenth annual convention	318. 48
Bonding secretary-treasurer	25. 00
Honorarium and clerical service in secretary-treasurer's office	1, 300. 00
Exchange on membership dues of Canadian members	2. 18

[1] Of this check for $5 for postage and telegraph fund, there remained the amount of 24 cents unexpended at the end of the year.

Expenses of attendance, program committee meetings	$30. 80
Purchase of certificate of Paterson Mortgage & Title Guaranty Co	1, 500. 00
Deposits in Perpetual Building Association	400. 00
Clerical service at seventeenth annual convention	75. 00
	3, 759. 07
Balance, bank deposits	1, 885. 08
Interest on book of Perpetual Building Association account	1. 67
	5, 645. 82

ASSETS

Cash in bank		1, 885. 08
Cash in Perpetual Building Association		401. 67
Cash in postage and telegraph fund		. 24
Securities:		
United States Liberty bonds	$1, 700. 00	
Canadian bond	1, 000. 00	
Mortgage certificate, Paterson Mortgage & Title Guaranty Co	1, 500. 00	
		4, 200. 00
		6, 486. 99

In addition to the assets enumerated above there are the following unpaid dues:

Nevada Industrial Commission, 1932	$50. 00
Oklahoma State Industrial Commission, 1932	50. 00
Oregon State Industrial Accident Commission, 1932	50. 00
Pennsylvania Department of Labor and Industry, 1932	50. 00
Washington Department of Labor and Industries, 1932	50. 00
	250. 00

The following securities are in safety deposit box R–454, National Savings & Trust Co., Washington, D. C.—Ethelbert Stewart:

United States Liberty bonds:	
No. 1217874	$100. 00
No. 1217875	100. 00
No. 236204	500. 00
No. A–00031671	1, 000. 00
Dominion of Canada bond No. 024880	1, 000. 00
Paterson Mortgage & Title Guaranty Co. certificate No. 8478, Series 435, due Oct. 19, 1933	1, 500. 00
	4, 200. 00

Respectfully submitted.

ETHELBERT STEWART,
Secretary-Treasurer.

SEPTEMBER 15, 1931.

[An informal roll call was had.]

REPORT OF COMMITTEE ON SAFETY

By R. B. MORLEY, *Chairman*

The report of your committee is, of necessity, brief, for it was a year of inactivity. Perhaps some of the members had the fear that an abundance of activity might set up a condition that would deprive compensation commissioners of a useful field of work, but the chairman knows that in the years to come there will still be plenty of accidents involving work for industrial accident and compensation boards.

The committee was well selected by you geographically, but that very fact made it difficult to have meetings and all our contacts were by letter.

Your committee on safety has been allotted Thursday, the 8th of October, during the Richmond convention and has built up an excellent program for that day.

My personal thanks go to the members of the committee who have comforted me with advice or agreed with suggestions, but most of all, my thanks go to my good friend John Roach, of New Jersey, who has really done most of the constructive work of the past year.

All of which is respectfully submitted, Mr. President, to you and the executive committee.

President DEANS. Next is the report of the committee on rehabilitation, Mr. Fred W. Armstrong, chairman.

REPORT OF COMMITTEE ON REHABILITATION

By FRED W. ARMSTRONG, *Chairman*

In the final analysis the principal value of compensation awards is in providing the disabled employee and his dependents with living maintenance for a period after injury during which time he may become readjusted vocationally. The nature of a great many industrial accidents is such that the employee may profitably return upon recovery to his former or a similar job within a given industry. On the other hand, however, a large percentage of industrial accidents leave employees so impaired physically as to handicap them seriously in their former occupations. The return of injured employees to a productive status is a matter of concern to all compensation boards and is not only highly desirable but an economically sound policy.

For that group requiring special services in their readjustment in employment, vocational rehabilitation as set up by Federal and local cooperation in the District of Columbia and 44 of the 48 States in the United States offers the best available means for bringing about this desired result. The rehabilitation people conceive of their service as one which fits a disabled person for remunerative employment regardless of the origin of his disability. This we find they accomplish by means best suited to the individual case, but consisting generally of one or more of the following services: (1) Physical restoration or removal as far as possible of the disability; (2) artificial appliances to restore the function of a member; (3) guidance or selection of the occupation in which the disabled may best carry on without handicap; (4) vocational training for a specific employment objective; (5) assistance in finding employment and supervision in employment.

Some accomplishments of rehabilitation

At a cost of approximately $250 each, statistics published by the Federal Board for Vocational Education in Washington indicate that rehabilitation service is returning disabled persons to remunerative employment and self-sustaining status at a rate of about 6,000 a year. The number is increasing as the support and personnel engaged increase. We are advised also that should these persons remain idle and become State or community charges, their annual maintenance cost would range in each case from $300 to $500.

A study in one State covering cases rehabilitated over a period of five years shows per capita earnings of those disabled persons before rehabilitation to be $481.85. After rehabilitation the average earnings are shown as $1,119.64. The per capita cost of rehabilitation in this group was $242.37.

A study of national scope covering the period 1920–1924—the first five years in which rehabilitation service was operative—shows, among other facts, that

43.6 per cent of the 6,391 cases rehabilitated during that period were compensable accident cases, and another 10 per cent were employment accident cases but noncompensable. Over 53 per cent of this group were, therefore, shown to be injured in employment accidents, thus indicating clearly the value of such service to employer and employee.

The stability of rehabilitation is also evident from data contained in this study in that the survey made in each case a number of years after rehabilitation shows a very large percentage of the rehabilitants then living employed satisfactorily in the occupations to which they returned.

Rehabilitation is considered accomplished when the disabled person is satisfactorily adjusted in employment at which he may earn at least as much as he and his dependents must consume.

How rehabilitation strengthens compensation and what compensation boards should expect of rehabilitation

Your committee conceives of rehabilitation as a service which strengthens and extends the benefits of compensation to those disabled employees who of their own accord might with great difficulty attain again a status of self-support. For employers and employees a service of such nature deserves whatever support and cooperation compensation boards may render in making it more effective. And, too, because of the very nature of such cases rehabilitation departments should be expected to expend their utmost effort in the vocational readjustment of the industrially disabled.

Compensation boards may offer indispensable cooperation: (1) By reporting cases resulting in vocational handicaps; (2) by adjustment of awards to suit best the rehabilitation program of the case; (3) by creating on the part of the employer a willingness to give the disabled worker a chance in jobs for which he is not handicapped; (4) by guarding the employee against any possible inclination on the part of the carrier to discriminate against the worker who is disabled but who is not handicapped in the job provided him; (5) by insisting upon proper and adequate medical attention after injury rather than a mere compliance with the law; (6) by advising employer and employee of the availability of rehabilitation service and recommending its utilization; (7) by supporting compensation legislation tending to make rehabilitation more generally available and by a liberal interpretation of such laws.

Rehabilitation departments may assist in the most useful administration of compensation laws: (1) By investigating for boards the advisability of lump-sum awards; (2) by supervision, under the board's direction, of expenditures in such awards granted; (3) by reporting to compensation boards such facts as their surveys may disclose that would aid the board in a proper adjudication of the case; (4) by explaining to employees the purposes and benefits of compensation; (5) by reporting periodically to compensation boards the progress of employment accident cases undergoing rehabilitation; (6) by reporting to compensation boards annually in summary form rehabilitation data on all such cases; (7) by cooperating with boards in such other ways as will promote the attainment of the best results to employer and employee through the two services.

Committee recommendations

Your committee, therefore, recommends:

(1) That the fullest possible cooperation of rehabilitation departments be sought as a means of strengthening compensation benefits and providing a service of adjustment for disabled employees.

(2) That in order to allay any prejudice on the part of carriers and employers against the reemployment of disabled workers in jobs in which they are capable of satisfactory service a second injury fund be more generally advocated.

(3) That in order to make rehabilitation service available in more industrial accident cases laws providing limited maintenance allowances while undergoing rehabilitation be advocated.

(4) That provisions be more generally made for using the rehabilitation departments' services in the matter of granting and expending lump-sum awards.

(5) That since workmen's compensation and rehabilitation are to an extent supplementary services intended to provide means for readjustment of injured employees in remunerative occupations and useful citizenship, the International Association of Industrial Accident Boards and Commissions and the National Rehabilitation Association each make provision in its annual conference for a discussion of the two services to be led by a representative of the other service.

By such provision it is felt that a clearer mutual understanding of the two services may be reached which will accrue to the benefit of employers and disabled employees.

DISCUSSION

President DEANS. What is the wish of the association?

Mr. ARMSTRONG. I suggest that we might hear from somebody on this.

President DEANS. Mr. Clayton.

Mr. CLAYTON. I would rather waive my right to the chief of our division, Mr. Kratz.

Mr. KRATZ (Washington, D. C.). Mr. Clayton and I, representing the rehabilitation division of the Federal Board for Rehabilitation at Washington, are very grateful for this opportunity. We listened with interest to the report of the rehabilitation committee, and I will take a moment or two to speak of the accomplishments of the rehabilitation of disabled persons in the last fiscal year and explain how it was possible.

We had been rehabilitating up to that time in the neighborhood of 5,000 disabled persons. We serve—that is, in the States—persons handicapped either by industrial accident, disease, or congenital cause, and, as the committee has pointed out, something in the neighborhood of 50 per cent of our cases each year incur their disability by reason of a work accident.

During the past fiscal year, which was characterized by a serious economic depression, the States were enabled to rehabilitate 13 per cent more than in the preceding fiscal year, about 8,130 persons receiving rehabilitation services last year, despite the very difficult obstacles in finding employment for disabled persons.

Some mention was made of a study we made in 1927 covering the postrehabilitation experiences of all persons rehabilitated during the period 1920 to 1924, which was the initial period of the rehabilitation program in this country. That study showed that retrained, replaced disabled persons had experienced a continuity of work and stability of employment which compared most favorably with comparable groups of nonhandicapped persons.

We made a further study of that group in 1931. All the data are not in, but I have just submitted my annual report to the board

covering the first thousand schedules received in that study, and we find that the disabled persons who have been rehabilitated have more than held their own. Not only have they been able to continue in the work for which originally placed, but a large proportion of them have been promoted in their work.

It cost the Federal Government and the State governments $291,000 in the period 1920–1924 to rehabilitate 1,000 of these disabled persons. In 1927 their total earning capacity, which I forget at this moment, represented for the one year the return of 240-some per cent on the investment of $291,000. Despite the depression which existed during the past year, when we made our second follow-up of those 1,000 persons, fully one-third of them told us that they were working from two to four days per week. Their earning capacity for the year was something like 213 per cent return on the original investment of $291,000.

I wish I had here a graph to show you the wage groups in which these persons fall. The 1927 and the 1931 follow-up show these rehabilitated persons as having in large part received promotion in their work. They are stable workers and are returning to the Federal and State Governments good returns on the original investment.

I think that is enough to show you that this rehabilitation service is functioning and is still effective. We have at present the largest number of persons we have ever had (23,700) in process of rehabilitation. The four States which are not engaged in rehabilitation work, strange to say, are not the four States which do not have compensation legislation. They have compensation legislation but not rehabilitation legislation. I do not know how that happened, but that is a circumstance that is interesting.

All of this work which is going on and has been accomplished certainly would not have been possible had it not been for the splendid cooperation which has been characterized by the relations of rehabilitation departments and State compensation departments. As most of you probably know, the Federal and State acceptance acts of rehabilitation provide that there shall be cooperation between these two different departments, and in the majority of the States those relations are splendid. Compensation commissioners and their associates are working hand in hand to the end that disabled persons may be properly compensated and retrained and replaced in employment.

Cooperation (I might as well be frank) in some places might be better, and I do not hesitate to say that the trouble often is with the rehabilitation man or his staff, who have not done their part. Sometimes it is the other way around, but probably more the first than the second case, as there are frequent changes in personnel which make it a little difficult. We have a compensation man on our staff who has visited us to help promote that sort of thing and I am again able to report progress. There are men in this audience who are better able than I am to tell you about this cooperation.

One of the most interesting experiments in this country in that line, I believe, is that which has taken place in New York in the matter of investigating applications for lump sums. Many of those investigations result in the applications being refused, and in many instances, through the results of a very thorough-going investigation such as a

rehabilitation staff worker is able to give, such sums as are granted are, I believe, very economically expended.

I will say again we are very glad to be here. We feel that the recommendations of the committee are good and in future meetings of the groups, both rehabilitation and compensation, if some attention were given to these endeavors, great good would arise.

In closing, I would say there is a trilogy of activities in this country making for the advantage of working conditions. I refer, of course, to safety, then to compensation, and then to rehabilitation. You need all three working together.

Unfortunately, we can not prevent all of the accidents, and unfortunately, in cases where compensation is desirable and needed, it does not always result in the man's being reestablished, and hence there is a place for a rehabilitation group which, through very careful analysis and service, can either retrain the man or give him such guidance as will enable him again to find a place in industry and become a wage earner and a producing member of society.

President DEANS. Does anyone else desire to discuss this paper?

Mr. MAGUIRE (Pennsylvania). There were some rather important points covered in the report of the committee, and I move that the report of the committee on rehabilitation be mimeographed and distributed to the members in attendance at this meeting.

[President Deans announced that Mr. Anderson, of the Virginia Rehabilitation Board, would have the report mimeographed and copies of it would be given to all the next day.]

Mr. MAGNUSSON (Washington, D. C.). Is there any possibility of comparing the wages which these disabled and rehabilitated wage earners get with the wages of ordinary wage earners? There is a good deal of sentiment about this, and the chances are that some may lean backward in giving opportunities to these people. On the other hand, is the steadiness with which they keep their jobs any indication that they are working at a lower rate of cost of production than the ordinary wage earner? Is there any way of getting that?

Mr. CLAYTON (Washington D. C.). The only way we know of making comparisons is by taking the figures from the labor organizations relative to the going wage in the various occupations. We do know that these people are employed, not because they are disabled, but because they have been fitted for better jobs or jobs they can do, and we do know that as a result of this rehabilitatiion over a period of something like 10 years, in a thousand cases studied, there is proof that many of them are getting considerably more money than they earned prior to the time they were disabled. We do have those facts and figures, and I think Mr. Magnusson might get a great deal of information from the Federal board itself, if he cares to ask for it, as to the matter of the wages in comparison with the normal wage; that is, the normal wage in comparison with that of the rehabilitants, and that would have to be ascertained, as nearly as possible, from facts given to us by the American Federation of Labor. If we rehabilitate a man as a carpenter or a bricklayer, we get the figures through the American Federation of Labor; otherwise we could not answer the question.

President DEANS. If there is no further discussion, the Chair will at this time recognize Mr. Sharkey.

Mr. SHARKEY (Washington, D. C.). I offer the following resolution:

Be it resolved, That Article VII, section 4, be amended by striking out the words "in the office of president," and to read as follows:

SEC. 4. If, for any reason, an officer of this association shall cease to be connected with any agency entitled to active membership before the expiration of his term, he may continue in office, notwithstanding, until the next annual meeting, but, if for any reason a vacancy occurs, the executive committee shall appoint his successor.

President DEANS. In accordance with our constitution that has to be submitted at this time, and I will appoint as the committee on that, Mr. R. E. Wenzel, Mr. C. G. Kizer, and Mr. A. B. Funk.

Secretary STEWART. Does this get us back where we were before, so that if a president is no longer connected with a commission, he still holds on until the next convention?

Mr. ARMSTRONG. That is the meaning of that. I think so.

President DEANS. If you will refer to that section, it says that the executive committee has authority only to appoint someone to fill the vacancy as president. The intention of the resolution introduced by the gentleman from the District of Columbia is to provide that any vacancy that occurs in any office in the association may be filled by the executive committee.

Secretary STEWART. I should like to hear it read again.

[Mr. Sharkey reread the resolution.]

Secretary STEWART. That is contradictory on its face.

Mr. ARMSTRONG. The point is that you have to distinguish between a member of a commission entitled to membership and an officer of the international association—"he shall continue in office." It does seem absurd. We have been up against this problem before when a president ceased to be a member of the commission, and when we went there we found that the chairman of the board who displaced the president of the association did not even attend the convention. That same thing can happen under this resolution.

I think if he ceases to be a member of a commission entitled to membership in the international association, the executive committee can declare the office of president of the association vacant.

President DEANS. I think I can clarify this situation. Sam Laughlin resigned from the Oregon commission. He was vice president of this association. When we referred to section 3 of Article VII, we found that the executive committee had power to fill only one vacancy and that was the vacancy of president; therefore, we had no authority to appoint a vice president. To meet that condition is the object of the resolution offered by Mr. Sharkey, of the District of Columbia. If Mr. Armstrong, of Nova Scotia, desires to enlarge this further, why not go before the committee that has been appointed and draft a new section; but, as you know, our constitution requires that all amendments to the constitution must be introduced on the first day, and if they are not, they can not be considered by this body.

Doctor STACK (Delaware). Is it not true that Sam Laughlin could have continued as vice president up to the time of this convention—in fact, come here as vice president of this meeting?

President DEANS. It is true that he could have continued, but it is also true that he resigned. Now where are we as far as this constitution is concerned?

Doctor STACK. It seems to me, as I see it, the best way to clear the thing up would be to take Sam Laughlin's case—when he left the Oregon board and ceased to be connected with an agency entitled to active membership at the time of his resignation, he should automatically have ceased to be a member of this association.

President DEANS. That is true, but now the question is before us. You took the position that the executive board could fill the vacancy. I say in the light of section 4 of Article VII we had no authority to do it, and I have made that statement in the presidential address. Now I want to correct that situation. I want to do exactly what you wanted us to do last year, but I ruled you had no authority.

Mr. KINGSTON (Ontario). I think I shall have to rise to a point of order. The resolution, whatever it is, can be before this meeting only as a notice of motion. We can not deal with the matter until the last day of the convention. I think there is a provision in the constitution that resolutions shall be read on the first day and shall be in the nature of a notice of motion, which shall be considered on the last day. I take it we can not deal with the merits of the matter at all, but that a committee should be appointed, and anything to be said should be said to the committee so that the whole thing can be threshed out.

Mr. DUXBURY (Minnesota). I think Mr. Kingston is right with reference to the procedure, but I think we are disturbed in that we do not know what we are attempting to do. If I understand it, all you want to do is change that particular phrase which provides that the executive committee may appoint the president to fill a vacancy—you want to change that and that only, so that the executive committee can appoint to any office in which there is a vacancy. The way in which it has been presented is unfortunate. It might be presented that it strike out "and may appoint a president" and say "may appoint any officer," because we are not doing very much with it as it is.

Mr. KINGSTON. But that can be changed by the committee. I do not say we are tied down absolutely to the words of the notice of motion. The notice of motion is one to deal with this question and that the committee frame the resolution in the exact wording that seems desirable to cover the case and then we can deal with it finally.

[Mr. Wilcox took the chair during this discussion.]

Chairman WILCOX. The Chair sustains Mr. Kingston in his point of order. The matter goes to the committee to report back on the last day of the session.

[President Deans resumed the chair.]

Mr. KINGSTON. I know that Mr. McShane intended no offense to the secretary in moving to accept his report as printed, but I think it is unfortunate that the report was not read. I feel like suggesting that Mr. McShane be asked to come up and read it him-

self to the convention, because, whether we read it or not, some action should be taken in the way of an appointment of a committeee to deal with the matter suggested by Mr. Stewart in his report. I think it should be read, barring the long list of names, but if the Chair does not wish to have it read, I will move the appointment of a committee to deal with a matter mentioned in the secretary's report.

Mr. McSHANE (Utah). I want to advise the assembly here to-day that if the secretary's report is read at this convention, it will be the first time in 11 years. I approve the suggestion of appointing a committee.

President DEANS. The committee on the reports of officers has already been appointed and it will make its report at a later date during our meeting. Is there any part of that report you want especially to be read, Mr. Kingston?

Mr. KINGSTON. There is a lot there that should be the subject of a special committee. I move that a committee be appointed to take care of the special matters in the secretary's report.

President DEANS. For the benefit of all, the committee to which this report of the secretary-treasurer is referred consists of Mr. Wilcox, of Wisconsin, Mr. McShane, of Utah, Doctor Stack, of Delaware, Lee Ott, of West Virginia, and Mr. Williams, of Connecticut.

Mr. KINGSTON. That is all right.

President DEANS. We will now have the report of the committee on workmen's compensation legislation by Mr. Abel Klaw, of Delaware.

REPORT OF COMMITTEE ON WORKMEN'S COMPENSATION LEGISLATION

By ABEL KLAW, *Chairman*

The committee's first opportunity to get together came this morning and we are not in a position to make final report at this time, but we will make a preliminary report covering the one phase of the matter that has been completed.

At the convention at Wilmington the committee was asked to consider three amendments to the law covering third-party liability, extraterritorial coverage, and insurance coverage.

We have been able to reach final action on only the insurance coverage, and if you would like to have a report on that now, I shall be glad to submit a provision for enactment into law so as to eliminate the present conflicting provisions and to tend toward uniformity regarding insurance coverage.

Before I read the proposed law, I want to say that Mr. Kiper, of Indiana, Mr. Allen, of North Carolina, and Mr. Davis, of Ohio, are not here to-day and did not participate in the deliberations of the committee. I have had considerable correspondence with all of the members of the committee, and in view of their inability to attend the meeting this morning, I took it upon myself to appoint in their stead Mr. Stewart, Mr. Sharkey, Mr. McShane, and Mr. Wilcox, who have not been designated heretofore as official members of the committee but who have shown a great deal of interest in the work of the committee. So the committee which met this morning was composed of Ethelbert Stewart, Charle F. Sharkey, Fred M. Wilcox, F. A. Duxbury, O. F. McShane, and myself as chairman, and we recommend this provision.

Insurance

(1) No company shall enter into any contract for insurance of liability under this (act) unless such company is at the time licensed so to do by the commissioner of insurance.

(2) All policies of insurance companies insuring the payment of compensation under this act shall be conclusively presumed to cover all the employees and the entire compensation liability of the insured. Any provision in any such policy attempting to limit or modify the liability of the company issuing the same shall be wholly void, unless the industrial commission has theretofore by written order consented to the issuance of a contract of insurance on a specific part of the employer's operations.

(3) Every policy and contract shall contain a provision that, as between the employee and the insurance carrier, the notice to or knowledge of the occurrence of the injury on the part of the employer shall be deemed notice or knowledge, as the case may be, on the part of the insurance carrier; that jurisdiction of the employer shall, for the purpose of this act be jurisdiction of the insurance carrier, and that the insurance carrier shall in all things be bound by and subject to the orders, findings, decisions, and awards rendered against the employer for the payment of compensation under the provisions of this act.

(4) Every contract for the insurance of compensation liability shall be written for a period of not less than one year. No such contract shall be canceled or revoked within the policy period until a notice in writing shall be given to the industrial commission, fixing the date on which it is proposed to cancel or revoke such contract, such notice to be served personally or by registered mail on the industrial commission at its office. No such cancellation or revocation shall be effective as against the claim of an injured employee until 10 days after the service of such notice unless the employer has obtained other insurance coverage for the protection of such employees prior to the time of the injury for which claim is made.

(5) If any insurance company licensed to write workmen's compensation insurance shall fail to pay claims promptly for compensation for which it shall become liable, or if it shall fail to make reports to the industrial commission as provided in the workmen's compensation act, the industrial commission may recommend to the commissioner of insurance that the license of such company be revoked, setting forth in detail the reasons for its recommendation. The commissioner of insurance shall thereupon furnish a copy of such report to the insurance company involved and shall set a date for a hearing at which both the insurance company and the industrial commission shall be afforded an opportunity to present evidence. If after such hearing the commissioner of insurance is satisfied that the insurance company has failed to comply with the provisions of the workmen's compensation act, he shall promptly revoke the license of such insurance company, otherwise he shall dismiss the complaint.

DISCUSSION

President DEANS. Do I understand this is a recommendation of your committee to the several different commissions as a tentative law to get through?

Secretary STEWART. To get these things enacted into their laws, if they are not already there and in so far as they are not already there.

Mr. KLAW (Delaware). And the committee will make further report as to the other matters of business during the convention.

Mr. DUXBURY. It seems to me it would be well for the chairman of the committee to move that this part of the report be adopted.

[Mr. Klaw moved the adoption of this part of the report and the motion was seconded.]

Mr. BROWN (Idaho). Idaho is in question. The only point in the report that confused me is the recommendation relative to the industrial accident board's reporting to the commissioner of insurance

those who fail to pay promptly. I recognize that in a number of States the commissioner of insurance has no jurisdiction whatever over this matter. What can we do in that connection?

Mr. WILCOX (Wisconsin). May I ask Mr. Brown a question? Do I understand that the insurance companies in your State are not licensed by your insurance commissioner?

Mr. BROWN. In our State particularly, any insurance company that wishes to write fidelity and guaranty insurance must receive authority from the commissioner of insurance, but so far as writing workmen's compensation insurance is concerned he has nothing to do with it; that is left wholly with the industrial accident board.

Mr. WILCOX. Then I would say that the need for presenting the matter to the insurance commissioner would be eliminated, but the law in that State ought to authorize, if it does not, the industrial commission of the State to revoke the licenses of such companies.

Mr. BROWN. It does, but the point was, that where they fail to pay promptly it would be referred to the commissioner. We do not know how to do that. As Mr. McShane says, "we are over the hump," because they have to have permission from the commissioner to write fidelity and guaranty insurance. They must get that first; when they have that, they have to comply with the requirements of the industrial accident board to write compensation insurance in addition.

Mr. WILCOX. The members will have to remember that in the formulation of any proposed amendment terms that are peculiar to a State law will have to be interposed here to take care of our suggestions. We used the words "industrial commission," and if the name of the body in a particular State is "industrial accident board" or some other term, those words will have to be corrected to suit the situation.

Mr. WILLIAMS (Connecticut). As I understood Mr. Klaw's suggestion, it was that the officers of each State should endeavor to get something like this on the statute books if the substance of it is not already there. In Mr. Brown's case the substance of it is already there, so I do not think there is anything that is disturbing.

President DEANS. That is right. Is there any further discussion?

Mr. WENZEL (North Dakota). It looks to me as if it would be better to confine ourselves to the presentation of the resolutions carrying general principles instead of the particular bill or law. My thought in this connection would be to adopt a resolution suggesting that the industrial boards of those States which do not now have that provision, incorporate into their law a provision which gives them authority to revoke the license upon failure of the insurance carrier to pay claims promptly. If you would pass that, you would cover the ground and not get mixed up with any phraseology.

Mr. MCSHANE (Utah). I think we are getting unnecessarily excited about a matter which, as the committee saw it, is a declaration of principles that should be acted upon in States where it is needed.

In Mr. Wenzel's State they are not interested at all because no insurance company in his State can write compensation insurance. It has a State fund. But for those States which have conditions wherein insurance carriers are giving the administrative body some trouble, it may be well to have incorporated into their laws a part of

the recommendations here made or such part as is necessary. This is not a bill at all. It is simply setting forth certain recommendations that we think ought to be lodged in certain compensation acts where they would be compatible. They would not be compatible in Idaho, nor in North Dakota, and they are unnecessary in my State, but there are some States, perhaps, where they would fit in, and I believe if we start discussing this matter from every minute detail and angle, we can spend all of our sessions on that one thing.

[The question being called for, the motion was put to a vote and carried.]

President DEANS. Is there anything else to come before this meeting?

Doctor STACK. There is a possibility of my being called away before the end of the meeting, so I would like to present my report now.

REPORT ON CONVENTION ON ALL-AMERICAN WORKMEN'S COMPENSATION LAW ADMINISTRATION

By WALTER O. STACK

On page 323 of the official proceedings of the seventeenth annual meeting of the International Association of Industrial Accident Boards and Commissions held at Wilmington, Del., September 22–26, 1930, is found the following resolution reported by the committee on resolutions and approved by the association.

Resolved, That the secretary of this association be, and he is hereby, instructed to ascertain the best methods and most convenient time for calling a convention on all-American workmen's compensation law administration, preferably in Rio de Janeiro, Brazil, in Mexico City, Mexico, in Washington, D. C., or in Toronto, Ontario.

The above resolution was, I assume, predicated upon a statement made by Mr. Ethelbert Stewart, United States Commissioner of Labor Statistics and secretary-treasurer of the I. A. I. A. B. C., which in part was:

The Bureau of Labor Statistics has just finished and has ready for the printer a translation of all the workmen's compensation laws of Latin American Republics including those of the States of Mexico, and I am going to introduce a resolution at this convention, repeating one introduced some years ago, that an all-American convention of workmen's compensation interests be called either in Rio de Janeiro, Brazil, in Lima, Peru, in Mexico City, in Washington, D. C., or in Toronto, Canada, whichever seems to be the most appropriate, and that we find out whether the Pan American Union and the Department of State are ready at this time to get behind such a meeting of compensation groups.

On July 9 President Deans wrote me in connection with the statement of Mr. Stewart and the resolution quoted as follows:

DEAR DOCTOR STACK: On yesterday I had a conference with Mr. Ethelbert Stewart. I want to designate you as a committee to develop a plan for bringing the International Association of Industrial Accident Boards and Commissions in convention or conference with the Spanish-American countries including Brazil, having compensation laws. I would be very glad for you to have your report ready by the October meeting.

Due to an automobile accident sustained a few days prior to receipt of said letter, it was not until September 11 that I was able to meet in company with Mr. Stewart and Dr. L. S. Rowe, Director General of the Pan American Union. At that meeting, I stated I was of the opinion, as the result of a careful survey

of the geographical and economic conditions, that the proposed convention, if called, should be held in Mexico City, as the distance for instance from New York City to Mexico City via St. Louis and Laredo was approximately between five and six hundred miles less than from New York City to San Francisco and railroad excursion rates being the same from New York City to Mexico City as from New York City to San Francisco. Similar conditions, mileage, and rates from other sections of the United States were found to be favoring Mexico City. Time necessary in traveling between the Provinces of Canada and the States of the United States, and the cities mentioned south of Mexico City, would in my judgment make it very difficult for many of the boards and commissions of the association to participate.

Mr. Stewart and Doctor Rowe concurring in my conclusions, we attempted to get an audience with the Mexican ambassador, but found him out of the city. Subsequently, Mr. Stewart wrote the ambassador advising him of the proposed meeting in Mexico City, requesting his excellency to advise him the opinion of his Government in the matter; and under date of September 29 Mr. Stewart received the following reply:

MY DEAR MR. STEWART: I take pleasure in acknowledging receipt of your letter of September 22 by which you advise me that the International Association of Industrial Accident Boards and Commissions is planning to call a convention on all-American workmen's compensation law administration in Mexico City and wish to know the opinion of the Mexican Government in regard to this matter.

I beg to inform you, in reply, that your letter has been transcribed to the proper branch of my Government and as soon as I receive a reply I will take the matter up with you again.

Faithfully yours,

_____,

Chargé d'Affairs ad Interim of Mexico.

As it will probably be some time before the Mexican Government will give us an official opinion, I recommend (1) that we proceed in our usual manner in planning for the 1932 convention in a State or Province now a member of the association and (2) that the committee on an all-American meeting be made a continuing body.

I might add in closing that it is my understanding that the United States Department of State feels as the boards and commissions are State or provincial agencies, the United States Government must wait until the initiative and necessary organization is completed by our association before it can officially act, and in what manner it will act will be problematical until we have first advised the Department of State of our plans.

DISCUSSION

President DEANS. What is the wish of the convention?

Secretary STEWART. I want to move the adoption of this report, and to say that the situation has recently so entirely changed in Mexico that it seemed to us that there was but one thing to do and that is to get together with Mexico if we can. Up to August, 1928, each Province or State of Mexico had its separate workmen's compensation law, just as the States of the United States have their separate laws, but early in August the Federal act which they have been trying to get through for years was finally passed and the entire workmen's compensation administration of Mexico is now in the hands of the Federal Government. My talk with the ambassador

was to the effect that he felt that his Government would be exceedingly anxious to have such a conference as is here proposed, but that, of course, it might take one year and it might take two. I do feel that it is important that we get in closer contact with the Latin-American republics.

[Mr. Stewart's motion was seconded.]

[Mr. Williams moved to amend by accepting and approving the report and continuing the committee with power to act at some future meeting of the association. Mr. Williams' amendment was regularly seconded and carried, after which the motion as amended was put to a vote and carried.]

Mr. ARMSTRONG. Do I understand that this committee will report to another meeting of this association?

President DEANS. Not this year, but next year.

Mr. KLAW. It has been suggested that copies of the suggested law which has been adopted be prepared for distribution to the members present, so that they can take them home with them and get busy trying to have the law of their States amended so as to include these provisions.

President DEANS. Aren't you going to make several other recommendations? Don't you think it would be wise that you wait until the latter part of the meeting and then direct the secretary-treasurer to have them all printed in some form to be distributed to the different commissions?

Mr. KLAW. I think so.

President DEANS. Unless there is a motion otherwise, we will have that understood, that the secretary-treasurer shall mail those to the association members.

[A motion was made, seconded, and carried that Bulletin No. 536 of the United States Bureau of Labor Statistics, containing the report of the proceedings of the 1930 meeting at Wilmington, Del., be adopted as the official report of that meeting.]

[An invitation to hold the meeting next year at Quebec was presented, and telegrams of greeting from Will J. French, of California, and Juan M. Herrero, of Porto Rico, were read.]

[Meeting adjourned.]

TUESDAY, OCTOBER 6—MORNING SESSION

Chairman, Parke P. Deans, President I. A. I. A. B. C.

President DEANS. This morning we are to discuss what to my mind is one of the most important subjects that we have in our compensation law. There is absolutely no uniformity in this one phase. Our State laws are in conflict, our courts are completely at sea, and I believe that it is the duty of our association to make some effort to get uniformity of laws. I am exceedingly hopeful that the committee that is making a study of uniformity of laws will bring something concrete to this association.

I am delighted that we have with us at this time a gentleman who I consider has given more study than any other industrial commissioner in the United States to this one subject. Last fall he sent me a synopsis of his views, which thoroughly convinced me that he realized the great difficulties we have. It is now my pleasure to introduce to you Mr. F. M. Wilcox, of the Industrial Commission of Wisconsin, who will speak on Procedure in Election to Claim Compensation from Employer or Damages from the Third Party Responsible for the Accident.

Procedure in Election to Claim Compensation from Employer or Damages from the Third Party Responsible for the Accident

By F. M. WILCOX, *Chairman Industrial Commission of Wisconsin*

I am interested, as President Deans has suggested, in this question of more uniformity. The States will differ in their ideas as to the scale of benefits, and that will go on for all time, but on those things which are more or less essentially fundamental in character there is no good reason why we can not meet on a rather common basis. If there is any fundamental principle behind it, we should be able to hit it, at least pretty closely, and save ourselves and those for whom these acts were instituted a lot of the difficulties we are now experiencing.

Wisconsin has run the gamut in legislation, from the idea that there was no relationship or right of contact and conduct, as between an injured man and his insurer or his employer after he had received compensation benefits, as against the third party who had caused his injury, to the notion that if a man took compensation then his employer or his insurer had a right to engage in this gamble with the third party, and perhaps another insurance company, on the adjustment of that third-party claim, where the pawn that they were playing for was just the degree of injury the other man had sustained.

Neither of those positions is tenable. I start with the statement that neither of those positions ought ever to be indulged in our compensation procedure; nevertheless, those things are written into the compensation acts of the States—one or the other of these extremes, and a lot of revisions that are in between.

In this day when the automobile has come to be so large a factor in the carrying on of industry, we are finding ever-increasing numbers of cases in which third parties are involved. To-day the salesman of a concern does not travel by train or by foot; he travels in an automobile and is exposed to the hazards of the highways. When he is injured by reason of the neglect of some other person who may be traveling on that same highway, immediately we have this conflict of right as between the compensation obligor and this third party who may have caused his injury.

In our cities there is hazard to those who are going about, as, for example, the delivery boy for the merchant. He is up against exactly that sort of situation, and when an accident occurs on the streets, we again have this conflict of right. Perhaps more pronounced than in any other field, there are the hazards that are encountered because of the fact that in our building and construction work to-day, we do not have one contractor do the entire job, but have half a dozen on the job, each working independently of the other—the carpenter, the plasterer, the lather, the electrician, the plumber—all carrying on their operations and exposing their men to hazards which, in case of an injury, are more than likely to produce this question and conflict that I have indicated.

My recollection is that more than 5 per cent of the cases that arise under the Wisconsin compensation act are accidents which involve an automobile. They may be to pedestrians, but they are accidents in which an automobile is involved. That will show something of the importance of that method of transportation in these last few years.

The fundamental principle of compensation is to see that an injured man shall receive a certain percentage of his wage representing his loss of wage because of industrial accident. When that man sues the third party, or when we contemplate this action against the third party for damage, the fundamental element in that measure of damage is his loss of wage and his medical and hospital attendance, exactly the same as it is in our compensation benefits. I submit that because of that fact the man (this compensation employer or insurer) who has once compensated him for a percentage of his loss of wage and all his medical and hospital attendance, has some right, and that the injured man has some obligation to respond out of the benefits that come from the third party for exactly the same thing.

How to work it out! We said that whenever an employee accepted compensation his employer or his employer's insurer should have the sole right to sue the third party, and might have all of the benefits that resulted therefrom.

What did we have? We had the most damnable situations growing up with which one can reckon. We had third parties who were guilty of the grossest sort of negligence, and who knew there was no escape from liability, joining hands with a compensation employer or insurer and encouraging this man to elect to take his compensation

benefits and "send us the bill," doing everything they could to steer this injured man into a field where his benefits would be 65 cents on the dollar and only 90 days' medical attendance, etc., and letting the third party, who could not escape liability, pay the bill. We had that situation.

There was rarely a case in which action against the third party was ever brought. These people did not go out and sue. The case was all settled outside, and never for actual damage, in case there was recovery, but for just enough to reimburse us for our compensation liability. So we decided we would get away from that scheme; that we would not have it in our State. So we took up the idea of trying this plan of community interest in the results of the proceeding against the third party, but we started out by saying that any employee who elected to pursue his remedy against the third party should automatically waive his rights to compensation.

If your experience is the same as mine, you have found that if there is any one thing that an injured man's family and all of his friends, and his church members, and his priest, and everyone else, want this injured man to do it is to sue somebody. That is what he wants, and so he hesitates for a few days and then decides he will not take compensation and starts a suit against the third party, and maybe he wins and maybe he does not. If he wins, it is all to the good, and if he loses, he has forfeited compensation and it is all over.

We set the thing to encourage people to start the third-party suit and waive their compensation benefits, but, if they did not do it, we allowed them to take their compensation benefits and automatically assigned to the employer or insurer of the employer the right to pursue the third-party remedy. We then said (the first time it had been said in any compensation act in this country) that the employer or insurer shall carry on this proceeding for the benefit of both parties, and when the third-party recovery has been determined, the costs of the litigation and the expense of collection shall be deducted, and then the benefits shall be distributed on the same basis that compensation benefits, exclusive of medical benefits, are paid.

We said, for example—we had a 65 per cent basis at the time—that, in rough figures, the employer is paying two-thirds of the loss of wages, and the injured man is sustaining one-third of such loss; so when on recovery from this third party and the costs of such recovery have been paid, we divide the proceeds of the recovery in that same proportion. This injured man had had no compensation for that one-third of his wage loss, so out of every $3 collected from this third party $1 shall go to him immediately to take care of the loss not compensated for, and $2 shall go to the employer to reimburse him for what he has already given to the injured man.

That was our plan of distribution, and it works out beautifully in theory. It was proposed to us by an insurance carrier, honest in his intent, who wanted to bring about harmony between the injured man and the employer, and to pit them both against the third party, so that we could see how the thing was carried on, honestly, openly, and above board; but that has some difficulties.

First of all, it was not unusual to find that the insurer of the employer was also the insurer of the third party and then no suit was

started. Just think of them dickering with themselves as to how much they should turn over! You can see that that does not work. So in the next sesion of the legislature we had to make an exception. You always find out about the bad spots in legislation after you have administered the law for a year or two, usually in the first year, and with the legislature a year off you have to tolerate it.

We changed that provision and said that where this compensation insurer is likewise the insurer of the third party, or the officers are the same, because many of these companies organize separate insurance carriers to carry the various lines, then this right of the insurance carrier or employer shall not be indulged. The injured man shall have his right to start the proceedings, but he has to distribute these proceeds as provided in the other instance.

We found, too, a lot of cases in which the compensation employer or insurer for other reasons did not care to prosecute the case. For example, we had in our State a compensation insurer whose attorneys had been named as the attorneys for the St. Paul Railway. It got a pass for its attorneys' services, and so you had a situation in which you could not get that insurance company to be very much concerned about starting an action against the St. Paul Railway when it had run down one of the employer's men or killed or injured him.

We wrote into the law then that, if the compensation employer or insurer does not proceed promply, the injured man may, by serving a notice, control the proceedings and go ahead with it and distribute the proceeds. We also wrote into the law that when the settlement went through (because most of these cases do not go to trial), if suit had not been commenced and summons had not been served, the industrial commission should have the right to pass upon the settlement, and it was not effective until we did pass upon it and ordered the distribution. If a suit had been started, then the court had the right to determine whether that settlement should be approved and the distribution made in keeping with the law. Each party had a right to be at these proceedings, whether before the court or before the commission.

In general that worked out all right, and that fundamentally is the right principle, if it were not for one thing which I must call to your attention. The result was that the employer or insurer reassigned to the injured man the right to conduct this proceeding or to conduct it in his name, and then the insurance company's attorneys or the employer's attorneys could carry on this proceeding. It went along nicely then. The suit was in the name of the injured man. The attorneys did not have to take it on a contingent basis but could take it on a per diem basis. Of course, these good attorneys were not sharks trying to pick up cases of that sort, and you knew the action would be handled legitimately at a minimum of cost, and the amount of excess over cost would be at a maximum, and if there were any benefits over after the employer insurer was reimbursed for what he paid out for benefits, indemnity, and medical, the balance went to the injured man; and so the injured man in those circumstances never lost—but you could not remove from the injured man his desire to want to start the proceedings, and employers and insurers gambled on that feature of the case and were always trying to encourage him to do exactly that thing.

If the employers and insurers did not think it was a good third-party suit, they egged him on to start the third-party suit and waive the right to compensation. In compensation administration that sort of thing must not exist because in such case the injured man can not accept medical attendance and you do not know whether he is getting what he ought to have. These third-party suits drag on and on before they are settled, and that does not square with the principle behind compensation. His benefits and medical attention must come to him right away.

So at the last session of the legislature we got away from that, and said that the injured man may in all cases be entitled at the start to his compensation and medical attendance—all of the benefits under compensation—and he may control this third-party suit, the only condition being that he must serve notice upon his employer and his insurer that he is starting the third-party suit, and give them an opportunity to be joined in it, and the distribution of the net proceeds after expenses are paid shall be made along the line that I have indicated. If the injured man does not start the suit, then the employer may come in and conduct it himself, distributing the proceeds as I have indicated, thus giving the employer the disposition and desire to prosecute for its full 100 per cent worth, because he has to do it. He has to recover three dollars for every two he gets himself, so there is something to give him incentive, and this employer and insurer may never profit out of it except to receive reimbursement for what has been paid out.

That is the condition in Wisconsin, and if there is any plan in any State that we have not had, I do not know where that State is. I think we have had them all and we have come now to this plan of handling it.

I am just a bit sorry that I have to speak for myself as to what the legislation ought to be, when sometime before this convention closes I shall have to sit with a committee which must either take my recommendations or have a good lusty battle.

DISCUSSION

Mr. DUXBURY (Minnesota). We all learn something from the researches of the compensation laboratory of Wisconsin, conducted almost entirely by the speaker who has just left the floor. I have frequently learned things to my great advantage from the results of these laboratory experiments in Wisconsin. In many instances, however, I have felt that even Wisconsin can make mistakes, and the speaker has just confirmed that impression. Wisconsin has made a lot of mistakes in reference to this third-party suit. It has a wonderful number of improvements, but still has some defects. I think.

It happens that I have taken a peculiar interest in this third-party proposition, because while the Minnesota law has many good features, I think it can lay claim to having the worst third-party provision, and it has been my consciousness of the viciousness of this provision that in the first place made me take some interest in these third-party provisions.

Then, at the last meeting of this association, at Wilmington, there was, you remember, a very able paper by Mr. Abel Klaw. It pointed out the great variety of bad provisions in compensation laws in the

United States of America. No two of them were alike, and the only question was as to which was the worst. Minnesota, I say, could claim priority on that particular. There came about the creation of this committee on compensation legislation—a standing committee—as a result of that paper, and that subject was referred to that committee for consideration and you will get the report later.

These things have caused me to give the subject considerable attention. I have thought of it a lot and studied it a lot, and have come to the conclusion that the cardinal thing, the most important thing, with reference to third-party provisions is that mentioned by the speaker at the close or near the close of his remarks—that they should all provide that, no matter what may be the rights against the third party, the employer should be required to pay compensation and furnish all the medical benefits exactly the same as he would where that feature was not involved. That is the cardinal and important question, because if anything interferes with that it mars and destroys the chief and important character of the compensation law; that is, immediate relief in the way of medical attention, and that other relief to take care of the necessities of the injured worker and his family.

Because of the very great importance of that being done, there should be nothing in the provision that interferes with that obligation. That is more important—manyfold more important—than the amount of his recovery against the third party. The amount of his recovery against the third party may be so delayed that the purposes and objects of the compensation law are entirely defeated, since he is left maimed and impaired in health for life because he did not get what he was entitled to because of the fact that the injury arose out of his employment. He should have had prompt treatment of the best character, and his necessities of existence and those of his family should have been provided for immediately. It makes no difference whether the accident arose out of the employment without fault of anybody or through the fault of a third party. The importance of that feature must be observed, and any provision of the compensation law which does not make that provision is vitally defective and defeats the fundamental and primary object of the law.

There are other matters I am not going to discuss because they will probably come up in relation to the report of the committee on this subject, and while it may have been a little embarrassing to Mr. Wilcox to discuss the questions and disclose his purposes and objects and ideals before the meeting of the committee, I think it will have something to do with promoting the discussion.

I want to say before I close that after I had made all this study of the compensation laws and the question of what ought to be the provision as to third-party liability, the latest amendment of the Wisconsin laws was drawn to my attention, and I confessed in a letter to my friend, Mr. Wilcox, that it met my ideals in every particular. It is all right. They have one thing right in Wisconsin and that is the third-party provision. I won't vouch for some of the other things, but in that I think they are right.

President Deans. This matter is open for general discussion.

Mr. Williams (Connecticut). I will not take up time giving the details of our own statute on the subject, but will tell you how practically it works out. If a man is run into by an automobile and

hurt, it is usually by a second-hand Ford purchased on the installment plan and the owner has no insurance, but the injured man can immediately file his claim against the employer and in practice he generally does that. Then, if the third party has anything, he starts the suit. The insurance carrier or the employer has notice and can join, and if they get a recovery, the insurance company gets a reasonable attorney's fee, and the balance of the judgment, over and above what it has actually paid out, goes to the injured man. He gets not one-third of it, but all of it after the insurance company has been reimbursed. The compensation proceedings generally lie dormant until the third-party suit is settled, but if the man's necessities call for it, he is given his medical care and the payments.

We had one early case where somebody claimed that the insurance company was entitled to only what it had already paid out, and, if it had paid out nothing, so much the worse, but our courts said that the liabilities were to be considered.

I had a case that went to the supreme court a little while ago where a man had a right to compensation and I told him to file his claim. He told me how it happened, and I advised him to get an attorney, telling him who was competent, and he got a judgment of $20,000, which the courts upheld, so that he got along pretty well.

Mr. WILCOX (Wisconsin). When so competent and so able a compensation administrator as my friend Williams misunderstood me in what I said, I wonder about the rest of you. He says that in Connecticut the injured man does not get just a third, he gets it all. Well, he gets it all in Wisconsin. You let your compensation employer and insurer take all of theirs out first. We do not. We let them take out only two-thirds. If they have paid out $100 in compensation benefits, they have to collect for themselves and the injured man $150. The injured man gets $50 every time they take $100, down to the point where the compensation employer is reimbursed and then he takes it all.

Mr. WILLIAMS. You did not make it clear to me.

Mr. WILCOX. I do not want any misunderstanding on that.

Doctor HATCH (New York). What is the tendency under your system in case of settlement? Most of these third-party actions are settled out of court. Under your system as it is now, is there not a tendency to settle for the amount of compensation plus the cost of litigation?

Mr. WILCOX. Yes, but you have always put into the proceeding the incentive to get more than the amount of compensation, because the injured man who is now going to conduct this suit can never take out but one dollar out of every three he collects. If he gets $3,000 damage, he gets only $1,000, and the other $2,000 goes to the employer, so it is not a matter of settling just for the amount of compensation benefits; this fellow is just put to it to collect more.

Doctor HATCH. I am talking about compromise settlements. When a man has a cinch on a third-party action, he is more likely to go to court and get it. The compromise is the thing that emerges when the case is not so sure. Is there not a tendency to compromise on the basis of what the compensation came to, plus the cost of litigation?

Mr. WILCOX. Do you mean on the part of the employer?

Doctor HATCH. Either one.

Mr. WILCOX. An injured man never has that incentive. He wants all he can get out of this third party.

Doctor HATCH. In the case of the employer, how about that?

Mr. WILCOX. His disposition will lag when he has collected enough to get reimbursement. He has no concern beyond that, and that was the thing that we undertook to protect by providing that no settlement of the third party shall be final or binding or deny to this injured man his right of remedy against the third party unless that settlement is approved. The agreement has to come in for approval before settling.

Doctor HATCH. I am asking these questions because I am very much interested in your attempt to solve this very bad situation which exists in so many States where the whole business of relief of the injured man is delayed pending the outcome of the suit, which oftentimes means years of delay.

When the case comes to the commission for approval, in what stage is it? Has it reached a stage where the third party has admitted liability? Is the question of negligence all settled and you simply pass on the amount? Are not compromises frequently proposed where the attorneys are not quite sure whether they can prove negligence?

Here is the gist of my question: In a case where it is not a sure thing, by what standard do you determine what amount should be allowed for settlement?

Mr. WILCOX. We have no right to pass upon what the third party shall pay. We have only the right to protect the injured man against a settlement which he objects to. Sometimes we get those contests and we have to argue as between them and adjust the difference between the injured man and the compensation insurer, and we have to go into the question of whether he has a good claim. That is true, but that is the rarest sort of case. Almost without exception the injured man and the compensation insurer come in together and say, "We have reached this agreement," and also the third party, all three interests come in to say they have reached a settlement, and that these are the facts and they would like the matter to be approved.

Of course we are never able to determine the matter of negligence except perfunctorily as to whether he should or should not accept the settlement.

Mr. BAKER (Kansas). Mr. Wilcox your commission has no jurisdiction over settlements between the third party and the injured party, has it? Is not your jurisdiction limited between employer and employee?

Mr. WILCOX. Absolutely, but let us remember this, that this compensation insurer can not relieve this third party of his liability to the injured man unless they get approval either from the commission or the court, and be assured of this, that they are just as keen about seeing that those settlements are approved as one may possibly be. They take no chances on paying the compensation insurer a lot of

money and then having the injured man start a suit next day. We have gotten away from that way of handling those things and of allowing this injured man to pursue his own remedy.

Mr. WILSON (North Carolina). What time limit is there within which the employer has a right of action in case the employee does not enter action against the third party?

Mr. WILCOX. He does it by serving a notice.

Mr. WILSON. How long does he have a right to serve notice?

Mr. WILCOX. Does the employer have a right?

Mr. WILSON. I understood you to say if he does not accept the right, then the employer can exercise the right.

Mr. WILCOX. After he has paid benefits, if the employee does not pursue his remedy then the employer may start a suit, giving notice to the injured man.

Mr. WILSON. How long does he have?

Mr. WILCOX. There is no limitation.

Mr. WILSON. There should be a limitation, really.

Mr. WILCOX. Yes, but he has to be brought in as a party plaintiff and that takes care of itself.

Mr. KINGSTON (Ontario). I can see where this problem Mr. Wilcox has introduced is really largely only a problem of liability in jurisdiction. We have in Ontario collector's liability. The problems which you suggest, Mr. Wilcox, do not seem to present themselves to us at all. True, we have this third-party liability. When an accident happens in which that liability is apparent or seems apparent, the injured workman must elect at the outset whether he will take compensation from the board or go after the third party. If he elects to claim compensation from the board, he is started on the regular payments immediately, and then it is for the board to pursue the third-party remedy, and we may pursue that remedy either in the name of the board or in the name of the injured man. We always pursue the remedy, however, in the name of the injured man, and we go to the courts—if the case has to go that far, though it rarely does—in the name of the injured workman.

If we recover in the courts against the third party, then all that the board gets out of it is reimbursement of the amount which is paid in the meantime in compensation and medical expenses. All the rest of it goes to the injured workman.

If the injured workman elects, however, not to take compensation, but to go after the third party, he may do so, and there is a provision in our act that if he fails, he may come back to the board and get the compensation to which he is entitled. By the mere fact that he pursues the remedy against the third party, he does not waive anything. He is not denied the right to compensation when he has exhausted his remedy against the third party.

As I say, the problem in an individual liability jurisdiction—and I can see all the difficulties which you gentlemen have met with in that situation—is different.

Now I want to mention just one other item. Mr. Wilcox mentioned the situation where men in several trades are engaged in the

one operation and a man employed in one trade is injured by a workman employed in another trade. That arises in a jurisdiction such as ours, and it involves simply the transfer of liability from the group in which the injured workman is employed to the group of the employer whose workman caused the injury, but if they are both in one, there is no such thing as third-party liability; that is to say, if a workman employed by A is injured due to the negligence of a workman employed by B, there is no third-party liability against B or the workman of B.

Mr. WILLIAMS. Why not?

Mr. KINGSTON. Because they are all covered under the collective liability. The man gets his compensation but there is no third-party liability where the man is injured.

Mr. WILLIAMS. Then you keep your common-law fellow-servant defense.

Mr. KINGSTON. No. There is no such thing. The workmen's compensation act cuts out all common law and the old liability act. There is no such thing as a right of action against an employer who comes under what we call Schedule I, our selective group.

Mr. HOAGE (Washington, D. C.). I should like to ask whether that is a ruling of the commission or part of the law.

Mr. KINGSTON. It is part of the law.

Mr. MCSHANE (Utah). I simply want to make this observation. I may have misunderstood Mr. Wilcox, but I do not think I did. The thing that Mr. Wilcox and the jurisdictions in the United States wish to get away from is failure in case of a third-party accident, negligence or no negligence. If a man must elect a remedy and he is undecided, he goes without medical attention when he most needs it, right at the time of the accident. He goes without compensation when his wages are cut off. Mr. Wilcox's idea is to guarantee to him from the start medical attention and his compensation with a possible addition in case a suit is instituted, so that he gets his compensation plus. Under the Ontario idea he simply gets his compensation.

President DEANS. We will go to the next subject, Relationship of Contractor and Subcontractor and Their Employees Under Workmen's Compensation Act, by Mr. G. Clay Baker, of the Commission of Labor and Industry of Kansas.

Relationship of Contractor and Subcontractor and Their Employees Under Workmen's Compensation Act

By G. CLAY BAKER, *Chairman Commission of Labor and Industry of Kansas*

The subject assigned me, "Relationship of contractor and subcontractor and employees of each under the act," is one presenting a multiplicity of questions.

A contractor under the act is subject to its liabilities and his employees are entitled to its benefits provided such employees have not elected not to operate thereunder in those States where such election

may be made. The same is to be said of a subcontractor and his employees if the subcontractor's business is subject to the act.

In the case of an injury to an employee of a subcontractor, must the employee look solely to his immediate employer, the subcontractor, or may he look to the contractor as well? If the employee may recover from the contractor, does the latter in such case have a right of reimbursement from the subcontractor? If both contractor and subcontractor are liable to an employee of a subcontractor, is the liability joint and may the employee lay claim against both, or must the employee pursue one first before having recourse against the other? If an employee has a right of recovery against the contractor, is his right coextensive or as all-inclusive as his right of recovery against his immediate employer, the subcontractor? If the subcontractor is one not subject to the act, may his employees nevertheless look to the contractor who is subject thereto for benefits? May a subcontractor look to the contractor for benefits in case of injury to himself?

One could go on at length propounding questions under this subject and no doubt numerous other questions and angles are presented to your minds, the discussion of any one of which might profitably consume the time allotted. I can not hope to take up all the questions arising under this subject head for specific treatment.

Although all acts touching on this subject show the same purpose, yet there is quite a lot of variety in their provisions. We find, on reading one act, that it is provided therein that an employer who resorts to any artifice for the purpose of executing work without liability to workmen employed shall, nevertheless, be liable jointly and severally with the immediate employer. Some acts make the contractor liable for injuries to employees of the subcontractor, but the contractor is relieved therefrom if the subcontractor has provided security of compensation as required by law. The contractor when liable may compel the subcontractor to reimburse him, and some acts provide that the contractor may, when a claim is filed against him, request that the subcontractor be made a party thereto.

The Michigan act provides that a contractor subject to its act is liable if the subcontractor is not subject thereto. Our Kansas act does not contain such a provision, but the commissioner is of the opinion that the wording of the act covers such a situation and that the contractor or principal is liable whether the subcontractor is or is not subject to the act. This may be said with reference to most acts and was so held in DeLonjay *v.* Hartford Accident & Indemnity Co. et al., a case decided by the St. Louis court of appeals and reported in volume 35 of the Southwestern Reporter (2d), page 911. Discussing its statute, the court said:

> But the clause does not say that the immediate employer must be liable to the employee under the act in order to make the principal contractor liable to the employee. * * * If the principal contractor does not have recourse in every case, it is because of a situation which the contractor itself has created by subcontracting with a minor employer who does not accept, and is therefore not subject to the provisions of the act. Of this the contractor has no right to complain.

Our Kansas court has held that a contractor or principal can not enforce reimbursement from a subcontractor not subject to the act.

It is to be noted that in almost every act there is restriction upon the liability of the contractor as compared with the subcontractor or immediate employer. These restrictions, all of which are not found in all of the acts, are: The employee is required, first, to endeavor to satisfy his claim against the subcontractor; the contractor, to be liable, must have retained control of the work being done by the subcontractor; further, the work must not have been casual; and the injury must have occurred on, in, or about the premises over which the contractor has control.

In a case decided by the Supreme Court of Louisiana (Seabury *v.* Arkansas Natural Gas Corporation, reported in vol. 130 of the Southern Reporter, p. 1), that court said that the language of the Louisiana act seemed clear and unambiguous and was intended to give the workman a direct action against the principal, although the workman was employed by an independent or subcontractor of such principal. The court made this statement:

> It was not necessary for the defendant to have had any direct contractual relations with the plaintiff or to have obligated itself to pay the wages of the person employed by Jarrell [the subcontractor].
>
> The statute was in existence at the time the defendant employed Jarrell [the subcontractor] and at the time Jarrell employed the plaintiff to do the work. The contract was made with reference to the statute and hence the provisions of the statute were read into the contract. There was therefore a legal contractual relation between the defendant and the plaintiff.

With reference to the validity of the statute so creating a contractual relation between the principal contractor and an employee of a subcontractor, the court said:

> There is no violation of contract rights in the act under consideration, and hence the statute is not unconstitutional on that score.
>
> It was clearly within the power of the legislature to make the principal engaged in a hazardous business liable to any workman employed in such business, whether such workman was employed by the principal or by an independent contractor or vice principal. The act in this respect does not restrain the liberty and freedom of contract any more than it does in making the principal liable for injuries to workmen directly employed by such principal.

If the holding of the Louisiana court, that a provision in a workmen's compensation act to the effect that a principal contractor is liable in accordance with the act for injuries to the employees of a subcontractor creates a contractual relation between such employees and the contractor and that such contract created by statute is valid, were not the case, the plan of workmen's compensation might be circumvented by a contractor through a system of contracting work.

And what is the purpose of these statutes but to prevent a circumvention of the requirements of compensation acts? The Supreme Court of Errors of Connecticut stated the purpose of these statutes in the case of Johnson *v.* Mortenson, 147 Atlantic Reporter, 705. There the court, in discussing this subject as contained in section 5345 of the Connecticut act, said:

> The object of such provisions as these contained in section 5345 is to afford full protection to workmen by preventing possibility of defeating the act by hiring irresponsible contractors or subcontractors to carry on a part of the employer's work.

And the court quoted from Belle *v.* Notkins, 101 Conn. 34, as follows:

> The special purpose of section 5345 is to protect employees of minor contractors against the possible irresponsibility of their immediate employers.

* * * Otherwise, section 5345, and, indeed, the whole policy of the workmen's compensation act, might be evaded by the device of the owner parceling out the work of construction among a number of separate contractors no one of whom employed five or more workmen.

The purpose of these statutes, creating a contractual relation between employees of a subcontractor and the principal contractor whereby the principal contractor becomes responsible to such employees under the compensation act, being to afford full protection to workmen by preventing the possibility of defeating the act by hiring irresponsible contractors or subcontractors to carry on a part of the work, should be the test applied to the various statutes. If a statute permits circumventing this purpose in any way or degree, then can it be said that it is fully serving the purpose intended by such statutes?

I think that the acts should prevent an unintentional as well as an intentional circumvention. In other words, the responsibility of the principal contractor should not rest solely on whether he has resorted to any artifice for the purpose of executing work without liability to workmen employed. The compensation acts are intended to protect workmen in hazardous pursuits, and that protection, if it should be afforded, should not rest upon any intention on the part of an employer. The employer's responsibility should be fixed, regardless of whether or not he has resorted to any artifice. In my opinion, fault or intention has no place in a compensation act, save in some instances where there is willfulness.

If the principal contractor should be held liable, should his liability be coextensive with that of the subcontractor? If the liability of the principal contractor is not coextensive with that of the subcontractor, are not the bars against circumvention of the act let down? As heretofore stated, the statutes contain restrictions upon the principal contractor's liability. How about those acts which require the employee first to endeavor to satisfy his claim against the subcontractor? If the subcontractor has not secured compensation and is not financially responsible, the employee is nevertheless delayed in pursuing the real source of his compensation, granting the principal is financially responsible, and the intended purpose of compensation, that of giving immediate relief during the time of need, may be defeated by delay. It would seem that the better plan is to make the contractor and subcontractor jointly liable with a right of reimbursement to the contractor from the subcontractor.

Does the provision that the contractor, to be liable, must have retained control of the work being done by the subcontractor permit circumventing the act? A subcontractor is usually, if not always, an independent contractor to whom the contractor looks only for results and over whom he takes no control as to method or manner of production and from whom he is himself not entitled to benefits. Suffice it to say that a contractor's liability may become very limited if he is held responsible only where he retains control of the work to be done by the subcontractor. Control by the contractor will, under proper circumstances, make the employees of the subcontractor servants of the contractor and liability attach to the contractor without such statutory provision.

A number of acts limit the liability of the principal contractor to injuries occurring on, in, or about the premises on which the contrac-

tor has undertaken to execute work or has control. Such a provision denies the liability of the owner of a carload of materials for compensation for an injury to an employee of an independent contractor whom he had employed to unload and transfer the material to a certain point; it denies, also, recovery for an injury, to an employee of a subcontractor of one who had contracted to cart away the rubbish from a street-paving job, received while driving a load of rubbish along the street some two miles distant from the paving job and on the way to a dumping ground of the subcontractor's own selection, no particular one having been designated by the contract.

The restriction of liability of an immediate employer to injuries occurring on, in, or about his premises is a provision originally contained in many acts and by many deleted. It was found to have worked a hardship and to have been most unfair to those workmen who sustained injuries arising out of and in the course of their employment but who were unfortunate as to the particular place the injury occurred.

The question may fairly be asked whether such limitation should be placed upon the liability of a principal contractor with reference to injury of employees of his subcontractor. There is this to be said, that the contractor should not be responsible for injuries of employees of a subcontractor when such do not occur on premises over which he has control, for it is only at such place that he creates the working conditions either conducive or not conducive to accidents. He should not have to assume responsibilities where the working conditions are subject to the control of another and may be conducive to hazard and injury because of carelessness of method of carrying on the work. On the other hand, it may be said that, when the work is in furtherance of the business of the principal contractor, that business should stand the responsibility for injuries occurring in the course thereof and arising out of same, and that, if such is not the case, the business may circumvent liability by contracting out portions of the work. There are certain parts of a business or industry which in and of themselves would not be subject to the compensation act, either because of the number of workmen employed or because of the nature of the work, yet the employees come within the act because the work is incident to and a part of the work that is of such a nature and employs a sufficient number of workmen to be subject to the act. In such a case, suppose such work was contracted out to be carried on by a subcontractor as a business of his own, and that he carried this work on away from the premises of the main business. Then, in that event, the employees of the subcontractor would not only be denied recourse against the principal contractor, but would have no compensation benefits whatever, as the immediate employer would not be subject to the act.

Under the Kansas act, which provides that the principal contractor shall be liable to employees of a subcontractor, with certain restrictions, the same as if the workman had been immediately employed by him, the court states in Leebolt *v.* Leeper, 128 Kansas, 61, that the employee of a subcontractor was entitled to compensation from the principal contractor but not entitled to an action for damages. In this case the injury was the result of a brick falling from a hoist being operated by employees of defendant, found to be the principal contractor.

As an analogy to this we have the Missouri court, in the case of Langston *v.* Seldon-Breck Construction Co. et al., 37 Southwestern Reporter (2d), 474, holding that, under its statute, a subcontractor's employee, injured by the negligence of employee of the general contractor, could recover against a general contractor at common law as against a "third person," where the subcontractor carried compensation insurance. The Missouri act, making the principal contractor liable to employees of his subcontractor, contains this sentence: "No such employer shall be liable as in this section provided, if the employee was insured by the immediate or any intermediate employer."

The court stated that, as to the point at issue, the several statutes fell into two principal divisions: Those where the principal contractor is made absolutely and directly liable to injured employees of his subcontractor; and those, like the Missouri act, which exempt liability of the principal contractor in event the immediate employer has insured.

The court held that, inasmuch as the subcontractor carried insurance, the contractor was excluded from the scope of the act and excepted from all liability for the payment of compensation but was not exempted from liability at common law for damages, and it made this statement: "Rights and liabilities, we take it, go hand in hand, and where the principal contractor has and can have no liability under the act, then he should be in no position to claim any immunities thereunder."

The statutory provisions on this subject, appearing in nearly as many forms as there are jurisdictions, make it difficult and, may I say, impossible for me here to deal specifically with the varied questions to which this subject gives rise. I have endeavored, as a matter of bringing the subject to a head, to give a general summary of the statutory provisions on the subject; and of the purpose of such statutes; and to raise the question of whether or not the purpose should be fully complied with and, if so, the fallacies of the statutes as to this.

Again repeating the purposes of these statutes, permit me to quote from 58 American Law Reporter, page 872, as follows:

> It would seem that the chief purpose of provisions of this type is to protect the employees of subcontractors who are not financially responsible, and to prevent employers from relieving themselves of liability by doing through independent contractors what they would otherwise do through direct employees.

A statute making a principal contractor directly liable to the employees of his subcontractor but relieving him of such liability if the subcontractor has complied with the requirements of the statute in the securing of compensation to the employees does not, in my opinion, violate in any way the purpose as above stated.

But is the purpose stated carried out if a contractor's liability rests on whether or not he has resorted to any artifice for the purpose of executing work without liability to workmen employed; if the contractor is liable only in event the subcontractor is not subject to the act; if the employee is required first to endeavor to satisfy his claim against the subcontractor; if the contractor's liability is limited to his having retained control of the work of the subcontractor; and if the liability of the contractor is limited to accidents occur-

ring on, in, or about the premises where the contractor has undertaken work or over which he has control?

It may be said that the statutes have gone far enough in making the principal contractor liable and that his liability should not be coextensive with that of the subcontractor for he had no such liability at common law. The general principles on liability of a principal contractor aside from workmen's compensation are stated in 44 American Law Reporter, page 934, as follows:

> A contractee is not, in general, liable to the employees of the contractors for injuries resulting to them while engaged in his work under the control of such contractors.
>
> Ordinarily, a contractee does not owe to a contractor or his servants the duty to furnish them a reasonably safe place to work.
>
> The general rule is that an owner does not owe to a person employed on his premises, in the service of an independent contractor, the duty to furnish a safe working place.

However, in considering this question should we not bear in mind that workmen's compensation says that, because of the nature of a given business or industry, it must provide for workmen disabled because of the operation of that industry. Having said that that liability should rest with that industry, it should always be charged with this responsibility and no plan of operation should permit it to escape the liability which is one considered by the plan of compensation to grow out of its operation. The work of the subcontractor is in furtherance of the business of the principal contractor—the principal contractor has set in motion this work—should he not therefore have the responsibility of either himself securing or seeing that there is secured to workmen, injured because of the furtherance of his business, wage replacement and medical care? Should the employees of a subcontractor be placed at any disadvantage because of a parceling out of work?

DISCUSSION

[Mr. Wellington T. Leonard took the chair.]

Chairman LEONARD. The discussion will be opened by Mr. O. F. McShane, of the Industrial Commission of Utah.

Mr. MCSHANE. About all I want to say regarding this paper is with reference to the last question asked. I think that about covers the entire field of my sentiments regarding the responsibility of contractors and subcontractors to an employee who is injured in the course of his employment and while conducting the business of the original contractor, irrespective of whether or not that contractor has control.

I want to go directly to the heart of the subject and hold the man for whom the work is being done as being responsible for compensation, and if it may be said that he is not responsible as a matter of law because he has parceled this work out to some man over whose acts and conduct he maintains no jurisdiction and control, I say that under a compensation act he either ought to be held directly liable or made to see that those to whom he parcels out this work have provided the needed protection.

Chairman LEONARD. I think Mr. McShane hit the nail on the head. Is there any further discussion of this paper?

Mr. HOAGE. Suppose the law provides that when a man complies with the act his liability is fully secured and he becomes the original contractor, and the employee of the subcontractor is injured, even if the subcontractor has complied with the provisions of the act, how far can third-party action be brought against the contractor for liability in that case?

Mr. MCSHANE. You will have to have the court answer that on a specific case—some court of competent jurisdiction when it has the particular facts before it.

Chairman LEONARD. It is the law of the different States.

Mr. BAKER. I think that was partially covered, though the facts were not quite as stated here, in the case I cited under the Missouri act where compensation was carried by the subcontractor and the original contractor was outside the scope of the act, but the facts you have stated, where both have complied with the provisions of the act, lead me to the supposition that, whether or not the statute reads that way, it should read that they are all parties and subject to the act and the only liability would be compensation liability.

Mr. PARKS (Massachusetts). That is exactly what a court in Massachusetts has decided, that employees of a subcontractor and employees of general contractors are all engaged in a common enterprise with the fellow employees and there is no liability for third-party suits.

Mr. WILCOX. In Wisconsin we said exactly the opposite. This was a case in which a manufacturer had brought onto his premises a building contractor to do some extensive repair work, and had elected to carry on the operations of his plant in the midst of this repair work. The contractor was insured under the compensation act. He accepted his responsibility, paid the liability to his employee under the compensation act, and then the insurer of that contractor started suit against this manufacturer for damage and recovery.

Mr. DUXBURY. What is the measure of the damage against him?

Mr. WILCOX. The loss of wages and all medical service with contribution back again under our law.

Mr. DUXBURY. It was not mere subjugation?

Mr. WILCOX. It was a third-party suit.

Mr. BAKER. It was not limited to compensation liability?

Mr. WILCOX. Not at all. My notion is this: I do not understand Mr. Baker to be taking a position that a principal contractor should have any liability to the employees of a subcontractor if the subcontractor has done everything that the compensation act requires. For example, suppose this subcontractor is insuring his risk and everyone is standing there to carry out the provisions of the law; then why should the principal contractor have any added liability in a case of that kind? I am asking for information. I am wondering if Mr. Baker, in making a study of the statutes, has not found that where the subcontractor is subject to the compensation act and has insured his risk and is ready to discharge his obligations, that is not sufficient. Is the principal contractor in that case still liable for compensation? I am not talking about the possibility of a third-party suit against that principal.

Mr. BAKER. Of course, the case cited was under the Missouri act which had specific provisions for carrying compensation with the subcontractor, but I think the best basis is to pursue the idea that there is created a contract relationship between the employee of a subcontractor and the principal contractor, and therefore they are all subject to the compensation liability.

I can not see the fairness nor the justification in the idea that when the principal contractor employs a subcontractor to do part of the work he must thereby take on liability over and above the compensation liability; in other words, I think that the subcontractor and the principal contractor should be jointly liable. They are both working under the compensation act, and the principal contractor should not have to take on added liability.

Mr. WILCOX. I think I have never noted a finer statement of the principle that should underlie our thought than that in the last paragraph of Mr. Baker's paper, but I do want to qualify with this statement, that I think when a subcontractor has done everything that the compensation act requires, has assumed his risks and is ready to serve any minute the employee is injured—when there is no subterfuge, no attempt to sidestep this liability—that ought to relieve the principal contractor from any liability of compensation whatsoever except in third-party liability.

I want to suggest, however, another problem that is right in connection with this. I mentioned it to Mr. McShane yesterday, and I was in hopes he would say something about it. You have, as we have, this problem of loaned employees, one man lending out another man on the same job. Along with this legislation we should undertake to protect the loaned employee and never leave him in a position in between where we do not protect the employee of the subcontractor, never allow anyone to borrow another man's services on the job and leave him unprotected.

[President Deans resumed the chair.]

Mr. DUXBURY. I want to ask Mr. Wilcox whether or not this principal we have been speaking about should ever have a liability as a third party, strictly speaking; that is, a liability the measure of which is the damages that the injured person actually receives. There seems to be a sentiment—I gathered it from one of the speakers—that because this third party happened to be himself an employer of labor, he ought to have immunities with reference to his liability as a third party that some fellow who does not employ labor does not have. I can not see any basis for that. They say he is subject to the compensation law, and they mean by that he is employing labor, and because of that he should have a certain immunity with reference to his liability for damages as a third party, caused by his fault, that a person who is not an employer of labor does not have.

My notion is that he has no more right to any immunity or modification of his liability because he is an employer of labor than any other person. If he is not liable for compensation, then he stands in exactly the same situation that every other third party stands, to stand for his negligence or fault. I think it causes much confusion in the framing of such statutes that for the purpose of making the statutes popular and selling them to employers of labor and getting

them passed, the inducement has been held out that it will limit the employer's liability, even as a third party where he is at fault, to the provisions of the compensation law.

That ought not to be so, because the purposes and objects of the compensation law are something entirely different from the purposes and objects of common-law liability for fault, and the purpose and object of the compensation law and its peculiar character are part of the status of the employer and the employee in that particular relation. When you get away from that status between those two, the rights of the employee against someone who is not a party to that status ought not to be affected by the limitations of the liability in the status, and that is why when Mr. Wilcox used the expression, which he did not quite mean, as to the "liability" of this principal where the subcontractor had taken care of the liability, he was referring to compensation liability only. He said there would be no liability in such cases and there ought to be no liability in such cases. He meant, I think, that there should be no liability for compensation, but he did not refer to the liability which that principal might have as a third party causing the accident by his fault, and that is one of the things which I observed mystified and entered into the third-party provisions in the Minnesota act. They seemed to have that all confused and made a mess of it because, as I said in the beginning, I can not see any reason why that third-party tort feasor should have any special privilege because he is an employer of labor. I mean I can not see why he should have any advantage over a tort feasor who is not an employer of labor. They stand in the same relation, and should stand in the same relation as to faults as any other person who is not an employer of labor.

Mr. LEONARD (Ohio). Is it not important for the employer to have a very definite responsibility to his workman relative to the subcontractor? It seems to me that a man who employs men should see that this subcontractor is covered by insurance.

In Ohio when a subcontractor is not covered, we proceed against the general contractor. The man gets his money from the fund and the general contractor's risk is penalized. We made it very drastic in Ohio for employers who do not have coverage, and I think there is a definite responsibility on the part of employers to see that subcontractors are covered.

A man may wait a long time before he proceeds in an action at law. We have the provision that a man can either elect to sue the principal contractor in a court of law or name him under the compensation law. We have a great many general contractors who have 40 and 50 subcontractors, and we are very careful in Ohio to see that those subcontractors are covered. It costs money to every fund to have irresponsible employers who take on men and say they do not care about their subcontractors, and it is not going to cost them anything, but when we make the provisions of this law apply to principal contractors and its costs them something, then they are applied when taking on subcontractors.

Mr. KINGSTON. We have a provision in the Ontario law dealing with this point that if a contractor or a principal sublets his work, he is himself regarded as the employer unless he sees to it that the

person to whom the contract is let makes proper provision for coming under the provisions of the compensation act.

Perhaps our greatest difficulty comes about in this way: One firm takes a large contract to get out so many cords of pulpwood, or to clean up a certain area of it, and he lets that work out to perhaps several dozen or more small contractors, some of them not being contractors at all, but simply half a dozen men banded together, partners in the enterprise of clearing out a little area. A great deal of difficulty has arisen regarding that, and we have tried to get the principal woods operator to cover all of this small stuff under his one pay roll.

I am speaking again under the terms of the collective-liability system. I am a little surprised to hear such fair-minded men as Mr. Wilcox and Mr. Duxbury say that they would favor or do favor—Mr. Wilcox in Wisconsin, and I think Mr. Duxbury says also in Minnesota—a liability against this manufacturer who is having some repairs done in his factory.

Take the situation as we have it. A manufacturer pays his rate for protection. The rate that he pays protects him in respect to all of his operations, including any incidental repairs he may have to undertake. He has fairly extensive repairs, as Mr. Wilcox suggested in the case he cited, and he brings in a subcontractor to do that work. There is a certain amount of intermixture of operations. The manufacturer's operations are going on alongside the contractor's operations and there is a certain amount of hazard created by that. Each man has paid his rate, the manufacturer on his part and the contractor on his part. They are all protected under the collective-liability system. It would be simply unthinkable to my mind that in addition we would permit a third-party common-law liability against the manufacturer under such circumstances. I agree with Mr. Parks, of Massachusetts, that it is unthinkable to have any such liability passed onto the manufacturer, who is working side by side with the contractor.

Mr. WILCOX. I want to spike this idea of collective obligation. There is nothing like that in any law anywhere in any State. Your knitting concerns in Ontario are paying their way, and your building contractor is paying his way; what excuse is there for the contracting industry, which goes into your knitting factory to do some repair work, having to be burdened with this liability because the employees of the knitting factory injure one of its employees?

Mr. KINGSTON. I should have added one word of explanation there. If the board feels that the employee of the knitting factory, speaking of the manufacturer, is responsible for the accident, and we find there was negligence, then on such a finding we simply transfer the liability from the contractors' group to the manufacturers' group.

Mr. WILCOX. What does the injured man have to say about it?

Mr. KINGSTON. Nothing. He gets his compensation and that is all he is entitled to. The act provides that the compensation is in lieu of all other rights, common law or statute.

Mr. WILCOX. Suppose he is run down on the street by the same contractor's truck?

Mr. KINGSTON. The situation would be the same if the workman was in the course of his duties, performing his duties for the manufacturer.

President DEANS. The hour has now arrived for the address of Secretary Doak.

[A telegram from Hon. W. N. Doak, United States Secretary of Labor, regretting his inability to be present, was read by the president.]

The Attitude of the Railroad Brotherhoods Toward Workmen's Compensation and the Reason for Such Attitude

By Hon. W. N. DOAK, *United States Secretary of Labor*

[Read by Charles E. Baldwin]

The subject assigned to me, The Attitude of the Railroad Brotherhoods toward Workmen's Compensation, and the Reason for Such Attitude, is somewhat difficult of approach inasmuch as it involves considerable explanation and, moreover, I think the word "attitude" may properly be used in the plural, because the railroad brotherhoods have taken several attitudes toward the subject of a national workmen's compensation law.

The Brotherhood of Railroad Trainmen, which I had the honor of representing as an officer for many years, has taken a consistent attitude in opposition to a workmen's compensation law since it was first presented to a convention of the brotherhood more than 18 years ago, and in my discussion of the subject I would prefer to discuss the attitude of the Brotherhood of Railroad Trainmen, rather than trespass upon your time by discussing the position of other railroad labor organizations with which I am not as familiar as I am with the action of my own organization.

The status of intrastate and interstate employees, as affecting their rights of recovery either under a State compensation act or the Federal employers' liability act, has become more clearly defined than it was several years ago. When it was proposed to abrogate the Federal employers' liability act and enact in its stead a national compensation measure, discussion among the railroad employees of all kinds in this country became active and occasionally vehement. A commission was appointed more than 18 years ago to make a study of this problem and to make a report to Congress favorable to a Federal compensation act to supplant in substance the Federal employers' liability act. It was favored, I believe, by a majority of the railroad brotherhoods, but opposed by the Brotherhood of Railroad Trainmen, with the result that it did not become a law.

Since the first action was taken by the convention of railroad trainmen, subsequent conventions of that organization have reaffirmed the opposition to workmen's compensation, and have actively opposed its enactment up to and including the last convention, which was held early this year. It should be borne in mind that perhaps there would not have been such marked opposition to a Federal workmen's com-

pensation act on the part of the trainmen if the provisions of the Federal employers' liability act could likewise have been preserved as an optional remedy to be used in aggravated cases, but when it was proposed to supplant the Federal employers' liability act by a compensation act, leaving compensation as the sole and exclusive remedy by which recovery for damages for injuries received by railroad employees, then the opposition became very pronounced.

One of the strong points made in opposition to a compensation act was that it deprived a certain class of railroad employees of the advantages given them under the Federal employers' liability law. For instance, men who were injured or killed as a result of negligence, or purely on the assumption of the risks of their employment, would be treated the same as those who might be otherwise injured or killed.

Also, at the time the compensation question first came before our convention, conditions of employment had not reached the higher stage of perfection which is the case at the present time, and a large number of injuries and deaths were being caused through lack of proper equipment, and otherwise. Then, too, great efforts had been put forward on behalf of railroad labor in securing the passage of adequate employers' liability laws by having the old common-law doctrine of fellow servant, contributory negligence, and assumed risk removed as defenses on the part of the employer. The railroads having sought to apply this principle, perhaps, to a great extent to its employees and to hide behind the old common-law doctrine, had a tendency to make the railroad employees skeptical of any change in the employers' liability act which would in any manner tend to a reversion to old methods.

Also, it should be borne in mind that the new Federal employers' liability act had been passed in 1908, amended at great expense and effort by railroad labor organizations in 1910, and the United States Supreme Court had upheld its constitutionality in January, 1912, and right in the face of these enactments and this judicial determination, workmen's compensation was presented to the convention early in 1913.

The schedules of payments proposed under the compensation act, and so far as I know the schedule now generally in effect where workmen' compensation governs, are of such a nature and so small in their final payments that railroad employees do not believe any plan of workmen's compensation so far proposed is adequate in case of major injuries or violent deaths, where it is plainly established that the cause of the injuries or death was the negligence or inadequate protection of the employers. I will, therefore, endeavor to point out some of the principal objections to giving as the sole and exclusive remedy any plan of workmen's compensation which would entirely remove the right of employees to go into court under a proper liability law and seek recovery of damages in certain classes of cases.

I think, therefore, the principal objections raised by the railroad employees to workmen's compensation when this matter was first presented may be summarized as follows:

1. The enactment of an exclusive compensation law would set aside the provisions of the employers' liability laws, Federal and

State, and would prohibit employees injured in the service or the heirs of employees killed in the industry from bringing suits for damages, and would virtually mean a surrender of their constitutional rights. Therefore, such a provision would be repugnant to railroad employees affected by its terms as the right of trial by jury would be denied.

2. Railway employees object to compensation because schedules of amounts to be paid are inadequate.

3. The railway employees believe that the employers' liability law of 1908, amended in 1910, and its constitutionality upheld by the United States Supreme Court in 1912, has had the effect of forcing rail carriers to settle thousands of personal injury claims out of court on a liberal basis, and the influence and effect of this law would be destroyed should a Federal compensation law be enacted, and would thereby cheapen settlements and would encourage many of the unsatisfactory conditions that prevailed prior to the enactment of the Federal employers' liability law.

4. The railroad employees fear that the courts might construe a compensation law to exclude employees injured or killed while in the service, if the accident which resulted in disability or death did not arise out of and in the course of their employment. This fear is based upon decisions handed down by the English courts under the English compensation act which have deprived numerous worthy employees and their dependents of compensation.

5. Railroad employees fully recognize the iniquitous practice which has grown up under the employers' liability law with respect to injustices perpetrated by certain classes of lawyers, who, in many instances, exact from 33⅓ to 50 per cent of net settlements made for injuries and death. However, up to the present time no compensation laws have been proposed that are automatic and that will insure the payments of amounts prescribed to claimants without, in many instances, protests being made resulting in the necessity of legal advice, and since the schedules of payments are usually fixed so low that such claimants could not afford to employ attorneys, even though they might be sure of winning their claims; they would, therefore, be left to accept almost any adjustment offered ranging between the minimum and maximum allowances fixed in the schedules. Therefore, railway men believe that inasmuch as they will be obliged to go into courts in many instances to bring an adjustment of their claims, that they stand a better chance of securing a fair settlement under the employers' liability act, which is not limited as to damages, than under any compensation act that might become a law, providing certain scheduled limitations.

6. Under compensation laws adjusters or judges are usually appointed to determine the amount of compensation to which the injured employee is entitled. Railroad train and yard men, while appreciating the fact that most judges are honest and courageous, are skeptical of having their cases determined by adjusters appointed by the United States district court in each judicial district, for the reason that the railroad that injured them has wealth and political influence behind it, while they are often unknown and without political influence or money. They feel that this handicap might result in the schedule allowance being minimized in many instances.

7. Railroad men thought, generally speaking, that the compensation laws heretofore proposed required certain technical procedure that laymen could not intelligently and effectively meet in opposition to the trained legal representatives of the carriers without the employment of attorneys. In other words, the legal procedure necessary to recover damages is made more complex and would add more legal technicalities than under the present liability laws, resulting in the recovery of less damages for the injured employees.

8. The compensation laws heretofore proposed have provided schedules that were beggarly low in cases of death where no heirs were left except children, thereby reducing the liability of the carriers, which we believe is fundamentally wrong.

9. Compensation, generally speaking, places an estimate on human life and limb so low that one wonders how men who know life and its hardships can favor it as against liability.

10. Members of the Brotherhood of Railroad Trainmen are not opposed to the principle of compensation, and it is hoped that some day a compensation act that provides adequate scheduled allowances which will be simple, certain, and automatic, will be introduced and such an act doubtless would meet the approval of train and yard men.

11. Train and yard men, who are largely the victims of injuries and death on account of the character of their service, appreciate the fact that under the best plan that can be arranged under our American legal system for compensation for injuries to workmen, that even under the most favorable conditions, "compensation laws" can not be enacted that are fully adequate and the term grates harshly on the Christian ear. After all there can be no adequate compensation to the widows and orphans when the husband and father has been cruelly separated from them by this modern Juggernaut of civilization. There is no adequate compensation to the young man who in the very prime of life suffers excruciating injuries, and the loss of limb, or limbs, while engaged in an honorable effort to win his daily bread. What compensation can there be to the families of those, the breadwinners, whose poor mortal bodies have cooked in hissing steam, or been driven into a lifeless mass of human pulp by the crushing timbers of a railway wreck? The term "compensation" as applied in these cases is a misnomer, and perhaps it would be more appropriate should we use the word "relief." In any event, the train and yard men of this country will be willing to give further consideration, as before stated, to an adequate plan of relief that will guarantee to their injured brothers and the widows of those killed in the industry, the financial relief in amounts equal or greater than now paid under the compensation laws, which we must admit are not wholly satisfactory, especially in cases where the most violent injuries or deaths have occurred as the result of following so hazardous an occupation as railroading, even with the greatest safeguards so far conceived by man.

Despite Herculean efforts put forward by the railways, their employees, and a sympathetic public in the direction of safety, and "safety first" measures, there still remains that element of danger due to the very nature of the work in which train and yard men are engaged, which makes for extreme caution on their part in the surrender of any constitutional or inherent rights which in any manner

may have the tendency to relieve employers of full responsibility in the maintenance of eternal vigilance over their welfare. Compensation, as construed, outlined, and applied even under what we sometimes term our "advanced system" in the larger sense does not have the compensatory, corrective, and deterrent effects as does employers' liability, properly, fearlessly, and humanely administered by courts and unbiased juries.

Therefore, unless and until radical reforms in systems already adopted are made, schedules more wisely increased with the aim of affording redress of a more reasonable character to the men engaged in these hazardous occupations, I am seriously of the opinion that the railroad trainmen will oppose workmen's compensation as the sole and exclusive remedy.

This view is sustained, I am sure, because 18 years' experience has made no change in the attitude of the brotherhood as evidenced by the last convention held this year which reaffirmed the stand taken in 1913 on this subject.

DISCUSSION

Mr. DORSETT (North Carolina). I have made it a rule so far in attending these meetings not to say anything, but to listen, because I am more or less a freshman. Had I not known that the Hon. W. N. Doak wrote that paper, I would accuse some damage-suit lawyer of the job. I can not see why the same argument put forth in that would not apply to textile operators, or to almost any industry that we have in North Carolina. If the compensation law is not good for logging and lumbering employees, if it is not proper for textile operators, if it is not profitable and good for tobacco employees, why is it good for anyone else? If it is good for those, why is it not, according to the same argument, good for railroad employees?

Our court has held that a railroad operated in conjunction with a sawmill, be that railroad 30 yards or 200 miles in length, is a railroad. The employees of North Carolina who work for lumber operators in logging and lumbering operations, are exempt under the law from the provisions of the compensation law on the theory that railroad employees are all exempt.

I was a little shocked and dumfounded at having paraded again "trial by jury" or "constitutional rights being taken away," and I am of the opinion that sooner or later there will be a changed attitude on the part of railroad employees, especially when we see railroad companies every week going into the hands of receivers, when we know that their security values are declining rapidly, and when we know that there will be a changed attitude on the part of the public in general as to "when in doubt, sue the railroad company."

Mr. MCSHANE. I want to say "Amen" to the gentleman from North Carolina, but I want to say too that I think the motive behind the brotherhood's attitude is the difference in wage levels. The curse of the thing is the confounded maximum provision in every one of our laws. A man earning $300 a month under the Utah law can realize only $16 a week as the maximum. It is only the low wage earner that ever gets within 40 rows of apple trees of his 60 per cent, or 50 per cent, or 66⅔ per cent, of the loss of his wages. If you take

out of the law of every State in this Union the maximum provision, beyond which a man may not go in getting compensation, you will have the brotherhoods with us because they will get then what they are entitled to and what every other man is entitled to.

There is no more reason for a limit in a compensation law than there is for excluding a man from compensation because there were only five, not six, employed. We have a lot of those jokers in all of our laws, and when we take the jokers out and come clean with labor, we will get labor's support all the way along the line.

Mr. PARKS (Massachusetts). I agree with everything Mr. McShane says about the act not being what it should be, but we are talking about the act as it is, and I am going to talk about it as it is. It is a great piece of humanitarian legislation, and it is a pity that the railroad men have not had it all these 18 to 20 years.

I wish I had known that this kind of paper was going to be read. I would have brought figures with me to show you something that would have been illuminating for Mr. Doak. Too bad he doesn't know something about the operation of the compensation act in these United States!

In Massachusetts every employer of labor, whether he is insured or not, the railroads included, is obliged to report his accidents. The railroads, of course, always have quite a substantial number of employees killed—they kill quite a number even in these enlightened days. When we get those figures, we send our investigators out to investigate the noninsured fatal accidents, and in our latest report it shows that as to the fatals of the noninsured employers the dependents of those who are killed—these people whom Mr. Doak has such a splendid regard for, and honestly so—receive just 18 per cent of what they would have received had they been insured under the compensation act in our State. Mr. Doak wrote that paper through ignorance of the true facts, and he has all the feeling for those fellows and the dependents of those that are killed that we have. We have that feeling, and we have the cases investigated.

Mr. MCSHANE. That is, the average.

Mr. PARKS. Yes, of what they would have received. I haven't the figures exactly in my mind. Under the act they would have received about $128,000—I won't swear that to be correct, but it is something over $100,000—and they actually received about $20,000, divided between them. Those are actual figures, and then to indict the compensation act like this, after 20 years of glorious service to the people of the United States.

In Massachusetts I was a student of the compensation act. I served on a commission in 1910 that drafted the Massachusetts workmen's compensation act, and at that time the injured workmen and the dependents of those who were killed were receiving in our State the magnificent sum, divided among all those who were injured and the dependents of those who were killed, of about half a million dollars. And what is this compensation act that we are being told is poor and inadequate, doing for them now? The glorious sum of over $10,000,000 is being given to the same injured workmen and the dependents of those who were killed.

Don't try to tell me we were better off under the old system than we are now, with $10,000,000 compared to half a million dollars. If

that is so, then I know nothing about the compensation act. I think an answer should be sent to Mr. Doak that he has been misinformed, that the compensation act is not the inadequate, poor, miserable little thing that he thinks it is; that it is a substantial thing and, as Mr. McShane said, we want to bring up the maximum—but I am talking for it as it is, and not as we hope to have it.

Secretary STEWART. I want to say, that the personal element in this debate is entirely unfair and misplaced. President Deans and myself agreed to ask Secretary Doak to tell us the attitude of the railroad brotherhoods. He nowhere says this is his attitude; he is simply telling exactly what the attitude of the brotherhoods is, and why, as part of their records and their instructions to him as their legislative agent.

Any attempt to make this a personal matter with Mr. Doak is absolutely unfair. He did exactly what we asked him to do. As to whether that attitude has been influenced in the organization by damage attorneys is another question, but the statement is simply one of plain fact without any personality in it. I do not know and we do not know whether or not that is Secretary Doak's attitude personally. He did exactly what we asked him to do.

Mr. WILCOX. I was just rising, as Mr. Stewart rose, to remind this group of what the minister told us last night was the telegram of the employer of the fellow who had a day of hard lines. The telegram was, I think, "Steady, steady, my boy." I feel just as Mr. Stewart does about this discussion. We have to think more deeply and more conservatively than we are. It is not going to do any good for us to charge anybody with not knowing what is going on in compensation administration in this country.

If I were a railway trainman, and I lived and was operating in some of the States that I know of, I swear to goodness you would have to take me and tie me hand and foot before I would accept compensation. I am not against workmen's compensation by any manner of means, and I think that ought to be the principle.

The thing that disappoints me in the attitude of the railway trainmen and the attitude of the brotherhoods generally is the fact that they do not actively undertake the preparation of the kind of compensation act they would like the Congress of the United States to pass. That is what I should like to see them do and stop sitting back and telling us that we must bring all of our varied acts up to the standard they like before they will consider Federal legislation.

Understand that in many of the States the compensation acts now apply to railway employees engaged in intrastate as distinguished from interstate commerce. That is what we have in Wisconsin, except that it does not apply to trainmen, and for the very evident reason that they did not want it to apply to the trainmen and we could not get the legislation unless we had their consent.

We have had some very interesting experiences with railways. Through all these years the Northwestern Railway, the Soo line, the Great Northern, and the Northern Pacific have operated under the compensation law of the State of Wisconsin as to all employees, excepting trainmen, who were at the time of their injury engaged in intrastate commerce, and these men have had their compensation benefits, so we have had a bit of opportunity to compare benefits.

We have a right to require reports of all accidents to railway employees whether interstate or intrastate railway accidents.

The St. Paul Railway, the Illinois Central, and the Green Bay have not elected to come under the provisions of the compensation law in these accidents and they settle by common law.

This last session of the legislature passed a compulsory act as applied to all employees, and that touched the railroads, and so the St. Paul Railway, the Illinois Central, and the Green Bay & Western had to consider as to whether a compulsory act was constitutional, and the St. Paul announced its intention of testing it—going to the United States Supreme Court, if necessary, to test the constitutionality of our act.

Our experience was such that we thought it was time to get in and do a little bit of missionary work. So we called in the St. Paul officials and counseled with them and they agreed to open up their books to the commission. We had our secretary take our experience under the compensation law, and he also went into the Chicago office and took the records of their serious injuries and we made comparisons of the benefits—the relative benefits under compensation as compared with the amounts at which they had settled these cases.

I think it is quite clear that the total amount of damage recovered by railway employees in their suits would be more than the amount of the recovery under compensation. I think that will follow even under an act that now pays 70 per cent of the wage, but with this limitation, that Mr. McShane refers to, of figuring the wage at not to exceed $30 per week, and if we can make contact with these people and start in trying to build up something that is decent and right, we will overcome this limitation. It was apparent that the injured men probably were not getting as much as, at least no more than, they would get under compensation, the excess going into overhead and whatnot.

Question. Did you find out how much the lawyers' fees were?

Mr. WILCOX. I said the excess going to the attorneys and into the overhead. The amount is large. The attorneys take these cases, and rightly so, on a contingent-fee basis, because these men never have any money to litigate with, and the lawyers have to take a chance in most cases, and so they take them on a contingent-fee basis.

Railways have indicated to me that they are willing to open their books to the State of Wisconsin anytime the railway brotherhoods come in and we will go over and see what the figures show. Perhaps we could work out something of benefit to all. What I want is to see the railway brotherhoods sit down with some one from Congress, some one whose duty it is, and who will assume the duty, to help prepare a compensation act to which they would be willing to subscribe and try to work it out; because if we could have a Federal act applying to interstate employees, railway employees, a Federal compensation act covering all employees engaged in interstate commerce, it would be a very fine thing. I do not want the off-and-on business of recovering damages, if that is the best way, or taking compensation, if that is the best way. I want the thing whole hog or none. If we could have a Federal act covering all interstate employees, that is the way I would want it.

I want you to get this picture: If we could have a Federal act covering all interstate employees, will we consent in Wisconsin, in Utah, in Iowa, in Minnesota, anywhere, to go on paying benefits to intrastate employees of a railway on a lower basis than the Federal act would pay interstate commerce employees? Don't you see we would immediately have the leavening effect, bringing up our State acts to a level with the Federal act and getting a type of uniformity that we will never get in any other way?

President DEANS. The next subject for discussion is Should There be an Unlimited Medical Period, by Mr. Wellington T. Leonard, of the Industrial Commission of Ohio.

Mr. LEONARD. I am glad that this paper follows the paper read by Mr. Baldwin. That paper spoke about damage—money—but it did not say much about humanity. There was not a word said about what an injured workman gets after his case is adjudicated.

Should There Be an Unlimited Medical Period?

By WELLINGTON T. LEONARD, *Chairman Industrial Commission of Ohio*

Suspended high on the ceiling of a new theater in Cleveland a scaffold broke and hurtled a painter to the floor, 40 feet below. In falling he struck a theater seat. Here was literally a broken body—broken arms and legs—with some internal injuries. Rushed to the hospital he was placed in the care of expert surgeons. More than a year later he left the hospital to take up training with the rehabilitation service in mechanical dentistry. After finishing his course he set himself up in business with the aid of the commission and made good. The surgical, nursing, and hospital services in this particular case were $6,317.29.

Five years ago a lad 20 years of age was caught by a fall of steel while in a sitting posture at the bottom of a pit. His back was broken and surgeons at the hospital said he could not live more than six weeks. His parents were people of very moderate means. The young man had the benefit of the very best hospital, medical, and nursing care, even a special nurse being provided. A radio was installed in his room at the hospital as part of the interest taken to bring a little happiness to this unfortunate boy, and it was made possible for the boy to find a lot of happiness under sympathetic care and attention. A few months ago he died in the hospital where he was taken after his accident of five years before, his death being due to infection following the extraction of some teeth. The medical, surgical, hospital, and nursing expenses in the case were nearly $20,000.

The above are two typical cases of unlimited medical costs under the Ohio plan. One was that of a man restored to industry through unlimited medical and surgical costs, and the other that of a boy who never could have been rehabilitated to industry, but whose life was prolonged to get some enjoyment out of life without being a public charge on the community in which he lived and for whose plight industry was responsible.

Another illustration of the vital need for unlimited medical costs is pictured in the case of a man of 35, who in his work suffered a frac-

ture of the spine and internal injuries, rendering him paralyzed from the hips down, and for the past five years has been confined in the hospital with a special nurse, the total medical costs in this case being $23,945.88, distributed in the following manner: Hospital, $10,780.38; doctor, $1,684.50; nursing service, $11,481.

Prior to June 28, 1917, there was a limit of $200 for medical and hospital attention in Ohio. Since then there has been no limit, provided the commission unanimously approves the bills.

Prior to July 1, 1920, there were no fiat fees for treatment, the fees being a certain sum for the first treatment and from 50 cents to $1 for subsequent treatments and $2 for house calls. On July 1, 1920, certain flat fees were inaugurated, together with increases in rates for office and house calls. For some time the new plan did not run smoothly, because a lot of the doctors did not understand the plan; some of them, for that matter, do not understand it yet.

The present fee schedule in Ohio is practically the same as that adopted 11 years ago and is generally satisfactory. It has the official approval of the Ohio State Medical Association, and in fact was drawn up after consultation with a committee of doctors appointed by the State medical association. The same plan was followed with the dentists.

When the Industrial Commission of Ohio was first organized, and for several years thereafter, relations between it and organized medicine were not of the best. For the last 10 years, however, relations have been very cordial and the commission is getting better cooperation than ever before. Doctors realize they must cooperate for the good of all, including themselves.

Under the old plan of limited payment ($200) there was never enough to pay both hospital and doctor in severe cases, and if a special nurse was necessary for two or three weeks the doctor usually received no fee whatever, unless he received it from the claimant.

Workmen's compensation, to be really helpful, must include the cost of all necessary treatment. The claimant must bear at least one-third of the loss of his earnings, together with the pain and disability due to the injury and the worry as to the outcome of his injury. One of the most distressing things about any illness is the thought of how the bills are going to be paid, and freedom from this worry is an important item in aiding recovery. Moreover, if such bills are not paid from the fund the ones who render the care—doctors, nurses, and hospitals—stand little chance of ever getting their money.

Workmen's compensation claimants are not charity cases, and there is no reason in equity why those who care for them should render their services gratis. To be really helpful, the compensation should cover all major cases; at least, they are the ones who need it most.

In Ohio, for the year 1930 the average medical cost per claim, in all types of claims, was $22.85. This includes medical only claims, where disability exists only for one week or less and upon which only the medical expense is paid, as claims for disability of one week or less, under the Ohio workmen's compensation law, are not compensable; also death claims in which medical attention has been necessary prior to death, and compensable claims, where disability extends beyond the period of one week. In compensable cases the average cost per case in 1930 was $78.25. These are cases where disability

extends beyond one week and in which compensation is paid in addition to medical expense. Medical costs average about 26.1 per cent of the total benefit costs.

Naturally there should be some check on medical costs. The commission should have some protection against excessively large bills. In Ohio there is such a check whenever the commission desires to apply it. Payment of fees in excess of $200 may be made only after the need is clearly shown and on unanimous vote of the commission. While there are undoubtedly some cases of unnecessary and ill-advised treatment, I think such cases are relatively infrequent and can be prevented entirely only by personal investigation of every claim, which is obviously impossible.

Under the Ohio procedure an injured worker may select the doctor of his choice, provided he is a licensed practitioner, except where the employer is a self-insurer, and in that event the employer is given permission to furnish medical and hospital care, provided it is satisfactory to the commission. At one time there were approximately 1,500 self-insuring employers in Ohio. To-day there are around 260 who are paying compensation and medical bills direct upon order of the commission.

There should be an unlimited medical period, but safeguards should be instituted to prevent abuse of the privilege. The need for such a policy was recognized in Ohio a very few years after the workmen's compensation act was passed, and there has never been an attempt to withdraw the privilege granted in 1917; even employers recognize the need for unlimited service.

DISCUSSION

[Mr. McShane took the chair.]

Chairman McSHANE. The discussion on this paper will be led by the Hon. Lee Ott, of the workmen's compensation department of West Virginia.

Mr. OTT (West Virginia). We have been talking uniform law medical costs for at least 18 years to my knowledge. I was a member of the association when our good secretary was not a member of it, and there are very few people here to-day who were members of this organization when it was formed. We started in Madison, and I think the next meeting was held in Washington, where we started to talk uniform laws. We are still talking them, and we have to-day 44 laws, all of a different kind. Whether we will ever get uniformity, I do not know; I do not have much hope of it because it seems to be very hard to convince 44 legislatures that an arm is worth as much in Virginia as it is in Ohio.

Notwithstanding my request to be excused, I was drafted for discussion of the paper entitled "Should There Be an Unlimited Medical Period?"

Commissioner Leonard's paper is highly interesting and shows, in a very convincing way, the benefits to injured persons of generous provisions in the compensation laws for medical and hospital services and a liberal administration thereof.

Our West Virginia compensation law provides compensation benefits of $8 to $16 weekly, or $416 to $832 per annum, and $800, if neces-

sary, for medical, surgical, dental, and hospital treatment. We have comparatively few instances in which this is not adequate.

In addition to the above, $600 has been provided for in cases where rehabilitation of injured persons was indicated, and it is shown to the commissioner that by additional medical or surgical interference, reduction can be made in the percentage of permanent disability.

The Ohio law provides compensation benefits of $5 to $18.75 weekly or $260 to $975 per annum, and $200 for medical, nurse, hospital services, and medicines.

A $200 limit in any case would seem to the writer to be wholly inadequate. For example, an employee injured, resulting in both legs broken, entered the hospital. It would cost $150 to set the legs, and, at least, two X-rays of each leg, amounting to $40; $10 for the operating room and $10 for an assistant. We are now $10 above the maximum and have not gotten the patient settled in the hospital. The surgeon would be obliged to go on with his work without the consent of the commission, hoping that he may gain its consent, which, of course, the commission could not do otherwise than approve. This seems to the writer to be letting the entire matter rest in the hands of the hospital and surgeons. Why not remove the limit entirely, so far as the $200 is concerned, and put a limit on the amount that could be expended for these purposes somewhere within reason?

In the Ohio law, in unusual cases, where it is clearly shown that the actually necessary services and medicines exceed $200, the commission may pay such additional amounts upon a satisfactory finding of facts and upon the unanimous approval of the commission.

It is interesting to note the effect of the liberal provisions of the Ohio act upon the total medical and compensation cost, as shown in the fact that in the year ended June 30, 1930, the Ohio medical and hospital cost was $5,216,342, or 30.18 per cent of the whole disbursement for benefits of $17,285,998.29. Whereas, West Virginia expended in the year ended June 30, 1931, for medical and hospital services $562,709.15, or 11.92 per cent of the whole disbursement for benefits of $4,722,325.39. Ohio's relative medical cost was two and a half times that of West Virginia. In other words, Ohio's medical and hospital services cost $3,156,000 more than if the West Virginia schedule had been effective, and it would have cost West Virginia $862,297 more if the Ohio schedule had been effective.

The retention in hospitals with special nurses for five years, until their deaths, of the two permanent total cases, as related by the speaker, was undoubtedly a great blessing to them and most benevolent, but I think it is questionable whether, in view of the low limitation for medical and hospital services in ordinary cases of $200, the expenditure of $4,000 to $5,000 per year in each of these cases, or many times the compensation benefits, over a number of years to keep them in hospitals with special nurses, together with the payment of the compensation, is not a contravention of the compensation law, and suggests forcibly that there should be in the laws some limitation to the necessary surgical, medical, and hospital services after the maximum physical rehabilitation has been effected, and that the compensation benefits should be such as to provide adequately for the keep of such persons after the greatest possible restoration of physical condition has been accomplished.

During 1929 and 1930, eight States increased the medical benefits under their compensation laws. All compensation States now provide medical benefits. The tendency is to furnish medical, surgical, nursing, and hospital service, etc., without limit as to time or amount. This is the case in 13 States. The time is without limit in 8 other States which limit the amount, while the time but not the amount is limited in 12 States.

The Eastern Interstate Conference on Labor Legislation held at Harrisburg, Pa., on June 18 and 19, 1931, adopted a resolution recommending " that the workmen's compensation acts of the several States provide full medical services, either by statute provision or procedural permission." It was also recommended that the several States adopt the uniform compensation rate at a maximum of not less than $20 and a minimum of not less than $10 weekly.

I am heartily in accord with the action of the eastern interstate conference and with Commissioner Leonard in that there should be full medical service provided, but I am afraid that unless there is some restriction as to the amount or conditions under which such expenditures may be made, it may in time prove too great a burden upon industry, which pays the bills, and may kill the proverbial goose which lays the golden eggs.

Personally, I am for no limit as to time but a limit as to amount.

[President Deans resumed the chair.]

President DEANS. If there is any further discussion on this, I ask that it be taken up this afternoon.

[Meeting adjourned.]

TUESDAY, OCTOBER 6—AFTERNOON SESSION

Chairman, Walter O. Stack, President Industrial Accident Board of Delaware

Chairman STACK. We are very fortunate in having such a splendid program for this afternoon as President Deans has assembled. Our first speaker will be Mr. W. H. Horner, of the Department of Labor and Industry of Pennsylvania, on What Should be Required of Self-insurers.

What Should Be Required of Self-Insurers

By W. H. HORNER, *Director Bureau of Workmen's Compensation, Department of Labor and Industry of Pennsylvania*

In order that employers coming under the provisions of the workmen's compensation laws of the several States in the United States and of the Provinces in the Dominion of Canada may guarantee their liability for the payment of compensation to injured workmen or the dependents in fatal cases, it becomes necessary for employers to carry compensation insurance in a State workmen's insurance fund, in a stock or mutual company, or to apply to the proper State authorities for the privilege of carrying their own risks, commonly known as self-insurance.

According to tables printed in Bulletin No. 496 of the United States Bureau of Labor Statistics, the compensation liability in the States having compensation laws as of January 1, 1929, is provided for as follows:

In 24 States the employer has the option of insuring his liability in a private insurance company or applying for the privilege of operating as a self-insurer. The following States come under this group: Alabama, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Minnesota, Missouri, Nebraska, New Jersey, New Mexico, North Carolina, Oklahoma, Rhode Island, South Dakota, Vermont, Virginia, Wisconsin, and District of Columbia.

In 11 States coverage is provided by carrying compensation insurance in a competitive State fund, in a private insurance company, or applying for the privilege of operating as a self-insurer. The States in this group are Arizona, California, Colorado, Idaho, Maryland, Michigan, Montana, New York, Pennsylvania, Tennessee (State fund-coal mining), and Utah.

In 5 States—Nevada, North Dakota, Oregon, Washington, and Wyoming—the employer must secure compensation in an exclusive State fund. In 2 States, Ohio and West Virginia, compensation insurance can be secured in an exclusive State fund or the employer can apply for the privilege of operating as a self-insurer. In Massachusetts and Texas the compensation liability must be covered by securing compensation insurance in a private insurance com-

pany, while in 1 State, New Hampshire, self-insurance only is provided. A summary of these statements shows that 37 of the 44 States having workmen's compensation laws afford the employer the opportunity of applying for the privilege of operating as a self-insurer.

In the islands of Porto Rico, Hawaii, and the Philippines, as well as the District of Columbia, self-insurance is allowed. The self-insurance privilige is also permissible under the longshoremen and harbor workers' compensation act.

It must therefore be conceded that the self-insurance privilege has a fixed place in workmen's compensation legislation, and no doubt carries a larger percentage of the liability under the workmen's compensation laws of the several States than any other individual group, classifying State fund, mutual, and stock companies as separate groups.

In the State of Pennsylvania the number of self-insurers during the year 1930 was approximately two-tenths of 1 per cent of the total number of employers coming under the provisions of the workmen's compensation act, which is comparatively small. During the year 1930, out of a total of 1,677 fatal compensation cases 904, or 53.9 per cent, were in the self-insurance group, while 30,834 of the 83,681 nonfatal compensable cases, or 36.8 per cent, were also covered by self-insurance. The compensation liability in fatal cases amounted to $3,297,213, while in the nonfatal cases the amount of compensation incurred was $4,007,601, or a total of $7,304,814. The total compensation liability for the year 1930 was $15,636,209, and the liability of the self-insurers' group was therefore approximately 47 per cent of the total compensation liability in the State.

The question of self-insurance naturally involves a credit proposition extending over a period of years, and while the financial strength of the applicant must necessarily be considered the most important factor, there are nevertheless a number of other matters that must be given serious consideration.

In most large industrial establishments self-insurance is conducted in connection with a general comprehensive plan for the financial and physical benefits of employees, including relief and retirement benefits, recreation, hospitalization, and general rehabilitation of disabled employees. In many instances self-insurers provide medical and hospital treatment far beyond the legal requirements of the workmen's compensation law. The employer's attitude regarding safety, the accident experience, promptness in reporting accidents and making compensation payments, cooperation in the administration of all laws affecting labor are questions which must necessarily be considered along with the employer's financial strength when applications for the self-insurance privilege are passed upon.

The application form should give a complete financial statement covering the applicant's business, including receipts, expenditures, pay roll, and annual profits for the three previous years, the accident experience, and total compensation liability, with a statement covering the outstanding liability at the time the application was filed, stating what provisions have been made to guarantee its payment. The self-insurance privilege should be granted only for a period of one year, and applications for renewal should be required each year.

It does not seem practical to adopt any fixed rule or regulation covering the granting of self-insurance, as each application should be considered on its own merits.

In the State of Pennsylvania it has not been deemed necessary to require surety bonds or other security in cases of many large employers with unquestioned financial resources; however, many applicants are required to furnish security approved by the bureau to guarantee the payment of any liability that may be or has been incurred under the provisions of the compensation law.

A number of large employers have subsidiary companies, and when an application from a subsidiary company is granted, the parent company is required to file an agreement with the bureau guaranteeing the payment of compensation liability, medical, hospital, and funeral expenses, within the limitations of the law, which may be incurred by the subsidiary company.

The success of the self-insurance provision of any workmen's compensation law depends largely upon the individual who is charged with the responsibility of handling this important work. He must necessarily be free from political or other influence in passing upon applications, must be conservative and at the same time have a keen knowledge of business affairs and be able properly to interpret financial statements. The services of some financial rating agency must also be available.

Some States require every self-insurer to deposit security when the application is granted, and there appears to be a tendency in many of the States to require every self-insurer to create a sinking fund in good securities equal to the amount of outstanding compensation liability and be ready, if called upon by the compensation authorities, to deposit such security with a bank or trust company under a collateral trust agreement with the compensation authorities to guarantee the payment of any outstanding liability. While this may be considered as a hardship by some self-insurers, nevertheless by establishing such trust funds self-insurers would only be using a portion of the money they would otherwise be required to pay for compensation insurance. The probabilities are that it will only be a question of time until this policy is adopted by all States in which the law provides for the self-insurance privilege.

Pennsylvania's experience with the self-insurance provision of the workmen's compensation law has been generally satisfactory. During the 15½ years the workmen's compensation law has been in operation there has not been a single default in compensation payments because of the failure of an employer operating as a self-insurer. The fact that a conservative policy along strict business lines has been followed is largely responsible for this record.

DISCUSSION

Chairman STACK. The discussion will be opened by Mr. George A. Kingston, of the Workmen's Compensation Board of Ontario.

Mr. KINGSTON (Ontario). I do not quite know why they selected me to lead the discussion on Mr. Horner's paper, because in a collective-liability jurisdiction such as we have in the Canadian Provinces self-insurance is not a factor in our work at all. Self-insurance is not allowed.

In anything I say I wish to avoid the appearance of either defending or praising the system in our jurisdiction or condemning the system adopted in any other jurisdiction, but I shall endeavor to analyze the various points of view which seem to have a bearing on the subject.

First, let me say that if every employer were of sufficient financial strength, self-insurance probably would be the ideal system. Before the days of the modern compensation law and before the days of the liability-insurance companies, every employer was a self-insurer. He had to be; there was no escape from it. The heavy drain incident to damage actions, however, naturally led to the business of insuring against this, and consequently liability-insurance companies came into the field.

Then about 20 years ago in America—earlier in Europe—there developed the idea of our modern compensation law as we have it today and one might say, speaking generally, this system is now universal but, of course, with much variation in various details.

The question of self-insurance under this modern type of law is one in respect to which there seems a wide variation of opinion.

Mr. Horner has divided the States into certain groups under specified headings, indicating how each group deals with the subject. In his grouping he has not included the Canadian Provinces.

I think, to make one broad distinction, I can say that in practically all the Canadian jurisdictions the collective-liability system is the rule, whereas in most of the American States the individual-liability system prevails, the liability being provided for by one of three systems of insurance, viz, liability company insurance, State insurance, or self-insurance.

In any individual-liability system it makes little difference, it seems to me, speaking from the worker's point of view, which of the three systems of insurance is adopted, so long as the administering board is satisfied of the stability of the insurance carrier.

Perhaps I am wrong in stating "so long as the administering board is satisfied." I rather feel I would go further and I do not know that I would leave it absolutely to the administering board. I think the law should provide something which will relieve the administering board of the responsibility. The administering board may look at some company that has been in existence for a great number of years and say, "Oh, yes, that is all right," and perhaps the application for self-insurance privilege is a perfunctory sort of matter. There is a recognition of substantial rights and privileges in the case without, perhaps, the fullest knowledge that ought to be secured by an elaborate examination.

From the employer's point of view it is largely an economic question tested by the question as to which is the most economical way to carry this liability, taking everything into consideration. The State fund people can easily show a very substantial economy in underwriting charges as against the liability-insurance companies, while the latter claim they give their customers a service which is worth the extra cost. The self-insurer on the other hand says he wants to run his own show; he is willing to pay his accident cost out of his own pocket, but does not want to be linked up with any other group.

I am not here to hold a brief for any one or other of these systems.

In a purely collective-liability system, however, the situation is quite different. We need the strong to help protect the weak. If we allowed the strong companies, that might well under an individual-liability system be allowed to be self-insurers, to break away from the group to which they belong, it is obvious that the group might be so weakened that one or two major accidents would be disastrous.

From the very start of the act, therefore, though at first strongly urged to do so, we said we will not allow any firm or industry which properly comes under Echedule I to withdraw from the group to which it properly belongs.

We, of course, permit a transfer from a certain class or group to what seems to the board a more appropriate group.

I can say, therefore, that self-insurance, as it has come to be understood in practically all the State jurisdictions, is not permissible at all in any of the Canadian Provinces.

I should make this statement, however: We have under our act what is known as Schedule II industries. This schedule includes the large public service corporations—railway and navigation companies, telephone and telegraph companies, public utilities commissions, municipal corporations and school boards, etc. Under this schedule the individual-liability system prevails. They can do as they wish about insuring their liability or carrying the liability themselves.

It was not regarded that the reason for adopting the collective system had any application to those comprised in this schedule, because with these public service corporations, practically speaking, all sums payable for compensation, same as wages, form part of the working expenditure which is a first charge on revenue.

With the municipal corporations the inherent power of taxation seems to provide the necessary security. As a matter of fact, however, a very large number of our smaller municipalities and public utility commissions have applied to our board to be grouped under our collective system, and as if anticipating that this would happen, provision was made in the act to permit such transfer from Schedule II to the appropriate class or group in Schedule I, which is the collective group.

I can not do better, perhaps, than quote the words of the late chief justice of the Province of Ontario, who was responsible for the framework of our act. In his report to the Government dealing with various features of the then proposed law on this question of providing for individual liability under Schedule II he said:

> The inclusion of the railways in Schedule I was opposed by the principal railway companies, and I saw no reason why their wishes should not be met, if by meeting them the act would not be rendered less beneficial to the employees and no injustice would be done to the employers in the industries included in the schedule. The draft bill has been framed so as, in my opinion, to work no injustice to anyone and not less beneficially to the employees, owing to the railways being excluded from the schedule.
>
> The only difference between the operation of the act as to industries in Schedule I and those in Schedule II is that employers in the former contribute to the accident fund and in that way pay collectively the compensation, while employers in the latter do not contribute to the accident fund but are liable individually for the compensation payable to their employees. In other respects the operation of the act is the same in both cases. If it had been practicable

to do so without impairing the efficiency of the collective system I should have preferred to include a larger number of industries in Schedule II in order that, with the two systems working side by side, experience might demonstrate whether the collective system or that of individual liability was preferable, but I have not been able to satisfy myself that the exclusion from Schedule I of any considerable number of industries included in it would not impair the efficiency of the collective system.

As to how this question of self-insurance is handled in some of the American jurisdictions, I recently sent out a questionnaire to a few of the State compensation boards and it may be of interest to note in this record some of the varying ideas.

In Ohio which, though an individual-liability State, has the exclusive State fund system of insurance, there are about 200 self-insuring firms out of approximately 43,000 employers. The financial standing of the self-insuring firm must be satisfactory to the board, and there must be sufficient pay-roll exposure to warrant the company's having an organization familiar with workmen's compensation procedure to handle accidents properly and promptly but there is no definite rule as to the extent of the financial standing or as to the extent of the pay-roll exposure—apparently there is no bond requirement.

In Massachusetts they have no State fund and no self-insurers so called. There are no carriers of insurance in this State other than the insurance companies, but a few large concerns like the Bethlehem Steel Co., and the Boston Elevated have formed within themselves a mutual insurance company. In effect these are self-insurers, but they are subject to the rules and laws of the insurance commissioner of the State, must maintain their reserves, and do their business the same as any of the regular line or mutual companies.

In Connecticut self-insurance is permitted, but it is purely a matter of discretion with the commissioner as to whom the privilege is issued. He must consider not only whether the company is financially strong enough at time of applying for the privilege but whether it will probably be so for an indefinite time in the future. No bond or deposit of securities is required.

One naturally wonders in these difficult days that are now upon us what is just around the corner in this regard. Many concerns that we thought a couple of years ago were as solid as the Rock of Gibraltar must be finding the going heavy, and I should think it a wise condition to be imposed on an applicant for self-insurance in any State that a satisfactory bond, or some other form of security should be deposited with the board to insure the payment of its compensation obligations for all time.

It would certainly make very unpleasant reading to have it said that any self-insuring firm in any jurisdiction was obliged to make default in its compensation payments. I am sure we all hope that nothing of this sort will happen.

In the State of Virginia self-insurance is granted to any firm applying that can meet the following conditions: It must be (*a*) a dependable concern with a proper motive prompting self-insurance, with a possibility of a sufficient permanancy of operation to justify this privilege. There must be (*b*) a sufficient number of employees with a corresponding pay-roll exposure; (*c*) a favorable experience within the State from an accident standpoint; (*d*) ability promptly

to meet compensation awards in the manner and method prescribed and to discharge other liabilities incurred; (*e*) an efficient organization to handle within the State all claim matters, with full authority to act; (*f*) a satisfactory plan for the providing of medical, surgical, and hospital attention, including a permanent first-aid station, if necessary; (*g*) ability to deposit security guaranteeing liabilities of the company, in amount to be determined by the commission.

In the State of Utah, the self-insuring privilege is made subject to fairly stringent provisions. The application must be accompanied by the most recent financial statement of the company and a certified copy of a resolution of the board of directors of the company which authorizes the agent signing the application to do so. Coal companies so applying are required to put up collateral security for the payment of the first $50,000 of compensation due to catastrophe, and in addition to this the company is required to secure unlimited insurance in excess of the amount required deposited from some surety company.

In North Dakota, which is an exclusive State fund jurisdiction, practically the same conditions apply as in the Canadian Provinces. Self-insurance is not permitted nor is any insurance company allowed to do any workmen's compensation business within the State.

In California the question of the right of the commission to control and impose conditions in respect to self-insurance came before the Supreme Court of the State. The decision was that the commission had full power in regard to these matters. The practice of the commission with respect to this branch of their work is stated as follows:

When an application for self-insurance is filed, the industrial accident commission has an investigation made of the financial status of the applicant. If the status is found to be poor or unstable in any respect the commission can set a minimum bond requirement so high that regular insurance becomes necessary for the individual or the firm. We insist in this State on a minimum bond of $30,000, or first-class securities of like amount, deposited with the State treasurer and subject to the call of the industrial accident commission. This is the minimum, and we have the right to go as high as we want, in order to make sure that widows and their dependents and injured men will not suffer. We insist upon a uniform application of the minimum requirements. In other words, the Standard Oil Co. and the Southern Pacific Co., and other similar large corporations, have to put up $30,000 bond or securities exactly as does John Smith, contractor, or William Brown, machine-shop owner. By following this plan, we prevent any charge of discrimination, because, as a matter of fact, some of the large corporations could meet all the obligations that would arise without question. Another reason we advance is that no one knows just what is going to happen, and especially these days, to an individual employer or a corporation seemingly in the finest financial condition.

Our California correspondent then makes this general observation:

The weak point about self-insurance is the possibility of the employer not living up to the spirit as well as the letter of the law. It is easier under self-insurance to save money as an outcome of failing to pay the full amount, scaling in some way, or offering the injured man a job for the purpose of tiding him over the limitation period. The instances of this that have come to our attention have been small in number and, of course, not all of the insurance carriers are up to a 100 per cent standard. Naturally, a large group of self-insurers will include a few that are not as scrupulous as might be desired. On the other hand, the self-insurers are apt to observe the safety requirements and to do everything possible to prevent injuries overtaking men, because this represents a direct financial saving to the self-insurer.

In Wisconsin, the provision regarding self-insurance or as it is called in this State "exemption" is stated in rule 16:

As a condition for an exemption, deposit of securities, a surety bond, or both shall be required in the following cases:

Persons and partnerships—

1. Where the net resources, exclusive of exemptions, are less than $25,000.

2. Where the net resources, exclusive of exemptions, do not equal $1,500 for each employee up to 20 in number, and $400 for each additional employee up to 50 and $100 for each additional employee.

3. Where the liabilities, exclusive of capital, exceed 75 per cent of the resources, excluding exemptions.

The industrial commission reserves the right to require a surety bond, or a deposit of security, in individual cases, regardless of the amount of net assets.

On January 1, 1931, there were 310 exemption orders in force in the State with respect to individual firms, but in addition to this a blanket exemption order has been issued for all banks and trust companies operating under the authority of the State or National Government, also for all counties, cities, towns, villiages, and school districts.

Those employers in Wisconsin to whom an exemption order has been given and thus take care of their own liability are for the most part the larger ones and these in most cases have a safety department giving special attention to compensation matters. The commission reserves the right to revoke the exemption in any case if any employer fails in any material regard to take care of this liability, or if the firm gives indication of an attitude in respect to its compensation obligations that is regarded as unwholesome.

I should like to incorporate in the record something which I have here. New York has issued a very complete set of rules regarding self-insurers and I think it would be well, if Doctor Hatch offers no objection, to incorporate these rules governing self-insurers in the record.

I wish to point out here, also, that if anyone has occasion to study this subject further, our good friend, Mr. McShane, made a very valuable contribution to this subject of self-insurance at the Hartford convention, which is in Bulletin No. 432 (p. 172). Mr. McShane has very ably grasped the subject, and what he has said makes very interesting reading in connection with a study of this subject.

Summing up, therefore, I would say this: I do not believe there should be any privilege of self-insurance in any jurisdiction unless there is in the law a provision making certain definite requirements, and one of those requirements should be that in any liquidation proceedings compensation obligation should be a preference claim.

As I pointed out, none of us knows just what is going to happen in the near future with reference to quite a number of firms that we have come to regard as perfectly solid financially in every way. We are concerned here with the question of compensation from the workman's point of view, not the employer's point of view.

All of these compensation acts should be studied and interpreted from the employee's point of view and we must not lose sight of that, so anything we say or do or urge in the way of amendment or tightening up of provisions should be toward the greater security of compensation in favor of the injured workman. I would say then

that there should be in every State (I do not suppose it is in many of the States yet) provision that compensation obligations shall be a preference claim in any winding-up procedure.

I have great doubt, too, as to the wisdom of relieving any employer from liability merely because he insures. Some insurance companies are no stronger than a great many of the employer companies that many of you would say are eligible for self-insurance. If the employer is to be relieved of liability merely because he insures, then you are substituting one liability for the other and one may not be any better than the other. I think there should be a reservation, notwithstanding insurance coverage, so that there may be a liability in the event of the insurance company's failing, and, as I said at the outset, I do not believe the responsibility should be assumed or put upon any of our administering boards for granting a compensation or self-insurance privilege without the actual deposit of securities that you can put your hands on in the event trouble develops.

I will add one word, that self-insurance should never be allowed to any concern that has not very large substantial assets in the country. I do not mean the type of assets included in a building contractor's plant. I mean a manufacturing concern of very, very substantial proportions, that has tangible assets beyond all question. In considering the question of assets I do not think, if you are going to deal with the question of assets at all in sizing up a company's ability to pay its obligations in the future, that much should be allowed for good will. I do not think that should be included in the company's statement of assets and liabilities.

Rules Governing Self-Insurers Under the Workmen's Compensation Law of New York

The workmen's compensation law provides a method (subdivision 3 of sec. 50) by which an employer may arrange for the payment of compensation claims by himself. Employers granted this privilege by the industrial commissioner are classified as self-insurers.

Rule 1.—*Application*

Every employer desiring to become a self-insurer shall make application for such privilege on a form provided by the industrial commissioner. This application shall contain (*a*) a pay-roll report for the preceding 12 months; (*b*) a sworn itemized statement of the assets and liabilities of the employer; and (*c*) a description of the safety organization maintained by the employer within his establishment for the prevention of accidents. If upon examination of the sworn financial statement, the industrial commissioner is satisfied of the ability of the employer to make current compensation payments and that his tangible assets make reasonably certain the payment of all obligations that may arise under the workmen's compensation law, the application will be granted subject to the conditions hereinafter provided.

Rule 2.—*Filing of Agreement*

The employer shall execute and file with the industrial commissioner an agreement in form prescribed and provided by the industrial commissioner agreeing (*a*) to pay to his injured employees and to the dependents of deceased employees, from time to time, all compensation as required by the provisions of the workmen's compensation law; (*b*) to deposit with the industrial commissioner securities in amounts as hereinafter provided; (*c*) to pay annually his share of the expense of administering the workmen's compensation law as provided in section 126 thereof; and (*d*) further providing that the industrial commissioner may sell any part of such securities and from the proceeds thereof pay any compensation obligations and any administration expense imposed by law which such employer may neglect or refuse to pay.

RULE 3.—*The Deposit Required*

The employer shall make an initial deposit with the industrial commissioner of securities which shall be equal in amount to not less than one year's premium in the State insurance fund at manual rates, such premium to be based on the employer's pay roll for the preceding 12 months. No such initial deposit of securities shall be less in amount than $15,000 par value. No such initial deposit shall, unless in special cases as the industrial commissioner may determine, exceed in amount $50,000. Such securities shall be transferred to and stand in the name of the industrial commissioner of the State of New York. Interest upon such securities shall be collected promptly by the industrial commissioner and shall be paid over to the employer so long as such employer be not in default on payments of compensation.

RULE 4.—*Kinds of Securities*

The employer shall deposit with the industrial commissioner securities of the kind specified in subdivisions 1, 2, 3, 4, 5, and paragraph (*a*) of subdivision 7 of section 239 of the New York State banking law. Among the securities that will meet the requirements of this rule are United States Government bonds, New York State bonds, New York City bonds, or the bonds of any city or county of this State which has been authorized to issue such bonds by an act of the legislature. Surety bonds will not be acceptable.

RULE 5.—*When an Additional Deposit May be Demanded of an Employer*

The employer shall file with the industrial commissioner semiannually a sworn statement of his accident experience for the six months ending December 31 and June 30 of each year; also a statement of all outstanding death and disability claims, as provided in paragraph (*d*) of rule 8. If examination of such statement shows the outstanding liability of the employer for unpaid compensation to equal or to approximate one-half of the amount of securities on deposit, the employer, on demand, shall deposit with the industrial commissioner within the time prescribed by the latter sufficient additional securities of the same character as required for the initial deposit to equal in amount the present value of all unpaid compensation in death claims and in disability claims wherein the period of disability equals 104 weeks or more.

The industrial commissioner shall also have the right at any time to require the deposit of additional securities in the event of a catastrophe or a change in conditions of the employer, either with respect to the financial condition of the employer, his outstanding liabilities for unpaid compensation, or an increase in the pay-roll exposure.

RULE 6.—*When Amount of Securities May be Reduced*

When the total amount of securities on deposit with the industrial commissioner (exclusive of the initial deposit) shall exceed the outstanding liabilities for unpaid compensation in death claims and disability claims of 104 weeks' or more duration the employer may make application to the industrial commissioner for the return of such excess security. The industrial commissioner shall determine whether the return of such excess securities is advisable.

RULE 7.—*Withdrawal of Securities*

An employer discontinuing business in this State or desiring to arrange for the payment of his compensation claims by one of the other methods provided by law may apply to the industrial commissioner for the return of the securities deposited by him. Such employer shall file a sworn statement of (*a*) all of his outstanding liabilities for compensation; (*b*) all pending claims for compensation; and (*c*) all accidents occurring in his establishment for a period of six months prior to the date of such application.

The industrial commissioner shall have the right to retain all or any of the securities for a period of 26 months from the date when the employer ceased to be a self-insurer or for a longer period pending the final disposition of outstanding claims.

A deposit in the aggregate trust fund made pursuant to section 27 of the workmen's compensation law shall be considered a final disposition of a compensation award.

RULE 8.—*Reports to be Filed*

Reports upon forms provided by the industrial commissioner shall be filed by self-insurers as follows:

A. Itemized sworn statement of the employer's assets and liabilities shall be filed annually as of the close of the employer's fiscal year.

B. A classified pay-roll report shall be filed upon the first day of January and the first day of July of each year showing the pay roll for the preceding month, but the industrial commissioner shall have the right at any time to ask for and receive promptly a pay-roll report for any given month.

C. A sworn statement of the employer's accident experience for the six months ending December 31 and June 30 of each year.

D. A sworn statement of all outstanding death and disability claims, as of December 31 and June 30 of each year.

E. A sworn statement of compensation payments made by the employer for the quarters ending September 30, December 31, March 31, and June 30 of each year shall be filed within 15 days after such dates.

RULE 9.—*Examination of Employer's Financial Condition*

The employer shall permit the industrial commissioner, or his duly authorized representative, to make an examination of the employer's assets and liabilities and of his books of account for the purpose of verifying any financial statement submitted. The industrial commissioner may in his discretion accept the report of a certified public accountant as proper compliance with this rule.

RULE 10.—*Forms That Shall be Used*

It is imperative that the forms provided by the industrial commissioner be used in making reports.

RULE 11.—*Revocation of Self-Insurance Privilege*

The law gives the industrial commissioner authority to revoke the privilege of self-insurance at any time for good cause shown. Failure to comply with any of the foregoing rules or with an order or direction of the industrial commissioner within the time prescribed therein may be considered good cause for revocation. Disregard of any of the provisions of the workmen's compensation law as to the time and method of compensation payments, the furnishing of medical treatment, or the filing of all accident and compensation reports may also bring about such revocation.

Mr. BOWMAN (Kansas). The speaker said he did not think the employer should be relieved of liability if he carried workmen's compensation insurance.

Mr. KINGSTON. I meant company insurance. If an employer insures in some old line insurance company—there are dozens and dozens of insurance companies, and I know some of them are very strong, but others that are not so strong have a permit to do insurance—he should not be relieved of his inherent liability.

Mr. BOWMAN. Is he ever relieved?

Mr. KINGSTON. I may be wrong; I thought he was. I am glad if I am wrong.

Mr. BOWMAN. We have had two cases of the insurance company going into the hands of a receiver, and I was going to write letters and say "Look to the employer."

Mr. KINGSTON. Was there not some question raised in California? There were three or four liability companies that failed in California, and it was reported about the unfortunate people who lost their compensation by reason of the failure of the insurance company.

Doctor HATCH (New York). The employer would not be able to pay it.

Mr. McSHANE (Utah). I want to ask one question. As I understand it, in most of the jurisdictions of the United States in all cases of insurance the employer is primarily liable and the burden is passed to the insurance carrier only so long as he is solvent. In the case of insolvency of the insurance carrier, it falls back on the original employer. I think that is the general rule in our jurisdiction. I should like to see a show of hands of the different States where that is the rule. [About 20 hands were raised.]

I want to make one observation regarding one of the last paragraphs of Mr. Horner's paper.

> Some States require every self-insurer to deposit security when the application is granted, and there appears to be a tendency in many of the States to require every self-insurer to create a sinking fund in good securities equal to the amount of outstanding compensation liability, and be ready, if called upon by the compensation authorities, to deposit such security with a bank or trust company under a collateral trust agreement with the compensation authorities to guarantee the payment of any outstanding liability.

I want to call attention to that last sentence. We tried the following scheme in our State: We require every self-insurer to set aside annually the amount of money that he would pay, based on his pay-roll exposure, into the State insurance fund. One of our insurance carriers built up a nice little surplus of about $100,000 this way, and along came the secretary of the treasury with an investigator and he would not let that money be used for the purposes for which it was set aside without taxing it as excess profits, and it rather discouraged that feature in our State.

Mr. DUXBURY (Minnesota). I wanted to say something when that question was being discussed. I thought Mr. Wilcox's point of order was going to be raised. We were discussing the question of self-insurance and not questions of liability of the employer when an insurance company fails, but I think, as the show of hands indicated, generally the employers would be liable if the insurance company failed. It would, however, I think, be an opposite expression to say it would not be liable for any more.

Mr. HOAGE (Washington, D. C.). I have had two occasions within the last two weeks to take action on cases where insurance companies who had written certain risks have failed and I got notice that they had gone into the hands of receivers and were unable to pay their liability. I immediately wrote a new order holding the employer liable for the payment of compensation in the case and filed such an order in the case and I expect him to comply with it.

Chairman STACK. Is the deputy commissioner administering the longshoremen's act and also the workmen's compensation act?

Mr. HOAGE. It is the District of Columbia workmen's compensation act, and the longshoremen's act is handled by our agent. I am responsible for the administration of the District of Columbia act, and twice within the last two weeks I have had occasion to take such action.

Mr. WILLIAMS (Connecticut). I do not know all the statutes of all the States, but so far as I do know the employer's liability is the primary act, and if he wants to get cheap insurance, he is likely to find out it is not very cheap, because he has to pay. I have had occasion to call the attention of several corporations to that interesting

fact, and they were pretty mad about it sometimes but they all came across.

We have, and I suppose every State has, a provision that compensation payments have the same status, in case of failure, as wages within four months, so that they underwrite everything except actual mortgage bonds.

There is one suggestion which I wish to make which seems to me useful for other States to consider. When we first started out in 1913, we prepared a questionnaire which is confidential, and each self-insurer had to tell us who the three leading stockholders were and the amount of stock they had. I remember one concrete illustration. One very rich and very solvent concern thought that was a piece of impertinence, and one of the officers came around to see me and said, "Of course, the board of directors among them hold the majority of the stock."

I said, "That is what I want to know. I know you people live here, and if I found each of you had a few qualifying shares and the control if it was kicking around Wall Street, it would make quite a difference."

While we never tell anyone about it, we want to know who owns the stock and what kind of people they are and how much they own, and since 1914 no one to whom we have granted the privilege as a self-insurer has left any workman or his dependents in the lurch, while in the meantime several insurance companies have gone into the hands of receivers.

Mr. BROWN (Idaho). I am here to get as much help as I can, not to put forward something that perhaps is better than others, but I want to state our method, and since this has not been noted in the different States, I wonder if what we are doing would pass muster. I should like to have personal opinions, personally or publicly, concerning this.

In Idaho we make no difference between self-insurers and company insurers concerning the requirement as to placing with our State treasurer bonds covering all liabilities. If any company wishes self-insurance, we require it to put up $15,000 in bonds, either State, municipal, or national bonds that are absolutely good—that is the minimum—plus 5 per cent of its annual pay roll.

That is the first requirement. Then, from year to year as these companies go on in their work, the rule that applies to them and also to insurers is that there shall be deposited in the State treasury enough bonds of a like standard to cover all their current liability for compensation continuously.

That practically has proven satisfactory to us and I am wondering whether or not it is a proper procedure.

Mr. KINGSTON. I should say Idaho is to be congratulated.

Mr. BOWMAN. The title of this paper is What Should Be Required of Self-Insurers? What difference does it make as to what should be required of self-insurers, or in the case of insurance companies wanting to be insurance carriers, unless the commissioner having the administration of the workmen's compensation act can force them to comply with those requirements? What are you going to do when an employer who is automatically under the workmen's

compensation act or who elects to come under the act does neither—does not procure workmen's compensation insurance nor qualify as a self-insurer?

Chairman STACK. Do you mean you can not punish that man?

Mr. BOWMAN. The Kansas act requires all those things but it does not say that those who fail to do them are guilty of a misdemeanor or a felony and can be punished for it. A commission is not a court. How are you going to require it?

I pass on all the applications of self-insurers, but I hear cases where they have neither insurance nor the privilege of self-insurance—that is, they have not availed themselves of it—but yet they are automatically under the act.

Chairman STACK. In Delaware it is a misdemeanor.

Mr. STANLEY (Georgia). You ought to have the Georgia law. Under the Georgia law not only is he guilty of a misdemeanor, but the commission adds 10 per cent to the compensation payable immediately and fixes an attorney's fee of $150 to $500 to be paid by the employer. That will get him. That is what we do and the courts have upheld that.

Our self-insurers in Georgia have worked very satisfactorily with the commission. We have no complaint against the insurance carrier, but the largest employers are self-insurers. Take the Bell Telephone Co., represented by Mr. Sharp from my State; it pays three months, entire medical expenses and $250 funeral, which is two and one-half times greater than our act requires.

We have another large employer in Georgia who recently finished paying a hospital bill of more than $20,000 in one case and gave the man a bonus of $5,000 after paying $5,000 compensation. It sent instructors who instructed him in accountancy, and in addition built an automobile for him that made it possible for him to operate the clutch with his hands instead of his feet.

We have never had a case appealed from the commission to the court by any self-insurer in Georgia. We require every self-insurer, except public utilities, to put up a bond. We do fix a bond as high as $15,000. Our minimum is $5,000. We have had to collect under but one bond in the 10 years we have been operating. One concern failed and we collected nine thousand and some dollars and that is the only trouble we have ever had.

Mr. BOWMAN. I want to ask the gentleman from Georgia what do you do if a lawyer, or doctor, or minister, a merchant, or any other individual, hires one carpenter to make repairs on a house that he has rented, and the man falls off and gets killed; the death liability is $4,000, and the lawyer, doctor, preacher, or other individual never knew he was under the workmen's compensation act. Also in the case of one painter who is employed to paint the roof of a garage, how would you handle that?

Mr. STANLEY. He would not be under our law at all.

Mr. KINGSTON. Nor under our law.

Mr. HOAGE. That is casual employment under some laws.

Mr. WILCOX (Wisconsin). We have varying provisions from State to State as to who are compensation employees. Just what you are

going to do with those cases you will have to work out for yourselves. There ought to be some way to compel every man to comply with the law and do the things that he should to secure the payment of compensation.

Aside from Massachusetts, I think every State has to meet this question of self-insurers. I think, Mr. Parks, that you do not have to do that because you do not allow self-insurers, but every other State, even those with compensation funds, I think, has to meet it, and the question is one of trying to be sure that this fellow is financially responsible and is going to carry on to the end. We have various ways of doing that—by bonds, by cash deposits, by faith or good will, Mr. Kingston, or a good-looking face and things of that sort. Those are all things that tend to convince you of their ability to carry through to the end. With their reports of what their tangible assets are and legislation, it is perfectly simple to get through with them.

I have this suggestion, as Mr. Williams made one. I think, as a sort of handmaid to this power of compensation, every State ought to have the right on any occasion to require an employer, or an insurance company for that matter, to pay the full amount of the compensation, if not to the injured man (and that perhaps should not be), then into a bank, a trust company, or somewhere so that when you have granted an exemption to a concern, believing that it is going to carry through, and you see that because of depression or otherwise, it is slipping, you will not be told, as you may be told in some of the States of this country, that you can not compel the payment of a lump sum. I submit that that is one of the times when you ought to be able to direct the payment of lump sums and do it right on the spot.

Chairman STACK. Delaware practice has been very similar to that of Georgia.

Mr. WILCOX. I want to suggest another thing for Mr. Bowman as a means of getting any of these fellows, when you find them, to comply with the law, and that is a simple injunction proceeding that is known in every State. Let your act provide that when men do not comply with the law, you may obtain from the court an injunction against their employing men. If that is written into your law, you will not be worried about a lot of these things.

Mr. BAKER (Kansas). Along with the suggestion of Mr. Wilcox. We do not have any power to compel compliance with a requirement in the Kansas act with reference to qualifying as a self-insurer, yet we do use one argument—whether or not it is sound I do not know, but we use it as an endeavor to get employers to comply—we tell them they are not complying with the requirements, and that may be construed as an election not to operate under the act, and if that is the case they will be subject to common-law liability without common-law defense as provided in the act. Often by using that argument we force compliance in some cases, but not all.

Chairman STACK. Do you have such a section in the Kansas law, or is it merely a matter of passing this?

Mr. BAKER. It is merely an interpretation on our part.

Mr. LEONARD (Ohio). I believe in Mr. Kingston's remarks he said Ohio did not require a bond in some cases. We are very strict about

the matter of bonds for self-insurers. When the fund started I think the bond was $5,000. We had 1,500 self-insurers. It was raised to $15,000, and now the minimum is $25,000. In the old days our power companies and transportation companies were allowed to carry self-insurance without a bond, on the theory that they were regulated by the public utilities commission, but to-day we require a bond of every self-insurer.

I might say, too, that it is a pretty good thing to watch consolidations that are being made. We have run up against a couple of propositions where a company has taken over another company and said, "We didn't take over the compensation liability," and we make the company through the board of directors take action to see that this fund is protected.

Also I might say that some of the self-insurers are in a rather peculiar position. Before they had no difficulty in securing an insuring fund. Our minimum bond is $25,000. A company we thought was very responsible made application for self-insurance on the first day of last July. A couple of weeks ago Mr. Evans came down to see us and said this employer was unable to get a bond from the surety company. We asked what the matter was, and he said the surety company wanted the employer to give securities equal to the amount of the bond, and consequently that company was without insurance from July 1 to two weeks ago. It might be a good thing for your self-insurers in different States to see that when they renew their bonds they can get them without putting up securities equal to the amount of the bond.

We try to look at each company's financial statement and, of course, sometimes that does not mean so much, but we do require this minimum bond of $25,000, delivered when the company puts it up to the commission.

We had a power company which went out of business when insured under the Ohio act. We made an award against that company for a certain sum, and the question with us now is, Who is going to pay it? I think the State fund will eventually pay it because, under the Ohio plan of registry, power companies and some transportation companies are allowed not to give a bond, but we look primarily at the interest of the worker to see that he is protected and especially at our fund.

We have had very little trouble with the self-insurer, if he does not pay within a reasonable time, the matter comes up with the revoking of his right of self-insurance. We have very little trouble in Ohio with self-insurance.

There was considerable agitation in the legislature against self-insurers, and a self-insurer asked me what the attitude of the commission was toward self-insurance, and I said, "You fellows will live as long as you come 50 per cent of the way." That is what we are doing in Ohio, and many large employers are going more than 50 per cent of the way. As long as a self-insurer adopts that policy, he is going to have the privilege of carrying his own insurance in Ohio.

Chairman STACK. In considering an application for self-insurance in Ohio do you attach any importance at all to the applicant's average daily bank deposits?

Mr. LEONARD. Mr. Evans is a Welshman, first cousin to a Scotchman, so he looks the application over pretty carefully, and the financial statement is taken into consideration. I remember that Mr. Klaw came to Ohio. Du Pont took over three or four companies and Mr. Evans had a bond of $25,000 against each company, with small exposure. He said, "Well, that is too much money. You haven't as much exposure."

I said, "Suppose we cut it to $50,000," and I think that is a reasonable thing. The Du Pont Co. could carry its own insurance without a bond, but we made it $50,000.

In the self-insuring proposition I think the different funds should play safe, and it had better go the other way rather than not get enough.

Mr. WILCOX. How do you vary the bond on up from $25,000?

Mr. EVANS (Ohio). Our minimum bond is $25,000. That always applies, and if the employer's annual premium is based on the State-fund rates, he is required to supply an amount equal to 50 per cent of his annual premium. We have some cases as high as $50,000. We do not recognize the size of the company—that is, when it comes to deciding on the security or the protection of the injured worker—feeling that the larger the company the greater is the liability and the greater the need for bonds.

I might say also that our bond is for each year. If an employer operates for 10 years as a self-insurer, he has a $25,000 bond for each 12 months of the 10-year period, or in 10 years he would have a bond of $250,000; that is, where we are accepting surety bonds. If we accept collateral or Government bonds, we require a minimum of $25,000; then each year we make an inventory or a survey of his outstanding obligation and he must put up additional bonds so as to cover all of his deferred obligation, and we will have a $25,000 clear bond to meet the ensuing 12-month period for which he is granted authority to pay compensation.

Chairman STACK. We will hear from Doctor Hatch.

Doctor HATCH. I was going to call attention to the subject, "What should be required of self-insurers," and I was going to emphasize something rather elementary if we change the question to "What should be required of a board or commission which permits or supervises self-insurers?" That is eternal vigilance, because you are dealing with two very variable quantities, one financial ability to pay on the part of the employer, and the other the liability. Those things change and vary as time goes on, and even though you may have the authority under the law to require at any time a self-insured employer to pay into a trust fund all his outstanding obligations, you still have the problem of finding out whether it is necessary to take that action before his financial condition may be such that he can not pay it. There is where the rub comes in, that a self-insurer may run into inability to pay the obligations before even he may be aware of it.

So in New York our principle is that self-insurers are under the strictest requirement to furnish current and repeated information both as to their financial ability and their liability, and the requirement as to securities is readjusted, not so as to prepare in a general

sort of way for contingencies, but to be absolutely sure you have all the securities there in case of insolvency arising.

Chairman STACK. Do you mean repeated examinations, that you would make them more than once in six months?

Doctor HATCH. They have to report quarterly in New York. Who can afford to do it any less frequently? Here is an employer fairly large who suddenly has a catastrophe, as we call it, and kills four or five workmen. His liability is suddenly shot up to a peak and you have to readjust it as to pensions for wives and other dependents. You have to readjust the security of that employer promptly and drastically.

Mr. HORNER (Pennsylvania). In Pennsylvania we take the position that an employer who is not strong enough financially to be granted the privilege of carrying his own risks without depositing security should not be granted the privilege of operating as a self-insurer. When that application is renewed, or if at certain times during the year we find the employer is slipping and there is any question as to liability, we require him to deposit security to cover his liability. In the last year one company operating as a self-insurer was required to deposit $200,000 to cover its liability because the record showed that company was slipping and it was necessary. We follow that practice in Pennsylvania. An employer should not be granted the privilege of self-insuring unless he is strong enough to assume that obligation.

Chairman STACK. Mr. Charles E. Corbin is deputy commissioner of workmen's compensation in New Jersey. Perhaps there is not a better authority nor one better qualified to speak on Status and Relationship of Total and Partial Dependents and How Determined.

Status and Relationship of Total and Partial Dependents and How Determined

By CHARLES E. CORBIN, *Deputy Commissioner of Workmen's Compensation of New Jersey*

This is probably the most serious aspect of the compensation statute, because it involves the most serious damage to society, inasmuch as it is always the result of a death which has occurred and oftentimes leaves a widow and minor children destitute, whereas in most other accidents only a partial disability occurs and the man is able to get back to some sort of earning power.

The State of New Jersey has divided dependents into two general classes—total dependents and partial dependents. In the former group are included the widow and children under the age of 16 (unless the child is crippled or unable to earn its own livelihood, in which case the dependency age limit of the child does not apply and said dependent receives compensation for the 300 weeks). The New Jersey act provides that "the term 'dependents' shall apply to and include any or all of the following who are dependent upon the deceased at the time of accident or death, namely, husband, wife, parents, stepparents, grandparents, children, stepchildren, grandchildren, child in esse, posthumous child, illegitimate children, brothers, sisters, half-brothers, half-sisters, niece, nephew. Legally adopted children, in every particular, are considered as natural children."

One of the difficulties in determining whether or not the dependency is total or partial arises when the alleged dependents are not members of the decedent's household at the time of his death and do not come within the conclusive presumption of dependency established in the act. In the case of those who are part of the decedent's household at the time of his death, dependency is conclusively presumed as to the decedent's widow and natural children under 16. An example of this type of dependency which gives rise to so much question is the case of members of the family who reside in foreign countries at the time of decedent's death in this country.

In figuring the question of partial dependency, a great deal of trouble is encountered. For instance, in the case of the death of a son whose father is working, it is difficult to decide how much the family was dependent upon the earnings of the son. One must take into consideration, in fixing or attempting to fix the dependency, that the expenses and maintenance of the deceased while living must be deducted. This sum, which was necessary for the upkeep of the decedent, subtracted from the amount he contributed, represents the amount of the dependency.

In the State of New Jersey the law as regards the question of partial dependency is that "compensation shall be such proportion of the scheduled percentage as the amount actually contributed to them by the deceased for their support constituted of his total wages," which, if worked out simply, is the scheduled percentage of the amount of money received by the dependent or dependents above that necessary for deceased's own expenses or maintenance.

In the cases of partial dependents we have found that perhaps the simplest and maybe the most exact way in which we can determine the amount of dependency is by adding up the entire income in the household and then dividing it by the number of members of the household. That will give us the expenses of the deceased which will be deducted from his wages, and the balance of his contribution from his wages is the amount of loss sustained by the dependents. The compensation then would be fixed by the scheduled percentage in accordance with the act. This, of course, is not an ironclad rule to be followed, because we often find that one deceased will not have contributed his entire salary beyond his maintenance and also we may find that some of the dependents do not demand the same amount of expenditure as others.

Another method that we have followed is to add up the entire expenditures of the household, such as for rent, food, clothing, and so forth, and finding out from that cost how much was payable by the deceased. It is practically impossible to fix an invariable rule as to how to determine proportion of dependency. It is in the last analysis mainly a question of fact, and much importance rests with the testimony of the witnesses and with the opinion of the commissioner hearing the case as to how far these witnesses can be believed in their statements of costs and expenses. We have experienced much trouble when it comes to the dependency of foreigners. For example, in the case of a son making certain contributions to his family in a foreign country, we must consider not only the testimony of witnesses who are practically illiterate, which is almost always submitted on deposition, but also we must consider the weight of proof as to how

much money was sent over as a matter of fact. We may find that the deceased has sent money in letters, or by money order, or by friends, all of which facts are very often rather hard to prove, making it difficult to determine the amount that was actually sent.

After all, in fixing the amount of dependency, the burden of determining the reasonable amount of contribution falls upon the commissioner hearing the case after he has assembled all the facts submitted to him. In fact, ludicrous as the situation may appear, we frequently have cases where, according to the testimony on behalf of the petitioner, the deceased actually contributed to those alleged to be dependent upon him more money than he was, as a matter of fact, earning.

Another question arises in the case of a wife who has been deserted by her husband. Unless she has acquiesced in the desertion, the court will invariably find that she is actually totally dependent upon the wages and earnings of the husband for support even though, as a matter of fact, she may not have been receiving it. The theory back of this is probably the fact that under the law of the State of New Jersey a husband must contribute to the support of his wife and children, and if he does not do so the wife not only may take an action against him in the court of chancery for separate maintenance or divorce with alimony, but also she may maintain a criminal action against him for desertion and he will be placed under a bond by the judge of the court of special sessions to contribute so much a week, the alternative being that if he does not do so he may be confined in State's prison of the State of New Jersey for a period of one year for each offense. Therefore, the obligation being imposed upon the husband to support the wife, the mere fact that he, by his own misconduct, attempts to evade the responsibility, will not deprive the wife of her compensation in case of his untimely death. However, as stated, the case is different where the wife acquiesces in the desertion of her husband and makes no move to have the husband support her prior to his death.

We have found in our experience that as the New Jersey act reads, and it is a great deal like the acts of most of our other States in reference to dependency, often we encounter great inequalities and unfairness because a dependent may have a very small income from another source, so small as to be practically insignificant, and yet as the result of that, the dependent is thrown from the classification of a total dependent to that of a partial dependent with a consequent great difference in compensation; while, as a matter of actual fact, there is practically a total dependence upon the earnings of the deceased, and the difference in the rate paid to that person, were she classified as total dependent, and the actual amount paid to her because of her classification as a partial dependent is considerable. For example, in some instances, if she were to be classified as a total dependent, she would receive as much as $20 a week, while, classified as a partial dependent, she would receive only $7.50 a week, and all of the actual contribution over and above that from the deceased would not begin to equal the difference between the compensation payments of $7.50 a week and $20 a week.

In short, if a dependent owns a bond the interest on which amounts to only $1 a week, the simple fact of this ownership will place her

in the category of partial dependency, with consequent material loss in compensation.

I have mentioned only the most frequent problems confronting commissioners. In general, they must render decisions on the basis of the statute, and in all cases make every attempt to secure justice both for petitioner and respondent.

DISCUSSION

Chairman STACK. Is there any discussion on this paper? In the case of a mortgage on the home, is the amount of interest on the mortgage, insurance, taxes, etc., considered as part of the expense of the home?

Mr. HOAGE. Do I understand that a widow is subject to prove dependency the same as other dependents?

Chairman STACK. Pardon me, the Chair finds that Mr. Stanley and Mr. Williams are to discuss this paper.

Mr. STANLEY. Dependents under the Georgia compensation act are divided into two classes, total dependents and partial dependents. Under the classification of total dependents are those who are conclusively presumed by law to be total dependents and those who must prove total dependency. In the presumed class are a wife upon a husband whom she had not voluntarily deserted or abandoned at the time of the accident; a husband upon a wife with whom he lived at the time of her accident if he is then incapable of self-support and actually dependent upon her; and minor children under the age of 18, or over that age if mentally or physically incapacitated from earning. These minor children include stepchildren, legally adopted children, posthumous children, and acknowledged illegitimate children, but do not include married children.

For widows, the necessary proof to recover compensation for total dependency is the establishment of the marriage and proof that there has not been voluntary abandonment; for a husband, the necessary proof is of the marriage and of physical incapacity for earning. For minor children under 18, the only thing necessary is to establish their relationship with the deceased, and when over 18, also the mental or physical incapacity for earning. In all other cases of dependency the dependency is determined as the facts may be at the time of the accident.

In cases of partial dependency, the compensation is the same proportion of the payments provided for total dependency as the contributions bear to the wage. Even a person wholly unrelated by blood or marriage can be a partial dependent, if support for one reason or another had been assumed by the deceased. Dependency other than in the presumed cases must have existed for three months prior to the accident, but not necessarily the three months immediately preceding the death. Under the decisions of the Georgia courts dependency can exist even though there may have been no contributions for the three months immediately prior to the accidental death. In establishing dependency in other than the presumed classes, payments made for board, lodging, services, etc., can not be considered as contributions.

In other words, an employee who is merely boarding or living with the claimant of dependency and who receives board, lodging, etc., to the value of payments made by him, can not be considered as a dependent. This does not hold true in the case of minors under the age of 18 living with their parents. Under common law a parent is liable for the support of a minor, and any parent is entitled to a minor's earnings. Where a parent has received the entire earnings of a deceased minor child, that parent is a partial dependent, but entitled to compensation as for total dependency since he is liable for the support of a minor regardless of the earnings of the minor, and such support is not deducted from the amount of contributions by the minor to the support of his parents.

Since there is some necessary cost for living and clothing on the part of the worker, parents of minors are practically the only class who can recover as for total dependency, with the exception, of course, of the presumed dependents.

In Georgia we have a negligible foreign population so that we do not have the problem of foreign dependency that New Jersey has. I recall only one case in all of the 10 years of the operation of the Georgia act in which the dependents at the time of the death of the deceased lived outside the United States, and it was necessary to take the evidence as to partial dependency by deposition in a foreign country. We do, however, have quite a problem in determining the presumed dependents in some of the Negro cases. It is a hard job sometimes to determine just who is the dependent wife in some cases.

We have a large Negro population and a great many of them practice polygamy. Our Negroes have a habit of going through the form of a marriage ceremony with or without a license and without the formality of having secured a divorce. Others do not consider even the form of going through the ceremony necessary. We have had as many as five women claiming to be the lawful wife and, therefore, the dependent. In some cases we have denied all of them compensation. Common-law marriages are recognized in Georgia and we have granted a number of awards to common-law wives.

A great many of our Negro population are not satisfied with one name, but change names when they move from community to community or job to job. Not infrequently the deceased is living and married under one name and is killed while working under another. These complications do not tend to simplify getting at the facts in any given case.

The basis under the Georgia law for fixing the degree of partial dependency being based on the proportion that the weekly contribution bears to the weekly wage, there is practically no evidence necessary for determining dependency other than proof of the contributions, and proof of contributions is the highest and best evidence as to dependency. This is true even though other evidence tends to indicate that the claimant is in such financial circumstances that the contributions received were not actually necessary for the support of the dependent. The obvious flaw in determining partial dependency by this method is that it is impossible to detect fraud if the claimant keeps the deceased's contributions within the bounds of reason.

If the partial dependent testifies that the contributions made were a reasonable part of the deceased's wage, it is impossible to controvert

this evidence; therefore, in practice, the degree of partial dependency is based largely on what the alleged partial dependent claims to have received from the deceased employee. Occasionally, the claimant will get his or her vision too high and the alleged contributions are as much or more than the deceased was actually earning. Occasionally, however, the deceased is not entirely dependent upon his earnings as a worker for his support but is enabled to supplement this by proficiency in games of chance.

I recall one particular case in which a Negro sawmill hand did in fact send all of his wages to his mother, who lived some distance away, and lived entirely on income derived outside working hours from an ability to make the right spots appear on the galloping dominoes.

As I have stated, the Georgia act does not require that any relationship existed between the deceased and the claimant for partial dependency. The status is determined by contributions. The line of demarcation between total dependency and partial dependency is practically determined by the relationship of the claimant to the deceased. In other words, there is practically no total dependency except the classes that are presumed by law to be totally dependent.

Interesting and unusual cases occur from time to time, and probably most of the commissioners actually engaged in hearing cases have had similar cases and experiences. We have had several instances where wives remarried and kept the information secret. We had one widow who held up her compensation checks for nearly a year trying to make up her mind whether she should conceal her married state and use the money or be honest about it. Her conscience prevailed and she returned all of the checks. Remarriages are not only frequent, but sometimes the widow waits a very short time before choosing another mate.

We had one notable case where a man was killed on Thursday and was buried on Friday. The claim adjuster happened to be in the town and on Saturday secured an agreement from the widow with respect to compensation. She remarried on Sunday. Her children, however, by her first husband, drew the compensation.

Under our law if a child dies or the widow remarries, full compensation is paid to the remainder. We had one case where a child 8 years of age was brought in by an alleged grown sister and compensation was granted on account of the accidental death of her alleged father. The ordinary of the county agreed to act as guardian. After compensation had been paid for a couple of years, the ordinary held up the payments and suggested that we investigate the matter. We found that the child was a ringer. Two grown sisters conspired to have the child named as beneficiary and they were to divide the compensation. One held out on the other, who squealed, and the facts then became known. This proved the truth of the old adage: "When thieves fall out, honest people get their due."

Mr. WILLIAMS. My two friends have left very little for me to say. The question of dependency in a minor child seems to me to present very few difficulties. I know our supreme court and the Supreme Court of Massachusetts have both held that the minor's parents were

obliged to support him and are entitled to his wages. When he is under 21 and lives at home, you can not figure out how much he eats or what it costs to do his washing; but when he is over 21 and lives at home, the figures are so conflicting that you can not find out much about it. The smallest payment on account of death is $5 a week, and if the claimants bring in such an improbable lot of stories that you can not make out anything, you will do no one an injustice by giving them the minimum of $5 a week.

We started out by discriminating against alien dependents, with the exception of dependents in Canada. I remember what a shock it was to me the first time I found out that Newfoundland was not a part of Canada. I suppose you knew that all the time, but I did not. We had a case of a man coming from Newfoundland who had been killed, and for the first time I found out that Newfoundland was an independent Dominion. Some years ago we decided to treat all aliens the same as though they had lived in this country, and if there was any dependency, let them have compensation on the same proof as if they lived here.

The so-called deposition made up by the mayor of some Italian cross-roads settlement is not evidential. He says he knows all about it and that he knows various things which he probably does not know anything about, and if you have a controversy there, you have to take depositions before some magistrate qualified to take them and have an English translator or a consul.

A partial dependent in certain cases might get as much as $21 a week. Dependency exists 312 weeks. It is not necessary, although a reading of our statute would indicate so, that the child should be a cripple or a fool in order to have his dependency continue after 18. If his status is that of a student, for instance, when the parent dies, he is incapable of earning.

I had one case about which I was consulted. A very nice old Irish lady in Hartford, a widow, had one son. She had a city job and her boy was going to be a priest. She was contributing to his support, and we agreed that his status was that of a student until the rules of his church made him self-supporting, and there was never any appeal from our decision. There was some talk by the corporation counsel about taking an appeal, but I suggested that if he wanted to go to the higher courts and say that it was an unreasonable thing for an old Irish widow to want her boy to be a priest, there would probably be a different corporation counsel pretty quickly in that city, and there was no appeal.

We do not have so much trouble with dependency as we used to, and we do not have any counting up of the cookies and the doughnuts and the charcoal and washing bills where the children are under 21.

Chairman STACK. Is there any further discussion of the paper?

Mr. KINGSTON. With us, and I think in this respect we follow the official decisions in England, under compensation laws dependency is a matter that must be proven and not presumed. It is true, of course, that if a man and his wife are living together, very little evidence of actual support is needed, but we go through the form in every case. We go through the form of having the widow say in sworn testimony that up to the time of the death of her husband

she was being supported by him. That is never the subject matter of investigation. It is taken as a matter of course, and in a sense the presumption of dependency is there though in form it is proven by affidavit. But where it goes beyond that situation, then anyone who is claiming dependency on the deceased must prove it substantially. I mean, if a father and mother are dependent, and the boy leaves home and is killed, and there is a claim on the part of the mother and father, that must be very fully proven. For dependents in Europe claiming compensation, the proof of remittances must be absolutely beyond question before we will allow it.

Speaking of rather peculiar cases, we had one that shows what complications families will get into. Mary and William were a widow and a widower, respectively, each having two children by the previous spouses. They married and there were two children by this marriage. Then Mary died and William entered into a common-law marriage with Mary's daughter by her first husband, and there was a child by that union, and the whole family—that is, the four children by the two first marriages, the children by the second marriage, and the child by the daughter of the deceased wife—was living together. Then the husband, William, was killed, and we found in the household, managing the household, this grown-up daughter who had lived as William's wife at the time of his death, and these three small children, two by Mary, and one by the daughter, and the problem came before the compensation board, as to who were the dependents in that family.

We have a foster-mother provision in our law, which provides that if any grown-up, suitable person continues the household of the deceased after his death and there are childen in the home to be taken care of, she may be considered the foster mother and receive the benefits that a widow would receive had she been left in the home under normal conditions. Upon inquiry we found this little girl, who had probably been more sinned against than sinning, was making herself a splendid little mother of those three small children, and on the recommendation of people in the district who knew the circumstances, we made her the foster mother, giving her $40 per month to help maintain the home and each of the children was a beneficiary under the act.

Chairman STACK. Our next paper is A Résumé of the Deductions and Substantial Perquisites to Be Allowed in the Computation of the Average Weekly Wage as Based Upon the Contract of Hire, Express or Implied, by Mr. Donald D. Garcelon, chairman of the Industrial Accident Commission of Maine.

A Résumé of the Deductions and Substantial Perquisites to Be Allowed in the Computation of the Average Weekly Wage as Based Upon the Contract of Hire, Express or Implied

By DONALD D. GARCELON, *Chairman Industrial Accident Commission of Maine*

Compensation for injuries to employees, under our workmen's compensation acts, is designed to take the place during limited periods, on a partial percentage basis, of the wages lost because of

such injuries. Although there are important exceptions to this rule which will readily occur to you all, that, I take it, is the fundamental principle underlying workmen's compensation legislation.

Since, however, not being blessed with the gift of prophecy, we can not tell what the future may hold, and so are unable to ascertain with any degree of certainty just what any employee would have been able to earn but for such injury, we do our human best, judging the future by the past, by taking as an earning basis his average weekly wages for such period of time prior to his injury and under such conditions as would seem likely to indicate what his wages would have been in the future.

Methods of determining average weekly wages, even under precisely similar circumstances, as we are all aware, differ widely in the different States. That, however, as a general proposition, does not concern us here. The subject assigned me is a summary of the various factors which are to be added to or subtracted from employees' regular stipulated cash wages in arriving at their actual earnings for compensation purposes.

Probably the first item which naturally comes to mind in this connection is board and lodging. Either or both is very often furnished to employees by their employers. That is the usual practice, of course, where the employers run hotels, restaurants, or school or recreation camps; also where groups of men, by necessity or for convenience, are gathered for mass production, as in lumbering or highway construction.

Is the value of such board and lodging, furnished to employees as part of their recompense, to be reckoned as part of their wages for the determination of their compensation in case of injury? The acts of 16 States, together with that of the District of Columbia and the Federal longshoremen's act, so specify in express terms. Some of these acts add other items, such as laundry and fuel. In addition, six other States make the same provision in general terms, by including all allowances received in lieu of wages.

Where States have no statute on the subject, their courts have uniformly held that such allowances should be included as a matter of principle. (See O'Callahan *v.* Dermedy, 197 Iowa, 632, 196 N. W. 10, 197 N. W. 456; Medland *v.* Houle Bros., 202 Mich. 532, 168 N. W. 446; Haas *v.* Globe Indem. Co., La. App. (1931), 132 So. 246.) In fact, there is no State, so far as I am aware, which declines to include for compensation purposes board, lodging, and other similar allowances actually received by the employee as a part of his wages, and intended as such by the parties themselves.

But even though these items are to be included, at what shall their value be reckoned? Where there is so great a variation in circumstances, just how shall they be measured? By cost to the employer, worth to the employee, or price to the public?

In order to avoid any controversy on this point, Delaware and Nebraska expressly provide in their acts that board and lodging shall be included only if their money value has been fixed by the parties at the time of hiring. The New Jersey act specifies that, unless otherwise agreed upon, the amount shall be taken at $5 per week. Pennsylvania by statute counts board in all compensation cases at 50 cents per day; board and lodging, at $1 per day.

In other States, even without such definite provisions, the matter has never been a difficult one to settle satisfactorily. Some acts enjoin the commission to fix the amount at the "market value"; others specify the "reasonable value"—which is the standard naturally applied by commissions in States where there are no provisions at all on the subject. Whether, however, the value is determined according to the circumstances in each particular case, as directed by the Colorado act, or according to the value to the employee, as the Minnesota act prescribes, or whether some conservative uniform value is taken as in Pennsylvania, at a dollar or so a day, it is obvious that the same amount should be used in making up the pay roll upon which the employer's insurance premium is based.

Fully as important as the class of cases we have been considering, and growing in numbers year by year, is that where employees receive for their services, from others than their employers, gratuities, or "tips" as they are usually called. All who travel know the system. The Pullman porter who makes up your berth and beams upon you as you leave; the important gentleman who is needed to signal the next taxi in line and bows you in; the taxi driver himself who can usually be depended upon to know where traffic is the thickest and waits are longest; the gold-braided doorman at the hotel who opens the taxi door and bows you out; the bell boy whom the clerk calls to show you the room he has assigned you; the waitress at the table who brings you the food that is served; the hat-check girl who sells you your hat after dinner; even the barber who shaves you and the boy who shines your shoes—to name no more—all follow the example of the manicurist in extending the receptive palm. Are the dimes and quarters that flow in upon them from the patrons they serve just extra income which they are fortunate enough to receive, or are they to be counted in with the cash wages paid by the employer himself in determining the compensation to which the employee may become entitled?

The leading case on the subject is Sloat *v.* Rochester Taxicab Co., 177 N. Y. App. Div. 57, 163 N. Y. S. 904—the employee being a taxi driver. The court finds that the word "wages" in the act is synonymous with "earnings"; that recompense for such services is in part paid direct to the employee in tips rather than in increased charges to the employer, and through him to the employee in correspondingly increased wages; and that where the employer has thus provided the employee with the opportunity to receive these rather dependable tips, and the parties have fixed his regular wages in contemplation of tips being retained by him, they are in effect, even though not in form, a part of the wages received from the employer himself.

To the same effect is Bryant *v.* Pullman Co., 188 N. Y. App. Div. 311, 177 N. Y. S. 488, the case of a Pullman porter; also Hartford Acc. & Indem. Co. *v.* Ind. Acc. Comm. (a hotel waiter), 41 Cal. App. 543, 183 Pac. 234.

In Powers' case, that of a restaurant waitress, a Massachusetts decision rendered in June of this year (176 N. E. 621), the court, in the course of its comprehensive and illuminating opinion, makes some pertinent observations which I am going to take the liberty of quoting at length—not only because they appear, literally as well as figuratively, to be the "last word" on the question as a matter of prin-

ciple, but also because this is the part of our subject upon which the compensation acts of the different States are least in accord. For although the acts of Missouri and of the District of Columbia, together with the United States longshoremen's act, provide that gratuities are to be included, the legislatures of six States—Colorado, Delaware, Kansas, Nebraska, New Jersey, and Pennsylvania—have expressly decreed that in fixing compensation they are to be disregarded.

Says Chief Justice Rugg in Powers' case:

> It seems plain that from the standpoint of the employee the tips in the case at bar were in the nature of wages or earnings. The stipend paid to her by the employer was the smaller part of the actual income received by her as a consequence of her labor for him. The situation was fully understood and freely assented to by the employer. There was no deception. No divided duty was thereby created on the part of the employee. Her loyalty to the employer was not allayed by the courtesy and efficiency rendered to patrons which were the basis of their gratuities to her. As to each customer of the employer the tip to the employee was a gift and not founded on an obligation, but the aggregate thus received was dependable although fluctuating according to the amount of patronage coming to the employer. Service may be rendered upon a reasonable expectation of reward without forming any basis of a debt. The tips were in the nature of part payment for the service received by the patrons at the place of business of the employer. Payments made to his employee by his patrons with the approval of the employer, under the protection of his place of business and for his benefit, bear a close analogy to wages paid by him. There was nothing illegal in the retention of tips by the employee in these circumstances. If the employer had established a rule of his restaurant forbidding tips, the direct wage expense to him probably would have been increased to make up in substance for the loss in revenue to the employees, and that doubtless would have been reflected in an increase in the prices charged to patrons. The employer, in effect, saved in direct outgo for wages the amount received by the employee in tips.
>
> The idea of tipping is distasteful to some people who would prefer to pay in increased charges enough to enable the appropriate wage to be paid directly to the employee by the employer. There is a feeling that tips are not in harmony with the spirit of American institutions and that they tend to put the recipient in a dependent or servile position and to undermine independence of character. It can not be overlooked or ignored, however, that in certain employments the custom is almost universal in this Commonwealth. That condition must be recognized. It has in those employments a vital effect upon the terms and conditions of labor and the relations of employer and employee. It is a custom by which the employer in the case at bar reaped a financial benefit in the lower payments made by him each week to secure the services of the employee. Some difficulty may arise in fixing the rate of insurance to be charged by the insurer to the employer over that existing in cases where the pay roll of the employer discloses all the earnings of the employee. But that can not affect the principle. The employee, a part of whose earnings comes from tips received in consequence of his service to the employer, is bound to make full disclosure for the purpose of enabling just insurance rates to be fixed.

Even though the soundness of the reasoning in these cases be conceded, an important qualification is to be noted. In all four cases, it should be borne in mind, tips were received by the employee with the full knowledge and consent of the employer, and contemplated by both parties in making the wage contract. In the case however of Begendorf *v.* Swift & Co., 193 N. Y. App. Div. 404, 183 N. Y. S. 917, that of a truck driver employed to deliver meat, who received tips from the customers of his employer without the employer's knowledge, it was properly held that such extra income, neither customary nor contemplated by the employer as part of his income in fixing wages, was not to be considered in determining the amount of compensation.

I may add in passing that the question as to the inclusion of tips could hardly arise in Iowa, where the acceptance of gratuities by employees working in hotels, restaurants, barber shops, etc., or engaged in transportation, or even the giving or offering of same, is a misdemeanor punishable by fine or imprisonment.

Still another form of extra income frequently received by employees is a bonus paid them by their employers on a production, attendance, or general efficiency basis. Again New York furnishes the leading case on the subject—Ciarla *v.* Solway Process Co., 184 N. Y. App. Div. 629, 172 N. Y. S. 426. There it was held that for compensation purposes such bonuses are properly to be considered wages. So held in Moss *v.* Aluminum Co. of America, 152 Tenn. 249, 276 S. W. 1052. If gratuities are to be so included when received from third parties, there would seem a fortiori to be no valid reason why they should not be included when received from the employer himself, since in reality they are no more than deserved recompense for extra satisfactory service. In this business world of ours where is there a bonus, even though called a Christmas present, which the employee himself has not in some way actually earned? If, in addition, bonuses are paid on a fairly regular basis which would be expected to continue in the future, then clearly they are a part of the wage loss which the employee suffers when he meets with an industrial injury.

It is not to be entirely unexpected, however, that States which do not recognize tips as wages would fail to recognize bonuses likewise, no matter how regular such bonuses were. Together with the Minnesota act, which excludes gratuities from the employer, the acts of the six States mentioned a moment ago sweepingly exclude all gratuities whether received from the employer or others. At least, they are consistent.

Closely allied to bonuses, since in addition to the regular stipulated wage, is pay for overtime; although, strictly speaking, it would appear even more to belong to the main subject of averaging weekly cash wages, since overtime is the converse of short and broken time.

In any consideration of the subject however the word " overtime " needs always to be carefully defined, since it may mean quite different things. It may mean, as it usually does, extra time, occasional or irregular, beyond the employee's usual working hours; it may also mean merely working time, even though on a regular basis, beyond the hours limited by statute as constituting a normal working-day. In the latter case, the total amount earned is of course the actual wage of an employee, and the pay lost by him in case of injury. In other words, for him it is not really overtime. So held in Franklin Tp. *v.* Litch, 82 Ind. App. 526, 146 N. E. 845.

On this subject also the States are not entirely unanimous. The California act flatly includes all pay for overtime as part of wages; nine States in their acts just as flatly exclude it.

The middle ground is perhaps the proper solution. The Minnesota act provides that: " Occasional overtime shall not be considered in computing the weekly wage, but if such overtime is regular or frequent throughout the year for the employment involved, then it shall be taken into consideration." This rule, embodying the principles advanced in the matters already considered, appears to be both logical and equitable.

In complete harmony with that rule, the United States Circuit Court last March in Baltimore & Phil. Steamboat Co. *v.* Norton, 48 Fed. (2d) 57, based a longshoreman's compensation upon his average total weekly wages which substantially exceeded the wage fixed by the hours of his contract, saying:

> As the statute accords the injured employee compensation for wages lost, we think the compensation should conform to actual wages which, but for the accident, he would have earned.

Is not that, after all, the simple and reasonable test in all these cases?

We now come to cases involving the question of deduction, for one reason or another, from the regular pay given an employee when determining the amount of compensation he should receive on account of injury. Perhaps the most common instances are those where an employer hires a man and team, or the more modern combination of man and auto truck. Shall the entire pay be included in figuring compensation? The cases correctly say no; that pay for the team or truck is no part of the employee's wage for his personal services, incapacity for which would entitle him to compensation. Therefore the pay should be divided, and the team or truck hire deducted. (See Buhner *v.* Bowman, 81 Ind. App. 395, 143 N. E. 366; Alexander *v.* Latimer, 5 La. App. 41.)

This principle is, of course, likewise applicable to the somewhat similar situation where an employee from his own salary has to pay an assistant. (State ex rel. Gaylord Farmers' Cream Assn. *v.* Dist. Ct., 128 Minn. 486, 151 N. W. 182.) The Missouri act likewise excludes pay of helpers; Delaware and Pennsylvania, pay deducted for necessary labor furnished by the employer. It is manifestly only the amount that the employee himself earns which can fairly be used for a compensation basis.

On the same principle there should also be excluded any amounts deducted from an employee's regular wage, unless for no fault of his, on account of tardiness or absence from work, of short measure, of breakage, or of inferior or spoiled products, especially when such deductions are a custom of the employment or are part of the wage contract. To include these would be to penalize the employer by giving the employee compensation to which he is not entitled, since it is the money he is actually receiving from his work that an injury makes him lose.

An interesting and important class of cases is that where an employer deducts from his employees' pay the cost of certain supplies needed by them to carry on their work. That appears to be the long-established custom in coal mining, the employer charging to the employees the price of powder, blacksmithing, etc., which he himself furnishes. What is the proper basis for compensation in these cases?

In Springfield Coal Mining Co. *v.* Indust. Comm., 291 Ill. 408, 126 N. E. 133, it was held that compensation should be based upon the entire amount irrespective of such deductions. Although the court rested its decision upon its interpretation of the act that compensation should be based upon gross earnings rather than net, it spent considerable time elaborating the argument that the entire wages which cover such charges are as much to be considered earnings as the wages of a carpenter who furnishes his own tools.

A distinction may well be drawn, however, between a carpenter's tools—personal, permanent, and comparatively inexpensive—and working supplies required by a miner that are entirely impersonal, and that are used up in the work, the constant replenishing of which amounts to a considerable sum in the aggregate. Under such circumstances it is hard to see wherein sums so deducted, even though part of a miner's stated income, are earnings at all. It is all the more difficult to understand this inasmuch as Illinois, in common with 10 other States, has a specific provision in its act that in determining compensation there shall not be included any sums customarily paid to the employee to cover any special expense entailed on him by the nature of his employment. However necessary or convenient, as a matter of bookkeeping or economy, this procedure of deductions may be on practical grounds, it seems hardly logical that an employee should receive compensation based upon money that he has never really earned, and that has never even passed through his hands, especially when these deductions have been taken into account in fixing his wages.

A contrary view—and with all respect to the Illinois court, an apparently sounder one—is clearly set forth in Richards *v.* Central Iowa Fuel Co., 184 Iowa, 1378, 1385, 166 N. W. 1059; followed by Reitmyer *v.* Coxe Bros. & Co., 264 Pa. 372, 107 Atl. 739. On principle, even though the gross amounts may be regarded by the parties themselves as wages, the amounts for deductions would seem to be no more an actual part thereof than are the amounts deducted for truck hire or labor furnished. Besides the States already referred to which in their acts disregard all special expenses of the employment, Colorado and Delaware expressly exclude sums deducted for supplies, tools, etc., furnished by the employer.

From the brief survey which we have given the subject, necessarily limited by the time allotted to these papers, we may lay down the general proposition—in line with the simple thesis advanced at the beginning, and with the court cases, almost without exception—that an employee's average weekly wages should include his entire earnings, whether in stipulated cash, in bonuses or material allowances, and whether received from the employer or others, provided they can be expected to continue on a fairly regular basis, and provided further that any amounts received from others shall have been taken into account by the employer in fixing the employee's cash wage. Average weekly wages, on the other hand, should not include any extra amounts earned which are due to emergency or are merely sporadic, or any amounts for other than the employee's own personal services, whether expended by him or deducted by the employer for labor of others, or for special equipment or supplies required by his work.

In conclusion I will say to you in the words of Prospero at the beginning of the fourth act of Shakespeare's Tempest:

> If I have too austerely punish'd you,
> Your compensation makes amends.

However you may feel about that, one would certainly need to speak with more authority than can I, to presume to suggest to the representatives here of sovereign States—changing the phrase a bit:

> Your compensation needs "amends."

DISCUSSION

Chairman STACK. The paper is open for general discussion.

Mr. BOWMAN. In our workmen's compensation act a section refers to average weekly wage, and another section tells how to figure it out, by taking the average annual earnings, but it says they shall be undiminished by loss due to illness or unavoidable cause. In the mining industry, where the mines do not operate the entire year, the supreme court has held that is an unavoidable cause, and if a man is getting $5 a day and working six days a week when the mine is running, his average weekly wage is $30, even if that is twice as much or a third more than it would be figured by taking what he earned during the year and dividing it by 52. We have applied that to road building. The State lets a contract and the contractor hires men now at $3 a day. They are supposed to work six days a week, making $18, but weather conditions are such that the men do not get in more than three days a week; yet we figure that compensation on $3 a day, multiplied by six, or $18. That is also done on the laying of pipe lines that go through. Isn't that the usual way of figuring by other commissioners?

Mr. GARCELON. I am not sure how other commissioners figure the average weekly wage. That is not a part of this subject, however.

Mr. BOWMAN. This is a résumé of the deductions and substantial perquisites to be allowed in the computation of the average weekly wage as based upon the contract of hire, express or implied. In the paper you said you took what the man had been earning before and figured that he might do that in the future, and yet in the coal-mining industry, if he has worked for a year, you take what he has made, but undiminished by loss due to illness of the employee or unavoidable cause, and the closing of the mines is an unavoidable cause. Do not other workmen's compensation acts have that provision in them? If they do not, we are figuring the average weekly wage much higher than the other States are.

Mr. WILCOX. This subject of how to figure the average weekly wage and how it is figured, is a different subject from the one Mr. Garcelon has been discussing, and it is one that will take a whole day if we undertake to expose our notions as to how it should be done.

Mr. Garcelon, Mr. Bowman, is trying to give us some light on how to figure the perquisites that go along with cash wage in the matter of weekly compensation. That is another subject.

Mr. BOWMAN. His paper on that was fine and it covered all that, but this subject is brought in there. The subject is A Résumé of the Deductions and Substantial Perquisites to Be Allowed in the Computation of the Average Weekly Wage As Based upon the Contract of Hire * * *, and it does include what I mention. He said that the average was reached by taking what had been earned and "undiminished" is not mentioned in there but that is all right. I have been trying to decide that in Kansas, and I thought if anybody else had any suggestions, I should like to hear them.

Chairman STACK. Mr. Garcelon made exceptions or stated certain States where exceptions were made.

Mr. PARKS (Massachusetts). That is the second time this gentleman has tried to get information at this convention to-day. I have

attended many conventions and there are men who come here looking for light. I am tempted to make this remark because I have seen it happen so often. We have so many papers and they are read a certain way and we get copies of them, but they do not mean a great deal to us, and if someone wants some particular thing answered, he is told he is out of order or we are not discussing that particular thing.

Now I suggest I can answer one question and I can answer perhaps the one he has just asked. I will do it privately, because, as Mr. Wilcox said, it would take all day. I would suggest for future reference that we have a sort of clearing house of some kind, have someone prepare data on the different subjects, as, for example, average weekly wage, what is the general rule in different States, so that anyone like Mr. Bowman can write to such center and ask what is being done in the different States about it.

I should like to have that question answered. It would be a help to me in my Commonwealth. The way we do business here is so different from that at a round-table conference I attended some weeks ago in Harrisburg. We sat around—some of the gentlemen are here who were there—and I confess I got more out of that round-table conference in a few minutes than I get out of any of these conventions, because there is so much formality here. You would like to get up and ask something, but you are afraid you will be out of step.

President DEANS. May I ask the gentleman a question? You say you were at a conference in Harrisburg. Would you mind telling me what is your method of putting into effect the recommendations you got at that meeting?

Mr. PARKS. It is left to Massachusetts to do it.

President DEANS. Then it looks to me as if you are not getting any farther than we are here.

Mr. PARKS. That is along the line I am talking about. I am trying to say something of a constructive character. This man comes here a stranger, and is told that his question has nothing to do with the subject under discussion. I do not think it should be so. When I say I got more out of that convention at Harrisburg, I mean it. I have been attending these conventions as long as anyone here, but the one I mention did not have so much formality. This is no reflection on this convention, Mr. Deans, or on you. It is what we do every year. We should have some clearing house as there are so many men like this one.

President DEANS. Mr. Parks, you have suggested a clearing house.

Mr. PARKS. I do not know what you would call it.

Mr. WILCOX. I do not like to be put in the position of suggesting to Mr. Bowman that he can not have a question answered. I am just as interested in the subject he raises as he is, or as Mr. Parks or anyone else is, but I should like to go ahead with this program.

Chairman STACK. Then you would like the Chair to pass on to the next paper?

Mr. MCSHANE. I am willing to meet at another hour, but we were advised by the president that we must be out of here by 5.15 and it

is not fair to the writer of the paper that is to follow, when we are all fagged out, to put on him the burden of addressing a lot of empty chairs.

President DEANS. We have three-quarters of an hour, so go on with the program.

Chairman STACK. Mr. W. H. Nickels, jr., of the Industrial Commission of Virginia, will speak on When Does Misconduct Become Willful Misconduct or Take the Employee Out of the Scope of His Employment?

When Does Misconduct Become Willful Misconduct or Take the Employee Out of the Scope of His Employment?

By W. H. NICKELS, JR., *Commissioner Industrial Commission of Virginia*

The various compensation acts provide a remedy for the redress of a statutory right, dependent upon the language thereof. A commission is the forum for the determination of the rights of the parties without the intervention of a jury. The common-law cause of trespass on the case for the redress of the right, with all of its legal technicalities of allegation, intricate requirements of pleading and practice and strict rules of evidence, is transposed to an administrative body. The common-law defenses of contributory negligence, assumption of risk, and fellow-servant doctrine are superseded in compensation law by the rule of willful misconduct and the definition of accident.

The right is founded upon the phraseology of the act granting it, and the burden of proof is on the claimant desiring to exercise it, based upon the contractual relationship of employer and employee for the performance of some task inuring to the benefit of the employer in his trade, business, or occupation. The law of contract recognizes the right of free negotiation, subject to the limitations of public policy, statute law, and good morals. It is within the province of the parties to contract for the discharge of a task in a special way with such limitations as they may invoke.

The contract of hire, be it express or implied, fixes the relationship of master and servant in relation to the task to be performed. The parties are at liberty to superimpose on the relationship such substantial limitations as will promote safety. These may involve the promulgation and enforcement of proper rules and regulations, subject to the terms of the act authorizing them, or the use of a safety device. In either instance the primary object is to promote safety. There is no legal objection to such a limitation. It involves no principle contravening public policy, good morals, or statute law. On the contrary, it promotes, in a vivid manner, the idea of safety as an essential element of the contract of hire for the protection of the employee.

The fact that such limitations are placed on the relationship of master and servant imposes the duty on the master to inform the servant, in a comprehensive manner, of the purpose or function of the limitation to the extent of eliminating any doubt concerning

the same. Thus, knowledge of a definite type is conveyed to the employee in advance of the actual discharge of the duty, or he works under the supervision of a competent instructor until his efficiency to perform the duty with safety to himself and fellow workmen is assured. Inability to grasp the function of a rule or regulation or proper use of a safety device, after patient drilling or coaching under the supervision of a competent instructor, manifests an inaptitude to meet the necessary requirements of the relationship. Those inapt in undergoing the qualifying test of one task should be given a task involving duties commensurate with their qualifications. The factors of inexperience, physical abnormality, with other objective and subjective qualifications and disqualifications, are determinative considerations in selecting the character of employment.

A definite contract of hire, with or without limitation, dependent on the degree of skill required or the safeguard by instruction, training, or supervision, or any combination of facts portraying definite knowledge of the work to be performed and the manner in which it shall be performed, add to the relationship a mutual understanding of such type as will insure the safe discharge of duty and the proper selection of the type of employment. Thereby many accidents caused proximately by improper selection or placing of an employee are eliminated. Individual and collective initiative are expanded and encouraged to produce a maximum of output with a minimum of accidents.

The employer and employee are brought into a definite relationship and clearly understand such substantial limitations as they desire to superimpose on that relationship, in advance of encountering any hazard or risk of the actual employment. The safe manner of operation becomes a definite engagement between the parties. It is of a substantial nature in comparison with a purely technical one of no efficacy in so far as the merits of the case are concerned. A substantial limitation is one to protect the employee, his fellow employees, and the property of the employer. An endeavor to superimpose technical objections in anticipation of a defense, or of any purpose not designed to promote safety, would lead to confusion rather than point to absolute perspicuity. The manifest purpose is to promote safety by a definite understanding for the mutual benefit of the parties—augment the relationship by a contract of hire of such breadth as shall accomplish this substantial purpose.

The thought of premeditation, design, or intent enters into the definition of willful misconduct. It involves conduct of a quasi-criminal nature, in which the element of willfulness is the essential. It is predicated upon the knowledge of a rule or regulation duly promulgated for the employee's safety or his failure to use a safety device installed for a like purpose, the violation of either of which is alleged in the defense of willful misconduct. It is difficult to conceive of a meritorious defense being made without adequate evidence appearing in the record of knowledge of the functions of the rule or regulation, or the purpose of the safety device, and the hazard or risk it is designed to alleviate. If, by a preponderance of the evidence, the record presents adequate proof of the foregoing, the element of intent or design is apparent. There are many cases involving experienced operators wherein the facts and circumstances

of training show such a knowledge of the duties and dangers of the employment as to dispense with the necessity for a rule or regulation, or training in the use of a safety device. The object of a rule or regulation in the first instance, and of training in the use of a safety device in the second, is the explicit purpose of safeguarding the employee against the danger of injury by accident.

There is no rule of abstract reasoning or of law to place greater stress on the promulgation of rules and regulations or on safety devices for the protection of an employee than upon the knowledge acquired by the performance of a duty and the consequent evasion of the hazards involved in the discharge of that duty as taught by experience. Thus knowledge becomes concrete in comparison with the abstract principle of safety first. Under such circumstances the promulgation of a rule or regulation, or initial training in the use of a safety device, would serve no useful purpose. Experience teaches that departure from the customary way of performing many tasks, particularly certain hazardous ones, leads to accidents. In this regard, the further question is raised, Was it an accident? If injury was to be expected from the departure, it was not; if not expected, it was. Hence, in many willful-misconduct cases, the defense of no accident within the meaning of the act is equally applicable. The facts should be exhaustively developed, because the evidence admissible to prove willful misconduct, which is synonymous with proving design or intent, is equally relevant to establish whether an injury by accident did result, because a person who willfully violates a rule or refuses to use a safety device may expect an injury. If, as a proximate cause, an injury follows the willful violation of the rule or willful failure to use a safety device, the accident follows as a consequence of the injured party's intent, and was to be expected, rather than fall in the classification of an unforeseen or untoward event. This is one instance requiring good pleading. An analysis of the pleadings from the standpoint of defense based upon allegations that, first, there was no accident, and, second, willful misconduct, presents the following considerations, viz.:

1. A defense of willful misconduct is an affirmative one, the burden to establish the same falling on the defendant.

2. A defense of willful misconduct is predicated on the theory that the accident arose out of and in the course of the employment.

3. The burden to establish an accident falls on the claimant, and that it arose out of and in the course of the employment.

4. A plea of willful misconduct alone limits the issue to the intent or design of the claimant in doing the act resulting in the injury, be it the willful violation of a rule or refusal to use a safety device, the burden of proof falling upon the defendant, under No. 1 supra.

5. A plea of no accident arising out of and in the course of the employment places the burden on the claimant to establish the facts and circumstances surrounding the accident.

A combination of the two issues results in a full development, by the claimant, of all the facts and circumstances surrounding the accident. He must prove an accident in the sense that it was a fortuitous or unforeseen event, one not expected under the circumstances proximately to result in an injury. The burden of proof

then shifts to the defendant, who may rebut the evidence of claimant by showing an injury was to be expected from the act being performed or that claimant was guilty of willful misconduct. In the first instance the defense overcomes the prima facie case made by the claimant; in the second, it assumes the burden of proof. The same set of facts are admissible under either issue. However, there is a vast difference in determining, from the facts and circumstances proven, who shall prevail.

The refutation of a prima facie case, where the ultimate risk of nonpersuasion rests upon the claimant, is safer from the standpoint of practice than so pleading as to assume the burden of proof. Unless the defense of willful misconduct is supported by a set of facts and circumstances, the defense is confined to proving the subjective element of intent, of a quasi-criminal nature, by a preponderance of the evidence. This is a narrow and difficult issue. The difference, concisely stated, is one of intent on the part of the claimant. If the claimant knew he was violating a rule or refused to use a safety device, proximately resulting in physical injury, the intent necessary on a plea of willful misconduct is established, assuming no question of action under impulse is involved. Irrespective of the question of intent, if the claimant did an act which experience in his trade shows would probably result in an injury, the definition of an accident has not been fulfilled because an injury was expected from the act causing it. These cases are such that the claimant anticipates danger. An injury from the act performed is expected to ensue rather than occur fortuitously; it is foreseen rather than unforeseen. The idea of an accident precludes occurrences which the power of prevision or foresight discovers, or ought to discover, by the exercise of knowledge possessed or acquired of the hazards or dangers to be encountered.

The philosophy of the law relating to willful misconduct, in so far as it relates to the promulgation of reasonable rules and regulations for the safe conduct of the business or to the installation of safety devices for a like purpose, is to place responsibility therefor upon the employer. His failure to bear the responsibility abrogates the defense of willful misconduct, in which instance the only defense is the denial of an accident. The causative danger, with knowledge thereof, can not be alleged as willful misconduct. To do so would be a vain attempt to take advantage of a situation produced by the employer's lack of diligence.

The gravamen of the action in a compensation case is dependent upon the phraseology of the act creating it. The majority of the acts provide a recovery for "injury or personal injury by accident arising out of and in the course of the employment."

The relationship of an accident to willful misconduct has, to a limited extent, been discussed. It was pointed out that "intent" is the essential element in willful misconduct, while the essential in the evidence relating to an accident is circumscribed by what was to be expected, under all the facts and circumstances, by the act being performed. It is difficult to conceive of a willful misconduct case in which the element of danger is eliminated from consideration. The fact that, by legislative enactment, willful misconduct is recognized as a defense emphasizes its legal, and as well its practical, application. The object is to deprive a party of taking advantage of his own

wrongdoing. The proper construction of the word "accident" accomplishes the same purpose. The premeditative commission of a forbidden act, known to have been hazardous at the time it was committed, resulting in an injury, constitutes willful misconduct; also it is not an accident. En somme, if, under all the facts and circumstances, from the willful misconduct an injury was anticipated, it is not to be classed as an accident.

It will be conceded that there may be accidents which do not cause compensable injuries. The loss of time may not exceed the waiting period, else there is no loss of wages by reason of the injury. On the converse, there must be an accident for the resultant injury to be compensable. The accident is the cause, the injury the result. Thus is established the relationship of cause and effect, i. e., "injury or personal injury by accident." Hence, an accident must first be proven, and that it resulted in an injury which, according to the act, is compensable; then it must be established that the accident arose out of and in the course of the employment.

The most exhaustive definition of the latter expression is contained in the McNicols case (215 Mass. 497, 102 N. E. 697, L. R. A. 1916 A, 306), as follows:

> An injury may be said to arise out of the employment when there is apparent to the rational mind, upon consideration of all the circumstances, a causal connection between the condition under which the work is required to be performed and the resulting injury. Under this test, if the injury can be seen to have followed as a natural incident of the work, and to have been contemplated by a reasonable person familiar with the whole situation as a result of the exposure occasioned by the nature of the employment, then it "arises out of" the employment, but it excludes an injury which can not fairly be traced to the employment as a contributing proximate cause, and which comes from a hazard to which the workman would have been equally exposed apart from the employment. The causative danger must be peculiar to the work and not common to the neighborhood. It must be incidental to the character of the business and not foreseen or expected, but after the event it must appear to have had its origin in a risk connected with the employment, and to have flowed from that source as a rational consequence.

The distinction between the two expressions is aptly stated in the case of New Amsterdam, etc., Co. *v.* Summerell (Ga.) (118 S. E. 786), as follows:

> It has been repeatedly observed that, if an accident arises out of the employment, it ordinarily arises in the course of it; but the converse is not true. An injury may occur in the course of the employment and yet not arise out of it. "Arising out of" does not mean the same as "in the course of," but the expressions in the act impose a double condition. The words "in the course of the employment" relate to the time, place, and circumstances under which the accident takes place, and an accident arises in the course of the employment when it occurs within the period of the employment, at a place where the employee may reasonably be in the performance of his duties, and while he is fulfilling those duties or engaged in doing something incidental thereto. * * * The words "arising out of the employment" refer to the causal connection between the employment and the injury.

The cardinal principle of causal connection is contained in the first sentence of the foregoing quotation from the McNicols case. It is imperative that "a causal connection be shown between the condition under which the work is required to be performed and the resulting injury." The inquiry shifts to "the condition under which the work is required to be performed" as the proximate cause of the injury.

The proper manner of performing an act embodied in the discharge of a hazardous task, needless to say, is the safest way, irrespective of loss of time or personal inconvenience. Any condition imposed on the relationship of employer and employee should be limited to the safety of the employee. This condition may be a rule or regulation controlling the employee's conduct in the service of the employer. Where the hazard or risk of employment is embodied in the manner of performance of the task, the condition should be limited, so far as possible, to the elimination of the dangers, patent or latent of nature, involved therein. The same thought applies wherein the time element is involved. It is readily conceded that the willful violation of a reasonable rule or regulation duly promulgated for the employee's safety may be urged in defense of payments of compensation. The subject matter of a reasonable rule or regulation of such importance is also a matter of contract. There is no sound objection to establishing an explicit understanding of the time and manner of performance at the time the relationship of employer and employee is established. A definite meeting of minds promotes a comprehensive grasp of the duty to be discharged and the hazards or risks to be encountered. In this manner the ordinary relationship is enlarged to cover those matters which, in the course of time, must be regulated in one way or another. It would seem wiser, from all viewpoints, to place, by mutual agreement, regulation in the relationship at the time it is established rather than allow it to grow out of the relationship. This involves more care in the beginning, at the time the relationship is established, because the employee and employer discuss the details of the manner and time of employment and the hazards or risks to be guarded against. Too often matters are taken for granted; it is assumed the employee is experienced or familiar with the task and its consequent dangers when, in fact, he is not qualified to perform it by reason of the lack of proper training or past experience.

The question arises: When does the accident fall without the definition of "arising out of and in the course of employment," and when does it fall within the rule of willful misconduct? In either case it is a question of the sufficiency of evidence. The burden of proof resting upon the employer is confined to the issues made by formal pleading or grounds of defense made in the evidence at the time of the hearing.

(1) When, by mutual agreement, a definite regulation is made a part of the contract of hire, i. e., the relationship of employer and employee is enlarged beyond the usual scope by a fixed condition or limitation of substantial merit for the protection of the employee, and the latter possesses or has acquired knowledge of the task to be performed with its consequent dangers, it may be safely said the accident did not arise out of and in the course of employment, because—

(*a*) The employee has violated the conditions under which the work was required to be done.

(*b*) The exposure encountered was not one occasioned by the nature of the employment.

(*c*) The causative dangers would be peculiar to the workman rather than to the nature of the work.

(2) When, under the facts as disclosed in (1), above, the circumstances and evidence disclose an intent to do the act which resulted in the injury, it is clearly a case of willful misconduct. As previously pointed out, it may not be an accident provided the resulting injury was expected.

(3) When, under (1), the facts and circumstances of the alleged accident disclose that an injury was to be expected from the act done, the definition of accident has not been met. The facts and circumstances must comply with the rule of law defining accidents before the question of determining whether the alleged accident arose out of and in the course of employment can logically be considered.

The burden of proof varies in a degree with the nature of the defense. This has been discussed as to accidents and willful misconduct. In regard to proving a limitation, regulation, or any condition enlarging or diminishing the customary relationship based on a contract of hire, the burden should rest upon the party making the allegation. The normal of enlarging or diminishing the contract of hire is based upon the manner ordinarily used in industry for performing the service.

It is impossible to state the principle applicable to all cases. They vary with facts and circumstances, which, in turn, are controlled by the definiteness of the contract of hire fixing the relationship between the parties. A definite meeting of minds obviates the complications developing from an indefinite one; the employee's qualifications are determined for the task to be performed and the dangers to be avoided by mutual agreement of the parties. Thereafter the question of knowledge of the service to be performed and dangers to be avoided is susceptible of proof. An advance step has been taken to enable the commission to determine from the evidence whether it is an accident, willful misconduct, or fails to meet the requirements of the law relating to "arising out of and in the course of employment." The clearer the relationship is made, the more easily and accurately can the facts be determined for a proper award.

The making of a definite contract of hire—an express contract of hire, so to speak—be it verbal or otherwise, is to focus the relationship of the parties on a definite obligation wherein the essential acts of commission and omission are emphasized. It crystalizes the rights and obligations of the parties around a mutual agreement as a guide for the future conduct of their relationship, an entirely different consideration from permitting the relationship to grow on a foundation based upon the conduct of the parties. The agreement should precede and fix the conduct of the relationship rather than that the relationship be established and its conduct be submitted to piecemeal composition.

Concluding, when, in the making of the contract of hire, patience and care are expended in promulgating a mutual agreement designed to define the service to be performed and the dangers to be evaded, it affords the greatest protection to the employee, efficient service for the employer, and cooperation through a mutual understanding, without sacrificing or jeopardizing the interest of either party. It centralizes around a definite contract of hire the acts of commission and omission of either of the parties.

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DISCUSSION

Chairman STACK. Miss Harrison, of the Maryland Industrial Accident Commission is here and will take the place of Robert H. Carr, chairman of the commission, as the first discusser of Mr. Nickels' paper.

Miss HARRISON (Maryland). Due to the illness of Mr. Carr, he asked me to say a few words on the subject of "When does misconduct become willful misconduct or take the employee out of the scope of his employment?" and I thought if I wanted to make a hit I had better make it short and to the point, and that is what I shall try to do.

In all the statutes it will be noticed that the legislative bodies have never overlooked the fact that one of the objects of a compensation law is to supersede the doctrine of contributory negligence, but at the same time they have zealously refrained from throwing wide open the door which would permit an employee to indulge with impunity in deliberate or reckless conduct in disregard of his own safety and that of his fellow workman.

I do not believe that the word "willful" involves the sense of intending to bring about an injury, because that is a distinct ground for denying compensation but, that "willful misconduct" means that the employee knew that he was engaging in this conduct which merely increased the hazard of his employment. An infraction of a reasonable rule of a company made in the interest of the safety of the workman, and properly promulgated and rigidly enforced, constitutes willful misconduct. Warnings and rules are not good unless rigidly enforced.

The Court of Appeals of Maryland says:

> Not all violations of rules or orders amount to willful misconduct. Few operations, perhaps none, can be carried out in strict accordance with rules and orders. Some departures in practice are inevitable. That we must assume that the legislature had this in mind and did not intend to deny compensation for injuries resulting from such ordinary departures. The very words "willful misconduct" in their general acceptation mean something else. There must be something more than thoughtlessness, heedlessness, or inadvertency in it. There must be at least a willful breach of the rule or order.

The Court of Appeals of Maryland has held that a claimant who was injured while attempting to climb upon his employer's rapidly moving motor truck was not guilty of willful misconduct. There is a difference between misjudgment and misconduct. The word "willful" implies misconduct and not thoughtlessness or misjudgment.

A Baltimore company and self-insurer has three safety-rule books, one for tree trimmers, one for electric stations, and the third for operation, maintenance, and extension of electric equipment and lines. The safety-rule book applicable to the work of the employee is given to the employee when he enters the employment of the company, and he signs a receipt for it in duplicate, the signature being witnessed by the person giving the book. After the employee reads the book, he signs another receipt that he has read the safety rules and that he agrees to observe them in the execution of his duties. He must read the book twice a month and be prepared to answer questions on its contents.

An inspector of this company was driving along the road and saw a lineman on a pole without blocks. The lineman and foreman were both discharged. This company not only makes rules but enforces them and will not tolerate recklessness.

It is not every breach of a regulation of an employer that will constitute misconduct. Certain circumstances may arise to justify such a breach. A distinction must be noted between that character of conduct on the part of an employee which constitutes mere negligence with regard to rules and regulations of an employer and disregard of a rule adopted for his own safety and with knowledge that he was thus subjecting himself to extraordinary risk and dangers. Whether it is a case of misjudgment or misconduct is for the administrative bodies to determine, the decisions of most commissions being prima facie correct.

Mr. WYSE (Ontario). I should like to suggest a vote of thanks to Miss Harrison for her thorough analysis of the whole situation. I think it has been remarkable, and as for enforcing rules with any degree of certainty, nobody ever heard of an Anglo-Saxon people doing that. They are very lax; they make a whole lot of laws and think the whole thing is done. The trouble with us in this country and in Canada is that we do not enforce our laws and every law not enforced creates a weakness of the administration and encourages people to break that and all other laws. I think we owe Miss Harrison a vote of thanks.

[The members arose and applauded.]

[Meeting adjourned.]

Chairman, G. H. Gehrmann, M. D., Medical Director E. I. du Pont de Nemours & Co. (Inc.).

Mr. HOAGE (Washington, D. C.). In the discussion so far in the session, I have found we are not getting complete satisfaction on many of the subjects. One man yesterday raised the question of the weekly wage, and that is a problem that we can not settle at this convention because there are too many different types of laws, and we all view them from the type of law we are administering; it is hard to get any definite conclusion out of a discussion of this kind in a convention.

I have felt the need of something different from this for a long time. We have some wonderful information in the files of the Bureau of Labor Statistics and in other places, the result of long labor under the best man in compensation work. Most of us do not know how to get that information, if we want to prepare an article on any subject, we do not know how to get it, and the farther we are away from the base of the information, the harder it is.

I think this association has gone on in this way long enough. We should have a general distribution agency for the purpose of distributing this information or having it at hand, so this information will be accessible to all commissioners in the United States and anyone else interested in workmen's compensation or administration.

Therefore, I want to make a motion this morning that a committee be appointed—the size thereof to be determined by the Chair, probably three or five—for the purpose of providing a method for the correlation and distribution of workmen's compensation information, so that men who are interested in any particular type of work may correspond with the Bureau of Labor Statistics and get it.

The Bureau of Labor Statistics has done wonderful work for us and we should be grateful for it, but we owe the bureau a little help and if we can transmit to it court decisions and information that we acquire through long study and hard work, the whole association should have the benefit of this information, not for to-day but for years to come. If we can establish an organization of this kind for the distribution of this information, I believe it will be a wonderful piece of work for us to accomplish.

I therefore move that a committee be appointed by the Chair for the purpose of preparing a plan for the correlation and distribution of information with reference to workmen's compensation.

[President Deans took the chair.]

President DEANS. Do I understand that you desire the present president or the incoming president to name that committee?

Mr. HOAGE. That is a matter to be determined by the association. I think certain men, because of the nature of their work, are the proper men, and I also think it is perfectly proper for the present president to take action on that.

[The motion was seconded and carried.]

President DEANS. I will name as chairman, Mr. Hoage, with Mr. Wilcox, Doctor Hatch, Mr. Sharkey, and Mr. Dorsett.

[Dr. J. Morrison Hutcheson, on behalf of the Richmond Academy of Medicine, extended to the association a hearty welcome to Richmond.]

President DEANS. I felt that I was exceedingly fortunate at the time of becoming president of this association to be able to name as chairman of the medical committee one who has been faithful to our association and who has always had a keen interest in anything connected with workmen's compensation. It is a pleasure to me to present to you at this time Dr. G. H. Gehrmann, of Wilmington, who is to be the presiding officer this morning.

[Doctor Gehrmann took the chair.]

Chairman GEHRMANN. For the past two years we have been considering, or rather I might say attempting, to put across the idea of a course in industrial medicine in our medical schools in order that we in industry and you as commissioners might be able to deal with a group of physicians who were trained in occupational conditions. We had a paper on this subject last year, and we are going to have one again this year because we feel that it is so important. I do not know of anyone who is more capable of presenting this subject to us than the man who is to give this paper this morning, because he has for many years been interested in industrial medicine and, furthermore, he has been interested in putting across to medical students a course which will enable them to deal in a more intelligent way with industrial conditions.

I take great pleasure in introducing this morning Dr. Henry Field Smyth, associate professor of industrial hygiene at the University of Pennsylvania, who will give us a paper on Should a Course in Industrial Medicine be Included in the Curriculum of Medical Schools?

Should a Course in Industrial Medicine be Included in the Curriculum of Medical Schools

HENRY FIELD SMYTH, M. D., Dr. P. H. *Assistant Professor of Industrial Hygiene, Department of Hygiene, University of Pennsylvania*

The question about which your program committee has asked me to give you my views is one on which there was some discussion by myself and others at your last annual meeting and was discussed at some length by me in a symposium on the Qualifications of an Industrial Physician, conducted by the health section of the National Safety Council in Chicago last fall, by Dr. A. J. Lanza in his chairman's address before the industrial hygiene section of the American Public Health Association at the Fort Worth meeting the following month, and was touched upon by Doctor McClure, chief surgeon of the Henry Ford Hospital, in an address on Industrial Surgery as a Specialized Field, delivered before the Interstate Postgraduate Medical Assembly in Minneapolis last fall.

With your permission I am going to quote very freely from these three addresses rather than formulate an entirely new paper covering the same ground.

Before answering this question we should consider what groups of students would especially profit by courses in industrial medicine, using this term in its broader sense to include industrial or traumatic surgery, curative and preventive medicine in industry, and industrial hygiene.

Every graduate in medicine should recognize the effect of work and working conditions on health, and should realize that particular industries, or rather particular jobs in many industries, may be associated with exposure to toxic substances or to deleterious conditions that may affect the worker's health in specific ways, and also that such effects may continue long after the particular exposure has ended. So all teaching of medical or surgical diagnosis or treatment should emphasize the relation of specific occupations and working conditions to health. Such teaching may be, and in some medical schools is already, included as an integral part of the regular courses in diagnosis, medicine, surgery, and hygiene.

However, physicians entering public-health work should have a more thorough grounding in the above than can be included in the regular courses to undergraduates. To meet their needs every public-health course leading to a C. P. H. or Dr. P. H. should include a much more detailed consideration and discussion of industrial health and hygiene, for the health officer should be just as interested concerning conditions surrounding the citizens in his community as to the effect on their health and well-being during the half or more of their working-days when they are at work as during their rest or play times. Industrial hygiene can be much more satisfactorily and convincingly taught if didactic lectures are supplemented by field surveys and free discussions.

A third group—those men and women entering directly into industrial medical service—need even more preparation, not only in medicine and surgery as applied to industry, but in a variety of allied subjects not directly medical but having definite bearing on the health of workers.

Doctor McClure says: "Industrial surgery in the broadest sense includes all the best that medicine has to offer. No one any longer regards the Surgeon General of the Army or Navy as operating surgeons, for we know that those positions call for men of the broadest knowledge and vision, and it is in this sense that we regard the term 'surgeon' here. Similarly the industrial surgeon must have had but little training in surgery and may depend on a true surgeon for this part of the work, while he himself supplies the medical generalship which reduces the toll of industrial accidents.

"That there is a specialized field of industrial medicine is no longer a matter of debate. That this field can be an attractive field for medical men is also without question. * * *

"To keep this step ahead, a man going into this specialty must have a fine training. He must have a conception of the whole field and must not be buried in the routine work of physical examinations and dressings. He must, by his good work, establish amicable relations with the captains and generals in that industry, keep them posted in the newest work in hygiene, and work with them in establishing the proper hygiene and sanitation in the plant. He should cooperate with the safety man zealously to see that every likely safety device is used."

Quoting at considerable length from Doctor Lanza: "We speak of industrial physicians and industrial hygienists, frequently using the terms in the same sense, whereas there is a wider difference between the two than between a general practitioner and a nose-and-throat specialist. Many industrial concerns consider their needs well met when they make available to their employees the services of a skilled surgeon, usually with the specific purpose in mind of satisfying their responsibilities under the compensation law. Obviously the main requirement of the physician who undertakes this branch of industrial work is that he be a competent surgeon.

"Industrial medicine has progressed far beyond this point, and the majority of the larger employers of labor are looking for much more than repair work from their medical officer. We are faced by an ever-growing intelligent demand from industry for the application of the principles of preventive medicine in industrial establishments, and nowhere is there a greater opportunity for this branch of medical service.

"The statement is frequently made by apparently well-informed persons, including medical men, that any graduate of a class A medical school is competent to accept a position as medical director of an industrial establishment and fulfill the duties and responsibilities of such a position in a satisfactory manner; yet I know instances of men with good all-round medical training who have been serving factories for some years and have been entirely unaware of occupational hazards in those plants until damage suits for occupational illness were filed against the firm employing them.

"It is obvious that a physician who aspires to practice as an industrial hygienist needs special training before he can qualify in that capacity. * * * It is increasingly evident that industry is expecting from its medical officers definite activities aimed at the prevention of illness which presuppose a type of training not possessed by the ordinary medical graduate. In other words, it expects its medical officers to be hygienists as well as physicians; but there is no more reason why a physician should essay this specialty of industrial hygiene without special training than the specialty of psychiatry or nose-and-throat surgery.

"The industrial hygienist should have a fair knowledge of the physiological aspects of ventilation and be able to correlate any given condition with the effective temperature chart. He should know enough about illumination to be able to measure the available light and estimate its quantity in relation to the job to be done and be able to recognize glare and correct it. He should know under what conditions it is desirable to take air and dust samples and what methods should be employed in taking air samples and analyzing them. * * * He should know something about fatigue and posture in relation to efficient work."

Doctor Lanza goes on to enumerate various other subjects which should be understood by the industrial physician, such as occupational poisonings and their effects, statistical methods, employment problems, and physical examinations in relation to placement and nonexclusion of the subnormal worker.

In the author's own address referred to above, after quoting from a number of authorities as to the field of industrial medicine

and hygiene and as to the qualifications of the successful industrial physician, or human engineer, as Doctor Rector calls him, he says:

"Those men paint beautiful pictures of what some of you may term 'supermen.' The ideal industrial physician must combine the qualities of physician and surgeon, statistician, insurance man, dietitian, athletic director, sociologist, and what not. Though probably few are equally competent on all these counts, yet I am sure most of us know men who meet most of these requirements and who are invaluable assets to the industries which they serve.

"However, they did not emerge from the medical school or hospital fully armed as did Minerva from the brow of Jupiter. Either they had had other training before studying medicine or they developed to meet the demands put upon them by their industry.

"To be successful the industrial physician, in addition to his medical and surgical training, public health training, training in personal work, etc., must have a proper personality, be courteous, resourceful, tactful, and must be vitally interested in his work. He must have a full realization of the importance of his position, with a vision as to its obligations and opportunities, but at the same time he must be able and willing to work with others and cooperate with rather than antagonize the other departmental executives. He must work in harmony with the family physician and the health officer. He must be interested in manufacturing processes and especially in the work done in his plant, and must be willing to be on friendly terms with the employees. His work or his training may not enable him to do research in hygiene, but if not he must recognize the need for such work and see that studies are made by others when indicated if he can not make them himself.

"No medical school to-day is of itself equipped to give the ideal training for this work to its undergraduates, nor will the already crowded curriculum permit thereof. Proper training for industrial medicine should be distinctly a postgraduate function, requiring the resources of a university, plus the opportunity for practical directed studies in industry itself.

"We feel that every undergraduate should have an introduction to the problems and opportunities of industrial medicine and hygiene, and a brief presentation of the effects of work and working environment on health, but this must be of necessity superficial.

"We feel that, as industrial medicine and hygiene are essential parts of public health, a more extended consideration of these subjects should be included in every public health course, as is done in Pennsylvania.

"We feel that if industry is alive to its best interests it will demand that special training be offered to fit men for industrial positions. This should be postgraduate training including much of the work given to public health students, but in somewhat more condensed form, and special training in personal work and sociology, and also, most important, an interneship or its equivalent in industrial medical departments under competent direction, for it is only by practical experience and observation that a full grasp of the needs and opportunities of industrial medicine can be had.

"This full special course as indicated takes time and money and few men can be induced to go through with it unless large industry demands such training and chooses its new medical staff from such

trained men. Where such men are not now available, industry itself should choose young medical men of promise and finance their training on a part-time basis, as has been done with us.

"The industrial physician should be specially fitted temperamentally and specially trained for his position. He should be an executive with an executive's responsibilities and opportunities. * * * He should be thoroughly grounded in the medical sciences, in statistics, in hygiene and sanitation, and in dietetics. He should have some grasp of insurance and pension problems, of sociology and welfare work.

"The proper training of industrial medical men and women is distinctly a postgraduate function, and the medical schools of to-day, with their already crowded curricula, can not be expected to train undergraduates for industrial positions. They should, however, give to every student an introduction to the responsibilities and opportunities of industrial medicine and some appreciation of the effect of various occupations upon health."

DISCUSSION

Chairman GEHRMANN. We will call on Dr. W. T. Sanger, president of the Medical College of Virginia, to open the discussion on Doctor Smyth's paper.

Doctor SANGER (Virginia). It is a pleasure to be here, though I tried to make it very plain to Doctor Stephenson, who asked me to participate this morning, that I am in no wise an expert in this field. I am not even a physician. My work is more in education in connection with schools of medicine, dentistry, and nursing. I have however, contacts with medical education which provide an opportunity to give our own local view with regard to the subject.

Should there be in the undergradute curriculum a course in industrial medicine? I assumed that Doctor Smyth had the undergraduate curriculum in mind and that industrial medicine is a specialty. From our point of view and a fairly general point of view in the country, it would be held that specialties can not be developed in the undergraduate curriculum. In the last 10 years there has been a decided tendency in the undergraduate course to reduce the amount of time given to specialties of every sort. In our own school the amount of time given to the eye and otolaryngology has been reduced 50 per cent and in some instances more than 50 per cent in the last six or eight years.

We would, therefore, hold that all specialties really belong in the graduate school and that is not only true in the medical field, but it is also true in other professional fields.

In dentistry, for example, whereas orthodontia used to be given in the undergraduate course, it is now pushed over into the graduate school.

It seems to me that in the program outlined by Doctor Smyth it is perfectly evident that in the undergraduate curriculum to-day there is no time for anything like the comprehensive survey of the subject educationally as he proposed. In the first place, there is not time for the background material such as economics, sociology, psychology, and statistics, and I should imagine, Doctor Smyth,

that a fairly good knowledge of statistics from the technical point of view, including such matters as the termination of the central tendency and deviation from central tendency, and mathematical consideration of correlation, and items of that sort ought to be part of the equipment of the industrial physician. There is no time in the medical course to give such work as that, and because of the intimate relation to personnel work and labor problems, it seems that would be fundamental in premedical or postgraduate study, and, of course, the undergraduate student does not have time.

It does seem to me that industry is prepared to have almost anything it wants. We school people think we are poor. We can not have what we want, but if industry demands full-fledged courses in industrial medicine, courses which include, as Doctor Smyth suggests, something like an interneship in an industrial plant, you can surely have those things.

You perhaps know that the American Dietetic Association prescribes a sort of interneship for graduates in dietetics. For instance, after a woman has completed the regular undergraduate course in dietetics, if she is to be properly qualified according to the standards of the American Dietetic Association, she will spend six months on an internelike basis in a properly certified institution to get first-hand information. She will receive about the same maintenance as a medical interne in an institution.

It is not known in professional education to expect something akin to an internship in various fields, so it seems to me fair to say that the undergraduate curriculum can not be expected to carry the load which the subject deserves, and if industry demands it, good centers can be provided; as far as undergraduate institutions like ours are concerned, I do not believe we can do more than give an introductory idea.

I should like to have one of our men tell here what we do in the undergraduate curriculum. We do not go into industrial hygiene or statistics at length, but we do give some little time to this. Doctor Wampler is available.

Doctor WAMPLER (Virginia). I agree with Doctor Smyth that industry should demand that special training be offered to fit medical men for industrial positions. I also agree that for important positions the training should be postgraduate training. Much can be done, however, for the average practitioner while he is yet a student in the medical college by cooperation between the departments of preventive medicine and of medicine. By this cooperation medical students can study the cases in the hospital right along with their lecture work and their field trips in preventive medicine.

In our school here we have something much like what Doctor Smyth mentioned. We give only four or five hours to the lecture work in industrial hygiene, but we get in field trips of two hours each in which the students study the more important industrial conditions. We have had the best of cooperation on the part of the industries here in Richmond, the different factories and places of that sort where we take these men, and this, of course, is for the average man. The man going into an important position in industrial medicine and hygiene, as I said before, certainly should have a postgraduate training, but the men who get out through the country

districts can hardly get that, although we are having industrial poisons and flare-ups here and there in the country districts in mines. Recently there was a case of manganese poisoning among a small group of men working in a manganese mine, an ore deposit. So all the men in medical schools should get a glimpse of what they might run up against in industrial conditions while yet undergraduates in the medical schools.

Chairman GEHRMANN. Is there any further discussion on this paper? Would anyone here like to say anything on this subject?

Secretary STEWART. I, of course, do not wish to discuss a medical paper from a medical point of view but I do again wish to emphasize that what this association is particularly interested in is something that will equip the ordinary, everyday doctor who is called in in these industrial cases to know something about the possibilities of industrial disease. I see, or think I see, or fear I see, that this thing is beginning to be organized in rather an academic way, and there is a danger that we are going to lose sight of the essence of what we are after. We want to put an end to the time when a doctor will send a man to a hospital and subject him to operation for appendicitis when he has painter's colic. Now you smile, but we have scores and scores of just such things as that. That very thing happens more than once every year.

It is that that we are after. I do not need to repeat; you all know this. I am an old man and I never yet have had a doctor ask me what my occupation is when he came to see me for anything that has happened in my life. That is what we are after. I am not sure the way you are going at this thing is not the only possible way, but I do want to reiterate that what we are after is the doctor who is called in on the case.

Doctor KESSLER (New Jersey). I believe that Mr. Stewart's remarks are quite justified. I believe they imply that a dissemination of industrial information among physicians in general should be encouraged rather than try to specialize on a few men who will attempt to take up the work as specialists. This means there must be other ways and measures introduced to spread this information besides a curriculum in a medical school, whether in the undergraduate or postgraduate work.

In New Jersey, where we have fairly extensive health hazards, we have tried to meet this by the establishment by Doctor Blunt about three years ago of an occupational disease center, a center for disseminating information to physicians and plants in general. The idea is to make it a clearing house for diagnosis and the dissemination of all industrial health information for those concerned, rather than a clinic for treatment. We have had large numbers of men interested in the work and we feel free in saying that it has stimulated the knowledge of the physicians in our vicinity to the extent that the reporting of cases of industrial disease has gone up to a large degree.

Mr. KINGSTON (Ontario). I wish something could be done which would enable the doctors to differentiate between real symptoms and symptoms that are similar. We have recently had a racket put over on the compensation board in Ontario—I am almost ashamed to say

it—and a couple of weeks ago a man was sent to the penitentiary for five years because of it.

It started off with one genuine accident that was a comparatively small one, but in connection with that accident the man learned the way, and he conceived the idea of getting his son-in-law and daughter and brother-in-law, and his uncle, and the wife's aunt, and his wife, and I don't know who else, to enter into the arrangement by which conditions that might come under the compensation act could be simulated. One instance was that of his son-in-law who went to the doctor with an alleged injured knee. He told his story to the doctor. I am not saying for a moment that the doctor was a party to the racket, but he was certainly fooled, and that man, with that same knee, went to several different doctors, under different names, in fact to seven different doctors, and the seven different doctors put over a story to the compensation board. They were led to believe that this man had a compensable condition in his knee, which passed the claims examiners in connection with our work.

I do not know that our doctors in Toronto are any better or any worse than they are in any other city, but surely some stress should be laid in the medical colleges where doctors are trained, and I have no doubt stress is laid. Perhaps no matter how much stress you put on the subject, you will still find rogues who will simulate a condition and put it over the best of doctors, but I would say to the average doctor that eternal vigilance is a prime necessity in dealing with a man whose complaints are largely subjective.

The only remedy we have in connection with these particular cases is to strike these men off our list so that they can not deal with compensation board cases any more. That has been done in some instances, but, as I said before, I want to emphasize the need of those who are administering medical education to look into this. It is not the specialist who is giving us trouble. The specialists have their place, but 95 per cent of all of our compensation board cases come through the hands of the average doctor who has merely average collegiate training. Very few of them have postgraduate training, and it is to emphasize in the minds of the average doctor the necessity of differentiating carefully between real symptoms and symptoms that are similar that I think is necessary.

Dr. HATCH (New York). I appreciate the significance of what Mr. Kingston has said, but certainly medical schools can not introduce into the ordinary curricula courses designed to meet that particular thing beyond what I imagine all medical schools have now. I suppose it is just as important that a doctor should be able to tell whether given symptoms indicate typhoid fever or appendicitis or some other abdominal trouble as that a doctor should be able to tell whether the case is simulated or not. All that comes under the general problems of every doctor, namely, to identify the really significant symptoms and to separate them from the others.

We have had in New York, both city and State, that same problem to which Mr. Kingston refers. Every compensation commissioner has that problem. It seems to me if a compensation board or commission has its own medical department with specialists dealing particularly with compensation cases where these things crop up, you have your remedy then, because with us a man who simulates an ex-

tended disability or an injury has to undergo the scrutiny of medical men who have specialized in this field for years and years. There you have your specialized ability to make that distinction which it seems to me it is absolutely impossible to ask of the ordinary practitioner beyond what he has naturally learned in his training, namely, the necessity of seeing what is real and what is not real in the case.

Mr. KINGSTON. Your specialist can not see them all.

Doctor HATCH. In New York we have had within the last year or two the experience of scores of self-inflicted injuries which not only got by the ordinary practitioner but also got by specialists of insurance companies for months and even years, they were so successful. In other words, your ordinary practitioner is not going to run that thing down and can not be expected to. You have to have highly trained specialists approaching the thing from the point of view of genuineness of injury due to accident in order to meet that problem.

Secretary STEWART. That is not the doctor's job at all; that is our job.

Doctor HATCH. That is easy to say, but when a man comes in with what looks like a hematoma on the back of his hand, I don't know a darned thing about hematoma except what I have learned lately. What I want to know is what kind of job produced that kind of injury. All this injury that grew up along with the longshoremen would never have been unearthed if the medical men had not unearthed it because there were so many hematomas in one district in a certain class of work, and after one carrier had spent scores of thousands of dollars compensating the cases, the medical men said, "It is a queer thing that so many of these of a given type are in one district. It doesn't run according to distribution." It was a highly difficult medical problem to get to the bottom of it and find out just exactly what was happening.

Secretary STEWART. The statistician ought to furnish that evidence.

Mr. KINGSTON. What you have said may be true, but the difficulty is our staff doctors can not see all of these cases and the compensation board can see but a small fraction of them. We must depend on the honesty and ability to diagnose and the brains of the physicians who have charge of the cases. If we can not depend on the doctor's diagnosis of the case, then where will we get in connection with these cases? I admit it would be inexcusable if that passed one of our own staff doctors in our office, but that is not the way it happens.

They bring up the case of a man who has water on the knee, a case that can be so easily simulated. He can easily simulate the limp and the painful condition, and he can produce some condition that will make the doctor believe he has some swelling in the knee.

Chairman GEHRMANN. I fear we are getting into the realms of differential diagnosis. Let's stick to medical education and we will take up differential diagnosis a little later. We will call on Doctor Smyth to close.

Mr. WILLIAMS (Connecticut). May I ask Doctor Smyth a question? What we need, I suppose—I know what I need—is to educate ourselves a little, and I take it that every commissioner does. I take it that all of us who are attending to our jobs have read such books

as Alice Hamilton's Industrial Medicine, and John Moorhead's work on Traumatic Surgery, and Kober and Hayhurst's Industrial Health. If Doctor Smyth will be good enough to give us references to other books that we can buy and study, and which will help prepare us to recognize a fake when we see him and know where to send him, it will do us good.

Doctor SMYTH. In preparing my paper, I prepared it in the way that I did because of the title that was given me, Should a Course in Industrial Medicine be Included in the Curriculum of Medical Schools? and I endeavored to answer that.

As I said before, you can not inject new courses into the medical curriculum without a great deal of trouble and a great deal of conflict with the members already teaching specialties, but you can endeavor to make every member of your teaching staff industrially medical conscious—your neurologist, your psychiatrist, your surgeon, your internist—and then conditions will be brought about such as our friend mentions and such as is the usual custom with us. The clinical cases in the wards are discussed from the standpoint of their occupation and the effect of occupation on their condition, whether it may be surgical or medical, neurological or mental. No matter how you may change your medical curriculum and no matter how perfect you may make it from this standpoint, you must remember that for years to come there will be a great many men practicing medicine who will not know a thing about industrial medicine. They are already out and they are producing irritation, and the only way to reach them is through the medical society meetings and through such institutes as Doctor Kessler is connected with, spreading the gospel in that way outside of the medical school. But that is not included in the title that was handed to me to discuss.

Chairman GEHRMANN. I think we are agreed that we and the doctors in general all have to learn a great deal about industrial medicine.

Secretary STEWART. In answer to Mr. Williams, I should like to say that Doctor Kessler has written a book from a much more practical standpoint and bringing it much more down to date than any of the books you mentioned, very much more practical and to our purpose.

Mr. WILSON (North Carolina). We are attempting to assist in educating the medical profession through a safety congress. We have a medical section and we hope to have Doctor Kessler down there to help educate our medical doctors in North Carolina.

Chairman GEHRMANN. We will pass to the next paper and it is an extremely important subject, Settlements as a Therapeutic Measure. We are dealing, not with the ordinary case as a general rule, but with the case which is bound to give you fellows considerable trouble in making your decisions as to just what is the best thing to do in order to finally close the case. I do not know of anyone who has had more experience or who is more capable of giving us his views on this subject than Dr. Henry H. Kessler, who is the medical director of the Rehabilitation Commission of the State of New Jersey. Doctor Kessler is handling thousands of cases every year and he has written a most interesting and remarkable book on the entire subject. It is with great pleasure that I call upon Doctor Kessler on the subject Settlements as a Therapeutic Measure.

Doctor KESSLER (New Jersey). Every time I think of a litigation case I am reminded of the story of Mandy, who was walking down the street one day and was struck by a trolley car and hurtled into the air; as she was about to rise and dust herself off, along came a damage attorney, who said, "Mandy, I can get you damages."

"Damages! Ah doesn't want no damages; what Ah needs is repairs."

That was one case that did not get a traumatic neurosis.

There is nothing permanent in life but change, and knowledge is included in that change. The dogmatic opinion of to-day is a discarded statement of to-morrow, and the general attitude toward traumatic neurosis is going through that same sort of flux as other forms of knowledge are undergoing. I propose to-day to examine this statement as to settlements being a therapeutic measure in the light of our newer knowledge and experience, which indicates a new attitude toward this peculiar kind of human behavior, namely, that this neurosis—so-called traumatic neurosis—is based on covetous desires and when it is satisfied, then the cure is complete.

Settlements as a Therapeutic Measure

By HENRY H. KESSLER, M. D., *Medical Director New Jersey Rehabilitation Commission*

Settlement as a therapeutic measure is a well-established method utilized in the administration of workmen's compensation claims. As long ago as 1894 Ricolins spoke of gold treatment which can be made with bank notes, referring to the causal relation between liability legislation and traumatic hysteria and the recovery of these claimants after the payment of an indemnity. During the World War hospitals were filled with patients suffering from true cases of traumatic neuroses in a different setting, but no hospitals were needed for the prisoners of war who knew they were out of danger. It was thus proved, as the modern psychiatrists maintain, that "covetous wishes" are responsible for the pathological psychic reaction known as traumatic neurosis. However, even before the war, Strumpel recognized that it was the possible compensation that brought on the neurotic syndrome and not the accident. If, therefore, these covetous wishes are satisfied by definite and final compensation or by other methods, this form of reaction subsides.

The experiences of most industrial commissions and compensation bureaus are replete with examples of injured workmen who have been sent back to work only after their cases were definitely settled and finally disposed of. Some examples might be cited.

A machinist, age 32, was struck in the back by a flying piece of wood, sustaining a fracture of the left transverse process of the third lumbar vertebra. He was incapacitated for three months, and when he appeared for examination he was very much depressed and apprehensive. He was obsessed with the idea that he was unfit and of no further use to his family. He contemplated suicide, which was never carried out. He was unable to go back to his job, but after the payment of compensation he was set up in an auto repair shop and has never again mentioned his suicidal ideas. He still seems of a sullen disposition, is inclined to be depressed and sad, but has been carrying on and making a fair income in his shop.

A painter, age 35, fell a distance of 15 feet from a scaffold, striking his head and shoulder. He was temporarily stunned but not unconscious. He continued to work for the next few days but began to complain of headaches, dizziness, insomnia, buzzing in the ears, and general weakness. All objective clinical, laboratory, and radiographic tests for any organic injury were negative. When he appeared for examination four weeks after the accident he presented an apathetic look, complained of inability to stand for any length of time, and asked to be allowed to sit. There was a fine tremor of the periorbital muscles and of the muscles of the hand. There was a general hyperreflexia. Although there was a good muscular development, there seemed to be some loss of muscle tone, which was probably due to disuse.

A prize fighter, aged 28, who worked as a laborer in between fights, fell off a freight car injuring his left shoulder. He appeared to have a simple contusion without fracture. Yet in a few days the arm became limp and hung helpless at his side. All electrical tests were normal, and there were no sensory disturbances. Four years have passed and there has been no change in his condition.

A Polish laborer is said to have sprained his back in lifting a very heavy beam. He kept on working until the following day, when he was forced to quit. Orthopedic, medical, and physiotherapeutic treatment for two years has failed to relieve the pain in his back, although objectively he presents no definite injury nor any end result to the spinal area said to be injured. However, he has a definite corneal and pharyngeal anesthesia and a right-sided complete hemianesthesia.

A telephone operator, aged 26 years, fell off her stool, injuring or twisting her neck. She continued working but was absent from duty the following day. At that time she presented a spastic torticollis of the right side of her neck which has persisted for 18 months despite all treatment. Radiographically and clinically there is no evidence of disease of the cervical spine or muscles.

In a certain percentage of cases, however, the final disposition of the case or settlement does not produce a cure, as for example:

While working in the shipping room, a foreman, aged 48 years, was struck by a pile of boxes, injuring his head and shoulder. He was taken to the hospital where it was found that he had a contusion of the shoulder and a small laceration of the scalp, which was sutured. Radiographs of the skull were negative and after five days, during which time he was free from symptoms, he was sent home. He returned to work two weeks later apparently well, when, while in the same room, he fell to the floor in what appeared to be an epileptiform seizure. He has had five seizures in two months at irregular intervals. He seems to be an honest and earnest worker, is anxious to return to work and is worried about his condition. He was under observation in the hospital when one seizure occurred and to all appearances the attack was of an epileptiform nature.

A man fell from a ladder striking his back. In two weeks he returned to work but was not paid for the time he was out. He made many visits to the compensation bureau, hired a lawyer and lost his case. His case, however, was reopened when it was found that he had a complete spastic paraplegia of hysterical origin.

An ironworker, aged 23 years, was struck on the head by a falling wrench. He was out of contact with his environment for five minutes, could not remember how the accident happened but presented no bleeding from the nose, mouth, or ears when he was brought to the hospital. He was discharged from the hospital at the end of a week, complaining of typical post-concussion symptoms of headache and dizziness. His condition was unchanged for several months, although he had remissions in which he was free from these symptoms. He did not return to work. He was seen a year after the accident by a psychiatrist, who was called in by the family because they were unable to get along with the patient. He was negativistic, uninterested in what was going on about him, was delusional, and for days would lie in bed without undressing, eating, or bathing. A diagnosis of dementia præcox was made. His condition became worse until it was necessary for him to be institutionalized.

A carpenter, aged 43 years, fell from a scaffold a distance of 10 feet, striking his head a glancing blow. He was not unconscious nor seriously hurt and required no hospital care. He was treated by his family physician and soon developed typical neurotic symptoms—headache, dizziness, restlessness, and insomnia. He was allowed a small award for his condition more as a therapeutic measure than as an indemnity. He did not improve, however, but his symptoms increased. He developed an intense depression and despite repeated increases in compensation his condition grew worse. One day he appeared at the bureau, and without warning plunged through the window onto a neighboring roof and was picked up dead.

A Swedish worker, about 32 years of age, was employed in an automobile assembly plant. An automobile part fell on his left foot, causing a sprain-fracture of the scaphoid bone. This was treated by the plant physician, who discharged him from treatment at the end of eight weeks. He still complained of pain and claimed inability to work. His case was terminated with a small allowance for permanent disability, about 10 per cent loss of the foot. He did not return to work but came back to the bureau for the reopening of his case, claiming pain and disability in the whole leg. In view of the negative findings objectively, the case was disputed, but finally went to a formal hearing, at which a larger award was allowed. Several months later he reappeared, claiming increased disability, although not asking for increased compensation. His symptoms were now referable to his back and side. Physical examination failed to reveal any objective signs to corroborate his complaints nor were there any signs symptomatic of hysteria. In the meantime his mental attitude had changed considerably. He developed a severe depression and it was necessary to hospitalize him. He was later removed to a psychopathic institution on account of this depression. He would lie in bed continuously, would not undress, nor eat, and absolutely refused to talk. A complete disability allowance was made. This fact was communicated to him but had no effect on his condition. Arrangements to send him back to Sweden where his family lived made no impression at all on him. He is still institutionalized five years after his accident.

A Polish laborer was hurt in a cave-in, sustaining a laceration of the scalp but no fracture or loss of consciousness. He was allowed 10 per cent permanent total disability. He was dissatisfied and went to the industrial commissioner to complain about the referee, claiming crooked tactics on the part of the latter and that he was in league with the insurance adjuster. On investigation this was disproved, and the injured was advised that he was mistaken and that the award was proper and adequate. The injured man then appealed to the commissioner of labor, alleging fraudulent tactics on the part of the deputy commissioner. The case was reinvestigated, and the advice of several physicians was requested to review the medical aspects of the case in order to determine the adequacy of the award. All agreed that the award had been liberal. This did not satisfy the petitioner, who appealed to the governor. During this time he was examined frequently by physicians, but little thought was given to the unusual actions as pathological until his wife appealed to the police for protection against him. He had threatened to kill her unless she went out as a prostitute. It was necessary to institutionalize him after an award of complete disability had been made.

These cases illustrate the necessity of careful examination and observation to determine the exact nature of the symptoms complained of by the injured workmen. The responsibility for distinguishing between those cases presenting neurotic symptoms based upon covetous wishes and between those cases presenting symptoms which appear to be neurotic but are based on serious functional or organic disease rests upon the medical profession. It behooves the industrial commissions to establish competent authoritative medical advisory service to meet this responsibility.

When a man is referred to the medical examiner to have his compensation status determined certain questions must be satisfied. What factor caused the neurosis? Was it the physical injury, the mental fright incurred, an inferior make-up, a wish for compensation, or some other unpleasant experience outside the pale of his employment or the circumstances surrounding the alleged accident?

The following case illustrates the difficulty in arriving at a decision as to the causative factor in the production of a right-sided paralysis.

A German girl, aged 27 years, working as a maid in a private home, had always been well and presented no external evidence of disease and no limp. She had been in the country only six months and was ambitious to learn the language, so she went to night school. One day she fell from a ladder, striking her head. She continued working the rest of the day and attended school that night. No medical attention was asked for. The following day she continued work and went to night school. The next day she worked but felt ill, had headache, chills and fever, and did not attend school that night. A physician was called and diagnosed the case as one of grippe with threatened pneumonia. The following day another physician was called by the maid's sister, who attributed the illness to her fall, although the injured herself did not feel resentful. This physician stated that he found evidences of severe swelling and ecchymosis on her face and that a broncho-pneumonia was impending. She was removed to the hospital, where her lung condition in five days resolved by crisis and where the diagnosis of

broncho-pneumonia was further corroborated. Five days later she became irrational, presented changing pathological reflexes in both lower extremities, was excited, and developed an impairment of power in the left arm and a limp in the left leg. On account of her unruliness she was removed to the psychopathic ward of the city hospital, where her psychotic symptoms disappeared. All the reflexes returned to normal, but she retained the limp and the weakened attitude of the arm and hand. When she presented herself for examination the condition was manifestly functional. There was no evidence of any organic involvement. With this knowledge at hand, it remained for us to decide the responsibility of the employer in the causation of this neurosis. Various possibilities had to be considered, viz:

1. The hemiplegia was a result of the brain injury sustained at the time of the accident. (The absence of any organic changes ruled this out.)

2. The hemiplegia was a functional residuum of an encephalitis as demonstrated by the organic changes described above.

3. The hemiplegia was the result of some other psychic inhibition.

The question then was not one of diagnosis but the determination of the cause of the functional condition, which was very evident. I do not believe anyone could have determined it. The commission, however, interpreted the condition in terms of a time relation, a cause and effect sequence, and since it was reasonably possible that such a functional condition could have resulted from a minor injury an award for compensation was made for the injured.

The inadequacies of medical knowledge and the mystery of the unexplained phenomena of mind make the subject difficult of solution; so speculation must give way to the rational logic of the law.

There are two methods of settlement: The capital or 1-payment settlement (adopted in England, Canada, Sweden, and Denmark) and the "rente" method, in which small sums are paid each month (adopted in Germany and in Austria, Italy, and Switzerland with exceptions). In the United States both methods are in practice. The lump-sum settlement seems less advantageous for those who are permanently disabled in industrial accidents, and the workmen so compensated are generally not capable of handling a 1-sum payment rightfully. Although prognosis of neurosis under the "rente" method is considered unreliable, His gives 90 to 97 per cent as becoming totally fit for work after settlement.

The time between settlement and return of capacity for work varies. There are few statistics but the curative effect of a settlement is certain. In Denmark, according to Wimmer, 35 per cent were able to return to work at full capacity in a year. In this country the management of cases of traumatic neuroses has not been uniform. There is nothing contained in the statutes of the various States which designates how these cases should be disposed of. Discretion for this disposition is usually left to the referee or commissioner. He may rely upon the medical advice of the State physician or other physician, or he may disregard them entirely. Awards ranging from nothing to 100 per cent permanent total disability for the same type of case are noted, not only in different States but within the same State by different referees or commissioners. Some uniformity of action is desirable for many reasons:

1. With few variations the condition is almost always the same.
2. Great injustice is done to those sufferers from real physical disability who receive less than those suffering from unreal or imaginary disability.

Although the procedure in New Jersey has not been uniform, the practice in my district has been as follows: All cases of neuroses are considered as falling into three major classes—

1. Those patients suffering from a desire neurosis—that is, desire for compensation.
2. Those suffering from a functional neurosis, the result of injury, such as fright or other circumstances surrounding the injury, which class has been described as the true traumatic neurosis.
3. Those suffering from neuroses due to unexplained complexes or mental conflicts.

Temporary disability.—A maximum period of temporary disability ranging from six months to one year is allowed for the three types, depending upon the presence of severe physical injury. In the absence of the latter, six months is all the time allowed. When the neurosis is superimposed upon a severe physical injury, a fractured spine, or a musculospiral paralysis, the period of temporary disability may be extended to six months beyond the normal time for that injury. For example, in a fractured spine one year may be allowed for the physical injury, and if neurotic symptoms are present at the end of that time an additional six months' temporary disability should be allowed. During this period it is assumed that the injured worker will adjust himself, with or without medical aid.

Permanent disability.—In the event that this adjustment is not made and the symptoms of his neurosis are still present, a capital or a lump-sum equivalent to 1 year of compensation is awarded. In New Jersey this would represent 50 weeks of compensation, which is equivalent to 10 per cent permanent total disability, which is rated in the schedule as 500 weeks of compensation. The purpose of this procedure is as follows: The lump-sum award should satisfy the desire of the neurotic and hence should eliminate the motive for his neurosis. In the true traumatic neurotic the same desire factors which might be present should be eliminated, as well as any further suggestive factors associated with litigation. At the same time he has a year in which to make his adjustment, which seems to be adequate time. As for the third group, those suffering from neuroses due to mental conflicts not related to the accident, such an award is more than they are entitled to. However, since it is practically impossible to differentiate between the three types in the beginning, since the symptoms are the same, the management and award should be uniform. The amount of the award is not too large so that it penalizes those suffering from real physical injury and disability. Regarding the adequacy of amount, it may be said that the labor insurance councils in Germany changed their awards from 20 per cent to 5 per cent, because they obtained the same results with the lesser awards.

If the neurosis persists in the same form one year after the date of the award, no additional award is made. It is assumed then that the basis for the neurosis is essentially some mental conflict not related to the accident and hence not influenced by the termination of the litigation.

Summing up:

1. Settlement as a device for arbitration of compensation of claimants suffering from neurosis is a sound practice.
2. Consideration should be given to the fact that the adjustment after settlement may not be immediate, but may be gradual and may even take one to two years.
3. A small percentage of cases will not be benefited, due to wrong diagnosis or to other mental conflicts at the bottom of the neurosis.
4. There will be a certain number of cases of real psychopaths whose reactions will be mistaken as falling into the category of the neurotic.
5. Finally, to recapitulate, traumatic neurosis is a social disease and requires social remedies. In this instance the physician can only prevent; the judge must cure.

DISCUSSION

Chairman GEHRMANN. We will now call on Dr. J. Morrison Hutcheson, professor of clinical medicine of the Medical College of Virginia, to start the discussion on this most excellent paper.

Doctor HUTCHESON (Virginia). I have listened with a great deal of pleasure and profit to the paper that has just been read. My own acquaintance with the type of patient under discussion usually ends before a settlement is made; consequently, I have no large experience with end results upon which to base any conclusions.

It is a fact, however, that every medical case has its psychic aspect, and where compensation is involved this factor may be and often is tremendously exaggerated. It is also a principle of therapy in neurotic individuals that the sooner a doubtful situation is ended, the better the prospect for an early cure.

I was particularly interested in the doctor's analysis of the problem that is presented to the examiner. He divides the question under three main heads. Is the neurosis in fact a desire for compensation, or is it the result of some circumstance connected with the injury—fright, for example, or prolonged litigation—or is it the outgrowth of a mental state entirely unrelated to the injury?

Mr. MCSHANE (Utah). Would prolonged treatment be a factor?

Doctor HUTCHESON. Prolonged treatment by lawyers or by doctors. It seems to me that such a scheme of investigation is simple and at the same time adequate. It orients the study as it were, and I think facilitates logical conclusions.

The doctor advocates uniformity of procedure among various industrial boards. He did not say just how that is to be consummated. It would seem to me, however, that discussions of just this sort in this type of gathering would lead to a better understanding of the problem and would produce a trend toward uniformity.

He outlines the method pursued in his own district. Such a method, it seems to me, has its advantages and its very distinct disadvantages. In cases where even mature study fails to produce a conclusion upon which a settlement can be made, one has a routine to fall back on, as it were, to mark time; however, any routine has this disadvantage: It is more or less a rule-of-thumb matter and there would always be a tendency to replace with a routine the

careful individual study and observation which, in my judgment, is indispensable.

Chairman GEHRMANN. We will ask Dr. F. H. Smith to continue the discussion. Doctor Smith is diagnostician at the George Ben Johnston Memorial Hospital, Abingdon, Va.

Doctor SMITH (Virginia). Settlements as a Therapeutic Measure—this is a broad subject to condense into a short paper and an even shorter discussion. Notice that the title embraces all manner of settlements as a therapeutic measure in all sorts of industrial injuries, with all the complications that grow out of injury. Obviously, it is impossible to discuss it in all of its content and ramifications, and I shall not pretend to do so.

I think the essayist has hit the nail on the head when he devotes practically his whole thought to the various neuroses which may grow out of industrial accidents and injuries. The real inwards of the large majority of industrial compensation problems lies right here, in the genesis and perpetuation of some form of neurosis arising out of or complicating the physical injury or threat of injury. There is a mental phase, an emotional reaction, to every injury not immediately fatal. Every injured workman is potentially a neurotic. The seed of some sort of neurosis falls into fallow soil in the first conscious moment after the man realizes that he has been injured. This is instinctive. It is but another expression of nature's first law, the law of self-preservation. How badly am I hurt? Will I live? Will I recover fully my earning capacity? What is to become of me and my dependents should I die or be seriously disabled? Such questions continue to hammer at his brain from this moment on.

An important problem, therefore, confronts everyone having anything to do with the administration of workmen's compensation laws: Is it possible to prevent the development of more or less fixed neurotic invalidism; and, if so, how?

There is an old saying in medicine that the fate of the injured man is in the hands of the doctor who first treats him. Modify this just a little bit, to say: The mental health of the injured man is in the hands of the first responsible official who deals with him. If it were possible for every injured man to be treated expertly at the time of his accident, and to be dealt with sympathetically in his mental problems, and if every such workman could be confident in his own mind that he will get such care and sympathy throughout his period of disability, the problem of neurosis would be largely solved, and with it most of the dissatisfaction that now arises out of the administration of the workmen's compensation law would disappear.

Unless this perfect service is available, or until it is, we must look elsewhere for the prophylaxis and therapeusis of the neuroses.

As usual, the remedy should depend upon the causes operating to produce the diseased state of mind. The essayist has said that in New Jersey all neuroses are considered as falling into three major classes: (1) The desire neuroses; (2) traumatic neuroses; (3) unexplained complexes or mental conflicts. He intimates that all of these several sorts of neuroses are adjusted along the same general lines. This is evidently a compromise to satisfy "the rational logic of the law." For, strictly speaking, we will all admit that the insur-

ance carrier should not be liable for anything except the consequences plainly arising out of the accident. If so, there is no place in the scheme of compensation for the first and third of these classes. Only a true traumatic neurosis is compensable. Practically speaking, it is difficult to draw the line between a true traumatic neurosis and a " desire " neurosis on the one hand, and nontraumatic mental conflicts on the other.

After all, what we are seeking is a definition of traumatic neurosis. What constitutes, inclusively and exclusively, the limits of traumatic neurosis? Until we set these limits, we speak different languages, and can never really understand each other. Shall we label by that term the bare statement of the claimant that he can not eat, he can not sleep, his heart bothers him, he has horrible dreams, etc.? Or shall we demand some objective symptom or sign of disturbed function before we accept such a diagnosis? Is the individual who is obviously of inferior make-up mentally and physically, and who has always reacted poorly to any previous insult, a traumatic neurotic? What of the claimant who has certain definite complaints and alleged disability, and yet in the course of conversation comments that he is behind several months in his rent and grocery bills, and he does not know what he will do if he does not get something out of the company? Such situations have been called traumatic neurosis.

Personally, I do not think it too much to expect and demand that any claimant who utters a definite complaint should react to that complaint in some way which the doctor can recognize. He should give clear demonstrable expression or evidence of malfunction before we accept his self-serving declaration at face value. I trust that these commissions represented here will turn their attention shortly to a definition of traumatic neurosis within the meaning of the industrial acts of their several jurisdictions. We need a definition expressed in some such categorical fashion as that of traumatic hernia.

When such a definition is forthcoming, the question of which case is compensable will be almost automatically decided—almost, but not quite. There will always be instances when even the most astute will hesitate to say that there is absolutely no connection between the traumatism and the nervous state.

Having determined that the given case is compensable, either because of physical disability arising out of an industrial accident, or because of true neurosis threatened or existent, or because of both physical and psychical trauma, the remaining question is the amount and manner of settlement.

For my part I am convinced that every case of compensable neurosis, whether physically injured or not, should be awarded compensation in one sum. Practical objections and difficulties are immediately apparent. Most of these are not insurmountable. A number of them, for instance, have to do with the difficulty of determining in advance the time the claimant will be actually disabled, and the length of time necessary for him to adjust himself after physical recovery. To meet these objections, let the final award await the moment that these factors are determinable, adding, say six months, for the neurotic factor.

A very real difficulty is our inability always to be sure that there is no real organic injury, however occult the evidence may be at any given moment. The essayist has mentioned several such cases. Like experiences have befallen every one of us, much to our chagrin. Most of these cases have involved alleged injury to the head. All examinations may be absolutely negative. Personality changes may seem to be within the bounds of simple neurosis. An award may be made on such a basis, when 6 or 12 months later the patient may prove to be a true psychotic, or something equally permanent.

To guard against such unfortunate mistakes, admittedly a small proportion, I believe that in the case of head injury where the complaint lasts beyond a reasonable time for recovery, the patient should be hospitalized for study and observation over a period of weeks if necessary, before final judgment is arrived at. Whenever a patient, separated from the influence of anxious relatives and injudicious friends, and under the cold surveillance of the hospital staff, continues to complain of head symptoms, and especially when he acts queerly, be wary of a diagnosis of simple neurosis.

The essence of the lump-sum settlement, its whole curative effect, is its finality. If the claimant can question whether the case is closed, the lump-sum settlement loses its therapeutic potency. Even so, I can see no real objection to reopening the case when it is certain that injustice is about to be done, just as the criminal law provides for the reopening of a case because of after-discovered evidence. Such an occasion must be very rare.

Then there is the very practical objection that settlement in one sum invites squandering. As the essayist says, very few workmen are capable of spending wisely any large sum of money, and therefore the purpose of the award is lost. I believe this objection is easily overcome. There should be a provision in the law by which the commission itself, or some responsible party or corporation becomes the trustee of this fund. Its supervision may be strict or lax as in the opinion of the official is necessary, and when the man has demonstrated his capacity to manage his own affairs intelligently, the trusteeship may be vacated. This may smack of paternalism in government, but we have already entered upon such a course when we set up the whole structure of the industrial act.

Having stated these objections, and admitting there are others, let me summarize my conclusions favoring the lump-sum settlement as a therapeutic measure:

1. Every injured workman is a potential neurotic.
2. It is the neurotic element which is the main difficulty in sizing up the case and fixing the percentage of disability.
3. However serious the physical disability, this complication prevents or retards complete rehabilitation, therefore
4. Every effort should be directed toward preventing or relieving the disordered mental reaction while expertly handling the physical injury.
5. To this end, a most important consideration is the matter of financial settlement.
6. Secondary in importance therapeutically only to the fact that an award is forthcoming is the manner of settlement.

7. It is counting too much upon frail human nature to expect the man to recover so long as he is being paid a dole, and there are other doles due. The argument that, since he is still being paid through the order of a governmental agency after a full hearing, he must still be incapacitated, is too strong for him to resist. How can he get well! If the dole system serves only to prolong the period of invalidism, and yet the man has to have his desire for compensation satisfied, or must readjust himself mentally before he can recover, the only reconciliation seems to be—

8. An award in one sum, under certain necessary safeguards, at the first moment possible to determine the extent and duration of physical and neurotic disability, so as to—

9. Close the case once and for all.

Chairman GEHRMANN. We will now open this subject for general discussion to anyone who may feel he has something to say on the matter.

Secretary STEWART. I should like to suggest one fundamental remedy for lump-sum neurosis—abolish the lump sum. We dangle the bait in front of the fish, and then we wonder that he keeps on biting, and gets hold. After all, isn't there a medical neurosis? Isn't there such a thing, as when the patient does not yield to any treatment, when the doctor is baffled and nothing happens from anything that he does, he gets mad at the patient?

I think one of the best things ever said in any of these conventions was said by Doctor Hutcheson, of Massachusetts, when he said that "malingering" is the diagnosis of the diagnostically destitute.

Mr. LEONARD (Ohio). I was very much impressed with Doctor Smith's statement about sympathetic handling of neurotic cases. I think that is a most important thing from the standpoint of the commissioners in the different States. We try to emphasize in Ohio the matter of sympathetic handling of neurotic cases. I remember we had the case of a man who was employed by a New York company in Ohio—a bricklayer, a high-wage man, who was struck on the head with a brick. This company had a lawyer. They wanted an oral hearing on the medical testimony and we said to this company, "That is a good way to make a permanent total out of your man. The thing to do is get the man back to work. He is going to too many doctors." That is the thing we have found in a great many of these cases. They will make the circuit.

We had a man with a neurotic tendency who came before us not long ago. We found that he had had 30 Wassermann tests taken before we found it out.

In the case of traumatic neurosis whose treatment is often indicated we can be of valuable service. There is an institution outside of Columbus where we send these people, and the doctor in charge there watches the patients very carefully. He is around with them every day. He talks to them and gets them interested in games, and when his reports come in to us, they are very illuminating.

I remember the case of one man who had 20 or 25 different injuries. They were medical only. This man had an injured foot and he never got over that foot. He said, "If that foot would only get right, I could work." This doctor had that man playing base-

ball, and he said he got around the bases quicker than any man on the team. In Ohio, we feel that the best medicine is mental medicine. Mental medicine works.

I think a great deal can be accomplished by telling a man that you are getting him in pretty good shape where he can get a job and then consider the matter of back compensation. I think it is a good thing occasionally in a case of traumatic neurosis to make the man think you are making a lump-sum settlement. In Ohio we can not close any case. We have said to a man, "Well, I think you are in good shape. We will give you something to get along on." We may advance him a year's compensation, not a lump-sum settlement, but an advancement.

I think this is a very valuable discussion to-day on traumatic neurosis. I think if our medical friends could give us something about the cure for back injuries, a lot of the medical aspects in the problems which come before compensation commissioners would be solved.

Doctor HATCH. I should like to ask Doctor Kessler whether, with these lump-sum settlements, the bureau of rehabilitation undertakes to follow up the man after the settlement goes through; whether you have found that some sort of advisory conference, so to speak, with the man is an important or necessary part of the rehabilitation on some settlements?

Doctor KESSLER. New Jersey goes farther than that and supplies the occupational therapy so essential to help the adjustment of the individual following the settlement, and, following the occupational therapy, rehabilitation. New Jersey has all of that.

In the first case I cited, that of the man with the neurosis, he was very apathetic and had symptoms bordering on the abnormal mental type, and the rehabilitation commission set that man up in business after his case was closed, but we could not do anything until that was closed. Once that was off his mind he was ready for rehabilitation.

We have the continuous set-up. The case is closed. Then the man is sent to a curative workshop—sign painting, printing, flower making, carpentry, and many allied pursuits; he makes his adjustment more rapidly than if idling and loafing, and then it is a simple matter to get him set up in some training or placement program.

Mr. MCSHANE. I think this association and the compensation boards of the respective jurisdictions owe a great deal to the doctors in handling the types of cases that have been discussed this morning, particularly the neurotics.

It has been indicated here that one of the symptoms that may be discovered by an astute diagnostician is the desire. Now, while we owe much to the medical profession for uncovering those cases for us and letting us have the lowdown, I want to say that the medical profession does a lot to murk the waters locally, because the desire is not always on the part of the man. In any sizeable community in the United States we can get any kind of opinion we want on a medical case. That is our experience, and I believe it is the experience of every board in the United States. I can not speak for Canada; Kingston is authority for Canada. But I want to say that we have more trouble with doctors than we have with the patients themselves, and this, I want to say again, is not any attack on the pro-

fession. It is an individual in the profession who does it, and there can be no group that will be free of a minor element that comes in to curse it, whether the group be of lawyers, doctors, or industrial commissioners.

Mr. DUXBURY (Minnesota). It occurs to me, on account of what Mr. McShane has said with reference to the simulated cases, those of the character that Mr. Kingston describes, and now we have gone farther than that, whether our problem is not the problem involved in original sin, which affects all humanity, whether injured workmen, or doctors, or lawyers; no matter what sort of people they are, we have that sort of thing.

Of course, we laymen expect doctors to make an absolute and positive diagnosis and when they do not do it, we are a little vexed because they do not quite perform the functions we expect of them. We forget that, after all, doctors are human, that there are limitations in their science, and that there are some things that they can not positively diagnose.

Possibly they are in the same class with a doctor I heard about. He was a doctor and the seventh son of a doctor. Formerly we used to think the seventh son was divinely appointed for the medical profession. The story is that one of those peculiar doctors had started out on his ordained mission in the world, and some friend of his was interested in how he was getting along and asked him about it, and he said, "Oh, fairly well, all right." (Everybody puts up that sort of guess, you know.)

"Well, do you ever have any difficulty in determining what ails a man?"

"Oh, yes; sometimes."

"What do you do then?"

"Oh, then I try to throw him into fits because I'm hell on fits."

I have thought of that story in connection with the modern perplexities of our modern doctors, especially when trying to diagnose a case that is very baffling and in which they can not find any physical or objective symptoms and can not tell what is causing this apparent disability, and, in fact, whether it is a disability or not, and in that perplexity they follow the tendency of the seventh-son doctor and conclude he is a neurotic because they are hell on neurotics.

Mr. PARKS (Massachusetts). These papers to-day were very interesting and certainly very helpful in the treatment of traumatic neurosis cases.

My trouble in helping to administer the compensation act for going on 20 years, handling many traumatic neurosis cases so called, is to differentiate between the real, true, and unadulterated neurosis and the faker.

Mr. DUXBURY. Well, that is the only issue I think, whether he is a real neurotic or a malingerer.

Mr. PARKS. I wish some of the learned physicians to-day, if possible, could help us commissioners out by some advice or some line where we could tell the faker from the real, true traumatic neurotic.

My experience would be this: When all the doctors have treated the patient many times for a period of years for a back injury—

when these people want to put something over, they have it in the back. You can never find anything in the back. Tell the doctor you have a pain in your back and he believes you because he does not know anything different. He can not tell you whether you have a pain or not and he says, "Well, if he has a spasm, of course he has a real trouble," but these people become so educated that they can actually put the spasm over on the doctor—they get so used to being examined—and so when they get all through and have had all the treatment, we still have this condition. One doctor, a real surgeon, an orthopedic specialist, treated a man for five years for his back and he was still totally incapacitated, and I said to the doctor, "Doctor, I suppose you have treated him with all the methods to be used in orthopedic surgery in your profession, that your profession taught you and that you got out of your medical-school training."

"Yes; I gave him everything."

"Don't you feel sort of bad that you have not had any effect on that back? In five years you should have made some impression on him."

He said, "Of course, it takes a long time."

And that is all he would say and that case finally wound up and he said, "I think he ought to be examined by a nerve man."

Of course, he came through. He had a traumatic neurosis and not a back injury at all, but the doctor treated him for five years for a back injury.

I agree about a lump-sum settlement when you find traumatic neurosis and you feel in your heart that the man is a faker but you can not prove it. When I meet those fellows that I think are fakers, the insurer suggests how much we should give him, and I say, "If you can get him to agree to a nickel, I will approve because I don't think they are worth a great deal."

One gentleman from Ohio said he believes in treating them all sympathetically. Well, I recall that one man was brought into a hearing before me. He had a wife and two daughters, and one had his hat and another had his coat, and another carried something else. One helped to take his cane from him, and they all put him gently down into the chair and soothed him. I wound up with this—Mr. Leonard probably will not like this kind of treatment, but it had its effect—I said to the wife: "What your husband needs is a good swift kick in the pants."

She talked to me afterwards. I asked her to come into my room and we talked it over and she carried out the treatment I recommended. They began to leave him alone and he got better in three months, and no doctor did that, either.

It may sound humorous, but these traumatic neurosis cases are becoming somewhat a serious problem. They are costing industry a lot of money. I hope that these traumatic neurosis cases will not read these papers, although I believe they are good papers. I believe that is the proper way to handle these cases. I am not reflecting on the doctors. I have a great deal of affection and love for the medical profession. We need their help and they give it to us in Massachusetts; we have some fine physicians there. Do not let us make these cases understand that, if you want a lump sum, just get a neurosis, because the industrial accident boards and commissions recommend that.

If some of these learned physicians here present—and I mean it seriously with all the affection I have for them—can give us some advice, some help, any little line that will help us to determine the faker from the true and unadulterated type, give it to us.

Mr. FUNK (Iowa). The impression has been given on the part of some speakers that the process of commutation is exercised in the interest chiefly of the employer. That is necessary sometimes. I feel that industry which is represented by insurance passes all the burden to industry and to the consuming public, and I think sometimes they are entitled to relief because of the evident tendency unnecessarily to increase that burden, and that is worth considering, too; but, on the other hand, I feel that in many cases it is a mercy to the workman to have this process exercised.

After a real, serious injury the workman becomes enervated, discouraged. He loses his intestinal fortitude, so to speak, and he needs encouragement. He needs a chance to make definite plans and to arrange things, to make arrangements accordingly, and he is worried about this compensation. He is concerned about his ability to work again. He is not himself in any respect. He has changed his habits. He has been a robust man accustomed to strenuous exercise, and in his inactivity the situation is worse than it would be otherwise. It has become somewhat psychological in its application. I have seen evidences in many cases that when a settlement has been made with great discrimination as to the workman, he has been benefited by giving him a sum of money on which to live and arrange his plans and through which he could know definitely what he could depend on. I have seen workmen benefited by the exercise of that process.

As to doctors, we can not get along without them. In some respects they are like women, of whom it has been said that we can not get along with them and we can not possibly get along without them. Doctors are in that same position. They have to do a good deal of guessing. It is like picking a time lock to decide just as to the actual condition of an injured man, and they do very well under the circumstances, and yet we must exercise a great deal of discrimination and administrative judgment in dealing with their reports.

I had a case of a back injury last week in which I had before me the estimates of 10 doctors. It was the reopening of a case as to the extent of disability. It is most difficult for doctors to measure injury in relation to disability—what the injury means as to the working capacity of the employee. These 10 doctors, several of them among the eminent men of our State, estimated disability from 10 to 75 per cent total, and that left a considerable range for guessing on the part of the commissioner.

Mr. MCSHANE. You have too many doctors.

Mr. FUNK. That sometimes happens, that there are too many doctors, but it seems to me all the administrator can do is take the evidence and have the workman before him, and exercise common sense and do the best he can.

An interesting incident happened at that same hearing last week. The workman came in walking as erect as anyone, and he seemed to be entirely capable physically, but that sometimes happens. Sometimes a man may have the appearance of being strong and well when he is really seriously affected, but during the course of the hearing

the wife was on the stand. She was French and did not speak very intelligible English, but she impressed upon the court and upon the counsel the fact that her husband walked this way [demonstrating]. "Well," counsel said, "he doesn't walk that way this morning. We have seen him walk around the room and he walked upright."

After that the workman changed his attitude. He went out with his hand here. I lost confidence in the man because he had walked upright, and then did not. I would not discredit him until he went to playing the game before me, making out the lameness to be more conspicuous than it had been before. That, I think, has to be taken into consideration—the bearing of the witness and the impression one gets at a hearing as to the character of the man and the measure of his efforts.

Mr. WILCOX (Wisconsin). I think we ought to bear in mind that this is not a discussion of lump sums but is something other than that. It is a question of whether or not a settlement will help to improve the condition of a neurotic, assuming that we have a neurotic to deal with. We have our difficulties in determining whether or not a man is afflicted with any neurotic condition, if that is keeping him away from work and preventing a full cure.

We will have difficulty in the case Mr. Parks referred to, but we will have the same difficulties in other cases. The question of whether or not a man's fractured limb is such that he can not return to work is a problem we have to meet, and we meet it every day, and back injuries are not neurotic cases. As a rule it is a head injury case that produces neurosis. The back injury presents a question of determining whether the condition of a man's back is so painful still that he may not return to work, and you and I who are getting along in years know what a pain in the back is and whether or not we may do some of the things we otherwise might do.

The question Doctor Kessler raises is not necessarily that of lump-sum cases, but settlement of a case which will have the advantage of restoring this man to his occupation, and those who have administered compensation must know it will have that effect.

If you use your good sense when you come to this question of settlement, you will determine the manner in which it shall be paid, whether lump sum or installments, and, as a rule, whether we approve lump sums generally or not, they ought to be paid for the psychic effect they may have on the man. Usually we put the man's money in the bank, and then we write the bank and write the man and tell him we are doing this; that is, we write the bank and send the man a copy of the letter. We tell the bank that he is a sick man, but he is going to recover, he is going to come back; that he seems an honest man and we are not worried about his funds and we are putting them in this particular bank, but we should like "you, because he says you are his banker, to deal with him and see that the money is not dissipated." We sort of put a guardianship over this man, and still do not restrain him to the point where we lose the psychic effect of his settlement.

I hate the baiting of doctors, because they are not necessarily responsible for these neurotic conditions we have. Compensation commissioners are a lot of supermen, Doctor Gehrmann. It is just wonderful all we know about this human mechanism.

This is not just such a nice thing to talk about here, but I want to talk plainly of an illustration once given to me, and it will help you to see just how well coordinated your mental and nervous system is. At a hearing in the city of Milwaukee we were dealing with a neurotic, certainly a neurotic, but we had an insurance company representative who could not distinguish between neurosis and malingering. "Malingering" is one of the nastiest words that ever a man contrived to use of another man who is sick. I resent talking about a neurotic as a malingerer; they are not in the same class. This man had been sent out in the corridor because we did not want him to know all there was about his case. It does not do any good to have them reexamined and reexamined and examined again. This is the worst thing that can happen to them. The sooner you get them away from that, the better.

We had him out in the corridor so that he could not hear what was going on. This insurance man made a nasty remark about this fellow, to the effect that there was nothing wrong with him and he was just a malingerer. The insurance company's doctor said to him (and this is a representative insurance carrier): "George, that isn't a nice way to talk about this man. This man is sick and he has to have a cure. You have got to do something for him. Now, you are so sure about yourself, here"—and he reached over and got his medical case and took out one of these bottles that doctors use for the gathering of a sample of urine, and he asked him there in the presence of our group of men to void that bottle full of urine.

Now men, ever since they were babes, have indulged a certain sort of false pride that makes it impossible for them to do this in the presence of other men. You supermen who know all about your mental capacity, your nervous system, just stop and think of the time when you were examined by a doctor for life insurance, and he asked you to do that sort of thing and you found, though your bladder was full to the point of bursting, you could not draw a drop of water. That will tell you something about what the nervous system is, and these men who are injured go through that sort of thing.

It is not so bad, not nearly, under the compensation law as under the old common-law system. Many of those administering compensation are men who formerly practiced law and had more or less common-law litigation. I had my part, and what did we do? Well, the first thing we did was to tell the injured man to keep a record of every single pain and ache he had and the day and date. We went out and got a doctor, and we catechised that doctor to the point where we had him say what the possible effects of this injury might be, not the probable effects, because we were going to have to pin our case for this man on possible results, not on probable results, and so we schooled the doctor and we schooled the man and we schooled ourselves to this idea of proving a case of liability. It is a wonder that the man did not come through sick and have a neurosis!

Just think of what we have gone through in these last years! How many bankers in your recollection have committed suicide, not because there was a dishonest hair in their heads or anything that they could not face except the fact that they had been given the custody of other people's money to invest, and the time had come when it had been lost and they could not face their friends, and so

they have gone out because of this nervous breakdown and ended it all.

Well, these are the type of people we have to deal with, and when we have one of these men who has had an injury—and, mark you, they get serious injuries, and usually in a serious injury case all the family talks about epilepsy to them and all sorts of things—we go on just developing that type of thing.

One doctor said there is no psychic effect in this if the man knows that the case may be reopened. I have spoken at a number of conventions, at Chicago and again at Atlanta, of a method that we are working on because our law does not allow the reopening of these cases, and it is, after all, for the neurotic. It is a good thing that he feels that the case may not be reopened. When we have a real case of neurosis and it is doubtful whether the man will recover within the allotted period, the reasonable and probable period, we just go and talk to these insurance men and say to them, "We are going to enter a form of an award which on its face looks as though it were final, for the purpose of giving to this man our one best boost to see that he recovers, but, as between you and me, we want in our records your written consent that if that thing does not come through as we contemplate, then we can reopen the case." We docket it as such and follow the case and check it from time to time until we know the man is back, and we try in these other ways that Doctor Kessler and other doctors have spoken of to have them helped back to a job and employment.

Neurosis is a real problem and may be helped by settlements just as you would be helped by the opportunity to retire to the toilet to draw your urine.

Chairman GEHRMANN. We will ask Doctor Kessler to close this discussion. We realize the importance of and interest in this subject, but we still have another very interesting paper on the program and the time is getting short.

Doctor KESSLER. I will not say very much except to reemphasize the points I made in my paper. I was trying to discuss the advisability of settlement in traumatic neurosis. Is it sound or isn't it sound?

As to this question of the baiting of doctors, I again refer to the paper where I say that you should establish competent medical advisory service and have the utmost confidence in that service, and I am sure a good many of your medical problems will disappear.

Regarding the word "malingering," I think that should be wiped out of the dictionary. Those men experienced in the abnormal form of mental phenomena are beginning to realize that even so-called true malingering is a form of neurosis, there are such variations in it, not only in the intellectual domains of various people but also in the character domains. There may be character deficits which we can not see on the surface and which are very difficult for us to understand.

Again, I believe in the settlement as a therapeutic procedure. The plans to carry it out should be left to the discretion of the commissioner whether it is a lump-sum award or a weekly or monthly payment.

Chairman GEHRMANN. We will now pass on to the next paper, and this is an extremely important subject, Relationship of Arthritis and Traumatic Injuries. I will call on Dr. C. H. Watson, medical director of the American Telephone & Telegraph Co., who is going to give us a discussion on this subject.

Relationship of Arthritis and Traumatic Injuries

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Arthritis means inflammation of a joint, and there is probably no single clinical entity with such a multiplicity of forms, about which medical logic has exercised more in the way of inductive reasoning. Arthritis may be divided into the acute and chronic varieties, the acute form being again subdivided into infectious and noninfectious, while the chronic form includes the infectious, the traumatic, the metabolic, the degenerative, and gouty types, as well as the condition known as spondylitis. All of these forms of arthritis are subject to traumatism, but from the standpoint of industry the likelihood of the acute types of arthritis or certain of the chronic forms being involved is more or less doubtful. It would be unusual for the individual with an acute gonorrheal, septic, or allergic arthritis to be subject to trauma, because the degree of disability would be such as to preclude an individual's working. To a less degree, the same might be said of certain forms of chronic arthritis, as for example, the tuberculous type, because of its predominance in the young, and the syphilitic type, by reason of progressive disqualifying deformity. This leaves then, of the entire classification of arthritis, as we understand it, those forms which can be designated as chronic in both type and duration. Certain cases of infectious arthritis as well as noninfectious arthritis, as they go on to termination, passing the acute stages, gradually assume the picture of more or less chronicity. The same is true of the forms of chronic arthritis of the degenerative type (the true osteoarthritis) the gouty arthritis, and spondylitis. Chronic arthritis of any type exhibits joint changes which depend finally upon mechanical alteration of those elements which enter into the formation of the joints. It is true that the periarticular changes may cause trophic phenomena, but in the final analysis the problem is a physical one.

Joints may be subdivided arbitrarily into those of no motion, slight motion, and free motion, or synarthroses, amphiarthroses, and diarthroses. As examples of the first, we have the bones of the skull, of the second, joints of the vertebræ and sacroiliac joints and of the third, the shoulder, hip, hand, knee, etc. The terminal results in all types of joints and their subdivisions, following infection, metabolic disease, old age, congenital anomalies and trauma, can exhibit alterations of joint components of the same general character, but varying in extent. From this fact, we recognize that among the most baffling types of arthritis, viewed as medical problems, diseased and damaged amphiarthroses, such as those of the spinal column and sacroiliacs, are the most difficult to solve satisfactorily from all angles.

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Acute arthritis in a joint of the third class, such as the shoulder, hip, elbow, hands, because of the wide range of motion, and the laxity of the supporting structures may, even though passing to a chronic stage, present less in the way of disability, because need for compensatory motion is imperative and opportunity for greater range is always present. In the second class, the vertebral column and the sacroiliac joints have limited motion both as to variety and extent, so that as chronicity of an arthritis in such joints is established, motion and the need for motion, while capable of exerting some influence, accomplishes but little, due to normal bone structure and type of articulation. Hence, productive processes occurring in the vicinity of such joints are more liable to interfere with motion by reason of additional mechanical limitation imposed by the products of either septic, metabolic, degenerative, gouty, and traumatic agencies.

Broadly speaking, a joint consists of: (1) Two approximating bones, and their covering of hyaline cartilage or an interarticular fibrocartilage; (2) the lining of the joint cavity with synovial membrane; (3) the fluid secreted by the synovial membrane; (4) the structures which enter into the formation of the capsule; (5) the articular blood and lymph supply as well as the trophic and vasomotor nerves.

We need not enter into the details of the various pathological pictures of arthritis, whether produced by infection, metabolism, degeneration, or trauma. By and large, the end results in all of these will be very much the same, with the exception of the traumatic arthritis. In the arthritic joint following infection various gross changes take place. In the ordinary septic joint of pneumonia, gonorrhea, blood poisoning, and typhoid, there are characteristic intra-articular changes such as thickening and proliferation of the membrane lining the joint and secondary alterations in the cartilage beneath, as well as, in extreme cases, in the underlying bone. These changes may mechanically limit the range of motion of the joint, and there may even take place osteogenetic processes in response to the mechanical, chemical, or other influences arising out of the sepsis, metabolism, joint antiquity, etc.

In the chronic types, such as syphilitic and tuberculous arthritis, arthritis deformans, Still's disease or gouty arthritis, both destructive and regenerative processes take place in and about such joints, completely altering the character and outline and range of motion of the joint surfaces. Articular and periarticular alterations accompanying or developing in an established chronicity in septic, syphilitic, tubercular, or degenerative joints, while tending to have a general reparative and compensatory feature in their reconstruction, nevertheless make for limitation in range of motion and the limiting agencies are easily subject to damage.

As an example of industry's most frequent joint problem, we have in degenerative arthritis a picture of composite joint changes growing out of altered metabolism and what may be called bad body chemistry. Here the tendency to fibrosis, hypertrophy, and perhaps long-continued minute trauma impair the joint integrity as age advances. From the standpoint of years such persons may not be old, nevertheless, physiologically, they can be classed according to Richardson as

"aged" and have other indications. Cecil and Archer in studying 612 cases at Cornell clinic, classed 182 of them as degenerative arthritis. The influences capable of producing these degenerative joint changes probably never cause actual joint inflammation and, hence, during the initial stages the term "arthritis" may be a misnomer. Nevertheless, the end results after chronicity has been established are such as to permit of subsequent arthritic changes. These may even take upon themselves the character of arthritidies secondary to germ-borne infection. Such joints have alterations in cartilage and underlying bone so that the bone may actually become exposed at points of apposition. There may be spur formation in the tissues of the capsule and at the points of tendon insertions and within the bursæ; the synovial membranes may be hypertrophied and calcified with portions separated constituting the so-called "joint mice." We do not have such joints becoming fixed even though they may be partially displaced with a certain amount of limitation present. Overweight, posture, and bony defects may contribute to the degree of gravity present.

The acute arthritis due to trauma may present a varying picture depending on the kind and degree of violence to the structures of the capsule, to the synovial membrane, to the cartilage, and to the bone. Traumatism of a joint, the degree of violence producing an arthritis, is also capable of producing the condition known as sprain. It is very difficult at times to differentiate between sprain and acute arthritis, and it is begging the question to maintain that in a sprain the injury is solely periarticular and insist that it is seldom that we have in a sprain the intrinsic structures of the joint itself damaged. There may exist in any joint trauma an intra-articular fracture or the loosening cartilage, or the stretching and laceration of the synovial membrane. According to Leriche, each traumatism of a joint is a traumatism of what he calls "vasomotoricity." In other words, following shock or a blow, particularly in the vicinity of joints even though there is no fracture, certain nerve endings are disturbed and the reflex action alters the equilibrium of the local vasomotor system. This disturbance generally expresses itself by active vasodilatation. In simple trauma or trauma of unusual character this may be but transitory. On the other hand, in certain types and degrees of trauma, the vasodilatation may last for days, so that, in addition to mechanical damage of bone, cartilage, membrane, and the accompanying inflammation, there is also added a superinflammatory picture in the form of a chronic vasodilatation, all of which indicates active and overexaggerated attempts at repair, with the throwing out of increased synovial fluid of lessened specific gravity. Hence there results in a sort of serial order, water logging, softening, hypertrophy of the hyaline cartilages, and calcification, the usual processes accompanying the repair of bone. Damage to joint capsule and lining may pass successively to underlying structures, rendering them susceptible to infection, and through chronic engorgement capable of productive fibrosis or osteogenetic processes. Such joints of trauma, if blood-stream conditions favoring infection supervene, afford again ready areas for infection by blood and lymph borne microorganisms. It is then that the joint of trauma again assumes the picture of the acute infectious arthritis and will pass through the same identical changes terminating in the same type of chronicity.

As we have said before, the acute infectious or noninfectious and the early type of chronic joint is seldom subject to trauma because of disability limitations, as well as age and accompanying pathology. So it is that we turn to the picture of the chronic joint of infectious origin, of noninfectious and to the terminal stage of the true chronic joint, metabolic, traumatic, and degenerative, as being fruitful types of arthritis against which the trauma of industry can exercise itself. The difficulty of decision, both medically and from the compensation standpoint, lies in determining where the effects of trauma end and beyond which the natural processes of the disease will extend. The acute joint, no matter what its type, in passing through the reparative stages into a chronic form presents varying conditions. The arthritis of minor trauma should tend to a spontaneous cure because there is no alteration in the joint surface and the periarticular alterations should be those of the common sprain. Where the violence of the infection, the intensity of abnormal metabolism, degenerative agencies, etc., have been such as to express themselves in destruction and alteration of membrane, cartilage, and bone, there are changes in the contours of joint surfaces and margins, hence, mechanical factors introduced, tend to maintain varying degrees of chronicity, particularly, if altered joint contours lie in the weight-bearing areas. Traumatic arthritis, pure and simple, can present the same picture of mechanical damage with intra-articular fracture of bone or cartilage resulting in mechanical alterations in the contours of the weight-bearing portions of the extremities, or of the bony masses in apposition. Old traumatic arthritidies can receive secondary trauma in just the same way as joints of chronic arthritis of infectious, metabolic or degenerative origin.

Following the trauma of germ, biochemical, biophysical, or mechanical origin, there takes place about any joint as the chronic stage approaches, opportunities for overstimulation of those processes of repair and protection which, if manifested in the extreme, may result in the several types of joints in varying degrees of limitation of motion. Hypertrophied or fibrosed tissue as well as osteogenetic repair and the precipitation of calcareous material, both of bony origin and from other sources, follow the physiological response to the specific stimulus, be it of infectious, metabolic, or degenerative origin. Trauma in influencing such joints may repeat the same type of pathology with an overexaggeration of the same processes of repair and compensation, or there may be actual soft part damage due to the mechanical effects of the violence exercised on the products of the osteogenetic repair and overgrowth.

In judging of the relationship between terminations as applied to arthritic joints there should be taken into consideration the pathology of normal chronicity, and judgment made as to the usefulness of such joints over a period of time. In other words, the chronic arthritic joint that is capable of being used should be capable of an estimable or perhaps indefinite period of usefulness. The chronic joint that is traumatized, many times, has a speedy recovery so far as actual damage of the trauma is capable of being investigated, and many such joints go on to a normal chronicity, expected in the course of the pathological picture of such joints. On the other hand, the trauma may alter the various osteogenetic and productive characters

which have accompanied the stage of chronicity to such an extent that restoration of shattered joint margins, altered and exaggerated joint contours, thickened capsular ligaments, etc., is indefinitely postponed with an accompanying disability incapable of being even approximately estimated. Such a traumatized joint will not go on to the normal pathological picture of a chronic untraumatized arthritis. Rather there will be indefinitely prolonged disability, which may or may not be reconciled with the joint changes. To summarize, we are concerned industrially with the chronic joint of infection, syphilis, tuberculosis, unusual metabolism, and degeneration.

The chronic joint of infectious origin where the focal zone was teeth, tonsils, gall bladder, or appendix may be still menaced by further septic possibilities. The arthritic changes that concern the marginal as well as the articulating portions of such joints in the event of trauma, where there is damage both to the productive osteoarthritic structures as well as to the surrounding soft parts, may be again rendered susceptible to germ infection.

The syphilitic joint may proceed for years with the usual low-grade progressive articular and soft-part alterations, oftentimes maintaining a considerable degree of usefulness, while violence applied hastens the disability which is frequently inevitable.

In the chronic tubercular joint where absorption of the cartilage has taken place and even ankylosis resulted, industrial trauma and even the passive trauma of surgery have been known to liberate into the blood stream enough live tubercle bacilli to produce a disseminating miliary tuberculosis. The articular and periarticular changes following bacterial, toxic, or traumatic stimuli are nature's efforts at repair, compensation, and protection of such joints, and while acute stages may have gross and occasionally alarming symptoms, their final subsidence may result in joints with but slight limitations. When this stage is reached, there may be still going on, in and about the recently diseased joint, fibrosis and calcification, generally misdirected and overdone because the normal requirements of such parts have been altered through the effects of the stimuli, whatever their nature. These more or less permanent changes are not the immediate outcome of disease or injury, but follow months and even years after relative chronicity has been established. So it is that in the recently traumatized joint showing bony and other alterations in and about the joint margins, the responsibility of the trauma must be judged, if possible, in terms of damage to the mechanical and growth factors which have produced the state of chronicity and not in terms of the entire joint pathology.

In all cases of persistent and prolonged disability growing out of joint injury, a careful history should be taken particularly with reference to acute infectious disease, respiratory, genito-urinary, gastro-intestinal, trauma, diet, etc., at any age. The traumatized joint, no matter what its possible origin, presenting pain and discomfort so that return to work is prevented and performance limited long after a normal recovery should be expected, must receive careful surgical examination. Where the facts of chronicity are not well established and it is judged that injury has supervened to the further impairment of the usefulness of such joints, blood culture, blood chemical examinations, and diagnostic serological investigation must be made.

It is essential that stereoscopic X-ray plates be provided from a number of different angles to demonstrate intra-articular alterations.

Medical knowledge is capable of visualizing the natural progress and outcome of what we may call normal arthritidies, but where demonstrated or suspected foci of infection are included in the picture of traumatized joint disability, these should be considered a part of the responsibility for care and treatment no matter at what stage their discovery is made. Furthermore, it should be possible to demonstrate with a certain amount of fairness, as a result of careful survey, those departures from the expected picture of disease which can be assigned to the trauma. We are discussing the bona fide traumatized arthritic joint and not the picture of disability so often seen associated with a certain amount of psychic trauma. That is another feature and outside our present domain. The differential diagnosis here is always of extreme difficulty.

I thought it might be just as well to run over, just for the academic benefit of a number of this body, a few of the A B C's of joint structure, and how they can work and operate in the event of these different types of trauma.

We speak of mechanical trauma, and as the subject was assigned to me, it was assigned as an element in industry which has to be taken into consideration.

When we are thinking of these joints of our bodies, the mechanical trauma from machine parts and accidents are not the only kinds of trauma to which the various joints are subjected. We can have various types of traumatic joints. We can have toxic trauma of joints due to germ origin or toxic trauma due to bad body chemistry such as we see in the elderly person, with the joint changes following the accumulation of these substances or the inability of our eliminating machinery to get rid of them; or we can have the trauma of joints that comes as a result of the slowing-up processes of old age where the margins of joints become altered by reason of the chemical story which is going on, and not in the way it was planned, although old age does not seem to have a great deal to do with certain types of joint pictures of that sort.

Suppose we think of three different types of joints. First, are the joints known as the synarthroses, such as the joints of the skull, where practically no motion of the joint surfaces occurs one upon the other, but in between them are certain intra-articular substances which may be subject to certain of the terminal changes which come on in our bodies.

The second type is the amphiarthroses, such as in the joints of the spine and the sacroiliacs, where we get wider motion and have interposed between the masses of bone the cartilage and cushioning fibrocartilage, and finally those of the arm and shoulder, etc.

The typical joint I like to think of in terms of a diagram, and I think most of us like to think of them that way, even compensation commissioners, when they are trying to get at the bottom of the pictures presented. We heard a number of remarks about the logic and the exactness of the opinions rendered by doctors. I think we like to think that at least in some parts of our frame there are exactnesses, and we can have exactness in our logic, even though our logic sometimes leads us to bad premises. When we take into consideration the

possibilities of altered personalities and the vagaries of human behavior, we often can not help wondering how any of us can come to any really exact conclusions.

Suppose this represents a characteristic joint [using blackboard]. Suppose that represents the bony masses of a joint in apposition. Nature provides terminal portions of any joint with a modification in its structure so that the joint can, aside from a certain resiliency which the joint has, take up a part of the mechanical shock in terms of the buttress and mechanically arranged internal structure of the joint; so practically all joints have close to their opposing surfaces what is known as the cancellous tissue, where the bone is spongy. That bone has a certain amount of give in response not only to normal trauma but also to abnormal trauma.

The same thing is true in this component of the joint surface. In addition to that, nature covers the surface of these joints with what is known as the hyaline cartilage, which is a cartilaginous structure which also takes part in the mechanical efficiency of the movement of a joint, and this hyaline cartilage springs from a generating membrane lying closely associated with the irregular margins of the opposing surfaces of the bones which enter into such joints. In addition to that, we have, as we said a moment ago, the capsule of the joint which is made up of what you would probably speak of commonly as ligaments, ligamentous material, not much give to it; and in some joints we have a little elastic tissue so the joints can stretch, and sometimes a certain amount of laxity so that free motion of the joint can take place and the articulate processes can readily pass one another to accomplish the motion for which it is destined.

Inside those joints, then, we have a lining membrane known as the synovial membrane. This is the synovial membrane [drawing on the blackboard], the membrane which forms the lubricating structure which facilitates free motion of the joint, and this is the capsule, and this is the hyaline cartilage, and this is bone.

In many of the joints, those which present the greatest problems to us, we have an interposed fibroelastic cartilage across this space here, and that fibroelastic cartilage merges with its marginal portions into the capsule, and these in turn are covered with this synovial or lubricating membrane, and here is the fluid of the joint.

In addition to that we have running to each joint a blood supply, and that is divided into two parts—the blood supply which goes to these structures here and must carry to the cartilaginous material those replacement agencies which will build up and renew the joint surfaces in response to the results of wear and tear, and in addition to that we have the lymph vessels, which we will not draw, but will consider our blood vessels as being part of the same general picture, because from our standpoint the blood vessels and the lymph vessels all belong in the same general picture.

Finally, and not the least of our entire story, is the nerve supply, because all of these structures here have nerve fibers going, not only to the walls of the lymph vessels, but also to the components of the walls of the blood vessels. So that in response to various things, expressed in terms of trauma, we have mechanical trauma, chemical trauma, thermal trauma, metabolic trauma, toxic trauma. We may have nerve endings affected, and as a result of the nerve endings

being effected we can have certain phenomena taking place in the blood and lymph supply.

As a result, then, of these various traumatic agencies, the greatest picture which takes place in any joint in response to mechanical trauma, chemical trauma, toxic trauma, the metabolic trauma due to the products of age and bad body chemistry, is the effect on the blood and lymph supply of those joints; consequently, we may have these blood vessels enlarged in size so that the amount of nourishment which goes to these structures may be increased; as a result of the increased nourishment they may hypertrophy, these trunk spurs of the internal agencies of the joints may become thickened, and we may have hyaline cartilage piled up in that fashion [sketching on the blackboard], and as a result also of the increased joint nutrition, the specific gravity of the fluid in the joint may be lessened, so it is possible even though the limb is at rest and the individual in bed, to find that the arrangement of the cellular elements which compose the hyaline cartilage is altered. The hyaline cartilages themselves are more easily subject to intra-articular pressure, so we have pressure exerted in these two directions inside the joint cavity, even though it is a joint of no more motion than we have in the sacroiliac, and the tendency is for this portion of the joint to become flattened out with a marginal elevation of cartilage in this fashion and the thinning out of the cartilages in the immediate points going in apposition. And not only does the joint become filled with a fluid which has a lowered specific gravity and carrying a diminished nutritive ability with it, but also we have as the final part of the picture the stagnation of the chemical agencies in solution in the stream of nutritive material, and we then have the tendency in such joints to deposit and to calcify the material which lubricated the periarticular joint spurs.

We may have loosening with free cartilaginous areas loose within the joint cavity, and they may contain more lime and act as a direct mechanical agency to still further traumatization of the structures within the joint.

The final picture, if we want to carry this to a brief termination, would be the limitation in the extent of the articular cartilaginous surfaces to such a point that these joints, as a result of the widening of the joint space, the tendency to spur formation along joint margins, and the depositing in the various muscles of deposits, have limitation reaching this maximum.

We have talked so far about the joint subject to chemical, metabolic, degenerative, toxic, germ-borne toxin or whatever you please, and these various things have happened to the joint.

Now suppose we think of it in terms of trauma. The same identical picture can be presented in terms of trauma, but after it has ceased to operate the joint contours remain as they were previous to the trauma—not only the bony ones, but the cartilaginous ones—and we have the joint going on to a speedy process of repair so far as the actual traumatism that produced that condition is concerned, but if the mechanical trauma is such as to break an articular cartilage, a hyaline cartilage, so that it presents a picture something like this [drawing on blackboard], possibly we may have

the underlying bone broken, and then we have a contour like that, and if the weight-bearing area is in this line, the opposing bone will probably go through the same general alteration as a result of that mechanical alteration.

Mr. KINGSTON. Is that what the doctors describe as a dislocation of a semilunar cartilage?

Dr. WATSON. It may be that or a broken-off portion of a hypertrophied cushion of hyaline cartilage, making a joint "mouse," but a joint mouse is generally cartilaged from this area; a semilunar is the same general story. The semilunar cartilage, located in the knee, of course, makes the commissioners a lot of trouble, but not so much trouble as the intra-articular fibrocartilages in the sacroiliac joint, because you can find out what is the matter with a knee with loose semilunar. You can open the knee and take it out if it is loose, but it can not be done with the sacroiliac.

Suppose we have then entering into this picture of mechanical trauma of bone agencies such as germ-borne infection, germs in the blood stream, chemicals in the blood stream, in the form of chemicals that are the result of bad body chemistry or the chemistry of old age, or the chemistry of occupation, because we do have some arthritidies that follow some of the mineral poisons, chemical agencies acting on joints and which are borne in the blood stream, poisons from bacteria, poisons from chemical products the result of old age, and bad body chemistry. The diabetic has a form of arthritis. The case with Bright's disease has a form of arthritis. The case with Friedreich's ataxia has a form of arthritis, because we can not get rid of some of the toxic products lying behind the initiating process of the disease.

When we have this injury coming along and not injuring the cartilage, the bone, the capsule, or the synovial membrane to a point that is demonstrable if we carry our diagnostic agencies as far as we should, then we can say that the picture that the joint presents is solely the picture of disease or of trauma. If, on the other hand, we have the superimposing on a joint of disease, be the disease caused by metabolic products, toxic products from tonsils, teeth, bad appendixes, etc., the responsibility for the joint condition must be considered as lying beyond the immediate responsibility of the individual himself or the industry which traumatized him, because here is a joint which is traumatized as a result of mechanical damage. If your diagnostic agencies give you a clean slate so far as body chemistry is concerned, so far as blood-stream infection is concerned, so far as demonstrable agencies of focal infection are concerned—if that part of the slate is clean—then the disability which the joint presents must be solely the responsibility of the trauma.

On the other hand, if trauma comes along and modifies either the germ picture, the metabolic picture, the degenerative picture, or the old-age picture of any joint so that the normal story of old-age degeneration, bad body chemistry, and focal infectious disease can operate, then I do not see how it is possible for industry to get away from the responsibility of making possible the opportunity for the agencies that arise out of infection, bad metabolism, old age, or degenerative disease.

DISCUSSION

Chairman GEHRMANN. We will now call on Dr. H. Page Mauck, of Richmond, to open this discussion.

Doctor MAUCK (Virginia). Doctor Watson has left little for me to say. There are some points which he has brought out which lead me to say that possibly and probably there is a little difference in our conception of the traumatism of an arthritic joint, and I hope that my discussion will not in any way confuse you in regard to the excellent presentation that Doctor Watson has given.

First of all, remember that in individuals in relation to joint function the age element has to be considered; that the ligaments which Doctor Watson has drawn here for you normally have a little elasticity. They do have considerable pliability. With age, whether it is supplemented by toxic processes or metabolic processes or chemical processes, or not, this pliability of the ligaments changes. For that reason we will find that the man at 45 years of age can not run the foot race that a boy of 14 or 15 can; he can not endure jumping. His joints give him trouble. He gets a sprain in his joint much easier than the young person would get an injury to the joint.

My conception of arthritis is this, primarily: The structure about the joint that is involved primarily is the capsule. An arthritic process causes a loss of pliability in the capsule, just as a toxic process does in other structures of the body. If there is a loss of pliability in this capsule, the normal range of that particular joint is not so great as it is in a joint whose capsule is very pliable, so that if a trauma, a sprain, or a strain, is inflicted on this joint something happens to the nonpliable capsule, and we know in most of these joints that are traumatized that the trauma to the capsule takes place at its attachment to the bone. Incidentally, there is a covering of this bone that comes down that is continuous with this capsule. If one tears or stretches the capsule just at the point of attachment to the bone, nature attempts to repair that by throwing out a certain amount of new bone, and—my conception is a little bit different from that of Doctor Watson—the new bone in a joint, whether it is traumatized or one that has lost its pliability from one of the metabolic processes and at the same time is constantly used, will cause proliferation of bone at that point and cause a spur.

I think in most industrial cases in which there has been an injury and in which secondarily we have made a diagnosis of probability of an arthritis, it has been made from the X-ray picture. As to the so-called spurring that has been regarded by many authorities as being characteristic of an arthritis, we know full well that in a joint with no symptoms at all of arthritis, if one has a serious enough injury to tear the capsule at this point away from the bone, without any superimposing arthritis at all or arthritic process, that spur formation will take place.

In the case of a patient who has suffered a trauma of a joint, who comes to you and denies history of preexisting trouble with this joint, it is always difficult to determine accurately whether the spur formation here is simply due to the trauma, or whether there has been an arthritis present and the patient simply has not recognized it.

Even with all of our metabolic work, Doctor Watson, our going over the patient very carefully for a focus of infection, we frequently find patients who are entirely negative, where there is no evidence of an arthritis present, and yet the patient still complains of the joint and we are forced to make a diagnosis of an arthritis; that is, in a case which has not been traumatized and in which there is no explanation of the pain in a joint but an arthritis.

There is no question in my mind that we can have arthritis in a joint that preexists any injury, the patient having comparatively no symptoms, or maybe just a slight pain in cloudy weather, or soreness in a joint after prolonged use of the part, an unusually used part, that causes a pain. That joint, because it has an arthritis and the ligaments are not pliable, is much more subject to a trauma than the joint which is perfectly pliable.

We can also have an arthritic process beginning at the time of the injury because Doctor Watson has told you there is an interference of circulation, a change in the circulation to the component parts of that joint in an arthritic process. If one gets a trauma—an injury—to the blood vessel or bone or cartilage, necessarily the local circulation to that part is disturbed by the trauma, rendering it much more prone to the activities of the chemical or the metabolic or the toxic processes that take place in the arthritis.

Lastly, we will have a traumatism to the joint and have an arthritis follow that traumatism, probably due to the continuation of the same process as takes place at the time of the trauma. If an arthritis preexists the trauma, one can naturally expect a certain course of that disease. One can estimate fairly well—not always accurately—the amount of disability that one would expect from the pathological changes already present in that joint before the injury, so that I believe in that type of case the physician or doctor can be fairly accurate in rendering an opinion as to the amount of disability probably due to the arthritis and the amount due to the trauma itself. In those in which an arthritis comes on at the time the joint is injured or those which follow an injury, I think anyone's guess is about as good as ours as to the rôle that the trauma itself plays in the production of the disability.

All of you commissioners are very much interested in back injuries. Doctor Watson brought out very well that a joint with very little motion, like the joints of the back or the sacroiliac joints, are the joints that suffer to the greatest extent when there is loss of part of the pliability of the ligaments. Normally such a joint has very little motion, so if you take a part of that away, you have taken a greater percentage away than in some other joint which has free motion, like a shoulder, elbow, or hip.

In the case of a patient who comes to you with complaint of his back, the alleged injury having taken place several days prior, the differentiation as to whether that condition is due solely to an arthritis in that back that is demonstrable, or is due to the trauma itself, is always a problem that in each case has to be solved from the history, involving a study and a thorough consideration of the case.

Chairman GEHRMANN. We will have a further discussion of this paper by Dr. William Tate Graham, of the State Board of Health of Virginia.

Doctor GRAHAM (Virginia). If I may be allowed to digress just for a moment, I should like to say that when you talked about this lump-sum settlement, it reminded me of an instance that happened with one of the trunk-line railroads which operates in this section of the South. This railroad company had the misfortune to have one of its colored employees killed. One of its representatives went to see the family once or twice and finally effected a settlement with the woman. There was considerable doubt as to whether there was any liability on the part of the railroad company, and I mention this fact to show you that lump sums can cure heartaches as well as headaches and backaches.

When the representative settled with this woman and she gave him a receipt, he said, "If you are not absolutely certain that you are satisfied with the amount we are giving you, I want you to give me the money back and I will give you this receipt and you can take it into court and take your chance on getting more or take a chance on getting less."

She said, "No; I think the railroad company has been pretty nice to me. I am perfectly satisfied to take this amount, but I tell you right now, if I ever marry again, I am certainly going to marry a railroad man."

Now as to the matter of arthritis, I have purposely for the last few years tried to avoid the term "arthritis" when speaking to laymen. If you tell them they have rheumatism, they take hope, but if you tell them they have arthritis, they think they have hypertrophy of an incurable type. If you tell them they have rheumatism, they will go out satisfied and they are not so desolate as when you say they have arthritis.

I think it would interest the commissioners most if I spoke of those injuries to the joint which occur producing pain and also disability. Among them is that group in which fractures or breaks in the bones are included, the bones which extend into the joints, and then you get an uneven joint surface, and when these surfaces are approximated, they do not mesh, so to speak, and you get constant friction and irritability, and discomfort is produced in the joints which is perfectly demonstrable with an X ray and often you can prove it without the help of an X ray.

I think another one you have to deal with quite frequently is that which occurs in cases where the person is standing with the knee bent like that [demonstrating], and you get pressure on it and a side pull on it like this. Frequently when that heals, it tears loose this little gristle in here which was spoken of as the semilunar cartilage. It floats into the joint and usually does not reattach, and it floats in there and continues to produce mechanical irritation. As long as you have that, you will have an inflammation in your joint, and it is far safer, with the present methods of taking this cartilage out, to take it out than to leave it in. There is very little risk practically in taking it out and there is a great deal of risk in leaving it in, because in more than one instance I have seen cases which were advised to have it taken out and they declined, and they have come

back several years later with a cartilage tumor practically filling up the joint. It was a difficult and trying procedure to attempt to restore the knee to function, whereas, the removal of the cartilage in the first instance is a simple and easy thing to do.

Another thing that terrorizes people is water on the knee. They will say, "Doctor, do you think I have water on the knee, or do you think I will get it?" I welcome water on the knee, just as Bolling Jones said he would rather have people say "Doctor, I have a pain." If they have a pain, he has something to work on, and he can give them relief, but if they are just sick and have no pain, he wonders if he has not something sneaking up on him that he is not going to cure. Water on the knee is a provision on the part of nature. You get an injury to your knee and the fluid comes in and bags out the side of your knee like your chest is bagged out when you have pleurisy. That is the Lord's work and when we draw the fluid out our work is interference. If it is left there, it keeps getting distended and you have the relief of the condition. It is just like two burned fingers stuck together, these raw edges. You have that same condition in the joint, and this water comes in and distends the knee and keeps the two raw edges from sticking together. It is the best thing you can have.

Often that fluid is not in a joint but in a bursa, and people are terrorized when they see it there. As a rule it looks bad, but it is not half so bad as it looks.

Another type that comes to our attention and to yours is composed of these people who complain of pain for a long time after they have had an accident to a joint and they do not get well. I think that is the type that bothers us as much as any other sort, or the sort where the type of arthritis is hypertrophied and deposits form in the joint or around the edges of the joint as a result of trauma. I say that because I believe it is the result of trauma. Doctor Albee, of New York, is of the same opinion, as are many other men. The reason I think so is that when we X ray them, we do not see any evidence of these deposits at all, but later they come back with spurs all around the joints and the spurs give them more trouble than the original accident did.

Recently I was asked to see a man who had a good deal of trouble with his neck. He had a fracture in one of the laminar sections of the spine, in his neck. It was four months since he had been hurt, and I said I was not willing to give an opinion unless he were X rayed again, because I did not think what I could see from the X ray made at the time he was hurt showed he was having trouble enough to justify the pain he was having. He was developing those spurs up in his neck.

Twice we have had cases of young women, thrown from horses, who have had an injury to the ankle, as perfectly clear, clean-cut joints as you ever saw, and following the accident they healed and these deposits came out, the joint got stiff, and it was necessary to remove one of the bones from the ankle joint, the astragalus, to restore function. All of you see that all the time.

Another thing that perplexes a commissioner is that a man will come in with marked changes, like the spurs in his back or joints, and tell you he never had any pain from it before, but since he has

been hurt he has had pain, and that condition of arthritis antedated the accident. What it did was to make it more acute, but he will get over that. You know he is going to get over it, but he will not get over the thing that he had before he was hurt. The spurs that existed before he was hurt will continue. The accident makes them acute for a while and you are justified in nursing him through the period, but you can not say that the accident will make him continue to have pain all his life and that he would not have had if he had not had the accident.

Mr. KINGSTON. Are you justified in believing that man when he says he did not have any pain before?

Doctor GRAHAM. Yes, sir. I have seen a lot of them climbing poles and working in mines and doing other strenuous things, people who I personally knew did not have arthritis. One of the worst cases I saw got it in the army and had to be discharged four months later.

Mr. KINGSTON. Then a man may have serious arthritis without any symptoms?

Doctor GRAHAM. He can have a marked case of it in his back and you can X ray him for gallstones and kidney stones, and the first time you find it out is when the thing comes to light from some sort of injury. Sometime he will lean over to get something out of a suitcase, or to tie his shoe, and get a wrench which will light that condition up and make it acute.

Doctor PAITON (New York). These spurs can not be removed by operation?

Doctor GRAHAM. No. You can sometimes put an artificial membrane in the knee joint between the ends of the bone, but in the back we do not attempt to remove them. Nature's way is to make them grow together and fuse the joints and stop all motion. That is the way nature proposes to cure them.

Mr. HOAGE (Washington, D. C.). How about fusion in the sacroiliac region?

Doctor GRAHAM. I have seen some made much worse by it. In some cases it does help, and it is difficult to say which would be right. I think the best answer to that was given at a meeting of men who do that sort of work. Not so long ago someone reported that he had done somewhere in the neighborhood of 40 cases and some other man said he had done just 40 too many.

In certain cases it is all right to fuse the sacroiliac joints and the spine, or do it with a bone graft, or by Doctor Hibbs' method, where you scrape off the edges of the bone and let them harden up that way, but I have seen some people of the temperamental, neurotic type that you have to keep away from, because if you go fussing with them you will make them worse off than they are.

Mr. PARKS (Massachusetts). What would determine the ending of a preexisting arthritic condition aggravated by injury? If a man has arthritis and has an injury which aggravates it, can you determine when that aggravation would stop?

Doctor GRAHAM. Purely clinically. We put those people in adhesive plaster, or we put them to bed and put on a brace, and limit

the motion and stop the friction in the spine so they get the weight bearing distributed more promptly, and they usually get comfortable again. As a rule the condition does not persist.

There is a whole lot about joints that might be said, but I know how difficult it is to get over to people an impression that may be perfectly clear and definite in their minds.

I was at a dinner once at which Dean Lewis, of the University of Chicago, was present, and he, mentioning that fact, said that sometimes when you were talking to people about a thing which was perfectly clear and cleancut to you, you not only failed to get over your impression, but you gave an entirely different impression than what you meant to give. He said the best illustration he had ever seen of that was at an educational meeting in the East. The dean of one of the larger institutions for women was on the program, and in the course of her paper she said that it had often been laid at the doors of institutions of higher learning for women that they were bad things because such a high percentage of highly educated women did not get married, and such a low percentage of those who did get married had children. She said the people who wanted to believe that accepted it and defended it, and those who did not want to believe it denied it, but neither had anything on which to base their beliefs—there were no statistics. So, at considerable expense to this college and a great deal of trouble to her personally, it canvassed every girl who had graduated during 35 years—and it was a large number—and she said the amazing thing was that when the statistics were gotten together they brought to light the fact that 75 per cent of their graduates were married and 85 per cent of them had children.

She said she could not for the life of her see how a statement of dry statistics should create any commotion in a serious-minded body like that, and she had no idea what they were laughing at until she had finished and sat down and then asked what they had been laughing at, and as the statement came back from her friends she saw how it might be construed.

I appreciate the difficulties you gentlemen have, and I am always not unmindful of the many courtesies that the commission extends to the doctors. You know we do not have an exact science, and we are pestered to death to get at the truth and to give them the truth and the facts as they want them, and we do our very best to help them. I do not know of any group of people more considerate of doctors than the commissioners. I have had the pleasure of knowing.

Chairman GEHRMANN. Due to the lateness of the hour, we will not open this paper for general discussion, but we will ask Doctor Watson to close.

Doctor WATSON. I should like to thank Doctor Mauck and Doctor Graham for their very kind discussion of the paper.

I hope the commissioners have gotten the idea that we have not only mechanical trauma but also various other forms and other types of trauma which are superimposed on the hazards and which can be modified or activated by the trauma of industry. There are chemical trauma, toxic trauma, trauma of old-age product, trauma of the natural processes of joint change and circulatory phenomena which finally give rise to the things which we call arthritidies.

Doctor PATTON. I should like to ask Doctor Watson one brief question: Do you think it is practically possible—I do not mean logically—for an industrial commission to go to the extent of making this differentiation you spoke of between the arthritis due to trauma and the arthritis due to preexisting conditions? What I am getting at is: Is it practically possible for commissioners of various States to secure that accuracy?

Doctor WATSON. I do not think it is possible to do it. I do not see how industry can dodge the possible responsibility for trauma to joints, whether advanced arthritidies or arthritidies of beginning formation. I do not see any way of differentiating the point where industrial responsibility begins and where the responsibility of normal pathology begins and ends; nevertheless, if those who are in position to judge the financial responsibilities for these joints that are associated with industrial trauma can feel more kindly toward the responsibility of the industry and at the same time recognize there is a picture of disease in so many of these joints, it may help in their judgment. I was talking to Cecil about arthritis not long ago and he says that practically 80 per cent of the people over 40 years of age have an arthritis, and I know one prominent orthopedist who says 85 per cent of all people over 40 years of age have an arthritis. In other words, something takes place in our bodies which makes for the aches and pains and the final stiffnesses which we experience as years go on, and which are ushered in in some persons very early. In fact, one of our prominent authorities on industrial medicine recommended the absurd proposition of taking X-ray pictures of the pelvis and spine in all prospective employees, so as to rule out the individual who had an arthritis. That came in for considerable rebuttal in response, because it meant, on the basis of his own figures, that if we did that we would not have people enough to do the work of the world.

I do not see how we will determine that. We know where trauma begins; we know where trauma ends; but we do not know where the picture of diffusion of the effects of trauma and the effects of the agencies which have to do with the production of the arthritidies ends.

[A rising vote of thanks was given the doctors for their splendid contribution to the program and the program committee for the excellence of the day's program.]

[Meeting adjourned.]

Chairman, H. U. Stephenson, M. D., Chief Medical Examiner Industrial Commission of Virginia

Chairman STEPHENSON. The first paper on the program this afternoon is Care and Treatment of the Injured to Avoid Traumatic Neurosis. This paper is by Dr. Richard H. Price, of the E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Del.

Care and Treatment of the Injured to Avoid Traumatic Neurosis

By RICHARD H. PRICE, M. D., *of E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Del.*

At first thought, this subject may seem to present a complex problem, but upon further analysis the solution is a simple one—the care and treatment of an injured individual to avoid traumatic neurosis is the same care and treatment any of us would want if he were the injured one.

Let us consider the meaning of the term "traumatic neurosis." Some neurologists define this disorder as certain symptoms which result from definite brain injury. Many of us, however, conceive of the term as designating nerve symptoms without anatomical basis, which persist in some cases following trauma.

Cases of supposed traumatic neurosis, upon being referred to a neurologist, are, after being examined, classified somewhat as follows: Group 1, including definite organic nerve disintegration or infection; Group 2, including physiological and psychological impairment of function; and Group 3, including malingering. Those in Group 1, where organic nerve lesions are present, should not be diagnosed as neurosis, despite the literal meaning of the word, but instead classified as organic paralysis or neuritis, in accordance with the particular physical signs present. Those in Group 3, the malingerers, should not be considered neurotic, so we are left with Group 2 for our discussion to-day.

One might question calling physiological disfunction neurosis. Whether or not we are justified in using the term in such a connection, this very condition is frequently so diagnosed. Much can be done to prevent physiological impairment by keeping the muscles, joints, and circulation in activity throughout the period of treatment of a traumatic case. In other words, every surgical clinic should be a rehabilitation clinic. Authorities on traumatotherapy, Doctor Moorhead, Doctor Kessler, and others, emphasize this and carry out such means of treatment in their work, but we have all seen patients who did not have the good fortune to be cared for by such experts.

The most important factor in the production of traumatic neurosis is fear. Let us think first of the effect of fear in general. When

we attempt to study by X ray the digestive tract of an animal, fear causes gastrointestinal activity to be almost nil until the animal has become accustomed to having the experimental work done. Fear interferes likewise with the digestive activities of human beings, and with all normal body functions. If one of us should receive startling news just before dinner to-day, his appetite would be diminished and digestion upset. In the same way, chronic mental unrest causes continued disturbance of nutrition and elimination, which in turn aggravates the mental state, thus forming a malignant circle.

Many types of special fears arise in injured individuals. For example: A man sustained a fracture of an elbow joint; a plaster cast was applied and kept on several weeks. Since the cast was not frequently removed for physiotherapy to be applied during the course of treatment, the result was that the adjacent muscles had become weak from disuse, and the joint stiff for the same reason. Fear developed in the man's mind that he had a permanent paralysis, and careful explanation of the cause of his functional disorder was necessary to overcome his natural dread of permanent disability. Another variety of fear is that a second injury will occur. A man sustained a fracture of his spine; a fusion operation was performed and, in due course of time, the man seemed able to return to work; he asked if he should not stay home on rainy days thereafter, lest he should slip and fall; much time was required to help him overcome this fear of being injured again. One type of fear is that a previous injury has recurred. A man had a fractured spine, and was treated properly, with good results; some months after resuming work he sustained a slight muscle strain of his back, but he felt sure he had again fractured his spine, the fear of which affected him adversely until he was convinced of the truth of the situation.

Another factor in the production of neurosis is habit. The habit of fear very frequently develops, and becomes increasingly difficult to dispel. Likewise, the various neurotic symptoms often become habitual and persist in spite of our overcoming the original fears involved. Therefore, we should not wait until full-blown neuroses have occurred before consulting neurologists in traumatic cases.

Doctor Moorhead, in his recent book Traumatotherapy, mentions traumatic neurasthenia and traumatic hysteria. Doctor Moorhead states that the better the neurologist the less often the diagnosis of neurasthenia is made. We might even go so far as to believe there is no such actual disease as neurasthenia. There is a group of symptoms caused by fatigue and toxemia which we have been in the habit of calling neurasthenia, although there is certainly a grave question as to its being a real neurological disorder. The usual symptoms of this syndrome are fatigability, irritability, insomnia, headache, backache, dizziness, and tremor. Traumatic hysteria, as well as nontraumatic hysteria, is characterized by such symptoms as paralysis and numbness or loss of feeling, despite the fact that no nerve injury or disease is present; other types of this disorder are in the forms of fainting attacks, emotional disorders, and pseudoblindness or deafness. We might add a third type of traumatic neurosis, traumatic psychasthenia, which, like its twin nontraumatic psychasthenia, is evidenced by peculiar fixed ideas and particular dreads or phobias on the part of the individual affected.

While we have been discussing symptoms, you have doubtless been thinking about the problem of men engaging in hazardous employment who are already suffering from neuroses. It is certain that such individuals are not only more apt to develop severe neurotic symptoms if injured than normal people, but are also more liable to have accidents, due to their impaired poise and self-control. The logical preventive measure would be to refer such cases to competent neurologists, and then make sure that the patients have recovered from their symptoms of nervousness before undertaking work. Even then, it is best to keep them away from especially hazardous occupations.

In summary, I would urge:

(1) Make every surgical clinic a rehabilitation clinic.

(2) Treat the injured physiologically and psychologically, as well as anatomically. Find out what the injured man thinks about himself, then reassure him by telling him the facts of the case in words he can understand.

(3) Cooperation between surgeons and neurologists is important in the prevention of neuroses.

I want to add a little more about this last. I think the most important thing is the matter of consulting neurologists. If you as commissioners and industrial men have trouble in your accounting departments, you consult experts in that line; so if you have neuroses that are problems to you the logical step would be to consult neurologists and do it early, before it is too late to treat the cases.

DISCUSSION

Chairman STEPHENSON. The paper is open for discussion and I will introduce Dr. R. Finley Gayle, jr., associate professor of nervous and mental diseases, Medical College of Virginia.

Doctor GAYLE. I have tried to treat this from the standpoint of the clinical neurologist rather than the industrial physician. My experience in industrial medicine is entirely limited to referred work.

The medical neurologist is infrequently called to attend the injured, even in those cases who have head and cord trauma, except in a locality in which there is no neurosurgeon. Were it possible to have the necessary neuropsychiatric attention for every injured individual, I believe that the likelihood of a psychoneurosis becoming fixed would be minimal. It is usually impossible to prevent the first symptoms of a psychoneurosis, but the care, the attention, the suggestion, the atmosphere of the home or hospital, the attitude of the nurse and of the patient's visitors, are most important in the prevention of this condition, which in the beginning appears to be mild, but which may and often does mount into permanent nervous invalidism.

The experience of the American Army in France is very interesting. When our soldiers got overseas, they were confronted with the fear of so-called shell shock. It spread through the Allied and German armies, particularly through the Allied armies. The word "shell shock" had spread throughout the armies. It was an intangible condition, which meant that they did not understand it, and it was grossly exaggerated by soldiers and thought to be some queer

new disease which overcame men. The soldiers developing the condition became so numerous that something had to be done about it.

Doctor Salmon, in charge of the Neuropsychiatric Association overseas, and Doctor Zabriskie, together with their advisers, conceived the idea of sending neurologists throughout the Army and instructing medical officers never to make the diagnosis shell shock. It was not entirely successful, but it was markedly successful. After August 17, no man was tagged at the front "shell shocked," and the number of cases fell off enormously.

About that time they developed the idea that it would be wise to accept these men who at the front had developed neuroses without physical energy at the Triarbor dressing station—sorting station it was—for 24 hours and have them under the care of the division neuropsychiatrist, during which time they could be given a bath possibly, some warm food, a change of clothing, and vigorous psychotherapy. In that 24 hours we were able at the front, or in the rear of the front a mile or two, to send back to the lines a great many men, because we instilled into them a good many things—patriotism, their duty to their outfit and whatnot—and in a way we explained to them what their condition was. In that way we were able to get back a great many men who otherwise would have gone to the rear, and once they got to the war neurosis hospital or base hospitals their condition became fixed. It is a matter of record that less than 1 per cent of the men in the Army sent to the rear that way ever got back to the front.

I can not entirely agree with Doctor Price's classification of the neuroses or psychoneuroses, particularly when he includes malingering among the group. My conception of a neurosis, or what is more commonly called a psychoneurosis among neurologists, is that it is a subconscious simulation of the disease, whereas malingering is a conscious simulation of disease. The one involves a mentally ill person who is consciously entirely honest, whereas the other is a pure faker. Further, I believe that we do have neuroses superimposed upon organic central nervous lesions, although they are rare. They are difficult to separate, and although an individual may show no objective neurologic signs following brain or cord injury, it has been proven by autopsy that there are frequently small petechial hemorrhages scattered throughout the structure of the brain which probably originate the efferent impulse of many of the sensations of which the patient complains.

Fear is unquestionably the motivating influence of all of the neuroses. The security of illness increases the attention given an individual so afflicted, it enables him to escape many of the trials and tribulations of this present-day existence, and frequently makes him more secure financially than he has formerly been.

In my experience the commonest type of post-traumatic psychoneurosis is major hysteria, or conversion hysteria. It is a fact that the diagnosis of neurasthenia as a type of phychoneurosis is seldom made, but I do think it is a very clear-cut entity. If my conception of the classification is correct, I have never seen a case of post-traumatic neurasthenia. That does not of necessity disagree with Doctor Price. Many contend that there is such a thing, but my conception of neurasthenia leads me to believe it to be rare.

The important thing, I believe, in reference to the prevention of post-traumatic functional nervous disorders is the correct attention, atmosphere, and nursing, from a psychological standpoint, by the physician, nurse, and the family. The impressions gained at the time of the accident, shortly after the patient regains consciousness, and during his convalescence, are the ideas that cement themselves and are the genesis of these horrible conversion hysterias, which are unnecessary and which are filling our courts with litigation and materially affecting our social and economic structure.

Doctor KESSLER (New Jersey). At the risk of repeating what I said this morning, I think all these papers agree in the gross essentials as to the etiology and the method of prevention and the prognosis of these cases of neuroses. There is a sort of incubation period in the cases of neuroses which is similar to incubation in typhoid fever and other infectious disease. If the idea gets hold within the first 48 hours, it is difficult to eradicate it. That was the idea back of that bit of prevention they adopted in the Army, to prevent the idea from getting hold. It was successful in getting a large number of men safely over those first hours and keeping them from being sent to the rear.

Somebody mentioned the idea of relation of back injuries to neurosis. Many of these men I have seen have not been treated properly. A man may have sustained a muscle strain and he reports to the doctor who says it may be a little lumbago or rheumatism and that he will be all right. That little pain which starts from muscle strain gets worse, due to the fact that the back is not protected, and in the incubation period of 24 to 48 hours that pain is the precipitation or starting-off point for the neurosis and continuation of symptoms leading from the back from that time on, so I say, as Doctor Gayle has pointed out, if we will treat the patients properly and prevent the germ of neurosis from taking root, we will have solved part of the problem. The other part of the problem is the cure, and that I still claim the judge will take care of.

Chairman STEPHENSON. The paper is now open for general discussion.

Mr. WILLIAMS (Connecticut). Will Doctor Price be good enough to state for the benefit of the layman exactly what he means when he says "fractured spine"? Did you mean the spinous process? What do you mean?

Doctor PRICE. In the particular cases there were fractured vertebræ, but no organic neurological disturbance followed.

Mr. WILLIAMS. Was there no pressure on the spinal cord?

Doctor PRICE. No.

Doctor HATCH (New York). I should like to ask Doctor Kessler a question. He has referred to the fundamental importance of proper treatment in the first 24 or 48 hours to prevent the inception or the fixing of the idea of the injured person that he is out and is not going to get back. How about the case where a man has some physical injury, not very severe but disabling, and he receives compensation based on good medical opinion that he is really disabled

by a painful condition, and then later on, it may be weeks or months later, he may come in and say, "Now a neurosis has developed."

There, of course, we are dealing with the inception of a neurosis one not a matter of hours but of weeks or months afterwards. Is there any reason to be suspicious of that claim of neurosis, doctor, when it is delayed like that?

Doctor KESSLER. There is no reason for suspicion as to its genuineness. There are probably many other factors and circumstances which follow a suggestion from relatives, patients, advisers, and well-wishers. They may very well have been the starting point at a later date than the actual time of accident, rather than actual lack of treatment or improper treatment in the beginning.

Chairman STEPHENSON. If there is no further discussion, Doctor Price will close.

Doctor PRICE. To go back to the bad word "malingering," I did not intend to imply that cases of malingering are cases of neurosis, and the only ones I would so consider would be those in Group 2, but I think it is still to be decided by the medical profession as to the meaning of the words "traumatic neurosis." According to my understanding of the ruling of the Veterans' Bureau, it does not consider such cases as I have described here as traumatic neurosis, but only cases where there has been definite brain injury. They do not call so-called neurospinals traumatic neurosis, but in industry I think we have been in the habit of considering it in a broader sense.

Doctor Gayle mentioned the neurological department of the Army. I think that if the Army saw fit to employ neurologists, we certainly need them in industry and at the service of the State commissioners.

Chairman STEPHENSON. The next paper before us this afternoon is The Value and Equipment of First-Aid Stations, by Dr. H. G. Longaker, of the Newport News Shipbuilding and Dry Dock Co., Newport News, Va.

The Value and Equipment of First-Aid Stations

By H. G. LONGAKER, M. D., *Chief Surgeon, Newport News Shipbuilding & Dry Dock Co., Newport News, Va.*

This paper as presented will not perhaps adhere strictly to the subject as suggested by your president. This it seems to me needs no apology, since as a rule any thought of value that we pass one to another results from personal experience and personal methods. The company with whom I hold the position of chief surgeon has made a favorable impression on the Virginia State Compensation Commission, and for that reason perhaps some of the methods, policies, and equipment that we use may be of some interest at this meeting. I have been connected with the medical department of the Newport News Shipbuilding & Dry Dock Co. for the past 12 years—6 years as an assistant and 6 years as the chief surgeon. The name of the company indicates at once to you that the chief business is that of building and repairing ships. Such an industry comprises in the ultimate analysis almost all the arts, sciences, and trades. About 20 separate, distinct trades are involved, and if broken up into their component parts there will be 75 to 100 separate, distinct kinds of

jobs done by men with their hands. This great variety of work gives the medical department practically every known type of accident to deal with. We have both the white and the colored man, very few foreigners, the intelligent and the very ignorant, the careful and the careless worker.

During the past six years we have had an average daily attendance at work of 5,859. About 2,500 of this number are black men. Over this period we have had a yearly average of 7,078 new accidents and an average of 14,440 redressings for the year. The medical department has been composed of two part-time surgeons, three female nurses, two colored orderlies, and a stenographer. The surgeon in charge is on call at all times and routinely makes two visits a day to the main clinic. The assistant surgeon spends the entire morning at the plant and during the remainder of the day is on call in the event of emergencies. During the morning hours he examines all men seeking employment. We have found the examination of new employees of great benefit to both the company and the individual. Female white nurses are employed. These young ladies have been connected with our medical department for periods ranging from 10 to 13 years and are thoroughly competent in all branches of industrial nursing. They command the respect of all employees. The kind and quiet manner in which women handle the sick and injured explains to a great extent the reason we have no difficulty in getting our employees to report to the medical department. To supplant them with male nurses, in my judgment, would practically ruin the efficiency of the department.

Our medical department may be described as a small emergency hospital and a first-aid station. The main building contains a large dressing room, an operating room, an X-ray and dark room, two large waiting rooms, an examination room, a small 3-bed ward, a physiotherapy treatment room, a small dressing room for screen cases, doctors' office, an office for the safety engineer, and a large supply room. This building has always been designated as the "clinic." Removed about a mile from the clinic in the most northerly end of the plant we have a well-equipped first-aid station. The first-aid station was located primarily to save time to the employee and to encourage his reporting for the most minor injury.

The main clinic is equipped to do everything except to provide for keeping the patient overnight. During and just following the World War all the major surgery was done there, the patient being transferred several hours later by ambulance to one of the city hospitals. This was done because of the congested conditions of the hospitals. Since 1921 all major surgery is done in the city hospitals and only the minor surgery is done at the clinic.

The equipment of the clinic is complete for our purposes. All new employees are sent to the clinic for a complete physical examination, including testing of the vision. During the past three years we have examined 11,352 new employees. Four per cent of these men have been rejected either because of definite physical defects which preclude them from work or because of temporary defects which must be corrected before they are permitted to go to work. A complete record of this examination is kept at the clinic.

The operating room is modern. A complete set of surgical instruments, including all the necessary bone equipment, has been installed. A sterilizing room adjoins the operating room. Sterilizers for pans, basins, dressings, water, and instruments were installed some years ago. All dressings, swabs, sponges, etc., are made and sterilized by our nurses.

A large, well-lighted, and well-ventilated dressing room is equipped in every possible way for the convenience of the nurses and patients. Patients are comfortably arranged so that a number of redressings and treatments are going on at any given time. This room is 25 feet by 23 feet and has 10 windows in it. A large double door opens onto a concrete platform, to which the ambulance backs when bringing in patients. A large table is arranged near the center of this room. A supply of dressings, bandages, bandage scissors, and the most used antiseptics are kept on this table. Rollers for adhesive are attached to all sides of this table. Large paper bags are arranged under the sides of the table for the reception of soiled dressings. This makes a very practical, simple, and easy arrangement to do dressings. A long settee seating six or seven patients is arranged along one side of the room for the patients whose dressings are best done when they are seated. A number of foot rests are near by for use in dressing legs or feet. This is also a convenient arrangement for having a number of injuries soaked in solutions of our choice at one time. In another well-lighted corner of this dressing room is the eye chair and table. Here the patient is arranged comfortably in a proper chair with an electric light just above his head and large windows surrounding him for the examination of the eye, removal of foreign bodies, repair of eye wounds, etc. Just in front of the patient is a small table containing boric acid, argyrol, mercurochrome, yellow oxide of mercury, solution of butyn, swabs, cotton sponges, eye spuds, magnifying glass, and Berger's loupe.

Near the eye table we have a very powerful electric magnet. This is one of the most useful articles of equipment we have. It is powerful and makes the removal of steel foreign bodies from various parts of the body or the eye usually a very simple procedure. We have many such cases. It is such a valuable part of our equipment that practically every surgeon in our community makes use of it when he has such a case.

There are two large washbasins in this dressing room, supplying hot and cold water. At the end of the room opposite to that of the ambulance entrance the dressing room has three sets of double doors, leading, in one instance, into the operating room; in another instance, to a hall which leads back into the main waiting room; and in the third instance, into the X-ray room.

Our X-ray equipment was installed by the General Electric X-ray Corporation. We have one of their shock-proof modern machines. The X-ray work is done by one of the nurses, who has had 10 years' experience in this work, and also partly by the assistant surgeon. The films are immediately developed in a completely outfitted dark room, and in a very short period of time after the admission of the patient we are able to proceed in accordance with our fleuroscopic or X-ray findings. Complete records of the X-ray findings are kept on file. All films are filed in a fireproof safe which was built into

one side of the X-ray room by our engineering department. This arrangement is designed to be explosion proof and fireproof.

We could not operate efficiently without our first-class X-ray and fluoroscopic outfit. During the year we can demonstrate any type of fracture that is known. Our supply of splints is complete. We have on hand and use, more or less, practically every splint that comes to our attention and seems to have merit. In many instances we have a splint modified to fit our own ideas. This work we have done in one of the company's shops. We use large quantities of plaster of Paris and with this mold our splints, yet we feel better equipped by keeping on hand all varieties of known satisfactory splints. I believe that one of the greatest values of first-aid stations or emergency hospitals to industry is proven in the treatment of fractures. We get our injured employees within a few minutes of the time of the accident. The case is studied under the fluoroscope or a film is made of it. The fracture is then immediately put into proper position and fixed. In my judgment one of the essentials in the proper and successful treatment of fractures is that absolutely proper treatment, reduction, and fixation be made by the one who first handles the case. Fractures are much more easily reduced immediately than at a later time, and in many instances immediate reduction and fixation will make a simple case out of what might otherwise be a difficult one. The vast majority of our cases are treated by the closed method. We do not hesitate to do an open reduction on any case that seems to need this method. We feel the question of open or closed reduction of fractures can be answered only by the type of fracture at hand, and we attempt to apply the best method of treatment to the type of fracture under consideration. Practically all of our compound fractures are treated at once at the clinic and converted by the cleaning and denuding of the parts into clean wounds and the case made a closed one. If we can claim fracture results as good or better than the average, I believe it is due to immediate reduction of the fragments, caution not to overtreat, and by returning the injured individual to some type of work just as soon as possible.

At the opposite end of the building from the dressing room, X-ray room, and the operating room is a small waiting room where the new employees wait for their physical examination. This examination takes place in a room which is exactly 20 feet long, so that with very little effort we can get the correct vision of the individual. This applicant is carefully examined and a complete record of the examination made and kept on file.

Adjoining this examination room is a small dressing room for screen cases. These cases are dressed either by one of the surgeons or an orderly.

We have a fine large 3-bed ward, well lighted, cool, and containing running water. Here patients are kept comfortable for six or eight hours if necessary.

The physiotherapy department was completely equipped two years ago. We were a little late perhaps in completing this department, but conservation on the part of the surgeon in charge was responsible for this. At the present time we have three infra-red lamps. We use them frequently, and while I do not propose at this time to

discuss the merits of these lamps suffice it to say that we believe there are conditions which are alleviated by the use of this form of treatment. We have installed the finest ultra-violet lamp and the best diathermy machine we can procure. This apparatus is used under the direction of the assistant surgeon. The cases for treatment are carefully selected and carefully handled. I presume you know that no employee receiving treatment at the company's medical department is permitted to pay for anything. This delightful arrangement precludes any possibility of overuse of the electrical equipment. This equipment, together with electrical vibrators and electrical stimulating batteries, has been installed with the one idea of restoring the individual workman to normal in as short a time as is possible. In outlining the complete equipment for an emergency hospital or first-class first-aid station I would recommend the installation of such apparatus, providing it was handled in a scientific, ethical, honest way, such as I believe ours is done. There can be no incentive in the use of these machines in our medical department except that of attempting to reduce the number of lost man-hours. Our observation, extending over a period of two years, has led us to the firm belief that our patients are benefited by such treatment, and in many instances we are returning such cases as fractures, sprains, muscular contusions, and infections back to their work in a much shorter period than previously.

The remainder of the space in the clinic building consists of a rather small office for the safety engineer, a small private office for the surgeons, and a rest room for the nurses. They have a large, comfortable lounge room with bath and a small kitchenette. This serves the purpose of allowing them to prepare their luncheon on stormy days.

Last, but not least, in the center of the building is a large waiting room. This is arranged with comfortable seats for the patients. In this room a large corner is arranged for the records and the carrying on of the necessary correspondence and other business that must be facilitated.

The records in our medical department get constant attention. A responsible person is in charge of the records and they are kept up to date. All records are cross-indexed. Our histories are kept on a card about 5 by 8 inches. We have these cards made in various colors and have instituted a practice whereby we use a certain color for a certain type of case; for example, a white card indicates the injury is a burn; a pink card that it is a fracture; a blue card that the case is a contusion; a buff card for lacerations and abrasions, etc. The card shows a complete history of the case taken when the first visit is made. The patient's name, address, check number, color, nationality, social status, date of accident, and date of first reporting to the clinic are shown. The diagnosis, treatment, prognosis, and disposition of the case are also shown. On the opposite side of the card the date of each visit and the condition of the injury at that time are shown, and a note is also made showing on what date the patient is to return for further dressings. This has been of inestimable value to us, and whenever a case is more than 24 hours late in reporting for redressings we locate him and see to it that his injury is treated. By this system we never lose our contact with the patient.

Our records are so filed that within a few moments we can locate the record of any injury, no matter how trivial, that has occurred during the past 12 years. Complete records are indispensable in the medical department of any industrial plant. They are a great source of comfort to us in many ways. With our records at hand it is an easy matter for us to keep up our necessary reports to the State industrial commission. If the interests of the patient are to be fully protected and complied with, we recognize that our cooperation is not only desirable but that it is legally just as mandatory as the filing of the income tax report. It makes no difference how independent or "set in our ways" we may be, it has to be done and we have adopted the policy of doing it promptly and properly. Our complete records are a source of great benefit in the few cases we have coming either to court or to a hearing before a commissioner. Friends of mine in other States have complained to me about their difficulty of getting medical referees to agree with their findings or opinions. This I am very happy to say is not one of our difficulties. Our records show, I think, that in practically all cases a careful study has been made.

We never allow a dissatisfied patient to go before the commission for a hearing without consulting with a surgeon of the patient's choice and one of our choice. We have brought to a practical minimum the number of disgruntled patients by encouraging them to get back into the old stride as soon as possible. It is advisable to do this by stages rather than all at once. Just as soon as it is possible to give the patient the simplest kind of work we return him to that work. We should give warning to the effect that the repaired machine may squeak, heat up, rattle, or otherwise improperly function until it has worked out some of the kinks. But—and this must be firmly asserted to the patient—it is a strong and safe vehicle despite these unusual manifestations, and if not unduly speeded can be put into high gear shortly. In this automobile age most people are familiar with the manufacturer's warning not to drive the new car fast for the first 500 miles. We should give our human machines the same sort of warning, and this applies with equal force to the daintiest runabout or the most ponderous truck. This plan can be carried out only when there is the utmost cooperation between the various departments in the company and in our plant; the medical department has the greatest cooperation from everyone connected with the company.

The effect of long absence from association or duty lowers the morale and often puts the patient in the invalid class, even when from the physical standpoint recovery is adequate. The will to get well, the desire to make the best of adversity, are powerful aides, and we should encourage sentiments and attributes of this rather rare sort. The psychic side is often favorably affected by appealing to the sportsmanship of the patient or by telling him how fortunate he is and how little his handicap is by comparison with the other fellow. When we are able to keep an injured man at work or to return him to light work during the period of convalescence we have performed a service beneficial to the patient, his family, the community, and to the company. It is evident to anyone who is familiar with the compensation laws that the individual who is able

to do a portion of his work during the convalescent period is financially better off than he is when depending wholly on his compensation, and it follows in a logical manner that his family and society at large are better off; the patient is happier when he is employed. This procedure interferes in no way with the payments for any permanent partial disability which is determined on at a later date. At times, especially with the colored patient, we have to contend with a situation where the patient has a larger income from his sick and accident insurance policies than he has when he is at work. This situation is a difficult one to handle and requires all the tact one can muster to get this patient back to work. In at least one respect we have not adhered strictly to the compensation law. When one of our employees is injured we treat him until he has recovered as fully as is possible, regardless of the period of time necessary to attain this end.

In addition to the main clinic, as stated in the first part of this paper, we maintain a first-aid dressing room in a distant part of the plant. We are constantly spreading propaganda in an effort to urge our employees to report to the medical department for the most trivial injury. In the July issue of our shipyard bulletin there appeared the following short article, entitled "Report Minor Injuries." The notice appeared as follows:

When is a slight injury a minor injury? It is a minor injury only when it is taken care of promptly and carefully. The medical department has been having trouble with employees who have not been reporting little bruises, cuts, and scratches which seem to them to be harmless. They must not decide on these things. Whenever you see blood, you see red, and red is the danger signal the world over. Come to the clinic at once. The management wants you to do this to protect the interests of everybody involved.

The installation of our first-aid dressing station has helped us to attain this end. In many instances a man would fail to report a minor injury until some infection became present, and then his excuse very naturally would be that the distance to travel was so great and the time lost so valuable for such a minor affair. The first-aid station has saved much time and therefore money to the employee and the employer. It is situated almost a mile from the main clinic, and it is evident that the time saved in walking to and from the main clinic over a period of a year amounts to many hours. This room is located on the ground floor of a large brick building. It is bright and well ventilated by eight large windows. The room is 13 feet by 28 feet. We have a large washbasin supplying hot and cold water, instruments for doing minor work, an electric sterilizer, and a large supply of dressings and bandages. The usual antiseptics, such as tincture of iodine, mercurochrome, chinisol, and bichloride, are kept on hand, as well as a few ointments used in the treating of minor burns, etc. In this first-aid station we have a comfortably outfitted eye corner exactly as described in the main clinic.

One nurse is in attendance here, and she is supplied with the same record cards as in the main clinic. These records are completed and when the case is closed are sent to the main clinic for filing. A telephone permits her to keep in touch with the main clinic for any reason whatever.

We operate two ambulances. One ambulance remains on the plant property. This is used to bring cases from the scene of the accident or from the first-aid station to the main clinic. The other ambulance is used to transfer patients from the main clinic to the city hospital and from the city hospital to their home, and is also used by the employees of the company to transfer members of their families to and from the hospital. We also operate a passenger automobile and a driver for the purpose of carrying those patients who are unable to work and yet can be brought to the clinic for dressings.

Our safety work is carried on in close conjunction with our medical department. We employ a full-time safety engineer and an assistant safety engineer. Careful observation over a period of years convinces me that a very great percentage of accidents, perhaps as high as 90 to 95 per cent, are caused by carelessness either on the part of the injured man or on the part of some other individual. Our safety engineers work in close cooperation with the medical department. All efforts are directed toward making our plant a safe place in which to work. Leaving aside the prevention work, just as soon as an accident takes place the entire situation is investigated. The injured man is asked for his version of the affair, such eyewitnesses as can be located are questioned, the materials which he has been working with are examined, and in practically all cases the cause of the mishap is definitely determined upon and all efforts made to prevent the recurrence of such an affair. A spirit of competition has been built up between the various departments of the company both in an effort to reduce the number and the severity of accidents. Figures showing the number of accidents per million-hour working period and the severity of accidents show conclusively that efforts made to teach men how to accomplish their work in a safe manner and efforts directed to make materials and machinery safe for men to work with do bring about results. One can never tell what the figures would show without safety campaigns, but the gradual, slow, but apparent sure reduction in the figures seems without a doubt to show that results are accomplished. There is no end to our safety campaign. The personnel of the company is constantly changing; the new man does not know so much about the dangers and the old man has heard so much about them that he has become careless. The little child being taught the proper table manners must be told at every meal for a long, long period before one can be sure that he will perform as society demands. The individual must be constantly reminded not to take unsafe chances. In this connection there appeared in the July issue of our shipyard bulletin an item entitled: "Do Not Remove Surgical Dressings." The article was as follows:

> When an employee goes to the clinic to have a wound dressed he must realize that this dressing is applied by professionals who make this kind of work their living. The wound is sterilized first and a sterile bandage is applied in a scientific manner. This is done in order to avoid any possible infection. Many employees go home and feel a little uncomfortable perhaps with the bandage on and remove it. This is dangerous as long as the cut is open and may result even in the death of the person so infected.
>
> Do not remove surgical dressings. Have them removed at the clinic when the proper time arrives. Do not try to dress a wound yourself.

During the past few years our figures have been as follows:

Accident frequency and severity rates, 1928 to 1929, by years

Year	Frequency rate (per million hours)	Severity rate (per thousand hours)
1928	16.12	0.83
1929	12.64	1.86
1930	11.65	2.60

We have perhaps accomplished more by continually insisting on the necessity of reporting to our medical department immediately the most trivial accidents. This, of course, makes our accident record look larger, but it results in the keeping of a minor case in this category.

We have devoted much time and effort toward keeping down eye accidents. We enforce the use of goggles whenever the type of work demands. We supply at our expense the proper goggles for the occupation under question and see to it that the goggles fit properly and are comfortable. From time to time we have a representative from one of the largest goggle manufacturers in this country make a visit to our plant. He makes a survey of conditions for us and makes recommendations as to the goggle best suited to the various hazards. We go further in that we supply a protection lens for the man who must wear spectacles.

In conclusion I would say that in considering the value and equipment of first-aid stations to industry I would give thought to the medical personnel. I am convinced that in industrial plants the choice of the chief surgeon is a responsible one. Managements must choose men of ability, of high ethical standing, and men with average or better than average personality. After this choice has been made the operation and choice of the remaining personnel of the department must be left entirely to the chief surgeon or the department will not reach its greatest possibility of efficiency. I think that the choice of the personnel of the medical department by the chief surgeon is a responsible one. In many cases the safety of an injured man lies in the hands of the one rendering first aid. The duration of the period of convalescence frequently is in inverse proportion to the degree of thoroughness and correctness with which the injury is first treated.

To my mind any success that has been accomplished by the medical department of the Newport News Shipbuilding & Dry Dock Co. is primarily due to the management of the company and to the loyalty and conscientiousness of the nurses and my assistant. My company has never refused to supply the medical department with any equipment that has been requested and has always put into effect any policy that has been offered for the increase of efficiency both in the prevention of accidents and the restoration of the injured employee to health in the shortest possible time.

DISCUSSION

Chairman STEPHENSON. The discussion of Doctor Longaker's paper will be opened by Dr. C. B. Bowyer, physician in charge, Stonega Coke & Coal Co., Stonega, Va.

Doctor BOWYER (Virginia). As has been stated, I have charge of a medical department in a large coal company employing in normal times about 4,000 men, most of whom work underground. I left a hospital in this city over 20 years ago to go to the mountain sections of this State to what was known in those days as a camp, and I was known as the camp physician. We were isolated from medical centers and hospitals, and it has been my duty and my work to organize a medical department, and to see that this department grew and met the demands of industry and became an integral part of the industry.

As you know, the coal industry is very different from shipbuilding or repairing ships. The work is different, and it is very hard to discuss a paper where the requirements for the medical department are so vastly different.

You all know that there are a great many occupations and industries, like the mining industry, sawmills, and rock quarries, where an interval of time elapses before the man injured falls into the hands of the physician. There are many industries in which you can not have a nurse readily available, and you can not have a doctor's office near the man, and it is those conditions which I am going to discuss.

When the industrial laws were first adopted, the medical profession was impressed with this one great truth, that it was not physical care but functional results that the doctor was charged with and for which the industry had to pay. When the commissions demand that you must get the man back to work in the quickest possible time in the best physical condition, it is something new to the physician to find out that his results are to be measured by the time lost by the man and the results the man gets. As a result the physician is very anxious that the man get into his hands in the best possible condition.

At that time, the time that the industries had to pay for, or the result that they had to pay for, was contingent on the condition in which the man was brought to the doctor; hence, the industrial doctors are very much interested in the care that the injured man has from the time he is injured until he falls into the hands of the doctor, because that is the period when the doctor has no control over the case. If this man must get back to work in the quickest possible time, then the doctor must see that the man is placed in his hands in the best physical condition possible. All industrial doctors are interested in that phase of the question.

Again, in studying the efficiency of industries and the means to produce efficiency, nothing has produced greater fruit nor shown more satisfactory results than the study of accident cases, the prevention of accidents, the treatment of accidents, and the care of the man power. To-day we find heads of industries anxious to cooperate with the medical department in every way possible, not only to prevent accidents, but to care for accidents. Now we have the doctor interested in first aid, and the industries are interested in first aid or in first-aid stations.

In the last few years the radio and the press, the National Safety Council, the Red Cross, and the Bureau of Mines, have all disseminated information so that to-day we find the laboring man much better informed as to first aid. Knowledge on public health questions has been disseminated, and we find the laboring man interested in every condition that tends to undermine his health or in anything that will place a handicap on him in the labor market. He has become familiar with the infections that may develop from minor injuries. He knows the complications that always may develop and do arise and develop from not handling things properly at the time he is injured. So to-day we find the working man ready to cooperate with the doctors in every undertaking or every device you plan, not only for his safety but also for his benefit when he is injured.

It is hard for any man to outline a first-aid station or equipment, because the various industries are so different and the medical department is so differently organized that you can not go into detail and specify just what should be in each first-aid station. Those questions have to be worked out. But the doctors are interested in it, and the heads of industries are interested in it, and the laboring man himself is interested in it.

In locating a first-aid station, industry has the working man in mind. Locate your first-aid station for his benefit. Make it accessible for the laboring man. Fix it so he will not have to lose so much time from his work going to this station for treatment.

Again, as I say, the prevention and the treatment of accidents has become a big economic question. In locating your first-aid station let that represent the interest that you have in treatment. Have a station that is well lighted, well ventilated, and attractive, and let that station be a reflection of what your industry stands for and the interest it takes in the treatment of the employees.

Do not equip a first-aid station and then forget it. Keep your first-aid station under supervision. See that it is properly managed and see that it is ready to function at all times the same as a fire department in the city. See that it is able and ready at any time to handle any condition that a first-aid station is supposed to handle.

The value of your first-aid station depends on the man or men who are to render the first-aid treatment. I know you can not make doctors, and you are not expected to, out of first-aid men, but see that the men who are to render first aid understand their business, and understand what they are expected to do—that they are expected to do a certain thing in a certain way and are not expected to do it differently, or attempt to do something that a doctor should do.

The Bureau of Mines and the Red Cross have published manuals through which employees may be taught just what is expected of them. Be sure that the men who handle your first-aid stations are competent to do the work that is placed upon them.

I can tell you what I think a first-aid station for a mine should be, how many first-aid stations you should have underground, how they should be arranged, etc., but I can not tell you about the rubber manufacturing business or building ships, so I will not go into details. Those are questions that have to be worked out for the individual needs of the plant or organization.

There is one other thing that I will mention, although Doctor Longaker has already spoken of it, and that is that in connection with your first-aid stations you should keep some kind of record. Every man who comes to the first-aid station, no matter how trivial his accident may be, should have a record made of it, with his name, the time he was injured, his occupation, and how he was injured. All that should be taken down. I do not mean that there should be a whole history or any elaborate description, but that accident should be recorded and at once. That record should be put in the hands of the claims department or accident department at once, and the accident should be investigated.

The advantages of an investigation are that the men in industry become safety minded.

For the last 12 or 15 years various schemes and plans have been devised and recommended to prevent accidents. After all, the prevention of accidents is the great goal we are after.

It has been said you might possibly prevent 10 or 15 per cent of the accidents by mechanical means, but in all our accidents there is a psychological question that enters into it, and to prevent accidents the men have to be made safety minded. They must be in the habit of doing work in a safe way and through safe methods, and the only way to get that across to them is to have a very competent claims agent in contact with your first-aid station, and have him in a quiet and diplomatic way find out just how that accident occurred and who was responsible for the accident, and get the facts.

Get your men thinking about accidents, and you will find that you will derive from the first-aid station nearly as much, if not more, benefit through the safety methods than from the direct results in applying first-aid treatment.

Chairman STEPHENSON. The next speaker on the program is Dr. S. E. Gunn, physician in charge, Tubize Chatillon Corporation, Hopewell, Va.

Doctor GUNN (Virginia). I agree with Doctor Bowyer that each plant has a separate problem in the first-aid line—that is, as to its equipment and methods of applying first aid—so I am going to vary from the discussion of first aid and give you some points on the way we handle it in the plant in which I work. This plant is engaged in the manufacture of artificial silk and we, too, have a variety of accidents. For convenience our accidents are classified as those caused by machinery, foreign bodies in eye, fumes in eye, explosives, hot substances, strong acids and strong alkali, falls of persons, stepping on or striking against objects, struck by objects in the hands of others, hernia, or ruptures.

We have a small plant hospital in which we render first-aid treatment and redressings. This hospital has five beds, an examining table, and several screened places used for redressings and treatments. The hospital is well lighted, well heated, and well ventilated. It has three large overhead fans and three large oscillating fans for use during the hot weather. There is a drinking fountain and other running water in the hospital. We have an electric sterilizer for sterilizing instruments and equipment used. An abundant supply of absorbent cotton, bandages, gauze, adhesive tape, iodine,

ammonia, ointments, eyeglasses, and splints are kept at the plant hospital.

Our plant covers a considerable area, so that it is necessary to place first-aid kits in different portions of the plant outside of the plant hospital. There are 22 such boxes placed in our departments. Each of these boxes contains iodine, ammonia, adhesive tape, gauze, compresses, absorbent cotton, bandages, and unguentine. In addition to the above list we have extra supplies for use in the chemical department. In these supplies we have boric acid ointment, sodium bicarbonate ointment, boric acid solution, sodium bicarbonate solution, and one eyeglass.

There are two stretchers kept at our plant hospital and 10 other stretchers scattered at various points over the plant area. Each location of a stretcher is marked by a Red Cross sign with the information "Stretcher inside." There are also gas masks available in places where there is danger of gas. We have also an apparatus for giving artificial respiration. This apparatus is supplied with one tank of oxygen and one tank of carbon dioxide.

Our medical personnel consists of plant physician and two nurses. The plant physician is on call at all times, and in the event he is not available there are two other physicians on call. One nurse is in our plant hospital and attends to the minor injuries, treatments, etc. In case she does not feel capable of handling the injury, the plant physician is called immediately. The plant physician makes two routine visits daily to the main office in order to make examinations, fill out accident reports, and attend to other correspondence, also to examine new employees and those who are transferred from one department to another. The other visit is to the plant hospital, where those desiring to receive treatment may come twice daily.

Each new employee is carefully examined with reference to eyes, hernia, and other physical defects. A record is kept of this examination. Further treatments that the employee may receive because of injuries, etc., are carefully filled in on a special form of accident slip approved by the Industrial Commission of Virginia. This type of accident slip is kept as a permanent record, and record is also made of redressings which the employee receives. A detailed report of accidents is filled out by the safety engineer to the department in which the accident occurred. In this way we can find out those who are habitually having accidents and the employee is warned to be more careful.

Several classes for studying first-aid treatment as outlined by the American Red Cross have been given in our plant. It is very gratifying to know that about 150 took the course and have passed satisfactory tests. These people are called upon to render first-aid treatment, and then the patient is promptly sent to the plant hospital for further treatment. This first-aid class is not intended to take the place of any treatment, but in some instances it is very necessary that the injured person receive immediate treatment, such as artificial respiration, washing off strong alkali or acids. This can well be done by some member of the first-aid class, and then the employee is promptly sent to the plant hospital for further treatment.

A very valuable adjunct to our first-aid work and accident prevention work is our full-time safety supervisor. It is he who investigates all accidents and in the most serious ones, when the patient comes to the plant hospital, he is called in order that he may get first-hand information as to the cause and circumstances surrounding the accident; also to see if a repetition of this accident can be avoided. His work is also to follow up accident cases who do not return to the hospital for treatment. He may locate such an employee at work in his department or at his home. His investigations show the accidents in the minutest detail, and statements are taken from witnesses so that in case we are called upon for a full report to the industrial commission, we have this information at our finger tips.

Throughout our plant we have safety groups selected from each department that note any unsafe condition which might cause an accident. These departmental committees meet once a week to discuss conditions which they have noticed since the last meeting. Memorandum is made by the chairman of the departmental committee, who reports the conditions at the monthly meeting of the area committee. The area committee reports in writing the condition to the general safety committee, which meets monthly, and is composed of superintendents and major department heads. All recommendations which are passed by the general safety committee are put into effect if approved by the plant manager. When it is found that an employee has a number of accidents within a short period, the employee is warned, and if he continues to have accidents, his work is changed to another department if possible, or he is laid off. Safety bulletins are posted each week at conspicuous places over the plant by the safety supervisor.

My last statement has deviated from the subject quite a bit, but is so closely related to first aid that I do not believe it is out of place to mention it here.

Chairman STEPHENSON. There will not be time to have a discussion on this paper generally so I will ask Doctor Longaker to close.

Doctor LONGAKER. I have nothing to add.

Mr. MCSHANE (Utah). You have a very considerable field of activity. Are you employed full time or do you have private practice on the side, and, if so, does it interfere with the standard of service you could render?

Doctor LONGAKER. I am not employed full time. I have my own private surgical practice.

Mr. MCSHANE. You seem to be doing a good job.

Chairman STEPHENSON. The next paper is The Differential Diagnosis of Traumatic and Occupational Chemical Injuries, by Major General H. L. Gilchrist, Chief of the Chemical Warfare Service, Washington, D. C.

The Differential Diagnosis of Traumatic and Occupational Chemical Injuries

By MAJOR GENERAL H. L. GILCHRIST, *Chief of Chemical Warfare Service, United States Army*

A thinker—a real philosopher—once said, "A rose by any other name would smell as sweet." He recognized that names are much the result of accident. Thus it is with chemical injuries, be they traumatic or occupational, they are there and the differentiation is usually a matter of history to the medical man. If the injury is the result of the toxic action of some chemical producing direct violence, of course we have a trauma. The differential diagnosis of these immediate trauma-producing agents, from the more or less continued acting toxic chemicals that produce the constitutional symptoms that we recognize as the chemical injuries associated with the various occupations, is so manifested that I believe the real subject that you wish me to discuss is not a differentiation of traumatic injuries from the constitutional symptoms from chemicals, but rather the differentiation of apparent chemical trauma from other conditions and apparent constitutional chemical pathology from other disease processes.

The differentiation of chemical injuries from other disease processes is a most important problem, not only to the medical personnel of the military establishment, but to a much greater degree to the industrial physician. I shall later offer cases to illustrate the problem.

Prior to the introduction of chemicals in the Great War as weapons of offense, the average physician seldom encountered a case in which they were involved, but since that 22d day of April, 1915, when 5,000 cylinders containing liquid chlorine were suddenly turned loose on the unsuspecting Allies, chemicals have been credited with more dire iniquities than have ever before been associated with any other thing, and the misinformation concerning the types and degrees of wounds produced by them is causing much anxiety.

To what extent chemicals should be held responsible for the great train of symptoms of which so many exposed persons complain is an open question and one which members of the medical profession are often called upon to solve. Of course, if there is a trauma on a part of the body which can be actually seen and it can be traced directly to the effects of chemicals, the problem is a simple matter. But, unfortunately, the cases which confront the medical men to-day are those presenting obscure symptoms and found in a class of persons who give a history of having been exposed at some period of their lives to chemicals.

There is no doubt that a large number of those incapacitated who claim chemicals as the responsible agents for their condition were actually exposed to them. But who in this room has not at one time or another been so exposed? It must also be realized that a large percentage of questionable cases in which chemicals are involved were also exposed to other conditions, any of which may produce similar effects. This is especially true of ex-service men, the majority of

whom left good homes where all comforts existed, and upon entering the Army they adopted new modes of living entirely different from those to which they were accustomed. Those who went to Europe were housed in all manner of places—some sanitary, others not. They were crowded into groups, whereas previous to the war most of them had lived apart from contact with large bodies of men. As a result of the changed living conditions, many diseases were prevalent, particularly those of the respiratory group—pneumonia, meningitis, diphtheria, etc. Naturally, if any of these men had been exposed to gas and later became ill, it was immediately taken for granted that their illness was due to the effects of gas.

In the year 1918, the epidemic of influenza, with its associated pneumonias, occurred, which was responsible for over 800,000 hospital cases. Now, with chemicals or poison gases, if I may be permitted to use the expression, similar sequela are noted as in the influenza cases. The similarity between the respiratory complications produced by them and those of influenza has been particularly emphasized by Winternitz, Lyle Cummings, Chaulmette and his followers. It is apparent, therefore, that the effects of lethal gases and influenza are quite the same and their differentiation is a very difficult matter.

In determining the differentiation of traumatic and occupational chemical injuries, there are several important things which must be considered and without a true knowledge of which it would be almost impossible to arrive at definite findings. Among these may be mentioned the following:

1. The physical condition of the patient at the time of being exposed to chemicals.
2. Time and place of such exposure, together with the nature of the chemical used, length of exposure, and concentration.
3. Nature of the symptoms following exposure, whether they appeared immediately, or whether they were delayed.
4. A true history of these symptoms.
5. The severity of the illness following this exposure, whether mild or otherwise. If hospitalized, the number of days in the hospital. Final disposition, whether able to return to full duty, and if recovered, the interval of time between such recovery and the appearance of the first symptoms traceable to the aftereffects.

In addition to the above, a very complete history should be known, including not only the diseases which the patient had suffered prior to being exposed, but also the nature of his work and his family antecedents.

The difficulty of differentiation between traumatic and occupational chemical injuries has been brought out very clearly during the past few years by various medical men who, in studying these cases, have discovered that many individuals claiming chemicals as being responsible for their condition also suffered from injuries or ailments, any of which could produce changes identical with those attributed to chemicals.

It is regretted that time prevents going into the subject as fully as desired, but with your permission I want to mention a case which illustrates this problem.

Not many years ago there appeared in the columns of the daily press an account of the death of a very prominent baseball player which was attributed to tuberculosis as a result of having been gassed overseas. Due to the prominence of the case and the fact that death was attributed to the effects of gas, it was gone into very thoroughly by the medical division of the Chemical Warfare Service, and the following facts found: Although this person had been in France he had never been to the front and had not been exposed to gas of any kind; that en route to Europe he had contracted a severe attack of influenza for which he was hospitalized for several weeks; and that he had been treated for tuberculosis at Saranac Lake, N. Y., prior to going to Europe.

In this connection I might say it was the policy of the Chemical Warfare Service to trace some of these reported cases of men having died from the effects of gas. We traced over 800 cases. We tried to find out the man's true name, and we took it up with the organization and the Veterans' Bureau and searched the records in the War Department. I think only 4 per cent were ever exposed to gas, but on account of the romance connected with chemical warfare, it seemed to be the proper thing to credit everything to the effect of chemicals.

The differentiation of direct trauma caused by externally acting or corrosive chemicals from constitutional disease process is not so frequent as the necessity of separating the slower-acting agents that produce less manifest pathology. However, these problems do occur. Recently, at Edgewood Arsenal we had an interesting example—a so-called case of eczema.

You are all familiar with how the dermatologist desires to conduct his clinic. He likes to bring a patient before the audience, looks at the lesions presented, and then tells the patient his history. Instead of obtaining the history from the patient, he prefers to look at the lesion and then in quite a grandstand way to read and act the drama that has caused the condition, and often it is very interesting to see a dermatologist present a case, say of rash, and then have him build up a background that produced it. He may be able to tell the man that he was on a week-end picnic three or four days previous and has contaminated his skin surface with poison ivy, or he may recognize a number of peculiar special skin manifestations that are due to the action of external toxics. He may receive a lead from the occupation of the individual.

It is significant that whenever a civil physician examines an employee of Edgewood Arsenal for any condition, he almost invariably attributes all pathology present to the fact that the man works in the proximity of the highly toxic agents that we have at Edgewood Arsenal and assumes that the symptoms are of necessity the result of contact with these agents. Possibly they might not be so quick to jump at these conclusions if they were familiar with the fact that the military personnel on duty at Edgewood Arsenal has for years had a very low noneffective rate, much below the average, as any one can verify who consults the Surgeon General's annual reports.

At the present time we have at the arsenal an employee with a chronic eczema who, after making the rounds of the various clinics, has finally presented himself for treatment to the physician (the

medical officer) in charge of our medical research section at Edgewood Arsenal for advice. The very interesting thing about his case is that it had been diagnosed at the clinic at Johns Hopkins as a chemical eczema, the result of his employment at Edgewood Arsenal. This diagnosis was probably caused by simply asking the man his occupation, and when the physician was informed that he was employed at Edgewood, and he noted the eczema on his arms, "Q. E. D.," a chemical eczema.

Further inquiry would have developed the fact that the man was an employee, that he is not and never has been associated with the handling of chemicals, and that his eczema had nothing whatsoever to do with our chemical agents.

This rather extreme case is cited simply as an example of how even externally acting agents may be incorrectly blamed for pathological conditions. Of course, a great deal more important and a great deal more difficult problem is the question of the rôle of chemical intoxications, or the late effects of the action of agents that produce some respiratory irritation.

A recent case in the industrial world on which I was asked to express an opinion by one of the large insurance companies illustrates this point all too well. An individual employed by one of the large rayon concerns using the acetate process was making claim for disability, attributing his disability to an exposure to sulphur chloride. An investigation revealed that his exposure was for a short period to a very mild concentration; that others working with him were exposed at the time of the accidental discharge by a leaky container of sulphur chloride to a much heavier concentration for a much longer period; that he had not suffered any acute injury at the time of the exposure, and, most important, that he gave a very definite history of a long-continued chronic pulmonary tuberculous process; and very, very important that the company physician on his original examination at the time of employing this individual had completely missed this disease process, and then unfortunately had in his early handling of the case tried to cover his failure to detect the tuberculous process by diagnosing the condition as a more or less acute, rapid, pulmonary tuberculous process, although the history of a chronic lesion was typical and the indisputable evidence of a Röntgenograph showed the chronic sclerosis process so typical of an old chronic fibroid phthisis.

The industrial physician is here confronted with a problem quite similar to the problem that the military physician, or the Veterans' Bureau physician had to meet after the war. The men that won the war came back and are now trying to cooperate in the national development. Many of those who were a problem before and during the war are still a problem. You remember that the draft brought into the service all types, the good and the bad; it mowed over American youth like the binder covers the wheat field; it took the well-developed grain and the shriveled, blighted, worthless kernel. The poor specimen, physically and mentally, was eliminated as far as possible, but no rigid sorting process, such as is necessary in emergency, could keep back all of the undesirables. The result was that many of this type of ne'er-do-wells are now trying to implant themselves on the Veterans' Bureau and attribute their many deficiencies to their military service, especially the exposure to chemical warfare agents.

The industrial physician has a similar problem. He is often required to examine personnel that are to be employed. He is expected to look over an applicant with possibly one examination, often without desirable laboratory and Röntgenological aid, giving a final opinion as to whether the individual is a desirable employee from the point of view of his physical and mental make-up. It is simply an impossible task if we expect it to be 100 per cent effective. It is, however, to the industrial concern, as it is to the Army, a most valuable step in greatly reducing the number who will later become a liability, but it can never be expected to approach the ideal of holding back all defectives.

The quicker the world realizes that the more or less superficial examination made by the industrial physician at the time of employment, or for that matter, the somewhat more extensive examination made on entering the Federal services, while of great value, can never be expected to sort out all defectives, the sooner we will arrive at a sound legislative basis for handling these cases.

Our position at the present time in the military services is certainly in many respects ridiculous. If any disability is presented by an ex-service man that was not noted at the time of entry into service, it is automatically considered as an incident of the service, regardless of the fact that in many instances the condition is obviously due to pathology that antedated his entry into the service, possibly even a congenital condition.

In this case I might say I know of many men examined when they entered the service and they were never stripped. They were examined for hernia without taking off their clothes. The physician would listen to the chest. But to-day, a man who presents anything which was not noted on his card comes in for compensation and is drawing down big compensation from the Government.

The case cited above shows that the industrial organizations face the same problem. It is my belief that the type of examination that is now routinely made on employment by many industrial physicians can not be expected to find a very high percentage of latent respiratory conditions, especially fibroid tuberculous processes.

The two examples cited of conditions occurring in the industrial world and the military service are not unusual examples of the likeness of our problem. In fact, the more I study the situation the more I become convinced that our chemical warfare casualties are not only similar to your industrial problems, but in many instances you are confronted with the identical problem.

Take for instance the case of phosgene, a typical, nonpersistent lung irritant that was extensively employed in the World War and that is now as satisfactory a nonpersistent agent as we have available for the production of casualties. Phosgene has been known for many years. It is an agent that is much used as an intermediate in organic synthesis and represents a potential hazard about many of our industrial plants.

Phosgene has produced casualties in the industrial world. Leakages have occurred and not only has phosgene escaped, with the production of lung irritant casualties, but carbon tetrachloride, the solvent and fire-extinguishing agent so generally employed, in the

presence of heat and oxygen presents a great menace, as carbonyl chloride (phosgene) is readily formed by splitting off two of the atoms of chlorine and substituting an atom of oxygen therefor.

This is not a theoretical hazard. It is an actual menace that has produced injuries. This is a danger, of course, to which firemen, more than others, are exposed. However, an instance is known in which phosgene was liberated by the dumping of a safety tank of carbon tetrachloride released automatically at the time of a duco explosion and fire that resulted in five rather severe casualties with typical symptoms of phosgene poisoning.

I think at the meeting a year ago I mentioned the Cleveland clinic disaster. We built a replica of that clinic and went through that explosion probably 25 or 30 times and we found some interesting things. We tried all different kinds of fire extinguishers to find their effect on a film fire, and we discovered that the little automobile extinguisher that you carry in your automobile, if thrown on a hot surface, would produce a heavy concentration of phosgene gas. We took it to the laboratory at Edgewood and tried various fire extinguishers. It had a very toxic effect and killed many animals, so I think that should be a point to look into. Find out what the composition of the fire extinguisher is, and, if you have chemicals there that will unite with heat to produce a poison, I think they should be so labeled.

Our service has recently had its attention called to the alleged toxic effects of sulphur dioxide. While the general impression prevails that moderate concentrations of this chemical are more toxic for the botanical kingdom than for the zoologic world, there is nevertheless quite insufficient data for us to make positive statements, and our medical research section at Edgewood is now engaged in trying to establish the actual facts concerning the toxicity of this material. We have only quite recently started this investigation; however, I can outline to you the nature of the problem as we see it and our plan of attacking same.

We intend to study the toxic action of this material when exposure is for a comparatively short period to comparatively high concentrations, or at least for only a single exposure of a matter of minutes, standard time factors are 10 to 30 minutes. We intend to investigate also, and possibly more important in this particular case, the effect of long-continued exposure to low concentrations. By this I mean the daily exposure of animals for six to eight hours to minimum concentrations, concentrations far below that required to produce symptoms at a single 30-minute exposure.

We have started this experimental work and we believe that we are already justified in reporting that for single exposures to comparatively high concentrations the results appear to indicate that the animals are killed or make a complete recovery.

We are not yet ready definitely to announce the lethal concentrations for single exposures. It is necessary to recheck our work with a number of animals and controls before we will feel free to make a definite statement, but we believe that the single exposure, if not lethal, does not appear to be followed by sequela. You realize, however, that the second part of the problem is in this instance much more important. You can also realize that it will take considerable

special equipment, and we are now preparing to construct the necessary chambers to allow us to expose animals daily to minimum concentrations for a period of weeks and months and observe the late or so-called constitutional effects of this chronic intoxication, if any exists. It is apparent that this work will be of as much interest to you, possibly more, than to the Chemical Warfare Service, although we desire this toxicity data to complete our files.

The similarity of our problem in handling the late effects of sequela from lung irritant gases, of course, is obvious. It is very, very difficult in any particular case to say exactly to what extent symptoms that occur possibly months, maybe even years, after a lung irritant injury can be attributed to the chemical action.

I believe sulphur dioxide will be one of your greatest problems. Three months ago I was ordered by the Secretary of War to go to one of the large cities for consultation with the head of a large steel corporation. A study was being made, as to the inhabitants within 5 miles of the place, for the residue of sulphur dioxide escaping from the smokestacks.

I looked up the literature and found nothing in print pertaining to the physiological effects of sulphur dioxide. There has been a tremendous amount of work on the botanical effect on crops and trees, etc., but not on the physiological effect. In this particular place, for example, I went into the vicinity and sort of circulated around among the people and applied for a position as school-teacher. I wanted to find out what the actual conditions were among the people. To show how they were organized, I saw two little boys with bright eyes and red lips walking down the street and I asked them if they were going to school, and they said, "No, we can't," and they pointed down through the valley. "You see those smokestacks, the gas is coming out from those stacks and is producing poison," and they both commenced to cough. "We can't go to school because it is ruining our lungs."

At our research laboratory at Edgewood we can control the heat and humidity, and we will be able to find the effects of concentrations of sulphur dioxide as low as one-tenth part per million. Thus far in our test we have found we can kill white mice and rabbits and guinea pigs with 40 to 50 parts of sulphur dioxide per million.

I do not believe that problem has ever come up in industry, but it is a most serious problem and you will have to face it. In this city of which I have spoken, up to the present time between $14,000,000 and $15,000,000 worth of lawsuits have been brought against one concern for the damage done to crops and health of the inhabitants. The problem is just in its infancy. We are working hard on it. There is a case which is expected to come up within a month, but we are trying to put it off for three, four, or five months, and then we expect to have some information which will be important.

As to the subject of sulphur dioxide, figuring the amount of it thrown out from the average smokestack, it drifts along and settles over the community, and, as I stated, the people are now being organized by different cliques of lawyers and are getting together and suing these different corporations.

In our test we are going to start in and find out the effects, working up from one-tenth part per million to 25 or 30 and find concentrations

sufficient to kill animals, and then we will check and recheck it, and we hope to have data before many months that we can turn over to the industry.

This matter is of far more importance to industry than to the military, but the Chemical Warfare Service, being a national organization, is organized for that purpose.

Of course, to the lay mind, all of our tuberculous military personnel are the result of the horrible gas warfare. The professional man and the statistical student know that tuberculosis was more prevalent in the 2,000,000 controls who did not reach France, than in the 2,000,000 who arrived overseas, and for that matter, the great majority of these were controls, as a comparatively small percentage were ever exposed to effective concentrations of lung irritant gases. To the lay mind, however, all our tuberculosis is the result of war gases. "Post hoc; ergo propter hoc."

In that connection I might say that in 1924 the question of tuberculosis in connection with exposure to gas was so set in the minds of the laity and a great many physicians that I went on a junketing trip. I went all through the East and my first stop was at Cincinnati. The lectures were advertised to the public and were given under the auspices of the medical society. I went to St. Louis, to Mobile, and back to Baltimore, all to bring out the point that we did not consider that tuberculosis and gas were connected in any way, and at the present time I think we are accomplishing certain things in that line.

In laboratory tests we generally take 50 animals. We take 25 as controls and 25 are exposed to different gases. We use phosgene; we use chlorine; we use lung irritants and mustard gas; and those tests are run on for three, four, or five months, at the termination of which all are injected with a mild saline solution of tubercle bacilli. We have detected it in the animals that have never been gassed, but to the present time we have never detected it in the animals that have been gassed.

That report has been made, and it has been taken up by the French. They have gone through the report and have duplicated the same experiments with the same results, and so have the English, so I do not believe the idea is much more than fiction.

A board was appointed by the President to study the residual effect of these gases. Dr. Allen K. Krouse, associate at Johns Hopkins, the chief of the Medical Bureau, and I were appointed, and up to a year ago we examined 3,000 cases from the Veterans' Bureau, then took them at random, then went to the War Department, and traced them all through to the present time. A large number of those men who claimed to be suffering from the effects of gas had never left the United States. Another class of them had never been exposed to gas, and we found that some of those men had suffered from all sorts of diseases but they were credited to the effects of having been gassed.

This tendency to blame all sequela on chemical injury is not entirely due to the confusion of sequence and causation. Many feel they have a claim against the Government, or a claim against industry, and it is very difficult for this claim-bound mental complex to make a recovery. No man is so hard to cure as the individual who

is not sick. No man is so hard to cure as the man whose cure will react to his financial disfavor. No man is so hard to diagnose correctly as the man who has an ax to grind.

Possibly this gives us the best insight into the differentiation of chemical injury from certain constitutional conditions, and possibly more important, the differentiation of chemical injury from the so-called case of compensationitis. Chemical injuries have one characteristic that may be of great value in differentiating them from compensationitis. Chemical injuries tend to improve or get worse. They tend to be progressive, either toward a favorable or an unfavorable outcome.

Do not misunderstand me; I do not wish to leave you with the impression that chemical injuries do not present a very serious and important problem to the industrial physician. I do not believe anyone has had a greater first-hand evidence of the fact that chemicals can and do produce casualties. However, since it is impossible for me to take up each individual class of agents with the symptoms they produce and the varied disease process that they are likely to be confused with, I hope this general statement of this important differential factor will furnish you food for thought.

DISCUSSION

Chairman STEPHENSON. The first doctor to open the discussion is Dr. Warren T. Vaughan, diagnostician, of Richmond.

Doctor VAUGHAN (Virginia). Major General Gilchrist's reference to the dermatoses, the eczemas, caused by chemicals, raises another question that will probably be coming into increasing prominence in compensation work as time goes on, and that is a condition that we call the allergic dermatoses. Allergy is a condition in which one is supersensitive, hypersensitive, to some particular substance. Food allergy is the old-fashioned food idiosyncrasy, "I can't eat clams; they give me hives, or asthma, or eczema," or "I can't eat tomatoes." Possibly many of you have had that experience, and in the same way we have certain eczemas which are due to contact with substances, actual contact on the skin with substances which cause no trouble whatsoever to the majority of individuals, but to which certain individuals may be sensitive.

There is the question as to whether the fact is that this individual is sensitive to pyrethrum, a constituent of insect powders, for instance. Pyrethrum gives many dermatitis, and pyrethrum is used in this industry. Now, is the workman a compensable case because he gets eczema definitely from working with pyrethrum? It is definite cause and effect, but the man working next to him has no trouble whatsoever.

There are many causes of occupational dermatosis of this type, and a sensitization may be due to a long list of substances—silk, orris root, soaps, woods even; dyes, furs, and many other substances.

Then we have the asthmas which are occupational, due in the same way to sensitization and inhaling the dust which is responsible for the patient's idiosyncrasy.

In Toledo about three years ago there was a large number of cases of asthma in the vicinity of a castor-oil mill, and it was definitely

demonstrated that the asthma was due to the castor-bean dust that was blown out as refuse into the air from this mill.

My own contact or interest in the compensation features in cases is rather indirect. Most of my work in this field is in the nature of referee work, in which I see the patient, if I see him, long after the injury, long after whatever original symptoms or signs were present have disappeared, and as a consequence most of my work deals with getting information on the literature on the subject of these poisons.

You can see from what General Gilchrist has just told you that the literature is old. The literature of to-day is old to-morrow. We are dealing with new gases, new substances, all the time, and even with the old substances, as for instance carbon monoxide, it is difficult to get a lot of literature, generally.

General Gilchrist, there is one question I should like to have you answer and which I think probably a lot of others here would like to know the answer to—whether there is any really adequate reference periodical or volume on these chemical irritants that are so great a factor to-day in the industries. Of course, we have Dr. Alice Hamilton's volume, and Henderson and Haggard, but these and several others of the same nature in the last analysis just touch the high spots.

I had occasion, not long ago, to study a case of so-called blindness from carbon-monoxide poison. We felt that by now we knew all that was necessary about carbon-monoxide poison, and it took a tremendous time to go through the literature and find out whether there were actual cases of blindness due to carbon monoxide. As you know, the usual conception is that, if you get well, you are usually entirely well. You either die or get well, and I found about 18 cases of definite proven blindness due directly to carbon-monoxide poison.

Recently I had occasion to make this study with reference to a case of so-called heart failure due to carbon-monoxide poison, and I found in the German literature a few cases definitely proven to be heart failure as a late sequel to carbon-monoxide poison.

So far as I know, there is no readily available sufficiently detailed literature which can be referred to by industrial commissions or the medical advisers of industrial commissions, and it does seem to me that this would be a good procedure and a good development for an organization such as this to foster. It would mean a tremendous amount of work. It would have to be of almost encyclopedic proportions, and it would have to be kept absolutely up to date right along on account of these new gases that are being introduced into industry to-day and every day.

Chairman STEPHENSON. The next speaker is Dr. Dean Cole, of Richmond.

Doctor COLE (Virginia). General Gilchrist mentioned factors taken up in the history of the patient. There are one or two things which we have to consider that he does not have to think about so much in the Army. One of those is race. For instance, a negro is generally more resistant to poisons that affect the skin, causing skin eruption, than a white person.

All of us who see any of this at all—I do not see many—know that individual conditions of skin, etc., are factors in this. On the other

hand, the negro is said to be more prone to lead poisoning. A few years ago lead poisoning was a very common condition with which to contend.

Then there is the matter of sex. In many of these conditions women suffer more acutely. That is true of lead poisoning, and it is said to be true, to a small degree, of carbon monoxide.

Age also enters into the question. We know that children, the younger adults, are more susceptible to some of the irritants, and I again mention carbon-monoxide poisoning. The question of whether or not any individual has been poisoned or adversely affected by some chemical or alleged exposure to a chemical, as Doctor Vaughan has mentioned, becomes very difficult at the time when we see them.

We attempt to get a history and to find out as accurately as possible just what happened at the time of the alleged accident. I have found, and I think Doctor Vaughan and a number of others who have seen these people will agree with me, that they appear to have been well coached. I see a number of men and it looks as though they had reviewed the literature on the subject. You go over it with them and find they are pretty familiar with it. For instance, in lead poisoning, when trying to find out just what has happened, whether or not you have an acute or a chronic poisoning, you frequently are astounded to find out the familiarity of the claimant with the condition.

Arsenic poisoning is rather uncommon, but if a worker has been exposed to it and has a condition with bronchial catarrh and bronchial irritation, disturbance of sensibility, and vomiting, whether or not he may have a motor paralysis, he is likely to give you a good story of arsenic poisoning; these men are usually pretty familiar with the symptms of the condition from which they think they are suffering.

When a worker is poisoned by ammonia, that is usually accidental. It occurs either in the liquid or gaseous form.

Phosgene has been alluded to as used in the war. It decomposes in the presence of water. It was my privilege to see large groups of these men in the Army and, as the general has so ably described, all of these men were gassed. All of us have been gassed more or less in one way or another, some of us much to our discomfort, some with phosgene and mustard gas, etc. I recall so well many of these men with severe burns around the thighs and scrotum, and the armpits and other surfaces which happened to be moist showed none of the classical symptoms.

I entirely agree with what the general says relative to the causing of pulmonary tuberculosis or even reactivation of an old tuberculosis with these patients. It has been my privilege and pleasure to see a rather large group of them, and I am convinced that it is a small factor.

I think ether has not been mentioned. I do not know how much of a factor it will be, but some of us are familiar with the ether jag and the poisoning that may come from that. Hydrocyanic acid usually kills, but occasionally we find a patient who survives it.

There is one thing I want to emphasize that is a problem to me, and that is the effect of some accidents, or alleged accidents, on an old condition. I wish when the general discusses this he would

refer to that a little more. We find not infrequently a patient who is suffering from an old tuberculosis with a recent reactivation.

As Doctor Vaughan has brought out, there is only so much to be found in the literature. Just what happens to these individuals? It is sometimes a most difficult problem to know just what effect an alleged accident has had on a reactivation of an old process. I should like the general to discuss that a little, if he will be so good as to do so.

Chairman STEPHENSON. Is there further discussion?

Major General GILCHRIST. First, about the literature. The only literature I know of outside that which has been mentioned is Salmon. He has written quite a book on chemicals and toxicoids; and there is also Pope, of England, and Mayer, of France. But we are having new gases come up to-day that are not touched; for instance, sulphur dioxide, which I mentioned. We can find nothing on that subject, and it is an important one, and you gentlemen connected with industry will have to face that problem.

It might be interesting to know that in the particular case I mentioned, that about the lawsuits, those people are suing for the deposit of sulphur dioxide; they are asking two dollars and a half an acre and are putting in exorbitant charges for the destruction of trees, and so on.

Now a word about carbon monoxide. We have discovered some very interesting things at Edgewood. A great many of the cases that have been put down as death from carbon monoxide we find have not died from that but from oxygen starvation. For instance, if we have several animals in a cage, and throw in a heavy concentration produced by a little flame or something, we find that a lot of those animals will die. We post-mortem them and find no sign of carbon monoxide in the blood. They are all gassed at the same time under the same conditions, but there is no sign of carbon monoxide in some; so we have been working on the oxygen theory, and I believe many deaths that we attribute to the effects of carbon monoxide are due to the effects of oxygen starvation.

As to tuberculosis, I know very little about the subject. I think Doctor Krause is one of the best men in the country on tuberculosis. He has had it himself for a great many years, and he is constantly taking treatment and working with himself; we used to trust to X-ray plates to a large extent. It was interesting to me. I do not know anything about reading an X-ray plate, but it was interesting to see Christy and Krause fighting about it and hear one say, "There is sclerosis there," and the other say, "There is a shadow there." There wasn't anything for me to do.

It is surprising to me the amount of tuberculosis you will find in the different hospitals, especially the veterans' hospitals. They have never found the bug. The patients have no night sweats. A good many of the people will gain in weight and still are diagnosed as tuberculosis.

Of course, I have sort of left the medical profession and taken up the chemical profession, but when I was studying medicine it was my understanding that in a case of tuberculosis you would find a sign of the bacilli in the sputum, and there would be night sweats and a loss of weight, but we are finding now that they do not have

those things, so I do not know how to diagnose tuberculosis; but when, for example, I had an X-ray made of my own chest, I found that I am suffering severely from tuberculosis, according to the shadows found in the X-ray plate.

At the present time we on that board have examined over 2,500 X-ray plates, and there is a difference of opinion between those specialists. There was nothing for me to do but sit on the side lines and allow them to fight it out, but I am thoroughly convinced that there is no connection between the inhalation of gases such as the gases that were used during the war and tuberculosis. I do not believe that there is.

You might be interested, too, in the Report of the Surgeon General for 1922 (p. 90), showing that the rate of tuberculosis among the men who had been exposed to gas was 2.5 per thousand in this country and among the men in France who had never been exposed to gases, the rate was 3.4 per thousand, so I think that that does answer your question.

I think there is a good deal to be learned in the proper diagnosis of tuberculosis. Of course, I look at it from the angle of chemical warfare. You might say I am prejudiced. Of course, I am Exhibit A of the Chemical Warfare Service, and naturally, I am trying to protect chemicals so far as possible.

Secretary STEWART. I should like to say one thing for the record in regard to something Doctor Cole said—the statement that when the man came up for examination they asked him questions about his symptoms and the fellow immediately created a suspicion in the doctor's mind that he had been coached. Everything, I suppose, depends upon the point of view. I am wondering if his statement might not possibly be true, and arise from the fact that the man really had the disease and that something in the literature might have been true.

You can not make us believe that anything in the literature is true unless the fellow who has it has those same symptoms. Possibly that fellow was not coached. Possibly something in your book might be so.

Doctor COLE. I love a discussion. I evidently created an impression. I do not object to such persons being coached; I rather enjoy it.

Secretary STEWART. I object to the assumption that they are coached.

Doctor COLE. There is no assumption that anyone is being coached—educated. We try to approach this absolutely unbiased. Do not misconstrue that. I think the claimant gets the benefit of every doubt; I think that is true. I know that in the few cases that I have seen in Virginia the industrial commission here certainly gives a fair deal, but we see only the difficult cases, the ones where there has been a lot of controversy. I will not say "never" because I do not like to use the word, but usually there has been a great deal of controversy before we see the claimant. I think quite a few things in the books are true. What I was asking General Gilchrist was, what effect some of these things might have on reactivating an old process. What we try to do is find out if what the man says and what the man has correspond to what is in the book or what we have heard from others or seen in others that it has been our privilege of seeing before.

Doctor KESSLER. General Gilchrist painted for you a background which is quite typical of the medical resources throughout this country. He told you how, at what great expense and with what great pains, he was trying to ascertain a medical truth. If the compensation boards and accident commissions would try to ascertain or to rely upon sources of information of this type, they would have a great many of the questions which are troubling them answered.

I, for one, was very much impressed by this thorough study that General Gilchrist has been making in order to determine the relationship between probable chemical injury and underlying or preexisting constitutional affections. My own experience has been that, in this whole subject of the relationship between injury and disease, injury plays a very small rôle; that with certain exceptions, internal conditions within the body, as well as environmental factors, are much more important in the normal progress of that patient's well-being than the specific occupational factors. The war experience, industrial experience, and experimentation have brought that out.

Occupational dermatitis, in my opinion, is the most important occupational disease which industrial commissioners have to arbitrate. These dermatidies may be the result of occupational irritants, and they may be the result of constitutional or allergic or hypersensitive reactions. The question of the compensability of the claim frequently depends upon the schedule of the compensation law as to whether or not it includes that specific irritant. Of course, in those States which have a blanket plan, that simplicity is not present, and so there is a greater difficulty in handling the problem. However, an easy way out is to remember this: If the man quits his work and gets better, there is a probable relationship between his occupation and his condition.

Mr. MCSHANE. I live in a mining country and, as you know, any man who spends 15 or 20 years of his life underground—at least we are told and led to believe so—has some lung condition, and we are frequently confronted with the problem of deciding whether or not a case is compensable when a man has been subjected to a gas superimposed upon an old tuberculous condition. We have in at least one hospital in our State a practice where ether is never given to a miner, or if at all very seldom, because of the reaction it will have—that is, not on any case that goes to the hospital, but on an injured miner—because of the possible lighting up of an old latent tuberculosis.

One of the doctors asked General Gilchrist what in his judgment the effect of a gas injury superimposed on an old tuberculous condition would be. I should like someone to tell me, because those cases are coming up and are quite important in the class of cases that we have.

Chairman STEPHENSON. Is there any further discussion? If not, is there any resolution or other business before the meeting?

Major General GILCHRIST. I should like to extend an invitation to all the members to send any of your suspicious gas cases to the Chemical Warfare Service. We are glad to try to solve them. If you have any troubles, send the cases to us and we will try to solve them for you, if possible. We are getting cases every day which are sent in by medical men around the country; they give us the history

of the cases and want to know if we can help them out as to the cause. We are glad to do that because it is your service and we are glad to do anything of that kind we can for you. I want you to feel free to send your cases to the Chemical Warfare Service for such information as you desire and we will try to get it for you.

Secretary STEWART. The gentleman who made that request is Mr. McShane, of Utah. Do you mean to say that you have the facilities for testing these things all through the country or are they centrally located? For instance, where would Mr. McShane send his cases?

Major General GILCHRIST. We had a similar case sent down by a medical man up near the salt works near Rochester. He has had the case of a man suffering from a severe effect of gassing of some kind. He does not know what it is and he sent a description of the symptoms and that was not sufficient, so we are in correspondence with him about the case. I can not give any information unless it is that the man's resistance is so broken down that he is not able to stand that. Does ether have an effect on all those cases, or on a certain class of those miners?

Mr. MCSHANE. I do not know what the effect is. That is what I am trying to find out.

Major General GILCHRIST. Is it all of them, or just a few?

Mr. MCSHANE. An employee who has spent a great number of years underground. My statement is that there is one hospital where one very good surgeon in charge refuses to give an ether anæsthetic to that class of patients because of his experience with those cases, that frequently, following the surgical procedure, however successful that may be, the man later dies of tuberculosis.

Major General GILCHRIST. It is not ether pneumonia he has?

Mr. MCSHANE. We have one case that I left at home undecided, where they brought a proceeding because a man died of tuberculosis. Some months previous he had been in a hospital for the amputation of a finger, and when this particular doctor was brought in, he testified that the man never did have an ether anæsthetic, but had sodium amytol, while our tuberculosis specialist had come in previously and said he had undoubtedly died as a result of the ether. Now, that puzzles me!

[A rising vote of thanks was given the speakers of the afternoon and the medical committee for the splendid papers and essays that were delivered.]

[Meeting adjourned.]

THURSDAY, OCTOBER 8—MORNING SESSION

Chairman, R. B. Morley, General Manager Industrial Accident Prevention Association, Toronto, Canada

Chairman MORLEY. First of all this morning, it gives me great pleasure to bring to you greetings from good friends to the north of the international boundary. It is, frankly, a great pleasure to most of us to come to a community so beautifully situated that it has been called "The Modern Rome." It is a pleasure to me personally to be here to renew certain friendships and perhaps to be reminded, through association with Richmond, of the man who was a friend to many of us during his life in Baltimore, a man who was formerly president of this International Association of Industrial Accident Boards and Commissions, and a man who gave his best efforts toward making the organization a success; I mean the late Robert E. Lee.

If I were taking a text for to-day, it would hinge around an extract from the fifth chapter of St. Luke: "And they beckoned unto their partners * * * that they should come and help them," for it seems that those of us in Canada and the United States have each grown into the habit of beckoning to the other as a partner when we need help. Certainly, it is so in the safety movement and we in Canada have borrowed freely from the United States.

There is, however, one point in our safety work that we have not borrowed from you but probably from Germany. I refer to that section in some of our Canadian compensation acts authorizing industries to set up accident prevention associations and permitting the compensation board to make grants for the maintenance of those associations. Under this section of the act, the Workmen's Compensation Board of Ontario made grants to safety associations in 1930 totaling $146,929.22. The industrial accident prevention associations were established some years ago and are made up of a number of class safety associations, which include more than 9,000 employers under compensation in the membership. The industrial accident prevention associations exist for the purpose of rendering a direct service to industry and, as such, have had a useful function to perform throughout the Province of Ontario.

This morning we are opening up an entire day devoted this year to accident prevention work. The committee on safety has built up an excellent program and has been fortunate in securing speakers from many parts of the United States, and there is provision on the program for discussion on any and all of the excellent addresses to be delivered. I hope that there will be plenty of discussion.

Col. H. A. Reninger, of the Lehigh Portland Cement Co., Allentown, Pa., a former president of the National Safety Council, will speak to us first. I have much pleasure in presenting to you Colonel Reninger.

How Can Factory Inspection Be Improved and Dignified?

By H. A. RENINGER, *of the Lehigh Portland Cement Co., Allentown, Pa.*

When my good friend, Doctor Stewart, sent me the program of this meeting he had marked thereon very plainly, in green lead, that I would be restricted to a 20-minute talk on a subject that 20 years ago we might have spent several hours on. I rather hesitate to express to you gentlemen my viewpoint on the subject of safety inspectors, and in doing so am giving you ideas which are the results of a good many years of safety work in industry.

I can recall very clearly in the old days a visit by a factory inspector meant trouble around the plant. In those days the factory inspector, armed with the authority of the law, paper and pencil, and wearing a badge, came into the plant and when he had finished his inspection of the machinery he had a long list of recommendations of changes to be made, which changes had to be made within 30 days or he threatened to shut down the plant. He came not as an adviser and friend but rather as one to be feared.

Those days are past and to-day the bureaus of inspection of the various States and insurance companies are keeping pace with the modern educational trend, and while the inspectors are compelled to carry out existing legislation, there are some that are more inclined to follow out the rule-of-thumb method and look at the same pieces of machinery each time they visit the plant, limiting their recommendations to these and perhaps overlook the more important hazards. We in industry appreciate the fact that toe boards may be very necessary at one place and perhaps useless in another, that a grating platform allowing small particles to fall through might be condemned in some places but that in a boiler room or blast furnace this prevents the accumulation of monoxide gas above the platform and permits those below to see a person above who might have been overcome, thus eliminating a serious hazard at the expense of a trivial one.

Twenty years ago we all thought that mechanical safeguarding was the answer to accidents, but our views have changed, and with years of experience in mechanical safeguarding and in trying to comply with the State and insurance regulations we have found that about 20 per cent of our accidents have been cut out.

I recall that back in 1916 a safety committee included in its minutes the statement that the machinery had all been guarded, all recommendations received from the State and the insurance company inspectors had been taken care of, and therefore they suggested that the committee be dismissed. To-day that same committee is doing more and better work in accident prevention than ever before, and we have not seen any such recommendations come in during the past 10 years.

In the early days we did not appreciate the value of education along safety lines. We did not think that safety included the study of a minimum labor turnover; that contentment, that absence of worry, had anything to do with the attitude of the worker or might be the cause of an accident. Good health, good lighting, good housekeeping, sanitation, safe clothing, and bright and cheerful

surroundings all enter into the subject of accident prevention and the wide-awake executives are paying a great deal of attention to this phase of the work. The experience of the larger companies and the experience reported to the National Safety Council show that accident prevention is not entirely mechanical safeguarding. The old inspectors in the department are realizing that they must keep pace with the modern educational trend and they are paying more attention to-day to the subject of accident prevention from the personnel standpoint than the actual mechanical safeguard.

The difficulty that has existed for years and still exists is the fact that inspectors are political footballs and many good men lost their jobs because they did not happen to be of the same political faith as the reigning power. The department of labor and industry occupies a very important part of State government and we do not think that politics should enter into this department. Every effort should be made by the heads of these departments to build up a competent corps of inspectors. The method of appointing a man who might have been a silk weaver or a shoemaker and sending him into a plant like Bethlehem Steel, Westinghouse, or any cement company to inspect the plant and tell the trained engineers and operators who have been working in the industry for years how to operate their plants and how to safeguard the machinery, is entirely wrong. It takes years to train an inspector and when he goes into a plant he should know the rules and regulations of the department of labor. He should know the interpretations of the department and if he had a technical training it would be of value to him. He should know the general operation of the plant that he is going to inspect. It would be a mighty good thing for him to know the personnel that is employed in the plant, for we find in our experience that the personnel operating our Birmingham plant is entirely different from the one in Pennsylvania—the Pennsylvania Germans. They are entirely different from the Swedes, Norwegians, Greeks, or Mexicans that we have at Mason City.

As I have said, it takes years to build up a competent corps of inspectors. Perhaps the ideal inspector would be the fellow who has had a technical training and after a few years of experience in industry could be brought into the department to study the labor and compensation laws, the safety codes, and the interpretations placed thereon, the routine of the department and the handling of the accident reports, also studying the causes of accidents in the various types of industry, and could then be sent out on the job with an old trained supervisor. He perhaps would make an ideal inspector, providing he has common sense and the ability and personality to talk to all of those with whom he comes in contact during an inspection trip.

Education of the employee, the foreman, the superintendent in safety work, is the thing that counts. Every inspector should be trained in accident-prevention work; by this I mean be able to talk safety not only to the laborer, the foreman, and the superintendent but also to the executives. This inspector should be able to organize safety committees; he should be able to talk to gatherings of employees, and to sell them this idea of safety, and in selling safety he should be able to sell them not only industrial safety but highway safety, public safety, home safety.

It is usually the case that in every State the corps of inspectors is limited. They can not visit every plant that should be visited, with the result that when they start making an inspection of one of the bigger plants in the State, a plant like any of the big steel corporation plants, General Electric, or Westinghouse, it takes weeks to go through.

One suggestion I would like to make to you gentlemen who are in charge of inspection work in the various States is that the different industries be classified—that a careful study be made of the last inspection report and the experience of the various plants for the five years previous. Those plants that are making progress and have good accident records with active safety committees should receive a rating which would place them in a class where the inspector would not have to visit them and waste time trying to tell those organizations what is necessary to cut down accidents. Why spend the time and money if a plant with a large number of employees has had a good 5-year record? We have found in the National Safety Council (and I believe you gentlemen have the same experience) it is not the big organizations that are having accidents but it is the small plants that are the hardest to interest in safety. We have tried all kinds of experiments to interest the small plant, and by the small plant I mean the shop that has from 25 to 50 employees. Somehow or other we have never been able to solve the problem as to how we can reach these people. We believe the only people who can reach the small shop or plant (and whose job it is, without question) are the State inspectors and the insurance inspectors, and that their time should be spent in inspecting and in visiting these small plants and helping them to organize their safety committees—to sell them the value of safety.

The factory inspector exercises a wide influence in the small plant. This type of establishment is usually without organized effort of any kind to educate and warn the new employee of the danger lurking in his daily work. The inspector with expert knowledge in the control of plant dangers, mingling with the workmen and getting daily experience of their occupations, can help greatly in creating an interest in the minds of the employees and getting them to exercise due care at their various jobs. With the inspector's experience in a wide field of industrial activity, being familiar with existing conditions from the hazardous trades, he establishes immediate contact with the employee and can show from actual facts and figures what has been accomplished in the various types of plants, large and small.

Speaking from experience, why should a State inspector spend his time in visiting six plants in an organization that went through the year 1930 with one lost-time accident and with two of these plants having operated over a period of two years without a lost-time accident, when right across the road a plant employing 30 men had 7 or 8 lost-time accidents—the one organization with safety committees, safety campaigns, educational work, being carried on and the other with no safety organization and doing no safety work whatever because the management says it can not afford it. It tells you that it is insured and the insurance company will pay its losses. Right here we believe that the State inspector should get on the job and help these people to reduce their accidents. We

also feel that the insurance departments and State commissions should classify these industries, and that the industry that is doing the real job should receive the benefit of the rates put into effect, because, as it is at present, the man with the low experience rating is helping to pay the cost of a man who is not doing any safety work.

I have talked this matter over with many of the large industrial safety engineers and they all feel that if any State wants to reduce accidents the place to do the real work is in the plant that has no safety organization. When you talk to the insurance companies, their executives tell you that they have lost millions of dollars in compensation. If they have, we believe it is their own fault. They say they can not afford to send inspectors to the small plants whose premiums may run anywhere from $50 to $200 a year. Wouldn't it be more practical, wouldn't it seem like better sense for their inspectors to help the small plant with a premium of only $100, when they may have an accident in that plant resulting perhaps in a disability or perhaps a fatality which may cost anywhere from $2,500 to $7,500, than to spend their time and money in inspecting a plant that may have a premium of from $5,000 to $50,000 and over a period of years have a loss of probably $10,000 or $15,000 a year?

We realize that not every inspector has the ability, the personality, education, and training to sell safety, but we believe every insurance company, every department of labor and industry ought to have one or two inspectors (if they wish so to designate them) who not only have the knowledge and ability, the personality and education, to sell safety to the men in the plant or the foreman, but can walk into the president's office and sell him safety, because you and I know very clearly that unless the president and the executives of any organization are sold on safety it is impossible to put safety across in the organization. The inspectors should have the ability to go through the organization not only looking for set screws, unguarded belts or pulleys, but studying the personnel and being able to set up a safety organization. No matter how much the employees may believe in the work, unless they have the backing of the executives, safety is not and will not become a part of their operation. The inspector who can show the executives the cost of accidents, the saving that can be derived through accident prevention, the power of stopping accidents (which means pain and suffering), is the type of man that we need for this special job.

We have an outstanding case in Pennsylvania of an inspector who can handle this problem and sell the idea of safety to the heads of organizations better than any other one man. This man does it not because he is a college graduate, for he is not a college graduate, nor because his knowledge of the English language is like the great orators, Patrick Henry or Daniel Webster, but because he knows human nature. He has the ability to talk to men, whether they be Slovak or Polak, whether they be common laborer or president. He can talk to them from the bottom of his heart; he believes in safety and he is not only an inspector but a teacher, a preacher, and he practices what he preaches. Common sense is what this man has and he is so convincing that I believe he could sell swamp lands to a rheumatic or horse liniment to an automobile driver.

You gentlemen who have the power of directing your inspectors should take a little more time in selecting, studying, and training these men and sell them the idea of safety, make them feel they are part of a great organization that is trying to do a job that is worth while, trying to save human life and limb; that they are not policemen; that they are teachers and advisers and that it is their main job to enlist the services of every industry in safety work and teach them to try and create a spirit of cooperation between industry and the department. Let them know that the department is not antagonistic to industry but wants to cooperate with them in every way possible; that they come as advisers. Then, perhaps, we can eliminate a feeling which still exists in many organizations that the department of labor and industry and its inspectors are a damned nuisance and only come around to create trouble.

DISCUSSION

Chairman MORLEY. I think the speaker has done a remarkable job in summing up the story in the last paragraph of his address. I know when four years ago I first sat in at the deliberations at Geneva, a great many of the European factory inspectors were very desirous of raising the status of their own particular jobs; in fact, at one point in the discussion I came to the conclusion that that was what those men were chiefly interested in, and so far as inspectors go, I truly believe that the matter lies largely in their own hands.

Our organizations, the industrial accident prevention associations, have a force of a dozen inspectors, and I know that those men get results commensurate with the stand that they take themselves.

We are fortunate this morning in being able to have a man who can follow this paper of Colonel Reninger's and can give us a worth-while discussion on it, Mr. Thomas P. Kearns, of the Department of Industrial Relations of Ohio.

Mr. KEARNS (Ohio). I want to pay my sincere respects to Mr. Reninger and his keen perception of what could be accomplished by State representatives delegated and appointed to the duties of prevention of industrial accidents. More than that, I want to congratulate him upon his comprehension of the subject, particularly because he has outlined in much detail just what is being done in Ohio through the State division of safety and hygiene, of which it is my great pleasure to be in charge.

But right here let me submit that there is a distinction between what a group of safety engineers can do acting as a service bureau for the industries of the State, but known to be without authority to order or compel compliance with the State laws, and the State department which is designed especially for the enforcement of State laws and whose representatives go to a plant as representatives of the law and are known to have police power to order and compel.

I can speak from personal experience on this distinction, for before my present duties of directing safety engineers in industrial safety education I had for many years the responsibility of directing State factory inspectors and the enforcement of State laws.

While there is at the present time a marked change in attitude of plant management toward State inspectors with police powers, there

is nevertheless and probably always will be a disposition to resent compulsion to do certain things in connection with management at State behest. I believe that the manager of to-day wants to have a safe plant and welcomes assistance in that direction, but if such assistance comes to him from a source other than a law-enforcement officer, it has been my experience, it is received more graciously and more sincerely accepted.

In fact I may say that we in Ohio are convinced, based upon our past experience, that the enforcement of the factory laws of the State and safety education can not be carried out by one and the same group to the degree of ultimate success as when these important duties come under different heads.

I would not like to say that the ideals of State inspection which Mr. Reninger has presented to you are not possible of achievement, as the time may come when State inspectors would go out into the field primarily as emissaries of safety and preaching the gospel of safety, and that a corps of men could be assembled in each and every State who would measure up to the standard of the inspector who, by his ingratiating manner, his winsome personality, coupled with a thorough knowledge of safety engineering and good sense, is able to convert the management to safety and secure a compliance with State laws and the adoption of safe practices in the plant through means of reason and persuasion rather than by the exercise of his authority.

I am not unmindful of the fact that this attitude toward the inspector which I have depicted is, or has been to a great extent at least, due to State inspection departments themselves and caused by undue officiousness, display of incompetency, and perfunctory exercise of duty, due perhaps in a large measure to lack of proper supervision and instruction in the duties and responsibilities of their position by the official in charge.

The charge to the inspector should be first to meet and confer with the head of the establishment he visits, whether it be the president or general manager—the one who ordains the policies of that organization. His good will and cooperation must first be secured. He must be convinced that the inspector is there to help him, and that this can not be intelligently done without a knowledge of physical conditions of the plant by making a thorough survey. Such a survey, made with his consent and approval, or even desire, is much more effective than an enforced visit for entrance to the plant by the authority of the badge and the credentials of the governor. This survey of all conditions should be made without prejudice, unbiased by known previous conditions, using discretion and sound common sense to recognize real hazards rather than theoretical hazards and to devise and recommend means to overcome them.

I think it will be conceded to be quite out of the question to have a staff of inspectors sufficiently large to embrace those trained in all of the diversified industries of the chief industrial States. I am assuming that the inspector has first been trained in safety and inculcated with its doctrine. Given this trained safety mind, the inspector can and will recognize hazards in the industry that would not appear to the technical engineer intimately familiar with the operations in that particular industry.

When the inspector has access to a plant with the sanction of the management he will be received by the whole force—superintendents, foremen, and workers—with a much different attitude toward him. This will permit him to carry his missionary work with him to the whole organization. Some of the best work can be done by contacts with the foremen and the rank and file. Every inspector should possess or acquire a tactfulness and friendly manner with all those with whom he comes in contact. He should be able to sit down with the manager for discussion of the affairs before them and to discuss the work with an employee with equal equanimity.

After this survey of the plant, a return conference should be held with the management, when the results of the survey and accompanying recommendations would be carefully reviewed together with suggestions for safety committee organization or other measures which should, in the mind of the inspector, be adopted for the conduct of safety in the plant.

It would also be impossible for any State to maintain a sufficiently large corps of men to continue to conduct intensive safety work in all of the plants where their duties take them. It is the inspector's duty to advise and recommend whatever appears to him should best be done for accident prevention in a given plant. But here his path is beset with the danger of applying himself too intensively by giving more time to one plant than would be fair to the many others who are equally entitled to his service. He should by all means keep in touch with all for general supervision and see that a given program is being carried out.

I have endeavored to convey my opinion that training is essential to inspectorship. I am not prepared to say that this training must be of a technical nature. I know that many outstanding safety engineers and exponents of safety are those with technical training, but it has been my experience in many cases that the technical mind is less ready to accept safety because of that training which did not include anything bearing on safety in the engineering of his profession. We can not deny that a practical training in shop or on construction operations will make the path of the inspector much easier and that his ability to speak by the card will help him in his work. The real essential is, however, a comprehensive and full conception of just what constitutes safety, with the experience of the application of this conception.

I would say most emphatically that an inspector should have a thorough knowledge of all the State laws bearing on factory and working conditions and the State safety codes—all of the laws which it is his duty to enforce. He could not creditably represent the State and would undoubtedly get into trouble without this knowledge. Worst of all he would lose or destroy the confidence of those with whom he comes in contact, which is all essential to his success. There is danger, however, that an inspector would surround himself with difficulties from which he could not extricate himself if he should undertake to go into matters outside of those with direct bearing on accident prevention. A representative of the State will always be importuned by the manager for information regarding his rates, or he may want to discuss claims before the commission or the status of such claims. These are matters that come under different depart-

ments, and I would strongly advise against the inspector allowing himself to be drawn into a discussion of such matters for fear of encroachment on business properly coming under an entirely different State division or department. He could not be expected to know what is being done by a claims department or what the attitude of the industrial commission might be on a certain case, nor could he be expected to know the intricacies of the actuarial work by which rates are determined.

So far I have dwelt with purely industrial contacts of the inspectors, but in working toward the broader field of safety engineering, inspectors could do a tremendous amount of good by urging or even conducting safety mass meetings, community campaigns, safety rallies and safety weeks, competitive contests in communities or in particular industries, pageants and parades, or in fact conceiving any manner of ingenious plans for arousing the spirit of safety, not only in the minds of the workers in a plant but in the minds of the community at large. For, after all, since the ultimate goal and objects of State inspection is the prevention of accidents or what we term safety in a broad sense, it will not be accomplished until we have created or aroused the dormant sense of self-preservation against injury by accident; or, in other words, until we have made both employer and employee safety minded or safety conscious.

Chairman MORLEY. I think the keynote of what has just been said is the slogan I heard several years ago regarding the operations of one of the safety organizations in England, and that is that they had education and cooperation rather than legislation and compulsion. I think that is worth remembering in all matters of inspection work.

We were to have heard this morning from two other gentlemen whose names are on the program, Mr. Immel and Mr. Keown, but I have letters from each of them saying it is impossible for them to be here, and giving excellent reasons. Because of the absence of these gentlemen, the Chair will extend the privilege of the floor to any individual who has anything to contribute on the subject under discussion.

Mr. WILCOX (Wisconsin). I remember that back in the earlier years of the organization of this association there were many people having membership in the organization who insisted that we ought not take up our time with a discussion of this matter of safety in industry; that we were compensation boards administering benefits, and that, interested as we might be in the safety of plants from some reason or other, as compensation commissioners we had no interest in this subject.

In my State we have never had to experience a situation where we did not have the same obligation to interest ourselves in safety as in workmen's compensation, because all of the labor laws are administered in the one department, so I do not quite know how you who administer compensation alone may feel, but I can not quite get into my system the thought that any man can complacently deal out compensation benefits to the man who has lost his arm or his hand or some other member, or suffered some other serious injury, and not be concerned right then and there, that minute, to see that that accident and that experience are reported back to somebody over

whom you likewise have control, to see that the thing does not happen again. What satisfaction can come to the man who is administering one of these functions and who has no responsibility for the other?

Many men have told me, "We have nothing to do with that," and they wave it aside as if it were a thing with which compensation administrators had no concern. I hope the time may come when every State will bring together in one department all of these functions that are so essential to the proper administration of each. You never can have good administration until that time comes.

I have in my hand something that Colonel Reninger will recognize. He has been too modest to tell you of what this cement association which he represents has been doing over this country. I had the privilege recently of attending the dedication of a trophy at Manitowoc, Wis., of this association in which he is interested. My recollection is that that plant—a plant with rather unusual hazards, the kind of plant in which you expect that now and then you will get injuries of all types, but many serious injuries—had gone 468 days without a single lost-time accident. The figures were posted on a bulletin board.

Here on the first page of this booklet is the experience for the month of June in this industry, covering many plants. I can not give you the number, but it is way up in the hundreds. Back in 1924, the beginning of the experience, they had had 271 lost-time accidents in those plants, and in June this year—June was the best month they have ever experienced—there were only 13 accidents.

If other plants have the same experience that Manitowoc is having, why can not they reduce it to 13. That is just what you would expect. If these plants, more or less similarly situated, may go for 400 days or for long periods of time,with their lost-time accidents substantially nothing, then why may not other industries if they will give it anything like the same attention?

At the dedicatory ceremonies of the trophy at Iola, Kans., Mr. Reninger was present. They completed on June 4 of this year 1,729 days without a lost-time accident. I tell you there is something in this matter of safety and what can be accomplished in these plants if they will set themselves to it, but it will not go alone, and we must have State inspectors, State safety departments, some one to supervise the thing, some one to get in and correlate the work, organize it, and help push it along and keep the management back of it—Colonel Reninger and the rest of the men engaged in that sort of thing.

So I do believe in public safety departments, public inspectors, men who have authority to go into plants and investigate them and see what is going on. I do not think they have to be lawyers, Colonel Reninger; I am perfectly sure of that, and I do not think they have to be graduates of universities or of engineering departments or anything of the sort. I think they have to be evangelists first. I think they have to have good sense and know how to meet men. I think they have to have some ingenuity, a bit of experience which we may call technical but which, after all, is just ability to see through and discover things that may be done. I think they have to have that. I think they have to have security in tenure of position—I am talking

now of the public safety inspector. One of the most damnable things that exists over this country is the possibility of a man in that movement being used during political campaigns to carry out a political campaign object.

I think, Mr. Brown, you asked me at Salt Lake City, whether a man should go on with his job and let a fellow who ought to be in jail be elected to governorship, and I said, "Yes, take care of the job, and if the man can't take care of the job, get out of it and do the thing that he wants to do politically and let some one else do this thing that has to be done."

We have civil service in our State. Whenever that is mentioned people begin to say, "I do not know whether I want it or not." If we have it here, civil service can be exactly what we want it to be and no more. There are men inspecting factories in the State of Wisconsin who have been with the industrial commission of that State longer than I have and, except in two instances, in all those years we have never let any man out of his position. One of those men was let out because he was not decently honest and the other fellow never was calculated to be in that sort of job to begin with. He just could not understand that the fellow who was a good fellow should not be relieved from the necessity of guarding his gears; if he was a good fellow otherwise, he ought to be exempt from it. That was his attitude of mind, and I finally had to get rid of him; but otherwise every man knows he is safe in his position. Except in those two instances there has never been a man let out. If men have gone, it is because they have died or gone to other positions where they might serve. The men know that the one thing they are not appointed to do is to do political service, and so when they go into a plant now they do not have to be goaded to organize the labor forces for this or that campaign for office.

Mr. FUNK (Iowa). I speak for a State in which the work of workmen's compensation is separated from that of other labor commissions, and if any compensation commissioner in the United States is indifferent to the matter of safety provisions, I should like to know the color of his hair.

It seems to be utterly ridiculous to assume that we who see so much of the tragedies of industrial misfortune should be so impossible as to be indifferent and not consider it part of our duty to preach in every way the gospel of safety. I subscribe to fully, and have for many years taken pride in, the slogan of the State of Ohio, which is that safety is better than compensation.

In each report I have made for the last 16 years I have made a special appeal for the labor department that it shall be better equipped for the work of inspection, and in page after page of my report I have cited the excellent records of such employers as the Lehigh Portland Cement Co., showing what may be done in the way of safety and how important it is that it should be done.

First, of course, from the humanitarian standpoint, and also largely from the standpoint of utility and business, I think that in all our States more attention should be given this subject. We have a good deal of mining interest in our State—coal mining—and we have just instituted a campaign for safety provision there. A number of insurance companies have gone broke carrying the miners'

risks, and the sole company now carrying the risks is just about at the point of abandoning the field because of excessive losses, and the rates have gone up and up with the misfortunes of accidents.

We have just started a campaign to endeavor to better this situation. There never was a better field for it and I hope for important results. We have been too indifferent to these provisions in the matter of cooperation between the employer—the operator—the workman, and the insurer.

I have enjoyed Colonel Reninger's paper very much. His plant at Mason City is one in which we may well take pride. We all do take pride in his safety record. They do anything there that the department asks them to do and they do it well. They trouble us very little. I do not know whether they have ever had a litigated case, but I do not recall any in all my 16 years of experience.

Speaking about the political part of it, that Mr. Wilcox mentioned, in our State, I can lose my job and be subject to a stiff fine if I take part in any political activity. I have been a pretty good partisan in my day and have been mixed up in politics, but I understand it is necessary for me to be good while I have this job.

Mr. BAKER (Kansas). I think for those States such as my own, that have an inadequate corps of factory inspectors, a very good suggestion contained in this paper this morning is as to concentrating your efforts where the efforts can do some good.

In Kansas we have a limited number of factory inspectors and for years have been traveling in the rut of producing paper reports, trying to cover the entire State, 200 miles wide and 400 miles long, getting to a factory every two years. What does it amount to? Nothing. We fell in line with this very suggestion. In looking over the situation we found that in some instances it was explained to us by the insurance carrier that its inspector would make a certain requirement and our inspector would make a little different one, and there was dissatisfaction on the part of the employer, so we called a conference of the representatives of the leading employers and insurance carriers and worked out an agreement, in the matter of cooperation, that we were going to concentrate our efforts. We are going to let those organizations which are the more intelligently equipped take care of their own safety work. We also worked out an agreement with the insurance carriers, where there were insurance carriers, that they are to make us a report of their inspection of the plants they go into so that we will have that, and then we are going to concentrate our efforts on those plants that have not taken up safety work, who have not been educated along those lines; and, for the first time, we are hoping that our department will really be able to do something through eliminating some of its work.

It is something like the work of the traffic officers. You do not put one on every corner, but you put them in the places where the traffic is most congested and where they are needed. We are now going to concentrate the effort where some good, we hope, will come out of it among the class of employers who are not taking care of the situation. I think that suggestion in this paper is a most fruitful one for those States which have been inadequate or poor in the matter of factory inspectors.

Chairman MORLEY. I am reminded of the story of the newspaper boy who made such a success of his sales, and when asked why, he said he went to a corner where there were a lot of guys who had no papers, and he hollered. I think that those of us who have limited facilities have to go where there are a lot of accidents and holler.

Mr. DORSETT (North Carolina). I wonder if there is not another side to stressing the no-time-lost accidents with employers and safety organizations. I will illustrate that. The Aluminum Co. of America carries on a billion-dollar operation in the State of North Carolina and some time ago it had a big celebration and invited most of the State officials and the higher-ups in the State to attend. Two thousand people attended the affair to celebrate the fact that the plant had operated two years without a lost-time accident.

About six or seven months following that celebration it was necessary, on account of the depression, to lay off some employees. We began to get requests at the industrial commission for hearings, and I went over to conduct them. I found we had men who had actually lost arms and broken legs, men who had actually suffered hernias, and they convinced me, as hard as I am to be convinced along that line, that they ought to be paid for them. We found that after a man's hand had been amputated at the wrist, he would be put to work the next day painting a crosstie, so the plant had no lost-time accidents.

I think that there is a danger of stressing too much the idea of no lost-time accidents, particularly if the plant will not put its cards on the table face up.

As for the politics of inspectors in my State, not until 1928 did we know we had any Republicans in North Carolina, and the political part of it has never bothered us.

Mr. MCSHANE (Utah). Before you leave this subject, I want to say that there is an important thought in what the gentleman from North Carolina has given us and one that our duties as State officials behoove us to look into. I realize that when large organizations whose executives are safety men, and have the means at their disposal set up large safety organizations and then celebrate occasionally the fact that they have conducted their various employments without lost-time accidents, it is very gratifying to us, but the experience of North Carolina has been, I think, the experience of every State in this Union.

There are organizations whose safety programs have gone to seed, and they have men who are actually injured, and seriously injured, who do not and dare not report those accidents because they are overorganized along that line.

This is not to be understood as a criticism of the safety movement. I realize what the cement plants have done. We have them in our State and they have done splendid work and work better than we are able to do it, and I honor them for it, but I also find occasionally a man coming to my office, after two years, limping. At a certain time a heavy weight fell on his foot. He went to the first-aid station, and was told "Don't say anything about this." His foot was put in hot water and was taken care of in the best possible way, but he was told to get out on the job and it didn't make any difference

whether he did anything or not. That accident is not reported and finally, due to lowered resistance or some point of focal infection, it is discovered that there is an osteomyelitis eating away the vitality of that man, which resulted from the accident that has been covered up for two years.

There has been not only one such experience that I have had, but several of them, in a State with a small pay-roll exposure, and I imagine that some of you who are operating in States with a single employment, with a pay roll greater than the entire pay roll of our State, if you dig deeply, will find just such conditions.

Chairman MORLEY. In defense, may I say of the safety movement that I think, generally speaking, the movement is on a higher plane than that of ordinary business, and if anyone directing a safety campaign is guilty of the sin of Ananias and of Sapphira, his wife, he is not playing the game to-day. I should like to have Colonel Reninger reply to some of the thoughts that have been brought out here to-day.

Colonel RENINGER. In reply to the gentleman who has spoken, I realize that there is a great hazard for safety committees, in men and superintendents trying to bring men back to the job when they are not fit.

In our organization we have employed a part-time doctor since 1916. He is paid a monthly salary. He comes to the plant every day. Every man, before he is taken on the pay roll, is given a physical examination. It is thoroughly and definitely understood by every superintendent in our organization that he has absolutely no authority when a man is once injured, no matter how slightly, to bring that man back on the job until he has been examined and passed by the doctor and the doctor has said that he may come back to work, just so that we may not have that criticism.

It has been put up to the doctor; no matter what the superintendent may say, he can not get a man back unless he is released by the doctor. There were some cases in the early days, when we had many hundreds and thousands of days lost through malingering. The slightest bruise or cut meant six or seven days, and it was a good time, if it was planting or ploughing or hunting season, to take time off. There have been cases of that kind where a man who was injured could come back to work, but now no man can come back unless he can do the job and earn the money that that job pays.

We had a case in Mitchell, Ind., of a man with a broken toe, who had worked in a quarry. This man was put in the bag house tying bags and he has never gone back to the quarry. He made $4.40 a day in the quarry, and he has made as much as $8 or $9 tying bags by contract. He has never gone back, but we do not allow a man to go back to a job and sit around.

I can give you another instance, that of a man who had a Pott's fracture, and although they had lost-time accidents in the plant, this did not affect the record. Our surgeon has had some experience; he took a course in surgery in Vienna. When he found this man in the first-aid hospital, the man did not want to go into the main hospital at Allentown. The doctor said, "I don't think it is necessary. I am going to fix you up and you can go back to work." He went down to the blacksmith's shop and had a frame made of iron—some-

thing they are doing now in Germany and in Austria—and he put this cast on the man's leg. In three hours after this accident happened they took the man into the hospital, took an X ray, and it was a perfect setting. He came back and went on the job. He did not lose a day and the X rays show a perfect joint, and the man has never had any trouble, never had any pain. I objected very strenuously to the doctor's doing this, but he said, "This is what they are doing over there, and if they are doing it in Germany, we can do it here." It has been a remarkable thing. We have had five or six X rays. The man has not suffered as much as other men have who have been laid up with legs in casts for eight or nine weeks, who have had slow circulation and a lot of other trouble. He has never had any trouble at all. He can dance and run and do anything he wants to, and he has never missed a day on the job.

Mr. McSHANE. But it is an accident of record.

Colonel RENINGER. Oh, yes; every accident is reported to us, no matter how slight, and it is sent in to the insurance company in the State of Pennsylvania; otherwise we have it in our record. If a man loses part of a finger or toe or anything else, it is a lost-time accident, whether or not he misses any time working, because it is a compensable accident.

Mr. KEARNS. I think every State, of course, does have this trouble we are speaking about, a number of accidents—sometimes serious accidents—occurring in plants, but which are not reported. Sometimes the men are put back to work, to the physical injury and detriment of the worker himself, and I believe that every one of us should strive to break up that practice. Every commissioner, every factory inspection department or safety department, should strive to break up that practice of not reporting these injuries. But I am not so sure—I feel as Mr. McShane has stated, and I think we all feel that way—that the fact that some fellow here and there is not a good sport, and will fail to report accidents that should be reported, should not be used or should not mitigate against the very laudable effort and ambition of the no-accident program carried on by numerous industries throughout the different States.

Chairman MORLEY. We have got a little bit away from the question of factory inspection, but I think the discussion has been well worth while and has served to bring out several other interesting points.

I now have much pleasure in calling on my good friend, Mr. W. Graham Cole, of the safety service of the Metropolitan Life Insurance Co., of New York City.

Selling Safety to the Industrial Executive

By W. GRAHAM COLE, *Director Safety Service, Policyholders Service Bureau, Metropolitan Life Insurance Co.*

Industrial safety work has passed through two stages in its development and from recent studies and demonstrations it is apparent that we are on the threshhold of a third phase.

In the early days of accident-prevention activities in industrial plants, it was felt that safety was largely a job for the mechanical

engineer. In other words, it was considered that if machinery were guarded properly and unsafe physical conditions removed, accidents in the plant would stop. It was found, however, that such mechanical improvements resulted only in a small reduction of accidents. To-day, it is considered that safeguarding and the correction of unsafe conditions will effect a reduction of only from 10 to 15 per cent through direct application. It is realized, however, that a safe plant, being an indication of the management's sincerity in safety problems, is an important aid in stimulating employee interest, and thus has a large so-called "indirect" effect on the entire accident problem.

The second stage in the development of safety work was reached when employers began to appreciate the fact that the larger percentage of accidents was the result of unsafe practices and careless working habits on the part of the employees. This resulted in the introduction of mass educational programs, whereby employees were trained in safe methods and their interest in accident prevention stimulated. These activities included the appointment of safety committees, the holding of employee meetings, the display of safety advertising material through bulletins, pay-roll slips, etc., the holding of accident-prevention contests, the development of first-aid training courses, etc. As a result of these activities, many of our larger industrial organizations have shown remarkable reductions in accidents. In fact, in some instances the reduction of accidents under mass educational methods might be considered as having reached or at least approached the irreducible minimum.

In the past two years, considerable attention has been given to the third phase, namely, the study of individual accident cases to determine the degree of accident proneness of certain employees. It has generally been found, in the several organizations where experiments have been conducted, that a small number of employees are responsible for a large percentage of the company's accident record. In fact, in several instances this relationship seems to be approximately one-third to two-thirds; that is, one-third of the employees have two-thirds of the accidents. Moreover, among the small group of employees with high accident rates only a few outstanding causes for proneness to accident have been found to exist. These include usually inexperience; improper training; physical defects; financial, home, or personal worries; improper attitude resulting from poor industrial relations, or the inability of the individual to adjust himself to social conditions. In most instances the "high-accident" employees can be grouped into one or more of these various classes, and definite measures can be taken to overcome those personal characteristics which cause their proneness to accident.

It has frequently been said that the prevention of accidents in an industrial organization is largely a matter of salesmanship. Before a plant can become safeguarded properly the management must be convinced of the advantages to be gained by appropriating the necessary funds. To guarantee the proper maintenance and use of safeguards, their necessity must be proved to supervisors and employees.

Convincing employees that their daily work can and must be conducted in a safe manner is the fundamental principle involved in safety educational work. Before employees can be expected, how-

ever, to adhere closely to safe practices it is necessary that their supervisors fully appreciate the requirements of safety and the results to be obtained through its observance. Furthermore, it is felt that supervisors will not take an active interest in an accident-prevention program until they realize that the higher executives of the company are "sold on safety" and demand its application in every operation of the company.

Little can be accomplished in studying accident proneness among employees unless the industrial management is convinced that effective results can be produced by correcting the high accident characteristics of certain employees. Even then few results will be produced unless it is possible to obtain the confidence of each such employee and have him realize that the company is sincerely interested in improving his record and aiding him in a personal manner to become a more efficient employee.

Thus, regardless of the method of approach, safety must be "sold" from beginning to end. It must be "sold" to employees who usually sustain the injuries and to supervisors who direct the work of the employees, but first of all it must be "sold" to the industrial executives who direct the supervisors, benefit financially by accident reduction, and are held responsible by society for the safety of their working force.

In selling any article it is necessary first to convince the prospective purchaser that he needs the article and second to prove that the article will accomplish the results attributed to it. Many examples to aid in meeting the second of these requirements exist at the present time, but the first is apparently more difficult to meet.

Since industrial safety work was first undertaken, many organizations have made splendid reductions in their accident records and are to-day carrying on their activities month in and month out with very few and sometimes without any lost-time accidents. Results of this nature are being accomplished in all types of industry, and even in those which were considered a short time ago as having very serious intrinsic hazards. For instance, in a large chemical organization, where it had been thought impossible to operate without frequent serious personal injuries, particularly those resulting from acid burns and splashes, a large manufacturing unit has recently completed a period of more than four years without a single lost-time accident resulting from acid burns. It has also gone over a year and a half without a lost-time accident of any nature.

The experience of a large number of industrial companies has proven that the experimental stage of accident-prevention work has passed. The trained accident preventionist, therefore, is now able to analyze a company's accident experience and its safety problem and to prescribe a suitable program of activities capable of producing definite results. On many properties, safety has ceased to be considered as a welfare activity, but rather as an operating necessity guaranteed to be self-sustaining and to produce results which more than justify the necessary expenditures.

Within the past two years considerable attention has been given to the so-called small plant safety problem. A study of records disclosed the fact that whereas in most instances the larger industrial organizations of the country appreciate the value of safety work, the

real problems lie in the small industrial units. Experience has demonstrated, however, that the same methods which have produced results in large organizations will, if applied properly, produce comparative results on the smaller properties. The following examples selected at random illustrate this point.

A small engineering company employing about 100 workmen was experiencing a high accident record. The management was not aware of this situation until the fact was called forcibly to its attention by increasing insurance premiums. The company was amazed to learn, as a result of a competent analysis of the previous personal injury records, that more than 60 per cent of the accidents in its plant resulted from eye injuries. Based upon this information, immediate steps were taken to provide proper eye protection, with the result that such injuries were eliminated entirely. This step convinced the employees of the management's interest in their safety and caused them, perhaps subconsciously, to exercise greater care in their work, as an immediate decrease of all types of accidents resulted.

In one year a foundry employing 150 men sustained 288 accidents, with a total loss of 742 working-days. Again, the management seemed wholly ignorant of the apparent high accident record of its organization. When convinced, it assumed active leadership of a properly designed accident program, and at the end of five years, the accident frequency had been reduced to four cases a year, with only seven days' lost time. Paralleling this reduction in accidents, the company, partly because of the improved operating efficiency of the employees brought about through safety educational work, reduced its staff to less than 100 men.

The executives of a woodworking plant employing 250 men were not particularly concerned about their accident record, as only 32 cases were reported during a year. It was found, however, that although this record was apparently fairly good as far as the number of cases was concerned, the accident cost borne by the insurance company was far in excess of the premium paid. This condition, which would have resulted in an increased insurance cost to the employer, was due to the frequency with which minor injuries became infected. Based upon a knowledge of this fact, the management was able to take definite steps to eliminate the causes of infection and to provide for the proper treatment of injuries.

The difficulty which the accident preventionist has in "selling safety" to executives does not result from his inability to prove the value of the commodity he has for sale, but rather to his inability to convince executives of the need for this commodity. For instance, in the cases mentioned above the safety engineer had no difficulty in proving that an accident-prevention program would produce results, nor in devising an effective program, once he had solved the major portion of his problem by convincing the management that safety activities of any type were essential. A bad accident experience, the serious injury or death of a valued employee, or a rapidly rising accident cost may provide the necessary convincing argument. In many instances, however, these factors of themselves are not of sufficient apparent importance to arouse the active interest of busy executives in the matter of safety.

To illustrate, an excellent showing in accident-prevention work has recently been made by a metal manufacturing company which has a pay roll of slightly more than $650,000 a year. In five years this company was able through well-organized safety work to reduce its compensation insurance premium from $1.17 per hundred dollars of pay roll to $0.48. This reduction of $0.69 meant a saving of $4,485 per year on the $650,000 pay roll. Although this saving of practically $4,500 is worthy of consideration in any organization, it was relatively very small in comparison with the company's total business. According to the 1925 Census of Manufactures, labor costs are approximately 40 per cent of that value which is added to raw commodities by manufacturing processes. Applying this percentage, we find that the value added by manufacture in the case of the metal company amounted to practically $1,625,000. The $4,500 annual saving resulting from the 5-year safety activities was 0.28 per cent, or practically one-fourth of 1 per cent of this figure.

Regardless of how interested a business executive may be in employee welfare and how desirous he is to reduce personal suffering among his working force, an argument for organized safety work will have a much greater appeal to him if it can be shown that a savings considerably greater than one-fourth of 1 per cent can be expected.

The accident preventionist is endeavoring to sell his commodity to industrial management. He has been highly successful in many instances, and, when properly "sold," his product has proven its merit. His failure to sell his product, however, to a large number of the smaller industrial organizations of the country may be due very largely to his failure to describe the full advantages of his commodity; in other words, his failure to show the very important economic value which accident prevention really has to a manufacturing concern.

In the past the accident preventionist has perhaps confined his efforts too much to a discussion of the purely humane phase of safety work. To be sure he has mentioned the savings in insurance premium which usually result because of lower accident records, but, as just mentioned, these savings, although in the aggregate amounting to thousands of dollars, are actually very small compared with the total business of the individual concern. In speaking of the reduction in accident cost the accident preventionist usually refers simply to the reduction in the cost of personal injuries. Without question, from the humane viewpoint, employee injuries are the most important result of industrial accidents. They are not the entire result, however, and very frequently are not the most important from the economic standpoint.

The salesman of any commodity would not obtain a very high record if he confined his sales arguments to a statement of one of the small advantages of his product and omitted entirely reference to the most important advantage which might prove of many times greater value to the prospective purchaser. This, however, is just what the safety salesman has frequently done in the past.

In conferences of safety engineers it is customary to hear discussions as to the desirability of studying the causes of no-lost-time accidents. It is usually agreed that the safety engineers' efforts

should be confined to the prevention of lost-time accidents. Even in such a session as the last meeting of the metal section of the National Safety Council, held in connection with the Pittsburgh congress, reference was made by several safety engineers to the desirability of confining accident-prevention activities to fatal and major injuries. The accident preventionist who assumes this attitude may find that his selling arguments are not very convincing, because the benefits to be derived from the elimination of the apparent or direct cost of personal injuries may be very small in comparison with the total business of the company.

These direct costs are familiar to practically all industrial executives and are usually fairly easy of computation. Briefly, they involve the payment of compensation awards, the providing of means for medical attention, and the necessary legal, actuarial, and clerical expenses involved in handling compensation costs. When compensation insurance is purchased these expenses are borne by the insurance company which charges the manufacturer a definite annual premium based upon his pay roll. In such cases a reduction in the apparent cost of accidents can be effected only through a reduction in insurance premiums brought about by improved experiences.

In a large majority of accidents involving personal injuries and in many in which no personal injuries result, tools, machinery, or other equipment may become damaged to an extent requiring repair or replacement. In addition, raw material or finished product is frequently damaged or ruined, causing a delay in production, and, in serious cases, resulting in inability to produce goods on time, and, therefore, a cancellation of orders. Many instances may be cited in which the cost of damaged material far exceeded the expenses resulting from compensating injured employees. For instance, an em-employee in an electrical power distribution station may, through "accident," throw a wrong switch. The throwing may produce a flash which may burn the employee and perhaps result in loss of vision or loss of life. Regardless of the seriousness of this accident to the employee, the cost of settling the compensation claim may be much less than the loss sustained by the company and its subscribers because of the temporary shutting down of the power plant for the time required to make necessary repairs.

When an employee is injured it is natural for his fellow employees to stop work out of curiosity, sympathy, or a desire to be of assistance to the injured man. In case of minor injuries the unproductive wages which the company pays to other employees may far exceed the compensation paid to the injured man. Furthermore, time is required for the injured man to report to the doctor for treatment and for supervisors and other officials to inspect the scene of the accident and prepare proper reports.

When an employee is injured sufficiently to lose time it is necessary for some one to be assigned to carry on his work. A substitute employee is usually not so capable as was the injured man, and thus a loss of efficiency occurs. If the accident resulted in death, a permanent substitution must be made, requiring the employment of an additional man. The employment and training of new men cost money and add materially to the expense of the accident.

Other indirect costs of accidents may be summarized briefly as follows: The demoralization of the force, disgruntled customers through inability to produce goods on time, bad community reputation, etc.

The Travelers Insurance Co., in a study made of several thousand accident cases, developed the fact that these indirect costs of accidents usually average four times the direct costs—in other words, that accidents are five times as costly as is generally assumed by the employer. It is interesting to note, however, that the Travelers' study was confined to cases of personal injuries. If it had been possible to extend the study to include those countless accidents which occur without resulting in personal injuries, the ratio would undoubtedly have been much higher. Although the employer can through insurance protect himself against the apparent cost of accidents, he can not protect himself against the majority of indirect costs through any insurance scheme yet devised. "Indirect costs," therefore, become a "direct" charge against his business which must be paid by him unless some means are developed to eliminate such expenses.

May I take a moment for a humble illustration? Say a man working at a bench in a machine shop, who has had the habit of dropping something on the floor, drops it only once a day. Something falls off his bench. It may be a casting; it is ruined. Maybe his foreman does not even know that he has distorted it. Perhaps a tool is thrown out of adjustment or shape and it has to be sharpened or readjusted. Perhaps it is just some little incident. Perhaps all it cost was to stoop down and pick it up and lay it on the bench—just a little bit of cost there, hard to figure. There has been a cost right straight through. Those are accidents. Every time the man drops something on the floor it is an accident, but once during the year that object happened to be heavy and his toe happened to be vertically underneath it and it dropped on his toe when it left the bench, and you say, "We have had an accident." Maybe you have had 300 but just one happened to be a personal injury. Unfortunately, I am afraid a great deal of attention is paid to those comparatively few accidents that result in personal injury, without much attention being given to create a safety atmosphere to take care of those other things which may lead to personal-injury accidents.

In selling his commodity, therefore, the salesman of accident prevention might well consider the desirability of presenting the entire picture of accident cost and not confining his efforts to a presentation of the benefits to be derived simply from reducing the small portion, or the direct cost. If he presents a picture of the entire accident situation, describing accident prevention not simply as a means of preventing personal injuries and of reducing insurance cost, but as a means of eliminating one of the most important elements of waste and inefficiency, he will be talking about an element of industrial operation which results in a cost much greater than one-fourth of 1 per cent of the company's annual business. He will perhaps be talking about the element which means the difference between profit and loss on the annual balance sheet. He will

not be attempting to sell the plan merely as a means of prevention of suffering among employees, but as a means of removing careless and inefficient practices and of correcting accident-prone characteristics which result in loss and waste. In selling such a product, however, he will not be neglecting the personal element, as injuries to employees can not occur in a plant where accidents are eliminated.

The accident preventionist, in selling his commodity on this broader basis, will not have to reorganize his method of approach to the safety problem. It has been proven that the same principles which are used so successfully in many organizations to prevent personal injuries will also prevent all types of accidents, including personal injuries, if applied with the cooperation, support, and leadership of the executives of the organization. Mechanical perfection, employee mass education, and the study of individual characteristics and practices will aid in the prevention of accidents resulting in property damage, inefficiency, and waste just as they will in the prevention of personal injuries. This method of approach, however, has a more direct and definite appeal to the employer, because it strikes at a much larger section of the organization's pocketbook.

I might say one more word, and that is that I recognize, of course, the position of the labor department and compensation boards in the States. They are primarily interested in the personal side, in the reduction of compensation costs. I put forward this thought which I have tried to express in this paper, not to depreciate the value of approaching the accident problem from a personal standpoint, but to add, perhaps, a few additional items to the kit of the salesman under your department, under the insurance companies, in helping to convince industrial executives of the need of their greater attention to this tremendously human problem.

DISCUSSION

Secretary STEWART. I should like to put into the record at this point some information that we received the other evening from a Richmond, Va., cigarette plant. The saving in time lost for the first three months of 1931, as against the record of the first three months of 1930—the 1-man time saved—was sufficient to produce 50,000,000 cigarettes. I think we could add to what Mr. Cole has said something along the gain side as well as the loss side.

Chairman MORLEY. Mr. Charles Senft, of the Globe Indemnity Co., New York City, will open the discussion on this paper.

Mr. SENFT (New York). In this old city in the grand old Commonwealth of Virginia, almost 150 years ago Patrick Henry delivered these words that rang around the world, "Give me liberty or give me death." To-day a more modern version might be "Give us freedom from accidents or give us death." Certainly, at the rate we are now progressing on this matter of killing our people as a result of accidents, we may soon expect to reach that point where we can quite safely divide the population of the United States into two groups, the quick and the dead. Those sufficiently quick, above the ground, and those not so, beneath it. The passing of each succeeding year produces an increasing number of deaths and serious and disabling injuries attributed to accidental causes.

Before attempting to apply remedial measures to bring about improvement, we must investigate to determine causes and then take steps to prevent recurrence. This, as Mr. Cole says, "regardless of method of approach," is a selling proposition. I can recall quite distinctly the attitude of numerous executive officers of industries throughout the United States 15 years ago when I presented my story. I feel sure many of my colleagues, some of them here to-day, will recall those old days also and, recalling them, will agree with me when I say that a decided change in attitude of these individuals has been noted during the past 10-year period.

There are very definite and tangible reasons for this change. Mr. Cole mentions the specific case of the management of one industry not being aware of the high accident frequency record "until this fact was called forcibly to its attention by increasing insurance premiums." Quite naturally they were "amazed," as most of us are when we find that money has passed out of our hands leaving no evidence that we have ever held it there.

This is the economic angle, well worthy of consideration, as all accidents cost money and produce nothing but waste. Waste is loss and losses must be controlled. Modern industry perfects its organization by promoting efficiency, thereby eliminating waste, whether this be breakage of expensive machine tools, spoilage of materials in the process of manufacture, deterioration of plant, or lost-time accidents. All spell waste.

Capital provides plant and management, but they are useless unless men are also provided. Is it not also true that a high labor turnover is costly? The far-sighted executive, he who looks into the future, recognizes this and takes precautionary measures to see that his men are kept on the job. The wisdom of Solomon is not greater than his who proceeds along these lines.

Mr. Cole refers to three stages of accident-prevention work—(1) mechanical safeguarding, without which no successful (2) educational campaign can be carried on. Therefore the first, representing interest and investment on the part of the management, encourages cooperation of employees in the second—education. The third phase referred to by Mr. Cole deals with the study of the accident-prone employee. All have been tried and tested and with proper support have produced gratifying results justifying the time and effort expended.

It seems to me there is a fourth phase that ties in very closely with Mr. Cole's third, i. e., the unknown physical condition of the employee. Hundreds of thousands of so-called minor injury cases occur in industry during the year, many of which are treated by the first-aid man or doctor with no unfortunate results following first treatment. Many occur that are never treated, these producing no ill effect, largely due to a healthy blood condition of the individual, backed up by excellent and completely sanitary conditions in his place of employment and in his home.

Let us glance at the other fellow, however, who is not so blessed. Due to the lack of a healthy blood stream, or to unsanitary conditions, the most minor wound, particularly if not treated promptly, becomes a thing of horror, of pain, not always responding to treatment, or responding slowly.

Quite frequently men who are apparently in excellent health and spirits are precipitated to the depths of despair as a result of a so-called minor injury, because of some peculiar local condition of which the management, and, in many instances, they themselves, were not aware. Physical examination of all prospective employees and an annual examination of those on the pay roll will expose these conditions and remedial or corrective measures may be taken.

I was rather surprised to note a short time ago, while reviewing an accident analysis of a certain large pipe mill located in New York State, that the name of one employee appeared three times as having been involved in accidents costing either medical or compensation payments. The analysis covered a period of approximately nine months. Arriving at the plant I asked to see this man's medical record card. My friends, there is an idea; never fail to keep a card file of the medical and accident experiences of your employees. This man's card—and I was not only surprised, I was dumbfounded—carried a record of 11 other accidents, or a total of 14 accidents during the period mentioned.

An investigation and examination disclosed that, while he appeared to be normal, this extended only to the physical body—the mental faculties were not functioning properly.

Just within the last two weeks I wrote to the secretary of that company and asked him whether he had made any attempt either to relieve the organization of that individual or to place him in a position where he would be able to carry on his work without becoming involved in a similar series of accidents like that which had been reported in the 9-month period that I mentioned. The change had been made.

My point is clear. Physical examination of this employee prior to the time that he entered the employ of the company would have eliminated the possibility of placing him in a position where he was in constant danger of causing harm to himself and to other employees, either by medical treatment if the condition could be corrected or by otherwise refusing to accept him as an employee.

Under circumstances such as this, or because of some other local condition existing, of which the management is not aware unless physical examination is made, the most minor injury may be considered a potential serious case, involving much physical suffering, lost time, and lost money.

Therefore, I submit, physical examination should be made, by all means, and more determined effort on the part of executives, management, and men to eliminate all accidents from the plant.

I am going to digress and go back to the paper that preceded Mr. Cole's, because there was one phase of that paper that was brought out in the discussion that was intensely interesting to me. About two years ago one of the large plants in New York State participating in the 13-week no-accident campaign conducted by the Associated Industries asked me whether I would come to its city and to the plant to award formally to the employees, at a special meeting called for that purpose, the plaque won by this individual plant and its particular group.

I went up. The plaque was put on an easel behind me where I could see it, and at the opportune moment I presented it to them

with a great deal of confidence and some complimentary remarks about the wonderful record they had built up during the period. There were about 400 people on the pay roll. I noticed some smiles when I presented the award, and immediately following the meeting the treasurer came to me and said, "I suppose you noticed some of the people laughing."

"Not only that, but I saw a grin on your face about a yard wide."

He said, "I'll tell you the story. On the afternoon of the day the contest ended, which was at 5 o'clock, one of our maintenance men, at exactly 5 minutes after 5, fell off a 6-foot stepladder and broke his leg."

I said, "I don't see anything funny about that."

He said, "No; but your audience saw the point right away."

I said, "There is only one question I want to ask you: Are you quite positive that it was 5 minutes after 5?"

He assured me that it was. I just want to bring out that point of the tremendous anxiety, the tremendous pressure, that these fellows are laboring under when involved in a competitive contest, trying to go through the 13-week period or the 13-year period, or whatever it may be, for a perfect score. "I ha'e me doots," as the old Scotsman said, as to whether that did happen at 5 minutes after 5, and if I did not know that my friend, the treasurer of that company, or the secretary, or whoever it was, was honest, I would say that we had good reason for believing that maybe it was 1 minute of 5.

Chairman MORLEY. Mr. Menke, we will call on you for your remarks, please. Mr. Bernard H. Menke, of the Liberty Mutual Insurance Co., of Richmond.

Mr. MENKE (Virginia). Mr. Cole has stated that accident-prevention work is now a sales job, and that the most advanced theories demonstrate that we must approach the problem by studying the accident proneness of individual employees.

Let us confine our thoughts to the methods which may be applied to the small and medium sized plants. I say this because every large corporation has its own well-organized safety unit. It is the employer who can not afford such a unit that we must help. Ideas and methods on accident prevention must be brought to these plants from outside sources, such as insurance companies, safety councils, and industrial commissions. The insurance companies have all the "tools" to work with—accident reports, schedule or plant charges, experience or past records, and comparative figures with other plants. And furthermore, the companies' engineers have ready access to the plant and the opportunity to establish themselves on a personal basis. The intelligent application of these factors should be of great assistance in accident-prevention work. However, you are interested in how this can be carried out by the insurance companies.

It will be necessary for me to answer this from the viewpoint of my own company's activities, but we have had more than normal success in this field. Our sales work on entering a plant is begun at the top of the organization and works down to the foreman, but here, except in a general way, it stops. When the foremen are sold on the prevention of accidents, and the management backs them up,

amazing results are achieved. In one large steel plant no special safety activity was carried on during an entire year, but the foremen's training-school course was broadened to include the economics of safety work, and the foremen's responsibility in accident prevention. A 50 per cent reduction in serious accidents was the result during that year.

The foremen must be given every help, and here the insurance company is in a position to furnish him with analysis of accidents happening in his own department, comparisons with other departments, and ideas as developed in a practical way in other plants of a similar nature. They must be made to see that every unlooked-for occurrence—we call them accidents—causes some interruption of production regardless of whether or not an employee is injured; and such interruptions are costly.

Mr. Cole's suggestion of determining the degree of accident proneness of individual employees is a more difficult problem in the medium-sized plant than in the large organization, due to the fact that their employment is handled in a perfunctory manner, usually without any records other than the man's name. We have approached this question by selling the management on the idea that a simple card record of each employee is beneficial in many ways. On this card are spaces for the man's accident history. This file does not, of course, become immediately valuable, but in a short time, sometimes much sooner than is expected, the accident characteristics of individual employees will show up. This record must be as complete as possible—merely showing lost-time cases is not enough. As nearly as possible every first-aid treatment should be listed.

The small employer would supposedly realize the situation if one employee was recurringly injured, but such is not the case. When they are presented with the concrete evidence they are amazed that "John Doe" was hurt so often.

These records are invaluable, and I see no reason why a suggestion such as this could not reach the employer from the industrial commission as well as from the insurance carrier. We are all working in unity to a common cause, and no stone can go unturned to reach our objective.

Sometimes it is possible for an insurance company to maintain specialists in certain lines of industry. We have done this with great success in the field of construction work and in the metal-stamping industry. It has been possible to turn business which has formerly been considered undesirable into profitable accounts. Here, instead of employing a safety engineer with general training, a man is chosen who has been in the field and knows the practical side. In the punch-press field it is possible to offer to a risk a man who will go into the plant and work for two or three days or a week with its own die designers and actually build for it dies which will not only be safe but in 9 cases out of 10 will increase production. Not only are accidents prevented, but economy of operation results.

Construction work, when of sufficient size, warrants putting a safety engineer on the job from start to finish. This man becomes one of the "gang," but his chief interest is in accident prevention. I recall one case where three entire city blocks in lower New York City were demolished without a single lost-time accident occurring dur-

ing the work. The buildings ranged in size from 1 story to 10 stories. Of course, the insurance company must have a good premium volume in the named industry to warrant such specialization, but such things are possible and eliminate accidents.

Mr. Cole has stated this morning that a plant rating has both direct and indirect values. The direct are easily understood from an economic standpoint, being the immediate reduction in insurance rate occasioned by proper guard work. The indirect values are less easily seen, but can be substantiated by past records.

A good rating could not justly be called so unless credit was being received for personnel items such as safety organization, etc. When we have such a set-up plus a continued improvement in plant conditions, we can feel sure that the indirect values are following along and that the economic return will be great.

A paper company operating in Virginia had in 1924 a schedule charge for plant conditions, but it installed a complete well-organized safety committee, for which it received due credit, and its record from that time on proves the point in question. I will give you the schedule and experience figures for each year since then so that you may see how closely they follow:

Per cent of credit

	Plant modification	Experience modification
1925	1.0	[1] 5.7
1926	4.7	3.6
1927	5.0	6.9
1928	6.1	16.6
1929	7.7	38.0
1930	8.1	41.6
1931	10.4	43.5

Although the manual rate for paper manufacturing has increased 55 cents in this period, its final adjusted rate has come down an equal amount since 1925 and it is paying just 50.6 per cent of the classification rate. Furthermore, it has eliminated the numberless hidden costs surrounding each interruption of production.

The social group represented by its 400 employees has also benefited by this good accident record; their wages have been constant, their earning power has not been reduced, and no charges have been foisted upon the State because the household provider has been killed.

The wedge which originally got it into action was the prospect of an improved rating under plant conditions and it little dreamed it would ever see so much in addition.

Find a plant which has an average number of point-of-operation machines and carries a poor rating, and you will see one struggling to make its production costs meet competition. A good rating means efficient management and one which is giving itself every opportunity there is to make money.

Chairman MORLEY. Have any of you anything to add in the way of discussion before we proceed with the program?

Mr. MAGNUSSON (Washington, D. C.). May I present an observation that I think may have been lost sight of in the papers presented

[1] Charge.

in giving consideration purely to the economic losses and gains involved? I think, perhaps, from the other point of view the choice may be a false one, such as Patrick Henry's was, because ultimately he got both, and his choice was rather a paradoxical one.

A study of the problem of ascertainment of the loss or gain from certain accident-prone workers exposes the problem but it in no wise solves it. What becomes of your accident-prone man? The large employer by his system of medical examination has exposed that and had the man put out of the plant. Is not that a reasonable explanation of why the small man may have the larger accident hazard? He does not have the medical examination. We do not eliminate those men from industry. They are still there and are finding jobs and contributing to the accident hazard, so your problem is not medical examination or disclosure of economic losses and gains, but a specific one: How are you going to fit this accident-prone man into industry and train him? You do not eliminate him by any means, until he gets the second part of Patrick Henry's choice.

I think we have been dealing with a superficial phenomenon, not a fundamental one, from the point of view of society. Your accident-compensation people take care of a certain group. Your devices of examination and economic losses and gains are simply self-defensive for the system, to take the burden off it, but society still has it and somebody foots the bill. So I do not want to have the problem appear as having been solved by any of the methods devised. The buck has simply been passed.

Mr. SENFT. May I say a word in answer to our friend's remarks? I do not think anyone in this room has ever stated that we have reached a solution of our problem. We are still groping, and groping in the dark, for the means that will solve this problem that is looked upon now as a national tragedy. When we think of a thousand people a year being killed we have a real problem to solve, and during the past decade we have been attempting to solve it with all the means within our power. We have not reached the solution yet, because the mounting number of deaths each year indicates clearly that we are not making the proper progress; but if we get down to fundamentals and then build up our case, I am hopeful that through these activities we will reach at least a partial solution and begin to see the trend downward rather than upward. So, in submitting any of the papers here in this conference, I think that everyone is working in the right direction.

If anything has been said in these papers that would seem to indicate that we are digressing from that particular phase of the matter, then something is wrong with the papers and I hope that mine has not been accepted that way.

Mr. MCSHANE. I am glad that the question has been raised, because it brings up the question that I wanted to ask the speaker in discussing Mr. Cole's very splendid paper. I, too, agree thoroughly with the idea of examinations at the time a man goes into the plant for a job and also for frequent examinations thereafter—as frequent as possible during the time that he is employed—for the purpose of discovering disabilities, physical infirmities, in that individual, not for the purpose of throwing him into the scrapheap but for the pur-

pose of letting the one who has charge of that man's work intelligently place him where he is least likely to get injured.

If it is found that the man has varicose veins, do not put him where he is going to bump his shins every time he turns around; if he has a potential hernia, do not put him where he has to strain or lift; and if he has weaknesses of the eyes, do not put him to work where there is dust.

I believe that real value comes out of the physical examination if it is done for an intelligent and constructive purpose.

Mr. LLOYD (Washington, D. C.). In most of the cases that have come to my attention where a study has been made of the accident-prone individual, the idea has been not to eliminate that individual from the industry, but either to give him the necessary training and instruction that will help him to eliminate his accident-proneness or, as the last speaker has just said, sometimes to change his job to one where he will not be equally liable to accident. It has been found possible in many cases to do that.

The accident proneness may come from a lack of instruction, from the man's ignorance, lack of experience, or a series of items, including a mental condition of worry, etc., which can easily be overcome. If accidents can be eliminated without the necessity often of even changing the man's occupation, but by removing the particular condition which can be found out only by making a very detailed study of that particular individual and the circumstances under which he has the accident, then it is certainly worth while.

Chairman MORLEY. Have we any other points to bring out? If not, it is now my pleasure to ask Mr. Ching, who has come from New York for the purpose of addressing us, to give us his paper. Those of us who know of Mr. Ching know him as a man keenly interested in this problem for a great many years and it is a very real pleasure to have him here this morning.

Can Industrial Accidents Be Prevented by Management? If So, What Measures Do You Advocate?

By CYRUS S. CHING, *Director of Industrial and Public Relations, United States Rubber Co., New York, N. Y.*

It is indeed an honor and a pleasure to be invited to address this organization on the subject of "What Can Management Do in Accident Prevention." In the few remarks that I make I shall confine myself to the subject of industrial accidents.

Of course, this whole matter of accident prevention has assumed much larger proportions than the industrial establishment, although the industrial accidents run into tremendously large figures in the number of persons killed and injured in industry. It is interesting to note, according to the figures of the National Safety Council, that in 1930 there were 19,000 industrial fatalities within 4,200 establishments representing 28 leading industries, employing two and a quarter million employees working five and a quarter billion man-hours. This report also states that 96,000 injuries within these establishments resulted in either death or permanent or temporary disability in 1930.

This is a big enough subject for us to address ourselves to at this session. However, I may say in passing, that the council's statistics also tell us that the motor vehicle is now the most serious accident hazard, 33,000 persons having been killed in 1930, and out of the 19,000 industrial accidents, 3,000 of the fatalities were the result of motor-vehicle accidents.

I think we all realize that great progress has been made along the lines of industrial safety, but with the above startling figures before us, we must all realize that there is a big job yet to be done.

Before attempting to say anything on the matter of what management can do in connection with industrial accidents, if you will pardon me I shall take the liberty of stating my opinion as to what industrial commissions can do.

When the various States were pioneering on the matter of workmen's compensation and the enactment of laws covering this subject, there was an attitude on the part of industrial management generally to oppose the enactment of such legislation, looking on it as a great burden and a possible hampering of future activities. The same type of opposition naturally developed in regard to industrial accident boards and commissions.

There is always a tendency on the part of industy, many times justified, to look askance at any kind of State interference with the operation of business, and the attitude which was expressed by industry in relation to workmen's compensation laws and industrial boards was a very natural one. Industry naturally looked on this as another method of policing and another interference in the operation of its business. However, as we have gone along and the question of industrial accidents has been more forcibly brought to the attention of management, and as the various boards and commissions have had more experience in handling such situations, the attitude of to-day has become entirely different from what it was 10 or 15 years ago. The old attitude of many of our factory inspectors was "policing" and there was a strong tendency toward bringing up technicalities in connection with factory inspection which cost a lot of money on the part of industry without producing the proper result. In later years, however, there has been a tremendous change in sentiment and to-day we find the industrial accident board and industrial commission working in cooperation with industry toward arriving at the best results rather than continually clashing as in the old days.

An outstanding example of cooperation between industry and the industrial commissioner's office, to my mind, can be found in the State of New Jersey. I attended a meeting last spring in Newark which was an inspiration. It was the occasion of the presentation of the awards to the prize-winning industrial establishments in the state-wide contest which was conducted there last year.

We are all more or less grown-up children and we like to get to the head of the class. This was strongly emphasized in the safety contest in the State of New Jersey last year and in the interest shown in it by the various industrial establishments. To the extent that industrial commissions cooperate with industry in this way, and interest those in management by giving them some recognition for their efforts toward improvement in conditions in so far as industrial

accidents are concerned, to that extent will industry respond and it will be much easier to get management interested in plant safety.

I believe that those States that are going along in this way are making a record of which they may justly be proud and at the same time are establishing a closer contact with the various industrial establishments in their States and are promoting a more friendly feeling and a more constructive attitude all around.

Representatives of the various industrial commissions throughout the States can be of great aid if they adopt an attitude of being helpful rather than of taking the attitude of policing industry, and I believe that the results more than justify the efforts which are made in cultivating this kind of contact.

My only purpose in mentioning this, the attitude of commissions toward industry, is that the first step in accident prevention, in so far as industrial management is concerned, is to have the management at the top and all the way down the line interested in this problem and considering it as one phase of management.

There can be no question that accident prevention is an important part of management's functions, and when accidents occur in an industrial plant the management must accept the responsibility. The management must look on this phase of its activities in exactly the way that it does any other. It is very apparent that in any type of organization, whether it be military, religious, fraternal, political, industrial, or commercial, the attitude of the man at the top is reflected throughout the organization and there will not be very much enthusiasm for something that the man at the head does not show his interest in, especially if it is something that the individual down the line does not feel that he is held directly responsible for.

A few years ago, safety might to some extent have been considered as a fad. Some few people in an organization were interested. It was carried on in a sort of a religious-revival way, the general attitude on the part of a lot of people being that accidents will happen, many feeling that they had performed their whole duty when they put guards around their most dangerous machines. Then, if something happened to a man there was the attitude, "Well, it's just too bad, but it couldn't be avoided because of the man's carelessness," and innumerable other alibis for such happenings.

In many large organizations to-day, this condition of affairs has entirely changed. Management has taken an entirely different attitude toward this matter of industrial accidents and is beginning to feel its responsibility keenly along this line.

In Russia at one time, under one of the Czars, they were having a number of revolutions in the Provinces. The method of quelling a revolution in a Province was to send the imperial army out and shoot up a lot of the peasants. One of the Czars, I've forgotten which one it was, at one time issued an edict that when the next revolution occurred in a Province he was going to shoot the governor. The result was that there wasn't a revolution for many years. Just so long as the attitude exists in an industrial establishment that accidents are caused by the carelessness of workers and this is accepted as a reason for the accident, then accidents will continue to happen in that establishment. But when management takes the attitude that accidents in any particular department are a reflection

on the ability of the supervisor of that department and the ability of that supervisor is judged on this factor as well as others, then progress can be made.

Entirely apart from the amount of suffering entailed in industrial accidents and looking at it solely from the business viewpoint, no industry can be considered efficient when there are a number of injuries resulting from its operations. The waste in time, the shattering of morale, the cost of such accidents, are a burden that no efficient industry can afford. It is worthy of note that those industries which are operated on the most efficient basis are the ones that are doing most along the lines of accident prevention. I think it is not going too far to say that a high accident record is an evidence of inefficiency and good management is taking this point of view at this time. Where this point of view exists, it will be found that this phase of the company's business is as well organized as any other.

I went into a plant once and over the door on a blue background in letters of gold was printed, "The Golden Rule." After spending a day or two at the plant, making various comments to the factory manager on things which I observed, he asked me what I thought of this sign. My reply was that I did not believe that posting the golden rule over the door was nearly so effective in carrying out its teachings as a good organization would be.

In the organization of a plant, certain people are assigned definite duties and responsibilities and a well-organized plant has always on its organization chart somebody who is designated as safety supervisor, or a similar title. Selection of such a man is just as important, as the selection of an individual for any other important post in the organization. He should be selected with a view to his fitness for this particular job. Too many times in the past when people decided to organize a safety department, they picked for the position a man who was of no use in any other part of the organization and assigned the task to him. Failure resulted in exactly the same way as it would result from the selection of the wrong man for any other post.

I hope I may be pardoned for injecting into this talk reference to our own company. In the United States Rubber Co. we are extremely fortunate in having as president a man who is an operator, a man who fully appreciates the necessity for organizing each and every activity. He is a man who is vitally interested in the problem of industrial safety. His attitude is reflected all the way down the line of our organization. We have a man functioning for the company as a whole on safety, supervising plant inspection, and the general work of the safety departments at the plants.

To emphasize the point which I made some time ago as to holding people in management responsible for accidents occurring in their department, I will read two letters which were issued in the ordinary course of business in one of our largest plants by the plant manager:

AUGUST 15, 1931.

Mr. ————:

Please note the attached report from Mr. ———— regarding the breaking of our record of no lost-time accidents since July.

There is one point that we must get down through the organization, and that is the responsibility for accidents is one of supervision. In this particular case I think the matter is squarely up to ———— and ————.

First. For having defective equipment operating.

Second. For retaining employees that operate in a careless manner.

When several of such faults exist in any department the question of accidents occurring is merely one of time.

The fact that the man operating the truck did not report to Mr. ———— that his brakes were defective does not excuse the latter one bit. It is up to Mr. ———— to know the condition of his equipment and to get proper cooperation from his employees in operating his department.

Until our organization senses that the prime responsibility of accidents is one for the management to assume, we are not going to get very far in changing the attitude of our employees toward this important subject. This responsibility, to my mind, is just as important as production, quality, costs, and all the other factors of good balanced management, which we now recognize as part of our responsibility.

I would like this viewpoint brought forcibly to the attention of the organization, particularly the ———— and ———— division and the ———— division, so that supervision on all shifts is on the lookout with foresight to avoid accidents.

FACTORY MANAGER.

JULY 15, 1931.

U. S. RUBBER CO. SAFETY CONTEST

The attached is an advance copy of a report showing the standing of all factories participating in the U. S. Rubber Co. safety contest.

It is interesting to note that every factory but one shows an improvement in their accident experience over the average of the previous three years' experience. You will also note that the ———— plant shows the second smallest percentage of improvement—a performance which I regret is not commendable.

In January of this year we set out to reduce our lost-time accidents at least 40 per cent, but according to records furnished me only a 30 per cent reduction for the first six months of 1931 has been realized.

To the plant showing the greatest percentage of improvement in 1931 over the previous three years' experience will be awarded the president's prize—an honor which the management of this plant would like to see come here.

It seems to me that accidents can only be prevented when all employees and officials get together and cooperate in the task of creating an atmosphere of safety and a sincere devotion to the important problem of eliminating unnecessary accidents. Let us not, therefore, permit ourselves to become so absorbed in our work that we neglect safety, for once again is demonstrated the fact that personal responsibility is the big factor in the reduction of accidents.

Your continued cooperation will be appreciated.

FACTORY MANAGER.

We realize in our company that we still have a long way to go in accident reduction. Although we are constantly showing improvement, yet we know that we can still do a great deal more. Everyone in our organization appreciates the difficulty of the problem and the patience necessary to carry it to successful fruition, and the keeping up of enthusiasm on the subject of safety in an organization requires a lot of thought and a tremendous amount of imagination.

One of the best methods we have found for stimulating safety activity is contests within a plant, together with interplant contests within the company. These contests have been conducted for the past three years. Then, in addition to that, as stated in the first part of my talk, if through some agency contests are conducted between industries in a given locality or state-wide, it still further stimulates the enthusiasm of local plants.

Our efforts along the lines of reduction in accidents have been quite gratifying. I believe we have been able to demonstrate in our company that placing the responsibility for industrial accidents directly on the shoulders of the management, endeavoring by cooperative efforts and central supervision to keep up the enthusiasm, will produce results.

Our frequency rate has been as follows: 1926, 13.25; 1927, 9.75; 1928, 11.86; 1929, 13.06; 1930, 9.64; first six months of 1931, 7.31. It also might be interesting to give you the figures for the rubber industry as a whole: 1926, 38.32; 1927, 38.41; 1928, 34.63; 1929, 22.32; 1930, 13.57.

Although we have managed to keep ahead of the procession in the rubber industry in so far as industrial accidents are concerned, yet the industry as a whole has made remarkable strides along this line and this result has been accomplished very largely through the same attitude of mind which has actuated the people within our organization.

Accurate records and statistics in the control of industrial accidents are just as important or more important than any other phase of the business if results are to be attained. The keeping of factory records, departmental records, cost of accidents, causes for accidents, etc., should all be a part of the management's functions and should be used by management the same as other figures in regard to operations, not for preaching purposes, but as a part of the whole record of accomplishment in a plant.

You can get only about so far in discussing the social consequences of accidents, not because people are calloused, but usually because they do not like to hear continual talking about a sad and gruesome subject. An individual injured in the plant may not be known to many people; the distress in the home, although fully realized, is so remote from the home of the other man, that it does not hit him as hard as it should. He has heard the story so many times, he has sympathized with the individual, and if this phase of safety is always talked about, then people become more and more calloused. However, when industrial accidents are placed squarely before management, superintendents, and foremen, so that it is going to have an effect on their standing and maybe on their compensation, and they are made to feel that an accident in their department is a black mark against them, then you will begin to make progress.

I believe it has been demonstrated that for quick results the fear of hell is more effective than the hope of heaven. Of course it is much easier to discuss this matter in this off-hand way than it is to do the job.

There are other factors in connection with the prevention of industrial accidents. You can not have a plant free from industrial accidents if the morale of the plant is not good. If you have very high labor turnover, if you have conditions where the employer and employee are in a state of conflict, where people's minds are diverted by other things, then you can not get that safety spirit which is so necessary in accident reduction. There must be a feeling of confidence all around; confidence on the part of the employees in management, and confidence on the part of management in employees. This can not be done by just talking about it. It has to be something that is started and cultivated over a long period of years so that the whole situation to my mind sums up to this: If you have a good management and an efficient plant, safety will never be neglected. If you have poor management and an inefficient plant, accidents are bound to result.

DISCUSSION

Chairman MORLEY. I have personally reached the point in talking to management where I should prefer to leave out of my vocabulary the words "safety" or "accident prevention." I think that the safety movement on this continent is suffering from some of the same things religion is suffering from, and that is a certain type of mushiness. The sooner we get away from that and get this thing on a practical basis the better it will be for all concerned.

I think the safety movement is suffering to-day from the old slogan "Safety first." Industry is not operated for safety first.

Mr. Miller, you are to lead the discussion on Mr. Ching's paper. Mr. G. H. Miller comes to us from the E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Del., where we were last year, and we are very glad to have him here this morning.

Mr. MILLER (Delaware). The problem of industrial-accident prevention is indeed a big one and will be as long as industrial establishments in this country continue annually to produce anywhere near 19,000 fatalities and hundreds of thousands of major injuries of less severity. A fact not always recognized is that most of these fatalities and lesser injuries result from common causes for which the remedies are well known and simple. So the problem appears to be a big one in size, but not in complication.

It is certainly true, as Mr. Ching has said, that accidents can be prevented by management. As a matter of fact, we are tempted to go a little further and say that accidents can be prevented only by management. Management is responsible for the physical conditions of the plant and therefore for the installation and maintenance of such protective equipment and devices as may be required properly to protect the worker from injury. Management is responsible for the rules for safety which the employees are to follow. Management has the responsibility for properly instructing its employees and for supervising them, not only at the time of employment, but afterwards, and with sufficient force and regularity to prevent such injuries as would ordinarily be caused by lack of instruction and supervision. Finally, management is responsible for the morale of the workers, and it is up to management to see that the workmen have the proper attitude toward their safety and the safety of others about them.

No industrial accident prevention program can produce even a fair measure of success unless management assumes the responsibility for that program, not only for its character but also for its proper functioning. The degree of success which will be obtained from programs of this kind will be measured by the sincerity and forcefulness with which management assumes this responsibility. Mr. Ching expressed this thought very well when he said, "When accidents occur in an industrial establishment, management must accept the responsibility for them."

While the managements of industrial establishments are presumed to be hard-hearted and to lack any great amount of appreciation of the humanitarian reasons for preventing accidents in their work places, yet there are many indications that this is not so. But, even if it were, there are sufficient economic reasons to influence manage-

ment to a sincere effort in preventing the waste which accidents produce. While it is true that in the past the humanitarian reasons for accident prevention may have been stressed too much, possibly to the extent that safety work has been considered a fad or a fancy, yet to-day all well-directed industries realize that accident prevention, properly carried on, returns at least dollar for dollar of expense; and the safety movement in industry has grown tremendously within the last 10 years, because management has seen the necessity and the economy of safety programs.

Evidence of the fact that in its beginning accident-prevention work did have some of the element of the revival and of the circus ballyhoo is clearly shown in the types of safety programs and the forms of safety organizations used at that time. The fact that accident-prevention work is recognized to-day as an absolute necessity in a properly conducted industrial establishment is evidenced by the sincere, coordinated, businesslike methods that are now employed. The safety engineer on a plant 10 years ago was a revivalist going about the plant preaching to the employees the salvation of carefulness. To-day, the safety engineer is a trained technical adviser on safety subjects to the operating personnel of the plant, offering his assistance to them in carrying out their responsibility for the work which he formerly attempted to do alone.

As Mr. Ching has said, the safety organization of the industrial establishment to-day is the operating organization, and each employee has his responsibilities to assume, his burdens to bear, and his duties to perform in the same sphere in safety work that he has in operating work. The plant manager and his assistant are responsible for the safety of the entire plant; the department heads are responsible for the safety of the departments under their control, and the foremen are responsible for the employees who work under them. All of these operating people have their respective responsibilities and field. To whatever extent each man in an industrial establishment is responsible for operations, to that same extent he is also responsible for the safety of such operations, and his respon sibility should not be taken from him, nor should it be minimized.

The success which has resulted from the modern industrial accident prevention program has been due in a large measure to the sincerity with which these operating people have to-day accepted the accident-prevention part of their work.

It has been stated that safety contests and campaigns are helpful in accident prevention, and it has been our experience that this is true; although they must not, of course, be allowed to replace the every-day logically organized accident-prevention work. Accident prevention, at least in its present stage of development, has a tendency to get into a rut, to grow monotonous or stale, unless it is stimulated from time to time; and an annual campaign or contest, or in some cases an even more frequent one, has the virtue of renewing interest, reestablishing logical responsibility for safety, particularly if the contest or campaign is conducted along the proper lines, and in creating the proper morale for safety among the employees—that is, the will to do their jobs in such a way as to prevent injuries to themselves and others.

Accident records and statistics are valuable in any work, and this is just as true in safety work; because as cost analyses reveal the wastes of production, so also do accident analyses reveal the wastes brought about by accidents and at the same time point out the weaknesses which must be corrected if this waste is to be prevented.

It is true that to-day we consider poor management that management whose plants produce frequent major injuries. Plants of good management have low accident rates; for after all, industrial accident prevention is an important part of industrial efficiency and therefore of good management.

Chairman MORLEY. Mr. Miller was to have been followed by Mr. John Shaw, of the Hercules Powder Co., Wilmington. I have a letter from Mr. Shaw saying that his wife is seriously ill and the doctor thought it was not desirable for him to leave Wilmington and for that reason he can not be here. He has, however, sent me the notes he had prepared in connection with this discussion.

[Chairman Morley submitted Mr. Shaw's notes and suggested they be printed in the record.]

Mr. SHAW. Mr. Ching has presented to us, in a very admirable manner, a convincing address that leaves no doubt that management can prevent industrial accidents. I have no criticisms to make of his paper, because everything he has said I believe to be true. However, I might supplement his paper by stressing a little more than he has the second part of the title of his paper, namely, "What measures do you advocate?"

First of all, management can prevent industrial accidents by seeing that workers are properly selected and properly trained. Not every foreman or supervisor is a teacher; in fact, many can not teach properly although they may be proficient in their work. It is important that management sees that the new worker is trained by someone who is experienced in his particular line and one who has a knowledge of the company's methods and policies, traditions and objectives, so that he can impart his knowledge and make a lasting impression upon the new employee.

Of course, it is understood that the plant is of sound design, and that there are periodical reviews or inspections of all equipment, methods of work, and the employees.

The next thing the new worker hears is that no unsafe workers are wanted nor kept upon the pay roll. This comes from management straight down the line. Management must insist that an unsafe worker be converted by reinstruction or, perhaps, transferred to a job where he will be better adapted and will work safely. Failing in this, management must see that a willfully unsafe worker is discharged.

The plant manager or superintendent plays a very important part, as management holds him strongly responsible for his safety record. The wise plant superintendent, therefore, reviews all accidents and near accidents occurring during the month or period. Many plants do not have accidents for periods running from 3 or 4 months to 3 or 4 years, but practically all have some near accident each month. Therefore, these are studied, as well as accidents, if they occur, and the superintendent issues work bulletins to all staff members on

every accident or near accident which bears a moral or teaches a lesson. Likewise, the superintendent issues direct messages to all his workers on the bulletin board at suitable times.

At most of our plants there are safety committees, but we have one plant which has operated very successfully without a safety committee because the superintendent makes his entire staff a permanent safety committee.

The general manager not only reaches the workers through his line staff organization, but may speak to them directly by articles written in the house organ. Our general managers write what we call "Safetygrams," which generally have a very strong appeal.

There must never be any mark of insincerity on the part of management, who must make all understand that safe work is a most desirable thing. This is not indicated merely by bulletin board flashes and the like. The strongest factors are proper selection and training of men; thereafter, a good supervision and good discipline.

Safety is one of the most important duties of management, like costs, production, and quality. Management must not be satisfied with bad safety records, because, as our friend Mr. Ching tells us, a bad safety record is the result of mismanagement and mismanagement is inefficiency. When the manager creates the spirit in his organization which makes every worker take pride in doing his work safely, then, indeed, will we have safety.

In a safe plant I have seen some workers hang their heads in shame because their fellow workers caught them doing something unsafe.

When any of our plants operate a full year without a lost-time injury, the president of our company writes a letter to the superintendent of that plant, and he writes the kind of a letter that makes the superintendent's heart glow with gratitude and pride. That letter is actually written and signed by our president. The plant manager or superintendent posts the letter for all employees to read. It bears a message not only to the superintendent, but to all of the workers, and they are all very proud to receive a presidential letter. To quote one of the most important thoughts expressed by our president: "With us safety has always been of major importance—the successful conduct of an explosives and chemical business demands that safety be one of the first considerations in all of our work."

In recognition of a year's operation without a lost-time injury in any of our plants, the plant management arranges for a little celebration of employees. This may be a moving-picture party, smoker, dance, or some other form of entertainment, usually where the wives and relatives can attend with the workers. In some instances, every worker is given a trophy, such as a billfold with an appropriate inscription printed upon the inside in gold letters, and also the man's name.

In closing, let me emphasize the fact that good training, good supervision, and discipline, when necessary, are far better than posting a lot of rules with "Don'ts" in them. I know that from young childhood to our dying days we react against "Don'ts." The proper and best way of performing one's task can be taught with a very few plain, common-sense rules.

When there are too many rules the workers at times violate some of them and, on finding that they get by, violate some more, until there is an accident..

[Mr. Miller was deputed to convey to Mr. Shaw the regrets of the meeting that he was unable to attend, and also that the reason that detained him was the serious illness of his wife.]

Chairman MORLEY. Has anyone any other point to bring up in connection with Mr. Ching's paper or with any other phase of the situation that has been up for consideration this morning?

Mr. MAGUIRE (Pennsylvania). I want to express my regret at the fact that Mr. Immel was unable to participate in this interesting program, and while he has not authorized me to say anything in his behalf, I should like to mention a few items he would have mentioned if he were here. One is in connection with the matter mentioned by Mr. Reninger respecting useless visits, in his opinion, to plants which have had no accidents or very few accidents during the course of the year. I want to say that we are not prone to be so boastful in Pennsylvania as the Governor of Virginia admits his citizens are. We admit we are developing good accident inspection in that regard through the means of recording accident experience by companies, and we are using that experience as a guide to the inspectors in their visits; in other words, if a company reports the accidents of the month, they are tabulated on a monthly basis, and if they have accidents during each month in the year, they probably receive 12 visits from an inspector rather than one.

I want to speak of one other point mentioned by Mr. Ching, relative to giving the employers a pat on the back once in a while as a means of encouragement. We have a plan in Pennsylvania of issuing a certificate, either of honor or of merit, the certificate of honor going to the companies reporting no lost-time accidents, and the certificate of merit to those which have had an accident rate less than the average for the State.

The means of determining the accident frequency rate for the entire State is rather crude, but we think it is serving its purpose. In the department we attempt as nearly accurately as possible to determine the number of accidents per thousand employees in the State. Then if the individual company has had an accident experience less than the average for the State, we compliment it by issuing the certificate of merit.

President DEANS. Dr. Patton has brought to my attention a telegram which should have some consideration from this body, but I do not know when you will want to consider it:

> Can you get without too much trouble from other delegates information as to how much of a problem awards against bankrupt employers may be in their States? Are they interested enough to make compensation awards a preference in bankruptcy through supporting any uniform or Federal legislation to secure such results?
>
> CORCORAN,
> *Assistant Secretary, New York State Department of Labor.*

Secretary STEWART. Bankruptcy is not a matter for the States; it is a Federal law.

President DEANS. Do you want to take that question up? Is it not among the rights of preferred claims?

Secretary STEWART. Not unless it is mentioned in the Federal law, and it is not mentioned.

President DEANS. At what period shall we discuss this telegram?

[A motion was made, seconded, and carried that the telegram be made a subject for discussion in the business meeting in the evening.]

[Meeting adjourned.]

Chairman, Charles R. Blunt, Commissioner Department of Labor of New Jersey

Chairman BLUNT. We in New Jersey have a code State in the sense that the labor department has the authority to adopt and draft codes, and in the adoption and acceptance of recommendations there are no national codes that we look more to than those drafted by the American Standards Association.

Mr. Cyril Ainsworth will now read the first paper, on the subject, Has the Development of Safety Codes Helped Accident-Prevention Work in Industry?

Has the Development of Safety Codes Helped Accident-Prevention Work in Industry?

By CYRIL AINSWORTH, *Assistant Secretary American Standards Association*

Compensation laws have performed a great service to society in general through arousing interest in the prevention of accidents. True it is that what the injured worker needs at the moment of his trouble is prompt and adequate relief and then rehabilitation, but the passage of workmen's compensation laws by many of the States has done more than merely give injured people temporary relief through schedules of compensation payments.

In spite of the pessimistic reports that have been issued year after year from many sources, showing that accidents are constantly increasing, the interest which has been stimulated in accident-prevention work has resulted in the development of effective programs that have stemmed the tide of industrial accidents to a remarkable degree. Complete success in the industrial field, however, has not been reached and much remains to be done.

Considerable time might be spent in analyzing the situation to determine who is to blame for this lack of complete success in our safety work, but for the purposes of this discussion there seems to be one factor that stands out predominantly as a contributing cause. It is the fact that there has not yet been brought about a satisfactory meeting of minds of the employer and the man on the job. In many States accident-prevention work is almost at a standstill because of this fact. Departments of labor and industrial commissions have been unable to develop programs including the promulgation of safety codes because of the lack of understanding between employer and employee. Much of the responsibility for this condition must rest with the governmental agencies, and the States that are not now active in the development of safety codes have either not seen the situation clearly or have failed to assume the proper responsibility and to make a definite attempt to bring about this satisfactory meeting of minds.

The employer is definitely responsible for the selection, training, and supervision of the worker. He is responsible for the physical condition of the plant. He is responsible for seeing that the tools and equipment which he gives the employee are such that the employee can perform his duties safely. Safety of operation is a managerial problem, and unless the employer fully accepts the responsibility the blame for accidents rests upon him more than upon anybody else.

The man on the job, who should be most concerned but very often is not, must also bear part of the responsibility for the prevention of accidents. Regardless of what his feelings may be toward his employer for his possible lack of sympathy with the accident-prevention movement, the employee has a tremendous responsibility in insuring that his own conduct is such that, through obedience to safety rules, through thoughtfulness for the safety of those working around him, as well as for his own safety, and through whole-hearted cooperation in the working out of suitable plans for the removal of accident hazards and unsafe practices, he will be doing his part to keep his plant accident record clear.

Many agencies have been developed for the purpose of stimulating this interest on the part of the employer and employee, and many other agencies or organizations are endeavoring to provide this stimulus as part of some other service which they may be rendering, but there is no organization that has a greater opportunity for bringing about this satisfactory meeting of minds between employer and employee for the prevention of accidents than governmental agencies such as labor and industry departments and industrial commissions. The adoption of safety codes based on sound engineering practices; intelligent, unbiased, and thorough inspection service; and the conducting of intensive campaigns of safety education among both employers and employees present an opportunity possessed by no other group. The first of these activities is probably the most important, and therefore the methods used in the development of safety codes should be very carefully analyzed.

States such as New York, Pennsylvania, Wisconsin, California, and several others that have been most successful in safety-code development have had as the key to the whole program the fundamental principle that the codes in reality should be created by industry itself. True it is that the governmental agency has made the necessary statistical and engineering investigations and possibly prepared the first tentative draft of the proposed code, but the plan from that point on has been to permit industry to thrash out its own differences and complete a standard that is acceptable to all. The plan for carrying this into effect has been to appoint a committee primarily of two groups—namely, employers and employees. In addition the committees may include technical experts and representatives of the governmental agency who serve as advisers. In other words, the procedure has definitely brought together employer and employee. They sit around a common table where they can learn one another's ideas and desires and arrive at a mutual understanding and solution of the problem before them. Not only has this resulted in the development of a standard acceptable to the industry and the ensuing removal of accident hazards, due to the application of the specifications of the standard throughout the industry, but

it has brought about a better general understanding in all employer-employee relations. One particular case where safety-code development definitely achieved this result comes especially to mind. The textile manufacturers in one section of the country had been successful in blocking the development of a standard for many years. They felt that the only demand for a standard came from a group of employees generally considered as agitators and that the development of a standard was simply an opening wedge for other demands. The governmental agency, with considerable diplomacy, was successful in bringing together for a general discussion of the problem representatives of both groups. It so happened that the representatives of the employees were men whom the employers considered as being the leaders of the strongest group of agitators; but instead of continuing to oppose one another's ideas, the two groups learned to respect one another tremendously, and out of that relationship in the development of the safety standard there grew a better understanding of all the problems which had been keeping the industry in a state of unrest for years. Little or no accident-prevention work had been carried on in the industry prior to the development of the standard, but its promulgation brought about a concerted effort for the prevention of accidents that had been almost entirely lacking before.

Not only has the committee work been of great value in stimulating better understanding, but another phase of the plan of development, which covers the distribution of the proposed standard for purposes of general criticism by correspondence or public hearing, is also very important. Particularly is this true in the case of public hearings. Employer and employee present their criticisms of the proposed standards to the regulatory body in public. Their differences of opinion are thoroughly ironed out through the medium of the free discussion afforded by the public hearing. The members of the committee which prepares the standard, including both employers and employees, attend the hearings and give definite evidence to the public that it is possible for the two groups to get together in the common interest of prevention of accidents and reach an agreement in the form of a standard of safe practices which they will be required to live up to.

The use of such a procedure by governmental agencies in the development of standards of safe practice, based on the experience of industry, is bound to bring, in the estimation of plant managers and employees as a whole, a higher rating of government work. The use of a definite group of specifications by inspectors in making recommendations for removal of hazards creates a far better impression than the haphazard methods resulting from the use of individual opinions. The question of inspection procedure for the proper application of safety standards is a subject in itself, but this much can be said: If the inspectors will work as trained advisers and represent an enlightened and a thoughtful departmental program they will become valuable safety factors. The development of a group of safety standards based on sound engineering practice is undoubtedly a great help to this type of public official.

This sound plan of development of safety codes which has been followed by many governmental agencies has had the very definite result of encouraging industry to police itself in accident-prevention

work. The development of American standard safety codes is based on this principle, and the procedure under which uniform safety codes are developed is based entirely on the one which has been outlined as the procedure followed by the States which have been most successful in their accident-prevention work. The progress made in creating uniform safety codes gives strong testimony of the success of this procedure.

The American standard safety-code program definitely represents an advanced step in making safety-code procedure a more effective instrument in accident-prevention work. There is nothing mysterious about the development of uniform safety codes. No attempt is being made to usurp the prerogatives of governmental agencies. The idea is not an attempt on the part of industry to quiet down the demands being made upon it for greater activity in the accident-prevention movement. The results already obtained give definite proof of the success of the program.

Much has been written on the way in which the American Standards Association has proceeded in making uniform safety codes instruments toward the success of the accident-prevention movement, and it is unnecessary to repeat this information here. It might be well, however, to discuss the situation with reference to the use of the program by governmental agencies.

Some of the States have not been given legislative authority to develop and administer safety codes in their accident-prevention work, while others, even though granted this authority, are working under budgets that do not permit the retaining of the staff necessary to carry on such work. In such cases the State agency has to be satisfied with attempting to apply the provisions of the general factory law under which it functions. In most cases such laws are not specific and are couched in most general terms. This leaves the door wide open for the use of individual opinion on the part of the inspectors, which may or may not be based on sound practice.

To such States the American standard safety codes can be of very definite service. The lack of definite statutory authority for the administration of safety codes does not mean that the State must remain inactive and perform only a part of its possible service to industry. The fact that its laws are written in general terms immediately suggests the advisability of the use of a group of standards as a means of applying the provisions of the law and as an authoritative source of information to which the inspectors may go when making recommendations. The American standard safety codes offer just such a group of specifications, specifications that have been prepared after a full opportunity has been afforded everyone in any way interested to assist in their development. The use of such a group of specifications can not help but stimulate accident-prevention work in States where the governmental agency has been active to only a moderate degree for the reasons that have been cited.

To the States that have full legislative authority and sufficient funds to carry on an active accident-prevention program, the use of uniform safety codes as the basis of their safety standards presents some concrete advantages. For instance, they contain specifications based on a broader point of view than is possible through purely local action. The development of any group of safety standards should be

from the point of view that they must be effective and acceptable to both industry and the State; and to make them so, whether from the local or national point of view, every possible source of information and criticism should be obtained. There is the advantage of making use of the national committee as a source of advice on matters of interpretation and application of the specifications. Some States are now availing themselves of this particular service.

Of considerable importance to all States is the definite improvement that will come through an extensive use of the uniform codes in the type of guards for mechanical equipment furnished by the manufacturer of the equipment. This improvement can not be expected until such time as a fair degree of uniformity exists in the standards of the various governmental agencies. This is of tremendous importance, particularly to the small-sized industrial plant which resents the necessity of spending additional sums of money whenever new equipment is purchased.

Time does not permit discussion of other advantages in the use of American standard safety codes, but before closing brief mention of the desirability of a more intimate cooperation by the States in the development of national codes might be worth while.

How to develop more adequate representation of the States in the development of national safety codes is a matter for decision by the International Association of Industrial Accident Boards and Commissions or the Association of Governmental Officials in Industry. It is hoped that they will be able to make progress in this direction, but whatever criticism of national codes the States may have, part of the responsibility of the facts presented by the criticism must rest with the States themselves. It has been the established policy that governmental agencies can have representation on the technical committees preparing standards. The fact is, however, that less than a dozen States have borne the burden of presenting the labor department point of view. In many cases the representatives of these States have been hampered by lack of funds or multiplicity of duties in attending meetings of committees or giving the subject the attention it deserves. The result has been that while the representatives of the States have served with fidelity they have found it necessary to present personal points of view rather than the collective point of view of the States. This problem deserves your serious consideration.

Safety-code procedure, whether viewed from the local or national point of view, has been effective in the prevention of accidents. Whether it will be of greater effectiveness in the future depends largely on the extent to which it is applied by governmental agencies. It is the one effective instrument that has been developed for bringing together the two great branches of industrial life, employers and employees, for the common solution of a problem that is a terrible blight on our industrial and social structure. May we hope, therefore, for a more complete study of the procedure not only by the States that have not used it in their accident-prevention work but also by those who have assisted in its development, with the object of improving the procedure in order to speed the day when greater success in our accident-prevention programs may be assured.

DISCUSSION

Chairman BLUNT. In New Jersey, next door to New York, we look upon the department of New York as good neighbors, and I have found Doctor Hatch one of the authorities on codes and statistics. I was interested in his work and was glad to see his name on the program this afternoon to take part in the discussion on the subject so ably discussed by Mr. Ainsworth. Doctor Hatch, will you take the floor?

Doctor HATCH (New York). Mr. Ainsworth has referred to New York as one of the States that has done something with industrial code procedure. As a matter of fact, we have done a great deal along that line. From the point of view of our experience I think I can accurately say that a paper such as Mr. Ainsworth has presented, urging that industrial code procedure be the method of developing safety regulations, seems a bit superfluous. We have no other idea than that in New York. It is so well established, after some 16 or 18 years' experience, during which no move has ever been made to supplant our New York code procedure method with anything else, that the whole subject is finished in New York, as far as any question of the desirability of it as a general method of developing safety regulations is concerned. We were committed to it long ago. We have had a lot of experience with it, and we have not the slightest idea of changing our method. I might say that that is true, notwithstanding the fact that since that method was established in the department, which is essentially the method of delegating legislative power to the department, the department has undergone a number of reorganizations. The code-making body has been changed in its form at least three times by legislative power and enactment, but never with any other idea than that the procedure in its essential principles and methods would be continued and carried on.

Turning to the fundamental principle of code procedure, which is essentially departmental by delegated authority from the legislature, it seems to me that it represents a most effective adaptation of means to an end, particularly to that part of accident-prevention work which has to do with mechanical and engineering problems.

A good many years ago, I wrote a paper on accident statistics, in which I ventured the somewhat academic definition of the problem of accident prevention as being a problem of adaptation of the individual worker to his environment; in part I think that is still so. It is too broad a generalization to be of very much practical value, however, except that it does bring out this fact, that part of the problem of accident prevention is in the proper setting up and arrangement of the worker's environment so that it will be safe.

It is with that part of accident prevention with which development has most to do as a matter of practice and with which it can best deal. Then, what is the problem? In the last analysis, it is a problem of ascertaining those mechanical improvements, or, better, engineering arrangement, which Doctor Chaney has rather frequently referred to as engineering revision, which will tend to make the environment of the worker safe, to eliminate hazards from that environment.

What you want to get in that case is simply the latest and the most effective idea about, let us say, a given machine. What is the best way to make a given machine safe? Nobody knows it all in this field any more than in any other, and one fundamental principle of code making is to bring together, not a group of people in a State legislature who are politicians or semipoliticians, or who at least have the political point of view and do not know the first thing about machines or how to make them safe, but people who have been dealing with this problem, particularly as related to the machine question, which means men acquainted with a given industry, with a given operation in that industry, and a given piece of apparatus for that operation, and that is a highly technical thing. What we want to get into our codes, if they are going to be most effective, is the latest and best knowledge for the setting up of what is required for safety on that particular machine.

The code procedure, I submit, is the way to get it. That is all it amounts to. In our practice, an industrial code committee is, to be sure, a committee representing employers and employees, but in New York, to a large extent (I think I am correct in saying) that old idea that we will have on these code committees opposing interests which will have their feelings placated and sort of get together to do something about this—that idea has great advantages in code procedure, they used to say—has become subordinate to the idea that here is a chance to get a regulation formulated by the best technical experts. It becomes a very highly developed and efficient method on a technical problem.

As I say, we are so completely converted to this thing in New York, by reason of long experience, that the idea of anything else as fit to take its place does not occur to us any more.

We have developed under this procedure in New York over a thousand—some 1,000 or 1,200—different rules and regulations. Many of those are of great length and detail, involving sections and subsections and subdivisions in great number. Our whole industrial code altogether fills some 20 to 30 different bulletins and covers hundreds and hundreds of pages.

Let me add one more thing which is true of those codes. Only once in all those years have we ever had a public attack on any one of those rules as being an unreasonable requirement in a given industry, or about a given machine or piece of apparatus, and in that case it was a question of quite a minor rule in relative importance and one on which it was very easy to have a difference of opinion.

The code regulations are accepted by all parties—by representatives of labor, by representatives of employers, and by the technicians, specialists, and experts—as the most satisfactory regulations in the State of New York.

We have gone to all that extreme of detail and technical requirements as a basis, of course, for our factory inspection work, our industrial inspection work, and the enforcement of the law and the code.

The gist of my story is that we have tried it out completely in New York. I doubt if any other State has gone any farther and I doubt if many have gone nearly so far.

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We have tried it out. It works to the satisfaction of everyone, and we are confident that it has been a most useful tool for more effective State regulation of industry with a view to accident prevention.

A word about the American Standards Association codes. Without attempting to supplement what Mr. Ainsworth has said so well on the general aspects and principles and desirability of a central standard promoting agency, I want to suggest two ways in which the idea broached by Mr. Ainsworth would be highly desirable, if the individual State authorities or other regulatory agencies who are concerned with code making and the American Standards Association would coordinate their efforts in making rules about safety. We have a little experience along that line in New York, and I might say that within the last two or three years we are definitely moving in the direction of going as far as we can toward coordinating our State regulations with the safety standards of the insurance carriers in their experience and schedule rating and with the standards of the American Standards Association.

We recently revised our code with regard to dangerous machinery, and in the revision of that code we called in representatives of labor, representatives of employers, and the specialists and experts, and particularly the representatives of the inspection rating board representing the insurance companies. We were able to work out and have now developed in New York a machinery code which very largely coordinates the various requirements as between those of the State and the insurance carriers, and I might add also of the American Standards Association because its codes are always before us when we are making codes.

We feel that that is a great step forward, and let me say that that was done without any lowering of standards or weakening of the State regulations in favor of insurance company requirements.

Another coordinating effort which we are making at this time: We are undertaking to develop a sound and constructive code with regard to window cleaning. The American Standards Association has also a sectional committee working on that same problem. These two committees are working together to a very considerable extent. It has been a very simple proposition. We, in New York, learned of the American Standards Association code committee, and we communicated with it and suggested that many of these problems might be worked out together and that with more minds on it we might both get nearer to the soundest thing.

We are going a long ways together. We have not arrived at full agreement. There are some very, very technical points connected with the window-cleaning code. For example, shall the anchor bolts or the fittings of the safety belt be made of bronze or other metals? Shall they be made of cast or forged metal? What shall be the dimensions of the fastenings on the belt and the anchor bolt? It is surprising what a variation there is on these points, and, what is more important, it is surprising to see how some small variations in dimensions vitally affect the safety of this belt in operation.

There is a highly disputed question of very general significance as to whether expansion bolts should ever be permitted for the anchor bolts in buildings which are already constructed as distinguished

from new buildings. So far the American Standards Association committee and the New York committee have not got together there. Our committee recommended that we permit those bolts, under as careful regulation as possible. I am informed that the American Standards Association committee does not believe that those bolts should ever be permitted. It has made the statement to us that it is well known that those bolts will pull out. We are now exchanging views, and we have said to the American Standards Association committee, "Can you give us any information or data which will show that those bolts are likely to pull out?" Of course, if they are, they are no good for safety.

We are working along together with no formality about it, except that Mr. Keefer, of the National Safety Council, is on the American Standards Association committee; I happen to be on the other committee; and the board of New York is correspondingly disposed toward working these things out together.

One of the industrial code members on your committee is also on the American Standards Association sectional committee, and we are just working along together. We are not, as I say, uncertain about this. In New York it is no longer a problem of softening feeling between employers and employees; we have got beyond that. I think I am simply stating a fact that all anybody is concerned about in the State of New York is to stop window cleaners' accidents, because, as everyone knows, that is about the most hazardous occupation there is. It is so hazardous that most window-cleaning employers in New York, under our scale of benefits can not get any compensation insurance, so they have all been sent to the State insurance fund, and the State fund says, "Yes; they can come in, but there are certain requirements that we shall have to make"; and thereby hangs quite a tale, which I will not go into now.

We simply do not care anything about it; there is no struggle between employers and employees, except as it comes to a purely technical question, such as—should we permit expansion bolts in belts or not? It is not a question of policy or class question; it is a technical question.

My feeling is that it would be highly desirable if other States would do what we are doing in New York. We do not feel that we are novices, so to speak, and sometimes we think we can tell the American Standards Association a few things about code making, and I have no doubt that they are sure they could tell New York a whole lot; but when parties are dead in earnest about accident prevention and are dealing with these purely technical questions, why on earth should we not get together to pool our information, so that out of it will come for everyone's use the most effective safety regulations—in other words, the best means adapted to the end of preventing accidents?

Mr. WYSE (Ontario). I should like to ask Mr. Ainsworth what percentage of enforcement would be obtained in a code of this kind, with relation, say, to the window-cleaning problem?

Mr. AINSWORTH. I do not quite understand the question. Do you mean what percentage of enforcement would be obtained through the development of a national code on this question?

Mr. WYSE. Suppose a code had been developed to 100 per cent efficiency, what percentage of enforcement would we get with relation to this one item of window cleaning, for example?

Mr. AINSWORTH. As to the percentage of enforcement, I think that is purely an administrative problem of the individual governmental agencies. If the code is properly developed, it will have a big effect on it, because the people obliged to comply with the provisions will understand that it is a sound, 100 per cent code, and they will be more ready to comply with it than if it is a half-baked proposition, but the actual degree is up to the regulatory body entirely.

Doctor HATCH. I might supplement that by saying that in the State of New York the window-cleaning code which we finally work out—and I am confident it will largely be the same as the national code—when it is adopted by our board will have the force of law and will be enforced exactly as the labor law is, and that is a pretty vigorous enforcement in the State of New York.

Mr. WYSE. The question in my mind is, would we have another prohibition law which would not be enforced and which for that reason would perhaps weaken all other laws? Is it advisable to add prohibition laws to the ones we now have all over the country and then not enforce those laws? That is what I have in mind.

Mr. AINSWORTH. Safety codes do not add more laws to the books. They simply provide specifications and standards with which you enforce the laws which are already on the books. Most of the States that are carrying on factory inspection work have general factory laws which they enforce. Safety codes are nothing more nor less than specifications to assist them in enforcing the general provisions of the law which they are already called upon to enforce. They are standard specifications and instructions to industrial establishments and employees as to the means by which they must comply with the basic provisions of the fundamental law which you are already enforcing.

It is true in some States they are given legislative authority to enforce directly the provisions of the law, but the fundamental is that those safety standards are specifications by which employers and employees can learn how the labor department or the industrial commission is applying the provisions of the fundamental law which is already on the books.

There is one point with reference to Doctor Hatch's remarks about New York not being bothered with the employer-employee situation. When the subject was assigned to me, I felt it was to be for the benefit of the States not now carrying on any safety code work. In my contact in many cases with representatives of those States I have heard the complaint made many times that they have been unable to get a law through the legislature to give them the necessary authority, because in one case the employers were opposing it and in another case the employees were opposing it. There are some States now working without any legislative authority for the adoption of safety codes. They have safety codes which they are using, and they are using them very effectively, but they are using them without any legal backing whatsoever. They are using them simply as a standard, not to be definitely enforced, but as a standard in the

enforcement of the factory law. It is true that if a case of prosecution comes up, they do not prosecute for violation of the standard, but of the fundamental law, and they point out that the standard method which has been accepted generally is not being complied with.

In that way—through the development of those safety codes—they have been able to bring together these two groups which seemingly have been preventing them from getting a basic law passed by their legislatures, and that was the keynote that I was trying to emphasize rather than to indicate that after safety-code procedure has been established in a State, it is still needed to bring about this satisfactory meeting of minds. There are States working at present who are hampered in their accident-prevention work simply because they have not been able to get the legislative enactments to give them the authority to go ahead on safety-code work. This is a way out. It is not necessary to have that right off the bat; it helps, but it is not necessary.

Mr. WYSE. Could you state whether the window-cleaning law, if you have one in New York, is wanted by the employers; that is, the companies who clean windows as a business?

Mr. AINSWORTH. I can give you one definite illustration of that, not in New York, but from my previous experience in Pennsylvania. The window-cleaning companies in Pennsylvania assisted in the development of their present window-cleaning regulations very, very actively. I was working at my desk in the office one day when the window cleaner came in to clean the windows. He went outside, worked on the window ledge, and did not put on his belt. I got after him, pulled him in, and advised him as to what he was doing, and asked him to use his safety belt which he had hanging around his waist and was not using.

His comeback immediately was, "We, in the window-cleaning industry, are wholeheartedly in favor of this. I slipped in this particular instance because you have a nice, wide ledge; but go to some of the other buildings which don't have such wide window sills and see if you can't get us some service along this line."

I asked what building in particular and he told me of a 14-story building with window ledges 2 inches wide, where the cleaner had to stand on tiptoes and hold unto the frames. It happened to be owned by a bank. I immediately communicated with the president of that bank and told him of the complaint of the window-cleaning company through its representative. The banker sent a representative to the office to go into the whole question. He was handed the regulations, was told what he had to comply with, and he ripped out every single window frame in that 14-story building and put in frames that would adequately support window-cleaning men. You can imagine the expense that meant in a building erected at least 10 years. That is evidence, however, of how far owners of buildings will go, when the matter is presented to them, in their efforts to prevent accidents.

Mr. WYSE. That seems to be an example of the wonderful results you have gotten, and it might be interesting to hear the experience I have had in Ontario—in fact, in Toronto—in the interests of the

Ontario Safety League. We have about one fatality a year through men falling off the window ledges when they are cleaning windows, and, after a good deal of solicitation from different directions, I took the matter up with all of the window cleaners of whom I could get the names from the compensation board. The result of their replies made me think they didn't want any laws, and if they didn't want any laws, it would have been useless to get the laws because they would not be enforced, and so we did nothing about it.

Doctor HATCH. Our window-cleaning code in New York is in an exceptional position because we (the board) were directed by the legislature a year ago this last winter to make such a code, after the legislature had passed an act, consisting of about six or eight lines, simply requiring that the regulations for safety should be lived up to by the responsible parties, and directing the board to prepare the necessary regulations.

Now, to answer your question. In New York that statute went through the legislature with hardly any noise or controversy at all. The problem is regarded as so serious, both by the window-cleaning unions and the window-cleaning contractors' organizations and safety men generally, that everyone felt " we have got to go at it in a basic fashion to find the answer or the whole series of answers which will stop these accidents."

Your speaking of one window-cleaning accident a year as being impressive notice to do something interested me. I can not give you the record in New York City, but it is one accident in a very, very much shorter space of time than one year.

Secretary STEWART. It is 194 a year.

Mr. WYSE. One of our largest window-cleaning companies in Toronto, working all over the Province, is the New York Window Cleaning Co., and its reply to the letter as to legislation governing the use of belts was that the window-cleaning employee should take a similar position to that of a sailor on a ship, who has to be able to climb the mast and furl sails and do everything of that kind without a net under him or anything in particular to safeguard him. The window cleaner should be an expert in his business and be able to take care of himself on window sills.

Mr. WILCOX. If the gentleman from Canada could write into the compensation law a provision that an employer subject to compensation shall be liable for compensation to employees of a contractor or subcontractor under him where that contractor or subcontractor is not insured or subject to compensation, he would have another party interested in the matter of window cleaning.

Chairman BLUNT. This afternoon we have another paper by a member of the New York board, Doctor Patton. Doctor Patton will read a paper on the question of Are Accident Statistics Entirely Satisfactory? How Can We Improve Them? Do They Furnish Enough Data?

Are Accident Statistics Entirely Satisfactory? How Can We Improve Them? Do They Furnish Enough Data?

By EUGENE B. PATTON, *Director Division of Statistics and Information, Department of Labor of New York*

I strongly suspect that Secretary Stewart worded this topic. As you notice, it has a triple head, and I can make my entire speech within a minute: "Are accident statistics entirely satisfactory?" The answer is "No." "Do they furnish enough data?" The answer is "No." "How can we improve them?" The answer is not quite so brief, but I would say (1) We need more light as to causes of accidents; (2) we need employee exposure so we may determine frequency rates; and (3) we need employee hours so we may determine severity rates. So, the answer is "I don't know," and that is what I have to say. That is what I will have said when I have finished.

First, as to light on causes, all of us admit that we need more information as to just how accidents actually do occur. What was the employee doing at the time? Was the accident due to maladjustment of the worker to his work? Was it due to defective material or lack of supervision or training?

We do need frequency and severity rates, and I want to say what is stale and trite, though occasionally someone denies it, that there is at present no adequate basis for any State as a whole, let alone the United States, to give us either one of those. I admit that individual plants or groups, such as the rubber plants of which Mr. Ching has told us, or the United States Steel Co., or Colonel Reninger's cement companies, can give us accurate, dependable severity and frequency rates for their industry, but that leaves out of account the other plants. far more numerous in number in any given State, so we are lacking in these rates for any State as a whole. I do not need to go into any further suggestions than were brought out this morning in the discussion, but I think it is worth while mentioning in passing that there is some suggestion or hint as to entire accuracy or completeness in the so-called no-accident contests. On the whole, I approve of them, but there is evidence to show that they are not entirely free from error.

Last year we heard Mr. Maguire tell about the plan which Pennsylvania had adopted, making the present statistics more readily applicable to the purposes of accident prevention. Since that time a plan somewhat similar to the Pennsylvania scheme has been adopted, a scheme which we think in some respects is superior to the Pennsylvania scheme. In brief it is this: Every accident that is reported from manufacturing concerns—we are not at present going beyond manufacturing (we hope to later on)—which on the face of it indicates the possibility that it will develop into a compensation claim is indexed as scheduled for hearing, is photostated, and the photostat of that accident report is given to the inspector who inspects the plant; so that if on July 1, 1931, an inspector goes to a given plant to make an inspection, he has a com-

plete record of all the accidents which have been reported from that plant up to that time during the year. He knows the department in which the accident occurred, the nature of the injury, the name of the employee; in fact, he knows everything about that accident which the department itself knows, based upon the report given to us.

For each one of these plants, in addition, the inspector has, when he goes out, a card which shows the classification of accident hazards in that plant. That list of hazards is supplemented by the comparison with the rating board's classification, and the rating board's classification is made a part of the classification made up within our department.

A year ago in Pennsylvania, as I remember Mr. Maguire's statement, the inspector had only the knowledge as to the fatal and nonfatal accidents reported, but no further indication as to cause of the accident. Under this scheme we now have in effect, we go very much farther and give him this additional information.

At the end of the year, we will have the desired material available for a complete industrial directory, containing the name, size, and location of each plant, the number of people employed, the number of accidents indexed, and the number of cases still pending, and we will have the material to make an accident frequency rate. We know how many employees are in the plant and how many accidents have occurred, and so we will have material not only for rates but also for frequency rates, and in addition this information to give to the inspectors. Copies of the accident reports are furnished to the separate divisions, the division of industrial hygiene being one. To it is sent a record of the type of accident in which that department may be interested and also photostat copies of that type. The division of women in industry is interested in accidents to women and children. It also may secure these photostatic copies of those accident reports.

Whoever was responsible for the wording of this topic may have had in mind that it should be pointed out that accident statistics are important, and perhaps the way to get satisfactory statistics is to beat the employers over the head with legislation and tell them to give us more light. That may be true, but I am firmly convinced in my own mind that the present accident statistics are capable of much further utilization by safety engineers and accident-prevention people than they actually are. For example, I can not see why in any State, when we know that falls of persons are the source of the greatest number of serious accidents (and that is true in New York, in Pennsylvania, and anywhere else), even though we know nothing else (and we ought to know a great deal more), that should not be sufficient to put safety engineers and accident-prevention people on the job to see that the hazards likely to produce falls are, as far as possible, eliminated from working places. A number of States have shown us that year after year the handling of materials and tools is the cause of the greatest single number of accidents. They cause more accidents than anything else. Now that is valuable evidence for safety people to busy themselves in seeing that that sort of condition, whatever it may be, is eliminated.

As to how we are going to get severity rates, I do not know. If we could get, even once a year, a statement from employers as to the number of employee hours worked, we could work out a severity rate once a year, which, though not so good as once a month, would at least be more than we have.

I do not mean to anticipate the forthcoming report of the American Standards Association in which it will discuss the difference between the cause of the accident and the cause of the injury. Commissioner Stewart referred to that in the May, 1921, number of the Monthly Labor Review, and Mr. Heinrich, of the Travelers, has said a great deal about it; but, as indicative of the point of view of State departments generally, I want to refer you to a statement in the Wisconsin Labor Statistics of September 15, 1930. Evidently they had heard of what was in the minds of this committee and they said in this issue:

> This bulletin reports an analysis of the cause of injury in 22,000 compensation cases. The objective agencies or circumstances which caused the injuries are recorded. In certain cases the cause of the injury is plainly the same as the cause of the accident which led to the injury; however, in most cases the cause of the accident is in fact undetermined.
>
> As a public agency, the industrial commission does not attempt to assign responsibility for accidents due to carelessness, inattention, and other subjective factors. It is held to be more important to determine the objective acts and circumstances involved as causes of injuries.

Wisconsin, as you know, uses a standard classification of causes adopted by this body some years ago, and Mr. Kearns is the author of a statement in the Ohio Industrial Commission Monitor for September, 1931, on this same point:

> Indicative of the steady development of progressive thought in safety work, the safety engineers have, at intervals during the past few years, challenged use of the phrase "cause of injuries" in quoting statistics. * * *
>
> Technically, their contention is sound and logical. Yet, from a statistical standpoint, the distinction raised seems really without a difference. So far as the assembling of statistics is concerned, the terms "accident" and "injury" are synonymous, since only the accidents causing injuries furnish a basis for the reports of the division. Undoubtedly there are numerous accidents which do not result in injuries but an accident reported to the industrial commission implies an injury; otherwise compensation would not be sought.
>
> The province of State agencies dealing with accidents and the resultant injuries, as ever recognized, is to deal broadly with the safety problem, disseminating safety thought and encouraging safety action, but leaving the solution of the fundamental causes of injuries to plant safety engineering, where, we believe, it properly belongs.

I do not believe that there is any State that will make adequate appropriations for an investigation on the spot to determine the cause of the accident as distinguished from the cause of the injury, and I am not saying that would not be a good thing to be done; it would be, but it seems to be, so far, lying outside the bounds of practicability. On the other hand, it seems to me this is not only practicable, but as a matter of fact I know it is being done. When, for example, a given type of injury is noted as being prevalent, either from the point of view of numbers or seriousness, a sample, so to speak—a group of such accidents small enough in number to be manageable but large enough to afford some indication of the trend—can be investigated on the spot.

I had a letter in the month of September from the director of our division of industrial hygiene which said:

> We are designing an accident-prevention series of pamphlets on the basis of causes, using the latest figure that can be obtained. Such publications as Bulletin 164 (that is our latest cause) are indispensable for our purpose; for example, in studying the electrical hazard we find a considerable number of fatalities of which 54 per cent are due to transmission wire. This fact fixes our attention on fatalities due to transmission wire and saves us a large amount of research. We then proceed to investigate these, knowing them to be a hazard in the electric industry.

We sent them the photostatic copies of the next 100 accident reports from the electric industry, and they do go out and investigate them on the spot and as soon after the accident as possible.

I submit that as a practical way for any State, and I am not saying that it will not be possible in all accidents to distinguish between the cause of the injury and cause of the accident. On that point I am from Missouri, and I am hoping that the report of this committee, which is soon to be made, will point out some practicable way in which that can be done.

So I conclude as I began, by saying: Accident statistics are not entirely satisfactory. They do not furnish enough data, and the practicable, feasible methods of improvement seem to be (1) more light as to causes; (2) more information as to number of employees, from which frequency rates may be determined; and (3) more information as to employee hours from which severity rates may be determined.

DISCUSSION

Chairman BLUNT. I am glad to be able to call on Mr. Frank P. Evans, of the Industrial Commission of Virginia, to open the discussion on Doctor Patton's paper.

Mr. EVANS (Virginia). I will confine myself to several points brought out by Doctor Patton. In the beginning I wish to agree with him in his answer to the three questions which are the topic. I wish to agree with him further by saying that the statistics that we now have can certainly be made capable of further utilization.

I wish to talk for a couple of minutes on one point on which Doctor Patton laid considerable emphasis, and that is the necessity for and usefulness of being able to get, in some fashion, man-hours.

In Virginia we do get man-hours for the manufacturing group. We send out reports based on man-hours—relation of lost time to such man-hours. We have been doing that for some three or four years. We started out in the fall of 1927. We had no law which would require employers to give us information from which we could secure man-hours, and in the beginning it was, therefore, done on the cooperative basis.

We found from the start that we could secure sufficient information to be able to rely on its accuracy, being able to get man-hours from 75 per cent of our employers in the manufacturing group. The following year, however, a provision was put in the law enabling us to get that information. We secure this information at either three or six month intervals, depending on the size or nature of the industry. We do not ask employers for man-hours, because, frankly, most of our smaller employers would scarcely know what we meant and

would have no record, but they have comparatively accurate records which enable them to give us the average number of employees during the period for which we ask the information, the total number of days of operation of the plant, and the average hours per day per employee, and from that we make up our man-hour records.

In connection with frequency we use only lost-time-accident records, and you can readily understand the reason for that. Plants have quite different policies in regard to accidents which result in no lost time. Some of them require the reporting of every accident regardless of how trivial it may be; others do not report any accidents except such as result in medical attention; others do not even report all of those; therefore we think the fairest basis in connection with frequency is lost-time accidents relating to man-hours.

Those reports, as I say, are made up at either three or six month intervals, depending on the size of the industry; in other words, they cover three or six months. By the use of those reports we have been able to secure rather good, and we might say in some cases very good, results. The reports we send out are only for a single industry; in other words, if we get up figures on the furniture-manufacturing industry, we send them to every employer in the furniture-manufacturing business. In addition to the average for the group, we include in the report, depending on the size of the group, a certain percentage of the total number, giving their individual plant frequency records, so that the employer can see where he stands in respect to the average and also where he stands in comparison with his competitor.

There have been instances, as I say, where we have gotten very good reporting and good reports from the use of this report; for instance, from the beginning, back in 1928, we commenced to get inquiries based on what was given in these reports. Employers would ask more about them, and once in a while they questioned the accuracy of the records, if they were particularly bad, and that made the contact. Sometimes we would write them, and sometimes we would go to the plant after that and explain the make-up of the report and the meaning of it; oftentimes we would take with us the record of that plant over the same period of time, or maybe covering a longer period of time.

Not only do we keep our records in the regular form, but we also keep the employer's records of lost time and no lost time under the employer's name. On one of these visits, we take such records with us and we can show the employer the causes, which Doctor Patton has mentioned are not always the cause of accidents, but the cause of injuries, and the type of cause, which, as Doctor Patton has further remarked, enables us to get at the high-cost group. We can give him any detail which we may think would enable him to get a starting point for any work.

With one plant, for example, its first report showed a frequency of 141 as the plant average; that was three years ago, and the last report we got out for that group, from the first of April until the last of June, showed a frequency of 6.5. The plant management told me personally that the reason for its getting interested in its problem was the suggestions made to it through this type of report.

I might say further that in Virginia we keep in our office a cost record of the insured group from the insurance company standpoint,

and we require every insurance company to render annually its risk experience, individual risk, showing not only the pay roll by classifications, but also the resulting rate premium and losses, every item detailed.

In this State there is no State insurance, as you know, Mr. Kearns. It has self-insurance and insured groups through private carriers. On the back of the reports we require the listing of all individual injuries, showing the date and cost, including medical attention in a separate item, and oftentimes because we have that information in our office, as well as the other information, we are in a much better position to get the interest of the employer. We work entirely through the employer, because the information we get that is charged against him we feel would leave us helpless in getting any results in accident-prevention work without the help of the employer.

Chairman BLUNT. I am glad to call on Mr. Maguire, of the Department of Labor and Industry of Pennsylvania, as the next speaker in this discussion.

Mr. MAGUIRE (Pennsylvania). Unfortunately, I was unable to secure a copy of Doctor Patton's paper in time to prepare a direct discussion of his paper. Accordingly, it is necessary for me to limit my discussion to a few observations in the nature of a reply to the three questions comprising the title of Doctor Patton's address.

Are accident statistics entirely satisfactory? Briefly, my answer to this is "not at all." In making the opening address of the Industrial Accident Prevention Conference held at Washington, D. C., in July, 1926, the then Secretary of Labor, Hon. James J. Davis, made the following statement: "We have no agency whatever entitled to answer with authority the question 'Are accidents on the increase, or are they declining?'" The report of the proceedings of that conference, published as Bulletin No. 428 of the United States Bureau of Labor Statistics, is replete with critical comment concerning the inadequacy of accident statistics. I will quote just a few of them.

Mr. James A. Hamilton, industrial commissioner of New York, stated:

"What now is the next general development needed in connection with safety work to carry it forward with greater effectiveness? What is it other than better knowledge of what we have accomplished, what we still have to do, and where we need to do it, in order to make sure that our efforts are being applied where the need is greatest and when applied are producing results. * * * Put in a word, we now need to advance another step in scientific method and have more accurate analyses of our problem and our results. * * * The only means of acquiring this modern kind of aid to our accident-prevention work is, of course, adequate accident statistics."

Dr. Leonard W. Hatch stated that, "Ten years ago the then United States Commissioner of Labor Statistics stated in a public address 'Industrial accident statistics for the United States do not exist' * * * and yet the present commissioner, if called upon to state the situation to-day, would have to say about the same thing as was said 10 years ago. Evidently, there is 'a problem' in this matter." Doctor Hatch then went on to ask: Do we need national accident statistics? Do we know how to get national figures? Why are national figures still lacking; and, finally, what shall we do about

it? I should like, if the time permitted, to read for you Doctor Hatch's masterful discussion of these questions. However, suffice it to say that in his opinion there is an indispensable need for national accident statistics for comprehensive comparisons of experience. His answer to the question, "Do we know how to get national figures?" may be summed up by saying that we probably know how to get them, but are not using our knowledge effectively. As to the lack of national figures, Doctor Hatch pointed out that the individual State is largely concerned in dealing with its own problem of accident statistics, that a plan of national accident statistics necessarily receives secondary consideration, and further that the particular needs of individual States and the peculiarities of State laws and procedures impede to a large extent interstate uniformity of accident statistics. In answering the question, "What is to be done about it?" Doctor Hatch suggests that the problem is a general one of education and that impressive propaganda is required to give any powerful impetus to the development of proper State and national statistics. As to the need of obtaining better national accident statistics, Doctor Hatch emphatically urged the cooperation of the State departments with the United States Department in the development of national accident rates based on State accident and employment records of individual concerns.

What was said at that conference relative to national accident statistics is nearly true of State accident statistics. Secretary Davis's statement that "We have no agency whatever entitled to answer with authority the question 'Are accidents on the increase, or are they declining'" applies with equal truth now, as it did at the time it was made, to both national and State statistics. Probably all of us can tell whether the number of reported accidents is increasing or decreasing from month to month, but few, if any, of us can tell whether the frequency of accidents is increasing or declining, or whether the severity of accidents is gaining or lessening.

Finally, then, elementary knowledge of what the actual trend in industrial safety is practically is not existent. The prime purpose of accident statistics is the prevention of accidents, and as Commissioner Hamilton so aptly stated, the next general development needed to carry accident-prevention work forward to greater effectiveness is a better knowledge of what we have accomplished, what we still have to do, where we need to do it, and what results we are achieving.

How can we improve them? The first step toward improving our accident statistics, both nationally and in the States, would be to have a uniform accident reporting law enacted in each State. On this point I should like to quote from Bulletin No. 496 of the United States Bureau of Labor Statistics, entitled, "Workmen's Compensation Legislation of the United States and Canada as of January 1, 1929. On page 21 of this report the statement is made:

"Nothing is more striking in connection with the subject of accident reporting than its lack of uniformity. * * * Only 26 States call for reports of all accidents, while 11 require reports of those causing disability of one day, or more than one day. Other periods prescribed are: Two or more days, Pennsylvania; one week, Georgia (or requiring medical, etc., aid) and Rhode Island; more than one week,

Illinois; 10 days, Colorado; and over two weeks, Alabama. In four States reports are to be made as directed or required by the authorities. The States whose compensation laws contain no provisions for reports of accidents have other laws on the subject, limited, however, to coal mines, except in Louisiana, which requires reports of accidents causing disability of two weeks or more where women and children are employed. In Tennessee, besides the reports by coal operators in the State fund, mine operators generally and employers in mills, factories, etc., must report, the former to the chief mine inspector and the latter to the division of workmen's compensation."

The second step toward the improvement of accident statistics nationally and between the States would be the adoption by each and every State of the uniform standards and definitions for accident statistics recommended by the committee on statistics and compensation insurance costs of this association. I do not know how many of the States which hold membership in this association have adopted the standards set up by this committee as outlined in Bulletin No. 276 of the United States Bureau of Labor Statistics. We, in Pennsylvania, I am frank to confess, have not adopted these standards in their entirety. Nevertheless, each and every State should adopt them, and we shall never have anything nearly approaching comparable accident statistics between the States until these standards are adopted in full by all States.

Doctor Patton, in his address, said he did not wish to anticipate the report of the committee on statistics now working on the revision of the accident-cause code. I suspect, however, that Doctor Patton did anticipate the report of that committee considerably and evidently knows a good bit about the way that committee is thinking.

It seems pertinent to interject at this point that certain sections of the standards for accident statistics, as recommended by this association in Bulletin No. 276, are now undergoing revision at the hands of a sectional committee of the American Standards Association, for which revision this association is one of the sponsors. When the revision is finally completed and the stamp of approval placed on it by the American Standards Association it behooves the representative of each State holding membership in this association to see to it that these standards are adopted in his State. In regard to that statement, I should like to emphasize that there is no use having a committee spend its time revising and revising codes for the States unless the States are willing to get back of that committee and put the recommendations of the association into effect.

Another step toward the improvement of accident statistics so as to provide the kind of information needed to carry forward safety work with greater effectiveness, as suggested by Mr. Hamilton at the Industrial Accident Prevention Conference in 1926, would be to compile records of the accident experience for individual concerns. At the meeting of this association in Wilmington, last year, I outlined the plan we are following in Pennsylvania to this end. I can safely venture the assertion from our brief experience that the records of accidents by individual concerns tell very definitely, "what is still to be done and where there is need to do it." It is true that we can not yet effectively measure the results of accident-prevention effort due to the lack of exposure records for these concerns. Nevertheless, we are attempting to remedy this deficiency.

If I may ask your indulgence for a few moments, I should like to refer to a tabulation we have just completed containing accident frequency and accident severity rates for a group of nearly 350 manufacturing establishments engaged in 51 branches of manufacturing activity in Pennsylvania. This tabulation, covering rates for the years 1929 and 1930, discloses that the accident frequency rate for this group of establishments was reduced from 18.97 in 1929 to 18.49 in 1930, a 2.5 per cent decrease. And the severity rate for this group of plants increased from a rate of 1.67 in 1929 to 1.73 in 1930, a 3.6 per cent increase. The records for these establishments covered an exposure of nearly 308,000,000 hours for the year 1930 as compared with an exposure of 371,000,000 hours in 1929 for identical plants. The highest accident frequency in 1930 was in the lumber industry, a rate of 38.19, and the lowest in the textile industry, a rate of 5.51. The highest severity in 1930 was in the transportation equipment group, a rate of 3.68, but in this instance the rate was abnormally high due to a disaster involving a number of deaths in one of the plants. The second highest severity rate was in the chemical products group, a rate of 2.50. The lowest severity rate in 1930 was in the textile products industry, a rate of 0.08.

A comparison of these rates with tabulations for corresponding industries published by the National Safety Council shows that the accident frequency rate for the Pennsylvania plants in 1929 was 17.9 per cent less than the national rate, and the Pennsylvania severity rate was 14.7 per cent less than the national figure. In 1930, however, the Pennsylvania frequency rate was 1.9 per cent higher than the national rate, but the Pennsylvania severity rate again was lower—18.8 per cent—than the national rate. We feel that this compilation of accident frequency and severity rates has provided some highly illuminating and useful information, and if any of you should be interested in the details of the tabulation, it will appear in the October, 1931, issue of the monthly bulletin of our department. We hope and expect to develop our compilations of rates of accident frequency and accident severity for Pennsylvania industries so that ultimately we shall have some measure of comparative accident frequency for each of the major industries in the State.

I should like to state that the exposure records used in these compilations are those that we obtain in connection with the reports sent monthly to manufacturing firms for the purpose of securing monthly data of employment and pay roll. They are, in my estimation, quite accurate, and while these rates as compiled represent only the rates for this group of establishments, the sample covered by our employment and pay-roll reports is approximately 30 per cent of the total manufacturing in the State and is a fairly representative cross section of manufacturing employment in the State.

Do they furnish enough data? This is more or less a mooted question. Some will say that there is enough accident data, but not data of the right kind. From one viewpoint the existing accident statistics do not furnish enough data. We are constantly receiving inquiries from safety engineers, physicians, trade associations, manufacturers of safety appliances, and others, asking for detailed information on accidents which we are frequently unable to supply. Of course, the thirst in some quarters for knowledge of details concerning all phases of accident statistics is insatiable. Nevertheless, in

numberless instances the additional data requested is required to serve some useful purpose, so that in my biased opinion the existing accident statistics do not furnish sufficient data, particularly with respect to industry, occupation, cause, and cost. On some occasions, I am prone to think that some of the compilations of accident data are compiled more for the sake of historical record than to serve a more useful purpose.

Basically, all accident statistics should be developed first with the thought of how they are to be used in accident prevention; and the test of usability should be applied to every compilation to prevent the wasteful assemblage of accident statistics of doubtful value. The best guide to useful statistics of accidents is the demand and need for accident-prevention purposes; and as the standards established by this association were developed primarily for the purpose of supplying information for accident-prevention purposes, the plan of statistics of this association provides a reasonably safe guide to the classes of accident statistics worth tabulating. This standard plan should be the minimum plan for accident statistics in each State. Additional data, of course, can be best provided in accordance with the requirements in each individual State.

I should like to discuss very briefly a few of the points mentioned by Doctor Patton in his address. First, I should like to congratulate him on his method of handling the information and conveying the information to the inspectors in his State. We considered originally a somewhat similar process of furnishing inspectors with copies of accident reports, but we thought that it would prove too costly a process. I can readily understand why Doctor Patton decided to limit his initial effort to the manufacturing industries since I understand that for that group alone it is necessary to make some 100,000 photostat copies of reports every year. Possibly that is an exaggerated figure, but the number is high up in the thousands and it is likely to prove a very costly means of doing it.

We feel that while we can not get the same information to the inspectors by simply giving them tabulated accident totals, we are giving them some information that they can use in a fairly economical and frugal manner. We do now give the inspectors a little additional information over that which we gave them last year—a more complete report on all fatal accidents and permanent disability accidents, the name of the injured person and age, and additional information of that character; in other words, a brief copy of the accident report.

You mentioned Mr. Fried's statement with regard to these things, with regard to his interpretation of the cause of injury as distinguished from the cause of accident, and I should like to state that Mr. Fried is a member of the subcommittee on classification of accident causes, and therefore is entirely familiar with the committee's intentions; but I wish to intimate, if I may speak for the committee, that we will certainly have a very reasonable definition of what an accident is, and also what we are attempting to get as to cause, whether it be cause of injury or cause of accident. It will not involve a series of complications which can not be dealt with effectively in the State.

Chairman BLUNT. Are there any questions to be asked of Doctor Patton?

Demands from outsiders, not from the department, as to data, are insatiable. We call it that. Certainly the refinements of data that are asked for are sometimes ridiculous. Only the day before coming to this convention the secretary of our Consumers' League asked me if it would not be possible for our compensation bureau and our inspection bureau, one or the other or both, to report to the Consumers' League, from the manufacturers' reports of accidents, the number of minors injured by machines who are graduates of technical schools. I do not know what the purpose was, but I have not yet replied to the letter. I think that is surely a refinement of data. Are there any questions or contributions on this subject from anyone?

Doctor PATTON. With reference to what Pennsylvania has been doing for two years and New York has been doing as to furnishing employers with the specific record of their accidents, you might say the employer knows it already, but he does not know it in the concrete sense he ought to know it.

I am reminded of the time when the inspection of mercantile establishments in New York State was extended to cover third-class cities—originally first-class cities, and then second-class, and then third-class—and the first time a given mercantile establishment in Niagara Falls was inspected the inspector said that the elevator would have to be made safe. The proprietor was indignant. He said, "I have been running this store for 25 years, and that elevator has been in use all that time and nobody has been hurt, and I don't see why it is necessary to cure a condition which has existed all this time without an accident."

The inspector said, "I know how you feel. My brother has et peas with a knife for 25 years and hasn't cut his throat yet."

One other point has not been brought up so far. I will admit I was very much surprised to find, on putting the two together, that the classifications of the I. A. I. A. B. C., as printed in Bulletin 276, are more nearly like the rating board's classifications than I had any idea they were. I think that the results of such a comparison would surprise anyone in this room who has not made it; in other words, the cry we have so often heard that State classifications are no good for the purpose of accident prevention is not borne out when you see those State classifications alongside of the classifications prepared by the rating board itself. In some cases our classification is more detailed than that of the rating board; in some cases, but not so many, the rating board's classification is even less detailed than the classifications now used in many of the States. In other words, while there are a good many things about it that puzzle me, I can not understand at all why anyone who is familiar with the rating-board classifications can argue that those, and those alone, are useful for rate-making purposes or accident-prevention purposes, because they are, as I say, much more nearly like State classifications than I believe the rating board people know; certainly much more nearly alike than I had any idea they were.

Chairman BLUNT. On the subject of Efforts for More Effective Regulations for Hazardous Electrical Equipment, we have on the program Mr. Charles H. Weeks, deputy commissioner of labor of New Jersey.

Efforts for More Effective Regulations for Hazardous Electrical Equipment

By CHARLES H. WEEKS, *Deputy Commissioner of Labor of New Jersey*

A brief review of the powers and actions and practices of the various accident-prevention boards and commissions of the several States shows that most of them have been given powers by the States, expressed or implied, to decide as to what is defective, dangerous wiring and to require that such dangerous conditions be corrected. The implication is pretty clear in most of these laws granting powers to the boards that they must know what kind of wiring and equipment is safe—that is, they must have a standard for safety in wiring and equipment. Only a few of the accident boards and commissions, however, operate under laws which distinctly state that they shall prepare codes, standards, regulations, or rules for safe electric wiring and equipment.

Those boards or commissions which operate under laws which require them to make rules for safe electric wiring and equipment have, of course, usually prepared more or less complete codes for safe wiring or have adopted national codes. Of these, I mention the interior wiring codes of Wisconsin, Pennsylvania, California, and Oregon as more or less complete. I mention also such fragmentary safety wiring codes as New Jersey's, covering grounding; Nebraska's, covering some features of interior wiring, etc. Then there are to be mentioned the State wiring codes adopted by other State commissions than those dealing specifically with industrial accidents. In North Carolina, for instance, the State insurance department has adopted the National Electrical Code and added a few further safeguards. The Insurance Department of Texas has taken similar action. The fire marshals of several States have adopted the National Electrical Code, usually adding some further safety precautions.

Finally, many States contain in various laws administered by them and in their regulations scattered electrical safety requirements. Oftentimes these are administered wholly or partly by the industrial accident boards and commissions. Such rules include those for safe types of equipment and wiring in theaters, dry-cleaning establishments, etc., usually covering places where fire and life hazards are high and records bad.

It becomes evident by even a short study that the various State boards are seriously in need of better and more uniform safety rules for electrical wiring and equipment. It is evident that only joint study and action through this body will accomplish this essential result. It is also clear that the present is the best time to undertake this joint study and uniform rule preparation, as this association is at the present time working on other safety programs. A good set of standard safety rules for electrical wiring and equipment, adopted in all the States, with such additions as may be found necessary in certain States and as experience from time to time indicates, will greatly strengthen the usefulness of our association in preventing fires and accidents.

There are some forces always at work to prevent the making of adequate safety standards and to prevent the adoption of such stand-

ards when available. This of itself is one of the best of reasons why our association should act to help in the making as well as in the administration of safety rules for electrical equipment.

A short time ago, through the efforts of certain members and certain friends, this association secured membership on the electrical committee of the National Fire Protection Association—the body which develops the National Electrical Code. A few years later other forces removed us from this membership. To-day, due to our further efforts, we are again being invited to join this electrical committee.

This association now has in regular operation six standing committees, known as executive, statistics, medical, safety, rehabilitation, and workmen's compensation legislation. These committees are performing vitally necessary functions. We lack any definite electrical committee, and this is becoming a very serious lack, as electrical applications are multiplying so rapidly, and this multiplicity, together with constant effort to reduce costs of equipment and wiring, are introducing more and more electrical hazards.

As the most effective means of making our representation of the public interest effective, both in electrical rule making and rule administration, I wish to offer the following proposition:

1. That this body designate two representatives and two alternates to serve on the electrical committee, National Fire Protection Association, and advise the electrical committee of our nominations and desire to participate fully and effectively; that these representatives and alternates come from different States, so as to secure all possible points of view and experience.

2. That this body form a committee of its electrical representatives, to include the four mentioned under (1) above, and at least five others, all from different States, to be known as the electrical committee of the International Association of Industrial Accident Boards and Commissions and to have the following general and special duties, in addition to such others as may be designated and assigned from time to time:

(*a*) To canvass all members and secure copies of electrical safety rules at present being enforced, used as a guide, or otherwise made use of.

(*b*) To assist the members on the electrical committee, National Fire Protection Association, to represent the wishes of this body in the work of that committee.

(*c*) To develop any needed further safety electrical rules beyond those of the present National Electrical Code to make wiring sufficiently safe in certain occupancies, etc.

(*d*) To assist Underwriters' Laboratories and other agencies in assuring that electrical equipment is safe when sold or used. This will include investigating sales-control methods which have been adopted in Canada and this country with success in promoting safety in purchased electrical materials.

(*e*) To prepare forms of regulations for members to consider for use in adopting and administering safety rules for electrical equipment.

(*f*) To serve as an advisory committee to which members having safety problems in electrical equipment can refer for advice.

(*g*) To keep in such touch with all trade organization electrical representatives as will assure reasonable understanding of their points of view.

(*h*) To arrange for constant constructive assistance to the International Association of Electrical Inspectors in their work of code development and code administration.

Representatives of this association have assisted in the preparing of a number of codes formulated by the American Standards Association which are in our opinion the last word in safety-code regulations. The principal codes we have assisted with are the mechanical-power transmission, power press, abrasive wheel, laundries, lighting, elevator, overhead traveling cranes, construction of walkways and platforms, grandstands, and others, and it is our opinion that the continuation of representatives of this association on all American Standards Association code-preparing committees would not only be of value to this association but also of great assistance to the American Standards Association.

I have made my paper as brief as possible in order not to consume any more time than is absolutely necessary and hope that the able representatives who are to discuss this paper will bring out many points of importance that I have failed to include. In closing, I wish to thank the association for permitting me to place before them the suggestions regarding the adoption of an electrical committee in this association.

DISCUSSION

[Mr. McShane made a motion that the recommendations in Mr. Weeks' paper be acted on by the executive committee, but at Mr. Stewart's suggestion that the matter be postponed until the end of the discussion, the motion was withdrawn.]

Chairman BLUNT. I will call on Mr. M. G. Lloyd, of the United States Bureau of Standards, who will discuss the subject.

Mr. LLOYD (Washington, D. C.). The applications of electric power in industry are continually expanding so that the problem of the safe use of electricity is becoming the problem of nearly all industries. Any attempt to lessen electrical casualties in industry and to lessen the electrical hazard is consequently one of far-reaching importance and one which should consequently claim a major share of the attention of all State authorities dealing with the problem of accident prevention.

The extent of electrical hazards is not widely appreciated. Everybody knows that a high-voltage shock may kill, but very few appear to realize that the same result may occur from a shock at the voltages used in our homes, hotels, stores, and industrial plants upon ordinary lighting and motor circuits.

In a report which I prepared last year for the National Safety Congress, it was shown that an incomplete canvass of the country revealed 107 fatalities which had occurred at low voltages during a period of a little more than a year. The classification of low voltage includes values up to 600 volts. A goodly proportion of the total number were reported as having occurred upon 110–120-volt circuits.

Many of the early fatalities on low-voltage circuits were found to be due to the existence of higher voltages upon such circuits originating from faulty insulation or crossed wires. It was assumed by many that contact with a low-voltage circuit could result fatally only when such a condition existed. We know now that this idea is a fallacy, and that not only is 110 volts sufficient to cause death but that many actual cases of the kind occur every year. This number appears to be increasing, due largely to the sale of portable electric lamps and electrical appliances which are equipped with substandard portable cord.

What is of importance in producing death by electrical shock is the amount of current which flows through the vital organs of the body rather than the applied voltage. The high resistance of the skin usually prevents sufficient current flowing through the body at low voltage to do harm. When the resistance of the skin is lowered, however, as occurs in the presence of moisture, there is quite likely to be sufficient current for a fatal shock. This is a fact which is not widely recognized by the general public; but what is of far more importance, it is not generally recognized by electrical workers and by the officials of electrical public utilities. The situation is one which must be kept in mind, however, by those who are attempting to correct hazardous conditions and those who are formulating the regulations which are to be followed in electrical installations.

I should like to believe that the opposition of electric light and power companies to adequate electrical regulations was due entirely to ignorance of the hazards, as that is a condition which we can hope to readily improve. One of the important safeguards in the installation of electrical equipment is the proper grounding of noncurrent-carrying parts, and the 1928 edition of the National Electrical Code went further than any previous edition in calling for this safeguard. With certain exceptions, it called for the grounding of all such parts, even including all portable appliances used in industrial establishments. The utility companies were so opposed to these regulations that they succeeded in preventing the approval of that edition by the American Standards Association, and in the following edition the rules were modified to make this requirement inapplicable in most cases where the voltage does not exceed 150 volts. In the 1931 edition of this code, which has recently been issued, there was inserted, upon my own motion, a requirement that this voltage limitation should not apply in continuously wet places.

Another claim which the managers of the utility companies have put forward is that the same requirements should not apply upon property owned by the utility company that would apply upon the premises of private concerns even though the physical conditions of hazard were identical. I can not see any justification for exposing one class of employees to the hazards that are considered unsafe for another class of equal skill and familiarity with the apparatus involved.

I have mentioned these matters only to emphasize the need for regulatory authorities to take an active part in the committees which formulate the regulations which go into the national codes, and at this time especially, into the codes which contain the electrical regulations. Mandatory electrical regulations may be state-wide or only

city-wide. Many of the cities of our country maintain electrical inspectors and regulate electrical installations in buildings of all kinds. Where there are State regulations they usually apply only to industrial and commercial establishments. The city codes are, in most instances, based upon the National Electrical Code or are identical with it. This is a code prepared and revised by a committee of the National Fire Protection Association and issued by the National Board of Fire Underwriters. It had its origin in an attempt to reduce fires from electrical causes and contains mainly rules for fire prevention, although many rules for prevention of casualties have been added in recent years.

The National Electrical Safety Code, published by the Bureau of Standards, is fundamentally a set of rules for casualty prevention and has had its principal mandatory application through its adoption by State authorities, many of these being the public service commissions which have jurisdiction over the construction of electric power companies. I am appending a list showing the adoption of the various parts of this code by State authorities.

A consolidation of these two codes would seem to offer all the regulations necessary for combating both fire and casualty hazards. Such a consolidation has been prepared periodically by the Bureau of Standards and is applied by law in the State of Oregon, whose code may be taken as a model for this purpose. In the States of California and Wisconsin similar codes covering both classes of hazard have been drawn up by local committees.

It is almost superfluous for me to state that I indorse the proposals which have been made by Mr. Weeks in his paper. Having myself for many years given special attention to electrical hazards and electrical regulations, I see the importance of State officials giving greater attention to this subject. It is encouraging to find that arrangements have been made for renewing the participation of your association in the work of the electrical committee of the National Fire Protection Association. It seems to me that the proposal to assist your representatives upon that committee through an internal committee of your own upon the same subject deserves support. I would further suggest the desirability of the electrical inspector of any State board or commission having one becoming a member of the International Association of Electrical Inspectors, where electrical problems are regularly discussed from the standpoint of regulatory action. Some of the States, such as North Carolina and Wisconsin, are already active in that organization, and it would be helpful both to the States and to the electrical inspectors to have the participation in their discussions by your representatives.

One item mentioned by Mr. Weeks has not yet received adequate attention in this country, although it is in a fair way to solution in Canada. I refer to the control of the sale of electrical materials and appliances for the purpose of preventing the use of hazardous articles. The city of Portland, Oreg., has taken a forward step in this matter, and through the licensing of dealers it has succeeded in preventing the sale in that city of hazardous electrical equipment. Most municipalities have been inhibited in such control through the inadequacy of the State laws under which they must exercise their regulatory powers, but if State authorities were given jurisdiction over this matter it would result in keeping much in-

ferior material off of the market. It is difficult for the inspector to regulate the use of portable appliances and portable cords which are used with them, because such items are brought into use after the original installation has been inspected, and it looks as if the regulation of this item could be secured only through some supervision of the material which is put on sale. I wish to stress the importance of State action to control this element, which contributes largely to the casualties upon low-voltage circuits. Such casualties occur mainly through the use of substandard materials or the improper use of materials which may be adequate for their intended application.

STATE ACTION RESPECTING NATIONAL ELECTRICAL SAFETY CODE.—The definitions appearing in section 1 of the National Electrical Safety Code have usually been adopted in connection with the use of the rules in the various parts of the code, and the action with reference to such definitions has not been separately listed in the following table:

States adopting or using part or all of National Electrical Safety Code

States	Section or part of code concerned	Edition of code used	Date in force
Using code verbatim or with slight modifications:			
Arizona	All	4	1928
Colorado	9	4	1917
Idaho	2	4	1927
Iowa	2	4	1927
Maine	1, 2, 3, 4, 9	4	1928
Maryland	All	4	1927
Montana	All construction	4	1917
New Jersey	All	4	1927
North Dakota	2	3	1920
Oklahoma	2	3	1921
Oregon	3, 9	4	1919
Do	1, 2, 4	4	1927
Pennsylvania	1, 3, 4, 9	2	1917
Utah	2	4	1928
Vermont	2	4	1929
Adopting rules based on code:			
California	1	2	1918
Do	2, 3, 9	3	1922
Connecticut	2 (joint use)	3	1922
Illinois	2	4	1927
Kansas	2	2	1917
Michigan	1, 2, 3, 4, 9	3	1926
Nevada	2	2	1920
Do	5	4	1928
Washington	3	3	1924
Wisconsin	1, 2, 3, 4, 9	3	1924
Crossing specifications based on code:			
Minnesota	2	4	1926
Nebraska	2	2	1919
North Carolina	2	3	1921
South Dakota	2	4	1926
Tennessee	2	3	1921
Using code as guide to practice:			
California	1	4	
Colorado	2	4	
Connecticut	2	4	
Indiana	2	4	
Missouri	2	4	
New York	2	4	
Virginia	2	4	
West Virginia	2	4	

Chairman BLUNT. And now our dean, Mr. Stewart, has the floor to discuss this and the previous papers.

Secretary STEWART. I believe that Mr. Weeks's method of having an organization committee to handle the American Standards Association code will give us men who will really handle the thing. It is perfectly true, as they claim, that men have been appointed from

the American Standards Association through the secretary—that was the only way to appoint them—and they have not always responded; they have not paid much attention to the meeting. They have not realized the importance of this thing and sometimes they have been too far away to attend.

I want to say that I agree with the whole scheme, and I want to repeat the motion that Mr. McShane made, with some modification, that a committee on American Standards Association codes be one of the permanent committees of this association. Mr. Weeks proposed an electric code committee. I will take that up first.

I repeat Mr. McShane's motion that a permanent committee of this association, with Charles H. Weeks as chairman, be appointed, the committee to be filled out by Charles H. Weeks in conjunction with the incoming executive committee; and if that carries, then I have another motion to propose.

[Mr. McShane seconded the motion.]

Chairman BLUNT. We have before us the motion of Mr. Stewart, seconded by Mr. McShane, on the recommendations of Mr. Weeks, plus the recommendation by Mr. Stewart that Mr. Weeks be chairman of such a committee. That is before the house.

Mr. BROWN (Idaho). Wasn't there an addition to that; that Mr. Weeks fill out the committee in conjunction with the incoming executive committee?

Chairman BLUNT. Among the recommendations is one that it is to be referred to the executive committee, and Mr. Stewart recommends that Mr. Weeks be chairman, but consulted by the executive committee.

Doctor HATCH (New York). Does Commissioner Stewart call this committee a committee on American Standards Association codes or a committee on industrial codes? It seems to me if the American Standards Association were to appoint a committee on some activity of this organization, we would think that was a little bit presuming. We can accomplish all we want to accomplish without labeling it that way. Maybe I am mistaken about that.

Secretary STEWART. This first committee, though, was an electrical code committee. I was going to follow it with an American Standards Association code committee, which you can amend and word as you please, but I want to make it two committees.

Doctor HATCH. On the code committee, what title?

Secretary STEWART. Wait till I get to it.

Doctor HATCH. I thought the motion was a permanent committee on American Standards Association codes.

Secretary STEWART. No; electrical code. I did not say that. I started to say American Standards Association code and then I said we would split it in two. First, let us have the electrical code committee, and if that passes, I will make a motion as to a committee on American Standards Association codes. This is an electrical code committee.

Chairman BLUNT. There is no place in Mr. Weeks's recommendation where the American Standards Association is mentioned. In one place it says something about cooperating with the National

Fire Protection Association and in another place with the International Association of Electrical Inspectors. It is to be an electrical code committee of this body to cooperate with anyone we wish.

Mr. MORLEY (Ontario). May I ask a question? Is there any special object in setting up an electrical code committee, based on what Doctor Lloyd told us and what I have believed for a great many years? I can not see any separation between safety work as we ordinarily understand it in industry and fire-prevention work in so far as it relates to human life and limb. I do not know whether the various committees of the International Association provide for subcommittees, but it would seem to me—and I discussed this privately with Mr. Weeks prior to this meeting—reasonable to consider at this time the desirability of having a splitting up of the safety committee into various sessions, and I submit that for consideration now; if necessary, as an amendment.

Chairman BLUNT. There is a motion before the house. If Mr. Morley cares to make an amendment to it, it is parliamentary to consider that.

Mr. MCSHANE (Utah). Is it a permanent committee or a special committee to deal with a special situation?

Secretary STEWART. It will be permanent.

[The motion that a permanent committee of the association, with Charles H. Weeks as chairman, be appointed, the committee to be filled out by Charles H. Weeks in conjunction with the incoming executive committee was put to a vote, and carried.]

Secretary STEWART. Now, I want another code committee. Perhaps Doctor Hatch is right and we do not want to call this a commitee on American Standards Association codes. I am not particular about that, but I do want another permanent committee on codes other than the electrical code committee. Doctor Hatch can name the committee if he would like to do that.

Doctor HATCH. I think that is a good idea.

[Mr. Stewart made a motion to have a committee on codes other than the electrical code committee, which was seconded, and carried.]

Chairman BLUNT. Does anyone else wish to discuss any motion?

Doctor STACK (Delaware). I was considering offering a resolution relative to a new organization recently organized in Chicago, known as the International Medico-Legal Association, but due to the fact that very few of us have had an opportunity to look into what this new association is doing, and after talking it over with some of my friends in the meeting this afternoon, we have reached the conclusion that it would be just as well to let this rest until after the new administration goes in, and then the International Medico-Legal Association can take up the matter of making some connection with this association through the executive committee. Does that meet with your approval, Mr. Stewart?

Secretary STEWART. That is all right.

Mr. KEARNS (Ohio). I should like to ask Doctor Hatch a question. I do not think I understood just under what authority the codes are made in New York City. Is it a special legislative authority granted to the industrial board, and do you, in the compilation or

formulation of those codes, call in representatives of the employers and the employees? I do not think I understood that clearly.

Doctor HATCH. The general situation in New York is substantially this: The legislature has declared it to be the policy of the State that all places where employees are working shall be made safe with respect to life and limb. It has set up that principle. Then it has said the industrial board may make rules and regulations to carry into effect this general principle and also provide detailed regulations over certain things in the statute. It is a delegation of legislative authority to the board to develop the necessary detail in the State regulations. Our codes are prepared, first of all, by the setting up by the industrial commission of an advisory committee, composed of employers, employees, and all sorts of technical men or specialists who know about the subject, to hold meetings and formulate a draft of a code dealing with the particular subject.

After that is done—after they arrive at what they think is the best thing to do—they submit that to the board, and the board is then required by law to advertise public hearings throughout the State on this code. We hold those public hearings and everyone is privileged to come in and make any criticism or suggestion he chooses to make. After that is done, the code is in the hands of the board for final consideration and adoption. When adopted by the board, it has the force of law and is enforced as the statute law is. Does that answer your question?

Mr. KEARNS. Yes; it does. I thought your plan was similar to that in Ohio. Our board is also authorized to adopt such regulations and requirements as in its opinion are necessary for the protection of the life, limb, health, and welfare of industrial workers, and our plan is, of course, a general advisory board composed of an equal representation of employers and employees, who in turn appoint subcommittees, which are for the most part composed of equal representation of employers and employees, and in all cases of men thoroughly familiar with the subject they are going to handle. They, in turn, hold public meetings or hearings on these codes throughout the industrial centers of the State, and then return the codes to the industrial commission. If satisfactory to it, the codes are then adopted and issued as a general order, having the force and effect of law.

In Ohio we are fortunate, too, in having an amendment to our workmen's compensation law made a few years ago which provides that for any accident or injury occurring as a result of the failure of the employer to comply with any of these specific regulations, either adopted by the industrial commission or enacted by the legislature, he is subject to penalties of from 15 to 50 per cent over and above the normal compensation allowed by law. This is, of course, an additional incentive for compliance with the code, and I think I can say that it has not in any way retarded the work of the code or interferred with the splendid cooperation that the employers of our State have given to the industrial commission in the formulation and adoption of these specific codes of requirements.

[Meeting adjourned.]

Chairman, Parke P. Deans, President I. A. I. A. B. C.

President DEANS. Mr. Matt H. Allen was allotted the subject which we are now to discuss, and it is with a great deal of sorrow, because I believe that Matt Allen won a place in the hearts of all of us at the Wilmington convention, that I have to report that Mr. Allen recently suffered a serious accident. I am glad to say, however, that his coworkers report that they are very hopeful of a complete recovery.

When we assigned Major Allen this particular subject we knew nothing of this occurrence. On his sick bed, not wanting to disappoint us, he designated Mr. Root, secretary of the North Carolina Commission, to prepare this paper, which is, Procedure for Securing Valid Election by those Exempted from Act.

[Mr. Root presented Mr. Allen's regrets that he was unable to be present and his greetings.]

Procedure for Securing Valid Election by Those Exempted from Act

By JOHN C. ROOT, *Chief Claims Examiner North Carolina Industrial Commission*

To those who are administering a "compulsory" act, the question suggested above must necessarily appear to relate to a wholly abstract proposition. Most of you, however, are, like the North Carolina Commission, working under an "elective" law, and have doubtless given the question serious consideration. Inasmuch as our North Carolina act has been in effect for only a little more than two years, our commissioners have been too busy with the details of organization and problems of administration involved in claims arising under our act to do more than casually consider the subject. What I shall say, therefore, should not be understood as a declaration of the policy and procedure either adopted or approved by our commission.

The subject forbids a discussion of the attitude a commission should assume toward those definitely excluded from the operation of the law. It relates solely to matters of policy and procedure in relation to the advisability and practicability of propagandist work initiated by the commission and directed to those now exempted, but upon whom the law has conferred the privilege of waiving their exemption. My own State presents an ideal field for work of this kind. Under our act, employers of less than five persons are exempt, and their exemption extends to their employees. This exemption may be waived only if the employer and those who work for him jointly elect to do so. It has been estimated that approximately three-fourths of the employers and one-third of the employees operating and working in the State of North Carolina have not been affected

by the workmen's compensation act. It may be argued that, with respect to them, the industrial commission should not be concerned; that the commission's responsibility does not extend beyond that incident to the adjudication of claims arising under the act; that it can not with propriety undertake to influence those now beyond its jurisdiction in respect to their attitude toward any law, least of all a law which the commission itself is required to administer. The apparent logic of such an argument will naturally appeal to any who may conceive the obligations of public office to consist merely of the perfunctory performance of statutory duties. Too, there may be those whose prospects for future public service are to be determined by the extent to which their present activities conform to the generally accepted code of political expediency. That any accident board or commission would be motivated by such influences, I do not believe. Unlike most administrative bodies it is dealing with humanitarian principles and economic problems. Out of the former should come the inspiration, and from the latter should emerge the vehicle, for carrying the philosophy of workmen's compensation to those who have not by statute been compelled to accept it. Herein lies the justification for a propagandist policy on the part of a commission.

We come now to the question of procedure. I am persuaded that, however much a commission may be inspired by the social aspects which characterize the ultimate universality of the application of the compensation idea, it must curb its zeal so as to avoid even the appearance of crusading. We are living in a time when the reformer is regarded with suspicion, even by those whom he would honestly endeavor to aid. This is but a manifestation of the same conservative spirit which has also developed a better understanding between workmen and those for whom they work. Recognized leaders in each group have learned that the economic welfare of each is inextricably interwoven with that of the other. Although as yet not fully envisaged, the fact of mutuality of interest has been recognized. No longer is every proposal from one group regarded by the other as a challenge. I would propose, therefore, that a commission adopt a procedure through which it first reach the employer, and through him those who work for him.

The commission should have a list of all employers not operating under the act. Such a list may be easily compiled from the records available in the several State departments. In my own State the secretary of state is required to keep a record of all corporations, domestic and foreign, chartered or authorized to do business in the State. The commissioner of labor has a record of all employers engaged in the principal branches of industry. The commissioner of revenue records the names of those who have paid privilege taxes. Names assembled from these several sources can be alphabetically arranged and then checked against the commission's record of coverage. The result would be a list to which the commission should mail a monthly bulletin designed to create in the reader an appreciation of the advantages to be gained by operating under the act. I have observed that too often the employer looks upon his compensation-insurance policy as evidence only of compulsory beneficence. I have likewise observed that he can be made to see

that that same policy protects his business. In the literature distributed by it a commission can make good use of the fact that usually the man who employs only a few men operates on very limited capital, all of which may be lost in a common-law action arising out of a single serious injury to an employee, the result being insolvency or bankruptcy for himself and unemployment for those who are dependent upon his business for their weekly wage. The employer can also be made to appreciate the importance of his business as a part of the social structure. I would have him see in himself the means of assuring employment to those who must work, and of assuring them protection against pauperism or charity when incapacitated in consequence of injury arising out of their work. In other words, I would endeavor to picture the compensation law as affording him an opportunity to protect his own resources and at the same time discharge in part his social obligation to those who are contributing toward the permanency and success of his business.

A commission should sponsor an aggressive state-wide safety program in which the interest of these employers would be enlisted. I know of no reason why a commission, or insurance company, for that matter, should restrict its safety work to those who are operating under the act. Safety education must, of course, be carried to the employer's plant. I believe, however, that in reaching those now exempted the better plan is first to secure their attendance at regional safety meetings, and at an annual state-wide conference, where there should be a section with a program especially designed for the purpose of presenting the benefits to be derived from operating under the act. Statistics show that in the small establishments—those having less than 100 employees—the severity rate is 60 per cent above the general average, while the larger companies have a rate of 6 per cent below. Certainly this unnecessary loss in the smaller plants is a burden which the State and the consumer are now carrying. Safety education will in part relieve this burden. Compensation will distribute it, and at the same time give to the man working in a small plant the same measure of protection now secured to those working for larger employers. Someone has well said that the laws of humanity and of the State should apply to the smaller as well as the larger plant. The procedure I have suggested is offered as a means of securing the uniform application of the workmen's compensation law.

DISCUSSION

President DEANS. We will now hear from Mr. Joel Brown, of the Industrial Accident Board of Idaho.

Mr. BROWN (Idaho). As the paper did not reach me until it was handed me to-night, I have had no opportunity whatever to review the excellent paper to which we have just been listening, but it was read so distinctly and so emphatically that I think I gathered quite well its contents and wish to commend it most highly.

To me the method suggested was a matter of propaganda to get the benefits of the workmen's compensation law before the people

who would come under it, and it seemed to me it would be exceedingly beneficial.

When I received the announcement that I was to review the paper I made some investigation concerning the problem as it is before us. Living as I do in a State where we have the compulsory act and where we recognize that if one man is working alone and gets hurt he is just as badly hurt as if there were a hundred working with him, and he gets his compensation just as if he were one of a hundred, I was somewhat confused when, in going over the laws of the several States that have workmen's compensation acts, I discovered that most of the States had very peculiar elective laws. In some of them the employers can elect to come under the law and the employee automatically comes under, and in some the employer must post a notice and then send a copy of that notice, properly authenticated, to the commissioner. If the employees want to come under, some of them may do so by notifying the employer; others by notifying the commission; and then, if they want to get out, more red tape than that is necessary. Some, if they want to get out, can do so in cold weather and some in hot weather. I do not know that that is under the law, but I want to know. Some, if they want to get out, must do so 10 days before January 1 or 31, and others must do so before the 31st of July.

There are some very peculiar things in the several State laws. When I got through going over that literature, I was reminded of our fathers who, here in this historic section of the United States of America, after Patrick Henry said "Give me liberty or give me death," had to deal with the question of getting all the States together in the form of a confederation. This confederation worked very well for a while, but as it went on it showed many defects, and immediately after the Revolutionary War conventions of the several States, called to meet for the purpose of revising the Articles of Confederation, were held. Immediately those people, headed by the great Washington, scrapped the whole thing and gave to us the Constitution of the United States, under which we live to-day and for which we thank God.

I wonder if it might not be a good idea if this matter of getting the people to come under the law who are exempted or who are accepted only by election were referred to our committee on legislation, and that matter approached from the legislative side rather than from an attempt to get the people to take the act as it is now. I am impressed that that is the proper process, since at the present time, after the several workmen's compensation laws have been enforced, we have discovered that there are so many flaws. Those people who are not under the law know that. The employees know it. The employers know it. And it occurs to me that if we can provide some remedy in legislation to remove some of these features, both the employer and the employee will be more likely to say, "We want to be under the law."

That seems to be difficult, from the history of our association. From its inception we have been talking uniformity of law, and we are no nearer uniformity now than we were in the beginning. It is demonstrated at every one of our sessions that when we get up

to make a speech we very soon drift into the custom of instructing the members of the association of the superiority of the law of the State from which we come.

I do not want to do that; however, I am convinced that if we are not able to get a law that all the States will accept and make uniform, there are many matters in the several laws that could be taken up individually in the several States and made better. Take, for instance, some of the things that are, it seems to me, outgrown, such as the words "hazard" and "extra hazard" in many of our laws. Only those industries that are classed as hazardous or extrahazardous come under the law. Perhaps in the days when we started the idea that might have been well. With that we excluded domestic servants. We have come to the point where we recognize that at the present time the man who runs a sawmill is not confronted with many more hazards than the housewife who has a number of servants.

This afternoon we talked about the hazardous matter of electrical appliances, and you remember it was suggested that there be some supervision over the sellers of appliances that went into the homes. Think of the average home at the present day. All of our homes are filled with electric appliances, and the woman who has to work in the home comes in contact with that very hazardous condition. Moreover, we have the habit now of having our floors as smooth as glass and the rugs over them smoother than glass, and the woman who attempts to get around in the home, here and there, is in a very hazardous position.

We say that falls are conducive to the largest number of accidents, and yet the climbing of chairs and stools and ladders that a woman has to do about the home is conducive to falls. Our safety statistics put the hazards of the home to-day next to the hazards in the highway, and yet we exclude them and say they can not come under the law.

One of our most emiment physicians and surgeons was in our office some time ago, and he said, "I have just discovered something that seems to me to be a damned error on the part of our legislation." We asked what that might be, and he said, "You exclude household and domestic servants."

"Yes," I said, "but you can elect to come under the law."

"I can! Show me that. Let me sign on the dotted line."

He took out insurance immediately, and in speaking about the matter he called attention to just these things I am speaking about. Why should we exempt that hazardous employment and yet consider these things hazardous in sawmills and mines and threshing machines? I see no difference.

Agriculture largely comes under the same indictment. When we hooked up "Old Dobbin" to the wagon or the old-fashioned plow perhaps agriculture was not so hazardous, but to-day the machinery on the farm, plus the mule, seems to be about as hazardous as when a fellow fools with a buzz saw in a sawmill. I am of the opinion that if propaganda for the matter of legislation were carried on, many of these now excluded matters would be included, but until that can be done, I am convinced, from some difficulties that we have had,

that it is very beneficial to approach those who desire to come under the law, pointing out to them how they may do so.

If a farmer should come to the commission and say, "I want to elect to come under the law," and sign a form of election—just that and nothing more—and file the form with the commission, I am not sure as to whether he could get it or not.

I believe that the commissioners in each of the several States should see that there are proper forms of election presented, so employers and employees may elect to come under the law if they desire, and also that there is a proper regulation as to how long they will be under the law, as to how they may get out, and how it may be explained to them that they can. These forms should be arranged to conform specifically with the laws of the State which gets out the form.

California has a very fine arrangement in that respect; so have Minnesota and some of the others; but many of the States have been negligent. I noticed, in looking up some of the States as to the matter of cases that have gone to the courts, that there has been some litigation concerning this matter which has gone to the supreme court of the State.

So I would advise, first, that the suggestions of this excellent paper be followed up; and, second, that we refer the matter to our legislative committee and ask it to use its influence to see that there is such legislation in the separate States as will remedy this; third, that those who have electives (and we have in our State)—agricultural, domestic, charitable, casual, and all that—provide a proper form for such employers and employees to come under, with the distinct understanding as to how they may get out, in order that the matter may be conducted in a proper way.

President DEANS. The next question is one that I consider of great importance to the industrial commissioners of the United States. I do not know of one that should receive the attention of all the commissioners more than this one. It is now my pleasing duty to present to this association the most distinguished woman in the United States, our coworker, Miss Frances Perkins, of New York.

Miss PERKINS (New York). I seem to remember that this association has discussed this same subject in other years and perhaps with more heat than light on some occasions. Of course, it is in its very essence a controversial subject upon which we are bound to disagree, and so it occurred to me, when our president and Doctor Stewart asked me to discuss this particular matter at this particular meeting of the convention, that it would be a good thing to attempt to get some new and perhaps valid information on the subject as to how great a problem this whole matter of waiving the rights to compensation has become in the United States of America, in order that we might see whether we were just frightened by something which had no real significance, or whether it was a problem with which we might have to deal seriously in the next few years.

So I was obliged to seek for help and information in regard to these items. All the information in the paper I am about to read was assembled and prepared for me by Doctor Patton, of the department of labor.

In thinking of the subject, however, I think we have to realize that there has been a growing agitation about the subject in some States for an extension of the waiver principle, particularly when men are partly ill or partly disabled, or some preexisting conditions exist—either preexisting illness or injury—there is a rather unscientific and just casual belief that these people are more subject to serious results from a slight accident than is the average person.

This class of accidents—the exacerbation of preexisting conditions by a slight injury—has been brought to light first, by the close analysis of the losses due to accident on the part of self-insured employers, and more and more, I think, by the growing practice of a close analysis of the causes of the losses in industrial accidents through the many individual merit-rating systems of the stock and mutual insurance companies. Whether that is a wise arrangement or not, we can not discuss it to-night.

I think, philosophically speaking, we made a mistake in America when we embarked on the merit-rating system. It was done with perfectly good intentions, in the hope of incentive to accident prevention, and no one realized the peculiar dilemma in which it would place us after a number of years, for in the analysis of it the individual employer is led to focus on the cash losses and lose sight of the absence of frequency in his analysis, and frequently of the incidental losses which are even more important to him than the cash losses—the incidental losses due to the interruption and interference with his whole scheme of production.

The average American business man—the great American business man, as we sometimes like to call him—has his own criteria of what constitutes statistical data, and sometimes comes to very strange and far-reaching conclusions on the basis of some one case of a slight injury to a man with varicose veins resulting in the loss of a leg or a very long disability, and, jumping to that conclusion, he has no doubts whatever as to the desirability of preaching some doctrine which will set aside the necessity of paying claims which arise out of some such circumstance.

In discussing this whole matter again, we remind ourselves once more that, after all, the whole purpose of these compensation laws was an attempt to spread the cost of individual misfortune as widely as possible, to socialize it, to circulate it, if it was possible, to make every human being in the community contribute to the cost of that individual misfortune, if some such way could be devised, through the utilization of the insurance principle, to have it sound. To have it sound we must take the sour with the sweet.

The recent habit of American business, this tremendous seeking for minute items of prospective advantage, has been one of the causes for the analysis of this particular class of losses and the effort to shift the burden of those losses on to some other fellow and so gain a slight competitive advantage. This has been what has been philosophically back of the theory that it is unsafe from the point of view of high insurance losses to employ men who have a hernia, a heart case, or some other physical disability.

Now then, to examine, if we may, what is the size of the problem.

Should an Employee Be Permitted at the Inception of His Employment, or at Any Subsequent Time, to Waive His Rights Under the Compensation Act?

By FRANCES PERKINS, *Industrial Commissioner New York State Department of Labor*

This subject was discussed at some length at the Wilmington convention last year. It was quite evident that a strong diversity of opinion existed as to waivers. Probably, this diversity will not be entirely removed at this convention.

It was also quite apparent last year that little concrete knowledge was available as to the actual extent to which waivers were permitted. Obviously, more light was needed as to existing practices and their results.

Where Are Waivers Permitted?

To secure information, Secretary Stewart wrote to the compensation jurisdiction in the United States and Canada the following letter:

At the Wilmington convention for the first time, so far as I remember it, the subject of the waiver of rights under the workmen's compensation law by defective workmen was brought into the discussion.

In order to be able to state in what States and to what extent and under what conditions the workmen's compensation boards recognize a waiver of rights, you are earnestly requested to answer the following questions:

1. Does your board permit a waiver of rights under the workmen's compensation law?
2. If so, under what conditions is this waiver allowed?
3. How general is the practice in your State;
4. If you have actual figures as to the number of cases of such waiver please let me have them, together with any other available information on the subject.

Please give this your very earliest attention. An addressed envelope which requires no postage is inclosed for your convenience in replying.

Through the courtesy of Secretary Stewart, replies from 35 States, answering his request, and from seven Canadian Provinces (Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, and Quebec), have been made available to me. In addition, information as to waivers in the remaining States (Louisiana, Maryland, Nebraska, New Mexico, South Dakota, Vermont, and Wisconsin) has been received from Bulletin No. 496 of the United States Bureau of Labor Statistics.

From the Commonwealth Fund, which has been making investigation as to the workings of the compensation laws in a number of States, information has been received as to waivers in Massachusetts and Wisconsin, and some further data on Connecticut.

Additional data as to Connecticut and Massachusetts were also made available through inquiries made by a special representative of the United States Bureau of Labor Statistics.

From the information at my disposal waivers are permitted by the terms of the compensation laws in four States only,[1] and to a limited extent in these. None of the Canadian Provinces permit waivers.

[1] Maryland also adopted a waiver law, effective June 1, 1931.

They are not permitted in Alaska, District of Columbia, or Porto Rico.

It would seem from the foregoing that the waiver question is largely an academic one, and provides no cause either for alarm on the part of opponents or congratulations by supporters. Before entering discussion of waivers in the four States where it is permitted to a limited degree, another widespread condition exists which should be considered in connection with waivers. I refer to the privilege, or power, of employers and employees, to reject the application of the compensation laws altogether.

Reasons for Waivers

The argument for waivers is based upon the ground that a worker handicapped by existing disease or disability will not be hired unless he can secure his employer against payment of compensation in the event of injury. The proponents of the waiver system do not go further, however, than to assert that compensation should be waived only for such injury as may be caused, or contributed to, by the pre-existing disease or disability. They do not propose that a worker who receives an injury in no way occasioned or contributed to by his existing condition shall go without compensation for such injury.

And yet it seems that in 31 of our States,[2] the compensation laws are elective and that an employee may, by filing proper notice, elect to place himself entirely out of the compensation law. This is waiver with a vengeance. It is far more serious than a waiver for a particular disability, and opens the way to nullification of the compensation principle.

In all of the Canadian Provinces the compensation laws are compulsory and waivers are forbidden.

As an illustration, a statement from a member of the Arizona Industrial Commission is as follows: In that State, the law is compulsory upon employers, but employees may reject it.

> The Arizona compensation law provides that any workman may reject the law prior to injury.
>
> As a condition precedent to employment several employers have insisted their employees reject this beneficial law. This is not done because the workmen are in some way physically defective, but for no other reason than to permit the employer to avoid having to carry compensation insurance. With the exception of three employers who have large properties, for the most part the employers who have forced their employees to reject have few assets, and if an employee was seriously injured and by reason of the injury was able to obtain a judgment in a civil action, there would not be sufficient property to meet the judgment. It is a deplorable fact that there are such employers. The extent of this practice may be appreciated from the number of rejections filed.
>
> During seven years, 1925–1931 to date, there have been 1,153 rejections filed. Of this number 186 are from men who did not desire to come under the law for some reason of their own, 967 employees have been forced to reject the law to obtain employment, and in no instance do I know of a case where this was forced on the employee because the employee was in some way physically defective, the only reason being a desire to escape the necessity of paying a premium for insurance.

[2] These are as follows: Alabama, Colorado, Connecticut, Delaware, Georgia, Indiana (but compulsory as to coal mining), Iowa, Kansas Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Vermont, Virginia, and West Virginia.

I would be pleased to hear from you on the above subject. Any suggestion that would correct the above practice and not take away the workman's right to reject, would be appreciated.

In Georgia an official statement reads:

Referring to your favor of February 21 with reference to whether or not the commission permits a waiver of rights under the workmen's compensation act, I beg to advise that we have only had one such question presented to us. A linotype operator in Augusta could not obtain employment because of the fact that he was afflicted with epilepsy. There were employers willing to give him work provided they could secure a waiver of rights. Of course, we could not grant such a waiver but we did suggest that this afflicted printer reject the compensation act, which he did, and was able to secure employment. Of course, it would be necessary for him in every case of a new employer to make a similar rejection. We have had but one rejection. We do not know whether he is still being employed by the same employer or what has become of him.

Illinois, with a compulsory law, save for "excepted employments" writes:

I am unable to furnish you at this time with actual figures as to the number of cases of such waiver. However, such cases are exceedingly rare and practically all of them are preexisting hernia cases where the employer requires such a waiver from the employee before giving him employment.

Indiana, with a compulsory law for coal mining only and elective as to other industries, reports:

We are unable to furnish the number of employers and employees who have rejected the act, but the proportion is very small as compared with the number of employees and employers in the State who are automatically placed under the provisions of the workmen's compensation act.

A number of States with elective laws report only limited resort to nonelection by employees. Thus, Maine estimates "about a dozen instances during the past 15 years." Iowa states "This provision is exercised very rarely. I am of the opinion that a number much less than 100 would cover the entire list during the past 15 years." Texas reports, "The writer, however, has no direct knowledge of this right ever having been exercised."

Minnesota, with an elective law, reports:

In answer to inquiries Nos. 3 and 4, our records indicate an increase from 911 such elections June 30, 1928, to aproximately 1,345 last June 30. These elections not to be bound by employees are not accurate inasmuch as they do not indicate the present number of employees that have elected not to be bound, because such election would apply only to that particular contract of employment existing at that time and not to subsequent employment or reemployment. It is getting to be quite well-settled practice for corporation executives to file such elections, which may account for some increase.

In New Jersey, with complete coverage of all occupations, waivers are specifically barred. The law is elective, however, and the report from New Jersey, after quoting the nonwaiver provisions of the act, states:

Consequently, no waiver relative to defective workmen has ever been permitted in this State. From time to time an inquiry relative to this question comes to this office but we have been obliged to advise the writer that the only legal means of avoiding obligation under the elective compensation provisions of our act is to serve notice upon the employee for the purpose of placing him under the legal liability section of the employer's liability law.

Michigan reports:

There is no provision in the Michigan workmen's compensation law by which an employee can waive any of his rights under the act, but an employee may

elect not to be subject to the act by filing a written notice to that effect with his employer when he entered into his contract of hire.

The situation revealed by the foregoing statements goes far to offset the statements made by many States that no waivers are permitted. For example, Kentucky reports that "The Kentucky workmen's compensation board does not permit a waiver of rights under the workmen's compensation law." Oregon states, "The commission does not permit, nor does the law allow, a waiver of rights under the workmen's compensation law." Pennsylvania, Tennessee, and others report similarly. But in States, such as these, with elective laws, the employer does have it in his power to force nonacceptance of the law as a condition of securing employment. Statistical information as to the actual extent of such nonelection by employees is only fragmentary.

Physical Examinations

It is probable that passage of workmen's compensation acts stimulated employers to pay greater attention than formerly to the physical conditions of applicants for employment. Every worker placed on the pay rolls becomes a potential claimant for compensation benefits. The prevailing American practice of giving credits on insurance premiums for favorable accident experience provides an incentive for employers to refuse employment to workers, handicapped either by disease or disability. This would seem to apply with even greater force to self-insurers since the gain to them is even more direct than in the case of company insured employers.

It is, of course, true that in precompensation days there was an economic gain in the prevention of accidents. But this did not stand out in such bold relief. The careful studies by Mr. H. W. Heinrich, reported by him at Wilmington last year, and elsewhere, as to the incidental costs due to accidents (such as loss of production, lost time of fellow workers, damage to machinery, and other items) had not then been made. In the main, the probability of jury verdicts for damages and the expense involved in maintenance of legal staffs to defend damage suits constituted, or were thought to constitute, the chief cost to the employer of accidents. The prospect for payment of damages was reduced by the fact that the burden of proof rested upon the injured worker, who had three formidable hurdles to encounter in order to establish his claim. These three hurdles were freedom from contributory negligence, the fellow-servant doctrine, and the assumption of risk. We are still near enough those days so that mention of these employers' defenses is sufficient without description of them. With these defenses facing him, a worker with a physical handicap existing on entrance into employment had small chance of financial recovery in the event of accident, since he was presumed to have assumed the risk of employment.

The crushing burden imposed upon the worker by the provisions of the common law (modified to some extent in some jurisdictions) was largely responsible for the origin and development of workmen's compensation statutes. If, now, the employer is to be permitted to require applicants to waive compensation rights as a condition of securing or of retaining employment, then, to some extent, the very evil which compensation laws were designed to correct is reinstated.

States Where Waivers Are Granted

Ohio

The information at my disposal indicates, as already stated, that four States grant waivers in greater or lesser degree. These are Connecticut, Massachusetts, Ohio, and Wisconsin.

Ohio is barely in the picture, however, so far as waivers are concerned. One section of the Ohio law permits a blind worker to waive compensation for such injury or disability as may be directly caused by or due to his blindness. A report from that State indicates that:

> The Industrial Commission of Ohio may adopt and enforce rules governing the employment of such persons and the inspection of their places of employment. That section is to enable the employer to place unemployed persons who are blind and relieves him from hazards of another accident. We have several such people working in Ohio plants—placed there by the rehabilitation service. That is the only exception under the Ohio law and it was done from a humanitarian point of view.

Wisconsin

In Wisconsin, waivers or nonelections by employees for physical defects were originally permitted. In 1925, the law was amended so as to permit partial nonelection on account of blindness or epilepsy. From 1926 to 1931 (fiscal years), there were 98 waivers (nonelections) by employees. This excluded members of partnerships, executive officers of corporations, and border-line cases of employees and independent contractors, but includes all waivers on account of physical defects. Of the 98 waivers, 84 were for epilepsy, 6 for blindness, and 8 for "other physical defects." The largest number granted in any one year was 24 in 1928–29, and the smallest number was 8 in 1927–28.

By chapter 87, Laws of 1931, effective May 8, 1931, the Wisconsin act was made compulsory upon employers, and waivers (nonelections) are permissible for blindness and epilepsy, but not for any other physical defect. The following extract from a thesis by Mr. A. J. Altmeyer, secretary of the Wisconsin Industrial Commission, as to waivers in Wisconsin throws light upon the relatively small number of waivers in that State:

> The reason the number of employees' nonelections is small is because the commission has frankly discouraged employers from asking their employees to nonelect. Moreover, in 1925, the legislature passed an amendment providing that, except in the case of epileptics and blind persons, "any nonelection by an employee which was procured by his employer as a condition of employment or by solicitation, coercion or fraud shall be void." This amendment largely removed the incentive for employees to obtain nonelections.

There is a suggestion in the last sentence of the above-quoted statement that, prior to 1925, everything was not as it should have been with regard to nonelections, and that employers had, perhaps, imposed the requirement of nonelection "as a condition of employment." Information as to waivers prior to 1925 is not available.

Massachusetts

In Massachusetts, section 46 of its law was amended, effective July 25, 1927, to read:

> No agreement by any employee to waive his rights to compensation shall be valid, but an employee who is for any reason peculiarly susceptible to injury or who is peculiarly likely to become permanently or totally incapacitated by an injury may, at the discretion of the department, and with its written approval within one month of the beginning of his employment, waive his rights to compensation under sections 34, 35, and 36, or any of them.

Waivers in Massachusetts do not affect the compensation rights of dependents of a worker who receives a fatal injury. Applications must be filed within the first month of employment.

The procedure to secure a waiver in Massachusetts is that application must be made on a prescribed form, having spaces for name and address of the workman, age, marital condition, number in family, names of dependents, present trade of applicant, whether he has any other occupation, approximate time worked at each trade or occupation, place of residence for last five years, names of employers in last five years, condition which renders him susceptible to injury or likely to become permanently incapacitated, and the number of places and names of employers who have refused him work because of his condition.

After signing the application, usually at the department offices, examination by a competent physician follows. A certificate of findings as to applicant's disabilities, with description of disabilities discovered, is made by the examining physician.

The applicant next signs the waiver, which is in the form of an agreement between him and the employer, specifying that because of the stated preexisting condition of the employee which renders him susceptible to injury or a recurrence of disease, and in consideration of gainful employment, compensation rights are waived in so far as his susceptibility to injury, or to recurrence of his particular condition, may be a factor in causing a personal injury arising out of or in the course of employment. The agreement preserves the common-law rights in the event of injury coming within the scope of the waiver. In other words, the injured worker may sue, if compensation is denied on account of the waiver, but the employer retains his common-law defense against such suit.

The application, findings of physician, and waiver agreement are then filed with the industrial accident board in Boston. An inspector of the department personally interviews the applicant, explains fully to him the meaning of a waiver, and verifies the questions and answers on the application. The inspector's report is filed with the department, and all the documents are referred to a member of the board for action. He recommends either approval or denial of the application. First action upon the member's recommendation is taken by the full board of seven members, and decision is made by majority vote.

The waiver provision became effective on July 25, 1927, and during the remainder of that year one application was approved and none denied.

Number of waivers in Massachusetts.—From July, 1927, to June, 1931, some 90 waivers were approved and 47 disallowed. For the first three and one-half years (July, 1927, to December, 1930), when 65 were approved and 45 denied (in addition to 27 incomplete applications not brought before the board), the following preexisting conditions were found:

Type of Disability and Number of Waivers Approved

Disease:	Number
Hernia	55
Epilepsy	6
Blindness (1 eye)	4
Cancer	2
Crippled hand	2
Varicocele	7
Crippled or amputated leg	4
Varicose veins	1
Catheter in bladder	1
Heart trouble	1
Arthritis	1
Miscellaneous (about 10 diseases enumerated)	1
Total	85

Number of Waivers Denied and Type of Disability

Disease:	Number
Hernia	16
Epilepsy	2
Varicocele	1
Varicose veins	3
Blindness (1 eye)	6
Heart trouble	4
"Bad" eyes	6
Back condition	1
Arthritis	1
Stub of nail on thumb	1
Undescended testicle	1
"Susceptible to injury by trauma"	1
Total	43

Connecticut

The original compensation law of 1913 gave a worker the right to "nonacceptance" of the act in its entirety. Such rejection of the act enabled the worker, if injured in employment, to sue. The employer retained, however, the common-law defenses to such suit.

Noting the number of nonacceptances, Commissioner F. M. Williams of the Waterbury district in the first annual report of the compensation commissioners in 1914 suggested an amendment to the law which would permit waiver, by physically disabled persons, of their rights and the rights of their dependents to compensation for injuries directly traceable to their condition, but would retain those rights for injuries sustained not due to their physical defects.

The matter was again referred to in the 1915 report of the commissioners, and in 1917 the following amendment, drafted by Commissioner Williams, was enacted:

Whenever any person having a contract of employment, or desiring to enter into any contract of employment, shall have any physical defect which imposes upon his employer, or prospective employer, an undue or unusual hazard, it shall be permissible for such person to waive in writing for himself or his dependents, or both, any rights to compensation under the provisions of this act for any personal injury arising out of and in the course of his employment which may be found by the commissioner having jurisdiction to be directly due to such physical defect. No such waiver shall become effective unless the physical defect in question shall be plainly described therein, nor until the commissioner having jurisdiction shall find that the person signing such waiver fully understands the meaning thereof, nor until such commissioner shall in writing approve thereof and furnish each of the parties thereto with a copy thereof. No waiver shall be a bar to a claim by the person signing the same, or his dependents, for compensation for any injury arising out of, and in the course of, his employment, which injury shall not be found to be directly due to the particular condition described therein.

These provisions remained until 1927. In that year, the Manufacturers' Association of Connecticut presented the draft of an amendment which, after some compromise with the Connecticut Federation of Labor, was adopted and is in effect at the present time. The present statute differs from the one quoted above in five particulars:

(*a*) The phrase "undue or unusual hazard" was changed to "a further or unusual hazard."

(*b*) Death of the worker was specifically in the waiver by adding the words "or death resulting therefrom."

(*c*) The phrase "directly due to such physical defect" was changed to "attributable in a material degree to such physical defect."

(*d*) A new sentence was added making clear that employees injured, within the terms of the waiver, had the choice of coming under the compensation act or coming under common law. This sentence reads: "The rights and liabilities of the parties to such waiver as to injuries arising out of and in the course of the employment and within the terms of such waiver shall be such as are provided by law in the case of an employer having regularly less than five employees who shall not have accepted the provisions of said chapter 284."

(*e*) Minors were covered by insertion of the phrase "if such person shall be a minor that one of the parents or a guardian of said minor shall have approved the same in writing."

This amendment stimulated the demand for waivers.

Administration of Connecticut law.—It must be remembered that there are five separate compensation districts in Connecticut, and that a single commissioner administers the law in his own district. Accordingly, the administration of the waiver provisions naturally is not quite the same in all districts.

The general practice seems to be that when the examining physician of the employer discovers a defect or disease in a prospective employee which might impose risk upon the employer, the employee is asked to sign a waiver, on which the physician records such defect or disease. This form, made out in triplicate, is signed by the doctor and the applicant. The applicant is then sent, sometimes accompanied by a representative of the employer, to the office of the compensation commissioner in his district. There the waiver is explained to the applicant. If approved, the commissioner signs it and a copy is retained by the commissioner, the applicant, and the employer.

In the first, or Hartford, district it is reported that ordinary applications are approved by one of the commissioners' assistants, familiar with the subject, but that any waiver submitted for approval which seems in the slightest degree queer or suspicious is referred by the assistant to the commissioner for personal judgment. Approval is not given unless he considers it justifiable. Waivers have been requested on account of advanced age, but these requests have been immediately turned down.

In the second, or Norwich, district, applicants have the waiver explained by the commissioner, or an assistant, in his office. If the distance to the commissioner's office is so great as to cause hardship to the worker, authority to approve is granted to an attorney or other qualified person, before whom the applicant must make oath that his action is understood. Where a considerable number of waivers are requested at one place of employment, the commissioner goes personally to such establishment and attends to them at once. Physical examinations are required by few employers in this district and the demand for waivers is correspondingly small. Some applications have been "temporarily turned down, until corrected, as the waiver covered too broad a field."

In the third, or New Haven, district, waivers are demanded by employers upon the finding of physical defects among prospective employees. The commissioner personally sees all applicants before signing waivers. At times, employers in a given locality accumulate a large number of waivers, and the commissioner goes to them instead of having the applicants visit him. As many as 160 waivers have been approved in one day in one locality.

In the fourth, or Bridgeport, district, physical examinations are required by all of the large employers and waivers are insisted upon when defects are disclosed. Applicants go to the commissioner's office, where the meaning of the waiver is explained by the commissioner or an assistant. An assistant may be sent to a plant from which there is a number of applications to explain and sign waivers.

In the fifth, or Waterbury, district, applicants usually appear in person and the commissioner or an assistant explains and signs the waiver.

Number of waivers in Connecticut.—Records are available for the 2-year period, November, 1926, to November, 1928, only. During this period, there are records of 9,148 waivers, distributed approximately as follows: Hartford, 4,155; Norwich, 87; New Haven, 936; Bridgeport, 1,295; Waterbury, 2,675.

Accurate figures are not available as to the total number of waivers granted. It should be borne in mind that a waiver is good for a particular job only, and that a new one is required upon a change of employer.

Attitude toward waivers.—Four of the five commissioners favor the waiver system as the only means by which the physically handicapped may secure work, one stating that older workers were enabled to secure employment as a result. One does not think them necessary, but has to approve them under the law. The Waterbury commissioner comments as follows:

> We are very much pleased with the way this statute works in this State, but it is a statute which would be easily abused and I don't know how it would

work in other jurisdictions, especially in what Senator Moses has recently spoken of as "a backward State." I have noted that the States that make the most noise about their affection for the rights of the people are those that give them the poorest treatment when anything happens to them. In a State with a small population and large territorial area it would be difficult for the commissioner to personally talk with the persons who execute the waiver.

The young women in the office always make sure that every man who signs a waiver is fully informed as to what he is signing and what it means. In our polyglot community it is often necessary to have an interpreter to explain the meaning of the document. I do not, as a rule, see these people, but if there is anything unusual about the conditions surrounding the proposed waiver my attention is personally called to it. The only exception to the rule which I have just stated is well illustrated by a case that arose yesterday. A man in the extreme western part of the State has signed a waiver releasing his employer from any further liability by reason of varicose veins and an ulcer. This man had the varicose veins when he went to work. Some trifling contusion caused a varicose ulcer to develop. The man was carefully treated and is now just as well off as he was when he entered this employment, but a blow or contusion might cause a recurrence. He has signed a waiver and it was sent in here yesterday witnessed. The man did not come. It would take all day to get from where he lives to Waterbury and back again and cost him considerable money. His employer will not continue him in their employ without this waiver. I don't blame them, I wouldn't myself. I therefore sent one copy of this waiver to the attending physician who treated this man and whom I have known since he was a boy, with word that if he would write me a letter that the person signing the waiver fully understood what it meant I would approve it without bothering this man to come clear over here.

Organized labor seems to be satisfied that workers find employment with waivers who would otherwise be denied employment. At a recent legislative session, the introducer of a bill to abolish waivers was the only speaker in favor of the change when the measure came up for hearing. The recently employed secretary of the Consumers' League of Connecticut had received no complaints as to waivers, but had little knowledge of the law or its results.

The Manufacturers' Association of Connecticut expressed satisfaction with the waiver provisions. Employment managers of three large manufacturing establishments thought that the chief value of the waiver provisions was protection against unfair apportionment of second injuries.

Effect of Waivers Upon Compensation

No figures are available as to whether any worker who has signed a waiver has ever been compensated for an injury "not attributable in a material degree" to the defect waived. It might be argued that this proves abuse of the clause in that all injuries were attributed to the defect waived. A representative of organized labor was of the opinion that employers generally believed waivers barred all claims for compensation, although, under the law, compensation is barred for specific defects only.

On the other hand, argument could be made that a worker who had signed a waiver would be more careful to avoid injury on that account.

From Bridgeport, it is reported that there has never been a case where waiver affected compensation. The New Haven report is that "if the signer of a waiver is subsequently injured, the commissioner decides whether the condition or conditions waived might be a possible cause of the injury, or contributing factor to it. Such decisions

have never been questioned in the district." In Waterbury, "the commissioner is the sole judge of whether the special condition described under the waiver is responsible for any injury, and his decision has never been questioned." In Hartford, one protest was made against an award in a hernia case, but it developed that injury had occurred before signing the waiver and the protest was withdrawn. No other decision has been questioned. No protest was reported from Norwich.

Extent of Preexisting Disabilities

From July 1, 1923, to and including June 30, 1930, a period of 7 years, 8,017 death cases were compensated in New York State. Of these, in 812 cases, or approximately 10 per cent, the referees of the department held that the injured workers died of a disease which was either caused by, or aggravated by, the accident. The diseases ranged from 10 cases of myelitis to 333 heart cases. These figures are subject, of course, to qualification as to what they indicate as to the size of the problem.

In physical examinations of 10,000 industrial workers, the Life Extension Institute of New York City found 5 per cent "with serious physical impairment or defect urgently demanding immediate attention." Out of 2,914 physical examinations in 1918 of applicants for employment in a plant making grinding wheels, 3.5 per cent were rejected for physical disabilities.[8] The figures as to rejections by the Army and Navy service are, of course, very much higher, but are not so important in this connection because of the extremely high standards.

Possibilities Other Than Waivers

We do not yet know from the information available what is the financial burden imposed by compensation payments for accidents in which preexisting disability was a factor. We do know the "second-injury fund" system is working satisfactorily in some States. In New York, for example, permanent total disability for loss of a hand, an arm, a foot, a leg, or an eye, when either of these members has previously been lost, has been compensated since 1919. At the present time, there are 75 cases receiving payment from this fund. Consideration should be given to the possibilities of extension of this plan to cover at least the more serious of other types of preexisting disabilities. In New York this fund is provided by assessing upon employers $1,000 for every fatal injury where there are no dependents entitled to compensation. Half of this sum goes to the second-injury fund, and half to the vocational rehabilitation fund. The present value of the awards in all compensated fatal cases in New York is somewhat more than $6,000 per case. If the employers who now pay into the second-injury fund were to increase this to the amount of the average death award, the fund would be several times as great as at present.

Another possibility to be considered is that of handling such cases under some form of sickness insurance. There is difficulty in keep-

[8] Cited in Health Maintenance in Industry, by J. D. Hackett.

ing compensation awards entirely free from any element of payment for disease or sickness. A system of sickness insurance, paralleling compensation insurance, is worth consideration in this connection.

Waivers Not the Solution

Lacking precise knowledge as to the actual size of the problem, it would be a mistake to inaugurate the waiver system as a cure, even on the carefully guarded plan of Massachusetts. Far greater harm would be produced by a general waiver system than it would cure. In addition to my own opinion on this point, let me quote the following statements from two nonwaiver States.

Commissioner French of California says:

> I think it is an error to permit such a waiver in a State law. It looks as though the requests would be numerous if the law permitted the system, although perhaps jurisdictions that do have this right fail to find it discomforting.
>
> If the matter became an issue in California, my individual opinion would be to oppose such a proposition, because of the effect it would have on men entitled to compensation and medical, surgical, and hospital benefits, and the possible tendency of drawing into the plan those who really should not be excused.

Commissioner McShane of Utah is even more emphatic:

> To do so would defeat the purposes of compensation legislation. Employers could, as a condition precedent to employment, exact releases from all defective workers and compel the A No. 1 risks to accept compensation in lieu of their right to sue in the courts.
>
> It seems to me that such action would be comparable to the employer and the employee going into business; the employee furnishing all the hazards and the employer all the liabilities.

I think we have to face the fact again that the intention of these laws is to take the burden off the most helpless, and it is not our function at this stage to put the burden of these particular accidents upon the most helpless members of the community. Those who have underlying heart conditions and constitutional difficulties are always the most helpless people economically and physically in any community. There is no reason why we should permit them to bear the full burden of their disability and the economic handicap due thereto.

If we are to recommend taking them off industry as far as compensation payment is concerned, we must—it is our duty—devise some method of distributing their misfortune over the whole community.

DISCUSSION

Mr. PARKS (Massachusetts). Like Joel Brown, of Idaho, I have heard the paper of Miss Perkins for the first time, so I could not prepare anything in advance as discussion of her paper. In attempting to prepare something to take up my time here, I did look up the statistics of Massachusetts, as I thought they would be interesting to this body. Miss Perkins has them almost up to date, and I thought I was the only one who could get that information so accurately up to even last week, which was the time I got mine.

You have heard those figures, so it is unnecessary for me to give them again. At the outset let me say that I agree with everything that Miss Perkins has said about the necessity of protecting the injured workman, or those who may be injured in the future, in

their right to compensation. I am not here as an advocate of waivers.

Away back in 1910, though I may go further back than that as an advocate of workmen's compensation, because it was in 1905, as a humble member of the Massachusetts Legislature, that I first proposed a compensation act there. I was appointed on a commission which drafted the present workmen's compensation act of Massachusetts; it has been amended considerably since then. I recall the dream I had—the dream the commission had—of protecting future injured men and women of the Commonwealth.

We put into that act (I confess I do not recall that I had seen the phrase anywhere else up to that time) that no employee could waive his right to compensation under this act. I revere that language. We wanted the employee to be safe in his rights to compensation. I am just as much in favor of that to-day as I was over 20 years ago. I little knew that this great piece of legislation, instead of being a great boon (which of course it has been to a good many thousand dependents of those who were killed or injured) would become an instrument of persecution, as I may call it, of men who are physically handicapped, but that is what it has become. Men who are physically handicapped are being discriminated against in our Commonwealth.

I do not know about the Empire State of New York but we are meeting this question every day, and, as Miss Perkins has told you, the thing that has brought it about is that merit-rating system, which we thought might be a good thing to get the employer interested in the safety-first movement—in reducing the number of accidents. Perhaps it has done that. No doubt it has, but it has also brought to the employer's mind the necessity of using various methods to boost the merit rate, boost his experience, because each year, when he is put into this class or that class, the insurance representative keeps telling him, "Now, Mr. Brown, you have had a terrible experience this last year. You know that old fellow who had the arthritic back that we warned you about was lifting that barrel of oil, and he strained his back and you have had him on your hands ever since, because that arthritic spine was aggravated; you have been paying him compensation all this past year and will continue to pay it, and that goes into your experience. Your rate will go up and continue to go up. You remember we warned you about that old fellow with only one eye. We told you not to employ him, but you took him on. You were a great big-hearted fellow, but he lost his other eye and you had a blind man on your hands, and you have to pay him the full rate of compensation until the end of the period."

So, Mr. Employer begins to study the thing out. Well, there is only one answer to that. Those arthritic fellows must be told to look for another job. Those old chaps with the tottering limbs and the gray heads, and those fellows who have but one eye, or one arm, or a lame step, and the epileptics, must be weeded out. He must get rid of them, because, forsooth, it boosts up his experience to keep them and he will have a bad rating in the rating bureau and his rate will go up.

The employer has been made to understand just where he fits in in the compensation scheme, and that the less hazard he has in his

shop, the fewer old cripples, etc., he has in his shop, the better will be his rate, so what does he do? He proceeds to weed them out.

We are not dealing with something that we know nothing about. I have been in this work for 20 years—I am in my twentieth year—and I see these people. They come in to see me in my office, and they say, "Mr. Parks, I have been fired. I thought you said you were a great friend of the workingman, and here I am being fired because I am getting old. I am crippled. They say they are firing me because the insurance company has notified them not to continue to employ me, so I have got to go. Where shall I go? What can I do?"

Organized labor in Massachusetts saw that. Men were coming to them with complaints saying that they were being discriminated against and they wanted to know what to do about it. Organized labor in our State went before the judiciary and advocated this waiver that we have on our books to-day. It was not the industrial commission that did it; we were opposed to a waiver. We had all these fine thoughts that every man and woman here has of protecting the injured workman.

What are we doing with that waiver? I have here the waivers which we have. Miss Perkins has given you a copy of it. The waivers are carefully guarded. Each case is looked over and each member of the board initials it, and names are called, after a thorough investigation, and the members vote. We reject a good many. At the present time we are having an investigation made to see what becomes of the fellow when we refuse to approve a waiver for him, so that we can know whether the threat of discharge has been carried out. We will probably have some interesting statistics on that matter later on.

The waiver that the man signs, if he has a hernia, for instance, deprives him of his right to compensation only for the aggravation of that hernia. If that man breaks an arm, gets hit on the head, breaks a leg, or injures any other part of his body, he is entitled to compensation. If he aggravates that hernia, and that is caused by the negligence of the employer, he has a common-law suit against his employer. That is what the waiver means in Massachusetts.

I will read two or three cases of waivers which we have approved. Here is one of a man who is married, is 52 years of age, has nine children, and is subject to occasional epileptic fits. The report is that the waiver will insure his job. What would you do with a man like that, with nine little kiddies to support, and with epileptic fits and no chance for a job anywhere. If one refuses to employ him, they all will. What will you do? Not a person here who would not vote to approve that waiver. It deprives him of compensation only in case he gets hurt as a result of the epileptic fits.

I have other cases here, but I will not take up any more time. I will say emphatically that our commission is not in favor of waivers. The law has been placed on the books, but not because of our advocacy of it. We are there to enforce the law and we are doing everything we can to protect it, and later on we are going to have some interesting statistics on investigating it further.

Mr. ARMSTRONG (Nova Scotia). We have listened with a great deal of pleasure to the excellent paper read by Miss Perkins and the statistics given. This is very valuable information.

In Canada we have no such information, because none of the Canadian Provinces allows a person to waive his rights in regard to compensation. We know very little about it. The great bulk of the paper gives more statistical information than opinions. Most all of us agree, I think, that it is a serious matter in some cases, where a case has come up such as Mr. Parks mentioned, but we are not brought face to face with that in our Canadian Provinces, and there are, as you know, only four States that allow employees to waive their rights. It is not a serious matter in the other States, but the point is this: Will organized labor, which I understand is very strongly opposed to the question of waiving rights, consent to have clauses placed in any others of the present acts?

I was rather surprised when Mr. Parks told us that within the last year or two waivers had been introduced in the State of Massachusetts, but, as he has said, the thing is very closely guarded and if it is not extended it will not become a very serious problem.

Secretary STEWART. I want to add for the record that the State of Maryland this year passed a waiver clause in its compensation act.

Mr. BROWN. The State of Maryland passed a waiver law which became effective on June 1, 1931. I can not say definitely whether any cases have been presented to the commission, but I think I can safely say that there have been none presented to the commission so far.

[The following resolution was, on motion, duly seconded and carried:]

Resolved, That this organization favors an amendment to the Federal bankruptcy law so that preference may be given to compensation awards.

BUSINESS MEETING

[The committee on statistics and compensation insurance costs submitted the following report, which was accepted:]

REPORT OF COMMITTEE ON STATISTICS AND COMPENSATION INSURANCE COSTS

By LEONARD W. HATCH, *Chairman*

There has been no occasion for a meeting of the committee during the past year, but it is proper to report to the association at this time what has occurred during the year on the revision of the plan for standard accident statistics which is in process by a sectional committee of the American Standards Association and for which this association is one of the sponsors. This will be in continuation of similar reports on this work heretofore made.

On September 29, 1930, there was a meeting of the sectional committee at Pittsburgh during the annual safety congress of the National Safety Council. The meeting considered a joint report on definitions and accident rates, going over the report section by section for discussion and criticism. Thereafter a revision of that report was prepared which embodied changes agreed upon at that meeting, and this revised report was mailed to all members of the sectional committee for vote on final adoption. The result was somewhat discouraging, considering the amount of work which had been put upon the material. Even after a follow-up letter subsequent to the first, submitting the

report, there have so far been received only 23 replies from the then 41 members of the committee. About half (13) of those replying voted unqualifiedly to approve the report, 6 indicated qualified approval, and 4 declined to approve. The replies contained many criticisms and suggested amendments. A meeting of the sectional committee is to be held in Chicago on October 14, this year, again in conjunction with the National Safety Congress, and the principal business at that meeting will be a discussion of these criticisms and suggestions, with the hope that final agreement may there be reached on the portions of the standard plan dealing with general definitions and accident rates.

The part of the plan relating to classification of causes of accidents is still in the hands of a subcommittee appointed to draft that portion. This subcommittee has been actively engaged on its work during the past year by correspondence and in a meeting. It will hold another meeting in Chicago on October 17, this year, where it is hoped that it may be able to reach final agreement on its proposals for that part of the standard plan. The chairman of this subcommittee is prepared to report informally to the meeting of the sectional committee on October 14 on the progress and general aims of the work of the subcommittee.

The remaining portion of the plan is to embody a standard classification of industries. The subcommittee to which the preparation of a draft of this part was assigned has not been able to make much progress in the last year. Such consideration as some of its members have been able to give to it has, however, led them to a suggestion that there is need, in order to make a really adequate study of the subject, of special work which it is practically impossible for any of the members of the subcommittee, who are all busy with their various individual professional responsibilities, to give to it, and that it would be well for the sectional committee to consider the feasibility of securing some sort of special technical assistance for that work. This idea is on the program for the Chicago meeting on October 14 for consideration.

The above outlines the steps taken in prosecution of the work on revision of the standard plan for accident statistics during the past year. One other item should also be included in the present report. During the year the personnel of the sectional committee was submitted to the safety code correlating committee of the American Standards Association for approval. By an oversight this had not been done previously, but has now been done in accordance with the regular procedure of the association. In addition to approving the personnel as it then stood, the correlating committee authorized the addition of five members representing certain large organizations of employers, with a view to a better balance among the various groups and interests represented. These additions included representatives of the American Railway Association, American Electric Railway Association, American Gas Association, National Coal Association, and National Electrical Manufacturers' Association. The present membership of the sectional committee is composed of the following:

Representatives of governmental agencies	19
Representatives of employers	11
Representatives of insurance interests	10
Independent specialists	7
Total	47

[A motion was made, seconded, and carried that the report be printed and distributed by the secretary-treasurer of the association to the different commissions as soon as possible after the meeting adjourned.]

REPORT OF COMMITTEE ON WORKMEN'S COMPENSATION LEGISLATION

By ABEL KLAW, *Chairman*

Your committee on workmen's compensation legislation recommends the following as an extraterritorial provision for adoption by the respective States:

Where the injury occurs outside of this State, the provisions of this act shall apply if the contract of hire was made in this State: *Provided, however,* That if the injury occurs in a State that has provided workmen's compensation for such employee and his dependents, an election of benefits under the law of such other State shall be held to waive the claimant's rights under the provisions of this act. Such an election to waive the benefits of this act shall be evidenced by an instrument in writing, to be signed by the injured employee, indicating his acceptance of the provisions of the law of such other State, which election shall be binding after approval by the industrial commission of this State. Credit shall be given an employer or insurer under this act for all benefits paid or furnished to an employee or his dependents under whatever assumption made.

Your committee on workmen's compensation legislation recommends the following as a third-party liability provision for adoption by the respective States:

The acceptance of compensation benefits from or the making of a claim for compensation against an employer or insurer for the injury or death of an employee shall not affect the right of the employee or his dependents to sue any other party at law for such injury or death, but the employer or his insurer shall be entitled to reasonable notice and opportunity to join in any such action or may intervene therein. If such employer or insurer join in such action they shall be entitled to repayment of the amount paid by them as compensation from the net proceeds of such action (after deducting the reasonable costs of collection), as hereinafter provided.

The commencement of an action by an employee or his dependents (or legal representative) against a third party for damages by reason of the injury, or the adjustment of any such claim, shall not affect the right of the injured employee or his dependents (or legal representative) to recover compensation, but any amount recovered by the injured employee or his dependents (or legal representative) from a third party shall be applied as follows: Reasonable costs of collection as approved and allowed by the court in which such action is pending, or by the (industrial commission) of this State in case of settlement without suit, shall be deducted; one-third of the remainder shall in every case belong to the injured employee or his dependents, as the case may be; the remainder, or so much thereof as is necessary, shall be used to discharge the legal liability of the employer or insurer; and any excess shall belong to the injured employee or his dependents.

An employer or compensation insurer who shall have paid compensation benefits under this (act) for the injury or death of the employee shall have the right to maintain an action at law against any other party responsible for such injury or death, in the name of such injured employee or his beneficiaries, or in the name of such employer or insurer, or any or all of them. If reasonable notice and opportunity to be represented in such action by counsel shall have been given to the compensation beneficiary, all claims of such compensation beneficiary shall be determined in such action, as well as the claim of the employer or insurer. If recovery shall be had against such other party, by suit or otherwise, the compensation beneficiary shall be entitled to any amount recovered over and above the amount that the employer and insurer shall have paid or are liable for in compensation or other benefits, after deducting the reasonable costs of collection; but in no event shall the compensation beneficiary be entitled to less than one-third of the net amount recovered from the third party.

In case of settlement of any action before the trial thereof such settlement shall be subject to the approval of the court wherein such action is pending, and settlement before an action is brought shall be subject to the approval of the (industrial commission) of this State. Distribution of the portion belonging to the dependents shall be made among such dependents in the manner provided for in the compensation law of this State.

NOTE.—Following to be inserted in States where applicable:

In case of liability of the employer or insurer to make payments to the State treasury under the provisions of if the injury or death creates a legal liability against a third party, the employer or insurer shall have a right of action against such third party for reimbursement of any sum so paid into the State treasury, which right may be enforced in the action heretofore provided for or by an independent action.

DISCUSSION

[The following discussion was had on the extraterritorial provision recommended in the report:]

Mr. HOAGE (Washington, D. C.). I should like to ask a question. Is not that a little infringement upon the provision or provisions of most of the compensation laws? That puts it in the class of contractual relation of hire, doesn't it, and in the position of taking it out of the exercise of the police power of the jurisdiction? I should like to hear that point discussed carefully before it is passed.

President DEANS. The gentleman from Washington, Mr. Hoage, has propounded the question. Will the gentleman from Minnesota answer that?

Mr. DUXBURY (Minnesota). This would apply only to those acts which are of a contractural nature, but would be suggested for an act which is of a legislative character. You would have to change the wording of it to adopt that principle, but the time of the meeting hardly afforded the opportunity to consider the wording of a provision which might apply to the New York statute and several other statutes based upon a constitutional provision.

[A motion that the recommendation be adopted, duly seconded, was carried, there being two opposing votes.]

[The following explanation of the last paragraph in the committee report was made by Mr. Klaw before reading it:]

What I am about to read now is in addition to what has been said heretofore, and is applicable only to those States, such as Wisconsin or New York, which provide for a payment to the State treasurer where there is a death and no dependents are entitled to compensation. In those States we recommend this to be added to what I have already read. This last section would not be applicable to quite a few of the States. That is why I wanted to make these remarks before I read it.

[A motion that the report as read be adopted was seconded.]

President DEANS. I know it is not exactly proper, but may I ask this question: How far does adoption of this resolution bind the several commissions that are represented here?

Mr. DUXBURY. Not at all, because they can not make it a law. They will have to apply to their legislatures. It is simply a recommendation.

President DEANS. Then, would it become the duty of a member of a commission present at this time to make that recommendation?

Mr. DUXBURY. I think not.

Mr. MAGUIRE (Pennsylvania). I think so, if he votes in the affirmative.

Mr. McSHANE (Utah). That is just dealing with niceties. No one here is bound by any action taken by this organization, but there is a very bad situation existing in the United States on the third-party provision, and after several hours of very hard work this is the very best that we could dig out of the situation. We have put it up to you for what it is worth and we should like to see it adopted, but no one here is bound to go back home and whoop it up for putting it over.

Secretary STEWART. As I see it, there is no uniformity in third-party legislation. The acceptance of this report to-night simply means that if any legislature wants to put a third-party clause into the law, here is the wording that the association of commissioners recommends.

Mr. PARKS. I am hearing this amendment for the first time. With all the faith that I must have in my colleagues here, I can not vote for a thing blindly. Mr. McShane said he would like to have you vote for this. The committee spent hours upon it. We are asked to accept it at the closing hours of this convention as the cure for all the evils of the third-party suit, and you have said it has no effect. It has this effect, that we vote to indorse it. It has the backing then of every commonwealth in these United States.

I did not vote on the other matter because I confess it was brought in here and I could not understand it offhand. I refused to vote on it, and I am going to ask to have it recorded that I refused to vote. I do not think there is any immediate hurry about these matters. I think they should be thoroughly investigated. All these amendments that we are asked to vote for should be investigated. We should know from whence they came. That is always interesting to find out. You never can tell. There is no reflection being cast on anyone. We ought to know all about it.

I would suggest that this long recommendation be printed in the way we can have it printed, and that it be put up to the next convention and the members receive a copy of it in advance so they will know what it is. If it is of any importance at all, is not that a fair thing to do? How could any man here, except one with the wisdom of Solomon, vote for that? Of course, we must all have faith, but I do not go to conventions to be a "yes man," because someone says this is a good thing, and take it without understanding it.

I do not understand that amendment now. I followed it very closely. Mr. Klaw knows all about it. He can tell you all about it. There is no question but that he studied it and evidently knew all about it before he came here.

Mr. KLAW (Delaware). I should like to say a word at this point. I hope Mr. Parks did not mean to reflect any criticism on the committee. Our report has been ready since yesterday afternoon, and it was by virtue of the fact that the program has been so long to-day that we were unable to submit it prior to this time. It is being submitted for adoption by the convention by virtue of the action of this association at its last convention, which charges us with the duty of reporting to this convention. We are now discharging our duty in doing that. If the action of the convention last year was not a wise one in asking that we report to the convention, and if the convention last year should have, instead of its action, adopted a

resolution asking that a committee submit a bill to the various commissioners, of course we are not responsible for that difference in action.

I merely want to offer that as an explanation, so that the members will understand that the committee accepts no criticism by virtue of Mr. Park's remarks, and I am sure he meant none to the committee.

Doctor HATCH (New York). Am I correct in my understanding that this resolution embodies essentially the plan which is in operation in Wisconsin as described by Mr. Wilcox in his paper?

Mr. KLAW. That is correct.

Doctor HATCH. This is to all intents and purposes a formulation of legislation in the form of the Wisconsin plan?

Mr. KLAW. It is an improvement on the Wisconsin law, if it is possible to improve the Wisconsin law.

Mr. WILCOX (Wisconsin). I have the notion that there is not anything about this that can not be understood in a few minutes. Those who are helping to prepare amendments to the compensation act and who are helping to administer compensation laws will find it is a very simple piece of legislation.

This proposal does simply this: It gives to an injured man or to his dependents or representatives, after the proceeding is carried out in a definite case, the right to compensation benefits and know at the time that he is taking the benefits that he still retains all of his right to control a third-party suit. It varies from the usual legislation in that regard in that it is customary in the States, pretty generally so, to take away from the injured man, if he accepts compensation, the control over third-party litigation.

Now this provision does exactly the other. It guarantees to him the right to take the compensation benefits and know that he is waiving none of his privileges so far as a third-party suit is concerned, and that he may still go on and conduct his third-party suit.

If he gives to the employer or the insurer under compensation notice of the suit against the third party, and gives him opportunity to join in the proceeding, then the employer is entitled to share in the recovery against the third party. After deducting the expense of the proceeding against the third party, they divide the proceeds, one-third to the injured man and two-thirds to the employer or insurer, with this further provision, that in no event may the employer or insurer retain more out of the net recovery than the amount that he has paid for compensation and his medical costs and such like.

If the employer or insurer does not elect to go into this proceeding, then he will lose his right to share in the proceeds. If the employee does not elect to follow out the proceeding against the third party to give the employer or insurer an opportunity to come in, join with him, then the employer himself or the insurer may proceed against the third party and may likewise bring in the employee and settle the whole scope of the proceeding against the third party, or he may fail to do that and then be limited in his recovery to the amount that he has paid.

It is not very complicated, except in language perhaps, but the policy, the purpose, that is back of it forever sets at rest in the mind

of an injured man, and his friends, dependents, or personal representatives, that idea that if he takes his compensation benefits he will be denied his opportunity to recover from the third party.

Mr. PARKS. With that explanation, I shall vote for it.

Mr. WILCOX. I think that is a very complete explanation of it.

Mr. BLUNT (New Jersey). I want to ask if the committee took into consideration the law passed in New Jersey this year. It took the Wisconsin law as the guide.

Mr. KLAW. No, sir; we did not.

Mr. BLUNT. Because Mr. Parks brought up the question as to who is back of such proposals, I should like to state that about a year ago I called upon the president of the Federation of Labor, the president of the Medical Society, the president of the Manufacturers' Association, the president of the Bar Association, and the highest officer—not the president, but the chairman of some big committee—of the insurance companies. There are five groups interested in compensation.

I wanted to have our entire compensation laws revised. I did not want to select the committee myself. I appointed it myself, but only upon the recommendations of the heads of these five groups interested in compensation. My predecessor, Doctor McBride, by coincidence was president of the Medical Society. Doctor Morrison of Newark was named. The president of the Federation of Labor named the vice president, and I promptly named him the chairman of the commission. It was called the advisory commission on workmen's compensation.

It has held between 20 and 30 meetings since November, 1930, less than a year ago. It held hearings, and representatives from all the five groups interested in compensation were there. One of the questions it wrestled with was the question of third-party accidents. The recommendation it made was by the unanimous vote of the committee and therefore by all the groups interested in compensation, Mr. Parks; but in my opinion the law we passed was far simpler than this; namely, that if within six months an injured workman does not bring the third-party accident suit, the employer can bring it and can recover. If he wins the litigation, he retains what he paid out under the workmen's compensation law, and the balance goes to the injured workman, but there is a six months' waiting period to allow the injured workman to bring the third-party accident suit.

It seems to me a very much simpler law than the recommendation of the committee and fairer to all parties, and apparently in New Jersey there were all parties at the hearing accepting it and there was no question about the fairness and simplicity of the law.

Mr. DUXBURY. During that six months' period is there a state of uncertainty about whether the injured employee shall be paid compensation and taken care of with medical and hospital fees?

Mr. BLUNT. Absolutely not.

Mr. DUXBURY. He is taken care of with compensation without regard to possibility of suit? If there is a state of uncertainty there, and he is without compensation during that time, while these vicious

things known as lawyers try to solicit him to bring the third-party suit, it is going to be vital to recovery; he should, in the meantime, receive the benefit of the compensation law that has been lost. Many of the laws lead to that very uncertainty and destroy the chief benefit of compensation.

Mr. WILLIAMS (Connecticut). I wish to say that the report prepared by this committee is practically the same as the law which exists in Connecticut and has existed there for some years and it has been very satisfactory.

Mr. WILCOX. I want to ask Colonel Blunt a question. I am not clear about what they have in New Jersey. Does the acceptance of compensation meantime waive an employee's right to start suit?

Mr. BLUNT. No.

Mr. WILCOX. Does the starting of a suit waive his right to compensation?

Mr. BLUNT. No.

Mr. WILCOX. Does he have to turn the proceeds of the suit to the employer or the insurer?

Mr. BLUNT. Not within the six months' period.

Mr. WILCOX. What becomes of the proceeds of the suit by the employee within the six months?

Mr. BLUNT. The proceeds, if he sues under third-party action?

Mr. WILCOX. Yes; where do the proceeds go?

Mr. BLUNT. He retains that, to my understanding.

Mr. WILCOX. And the employer gets nothing?

Mr. BLUNT. Mr. Corbin helped draw that law, and perhaps could answer better than I.

Mr. CORBIN (New Jersey). The employee reimburses him.

Mr. WILCOX. He is suing entirely for the benefit of the employer?

Mr. CORBIN. Not entirely, because any balance goes to the employee.

Mr. WILCOX. Suppose there is no balance?

Mr. CORBIN. Then he does not get any.

Mr. WILCOX. Then the employer gets it all and he has to pay the expenses of the suit. Well, I may add in conclusion that we canvassed all that sort of legislation, and we concluded it was nothing that this association ought to recommend.

President DEANS. If I understand correctly, the chairman of this committee, Mr. Klaw, has moved the adoption of his report and, if I further understand you, it is your intention by that to recommend this as a model for legislation. Am I correct in that?

Secretary STEWART. Yes.

[The motion to adopt the section was put to a vote and carried with two dissenting votes.]

Mr. KLAW. I want to thank the members for their work in formulating these proposed bills which we have submitted. It has been a hard and tedious task, in such a short space of time, to delve into

these questions which are so complicated and formulate our ideas into something concrete which we could present to you. The gentlemen of the committee, aside from myself, deserve the thanks and credit of the association and I want to thank them for their cooperation with me. Inasmuch as the committee has completed the duties assigned to it, I ask that it be discharged.

[A motion was made and seconded that the committee be discharged with thanks.]

[Secretary Stewart raised a point of order that the committee is a permanent committee of the association, and to this committee or a committee of the same name (it may not be the same personnel) will be assigned from time to time questions of legal aspect. The president sustained the point of order, stating that at Wilmington the committee on uniformity of laws was adopted as a standing committee.]

[The auditing committee reported that the accounts of the treasurer had been carefully examined, and were found to be correct as shown in the report submitted to the association. The committee recommended that the bond of the secretary-treasurer in the sum of $10,000, which expires October 23, 1931, be renewed. The report was adopted.]

President DEANS. Next is the report of the committee on resolutions, by Mr. Wellington T. Leonard, of the Industrial Commission of Ohio.

REPORT OF COMMITTEE ON RESOLUTIONS

Resolved, That the International Association of Industrial Accident Boards and Commissions hereby approves cooperation with the Committee on the Regulation of the Employment of Minors in Hazardous Trades, organized by the Children's Bureau on the recommendation of the White House Conference to collect and analyze information which may be used as a basis for the formulation of scientifically determined standards for the protection of children and young persons from occupational hazards, which standards may serve as a guide to the various States in the revision of their legislation in this field.

That this association hereby goes on record as favoring such cooperation and authorizes the executive committee of the organization to appoint a representative to serve on that committee.

That this association also urges the officials constituting its membership to aid the committee by furnishing information and in any other way possible. [Adopted.]

Resolved, That the sincere appreciation of this international association be extended to the citizens of this State and city for the opportunity of holding our annual convention in the delightful city of Richmond, the acknowledged center of culture and enterprise in this old State of Virginia. On every hand as we enter and pass through the State we are reminded of events in its early history which truly give Virginia a first place in America's birth. It may surely be said that this State is at once the cradle and nursery of these United States. Virginia may be justly proud of its history, traditions, and ancestry, as well as of the long line of gifted sons she has given to the Nation.

Coming as we do from Canada as well as the United States, we welcome the opportunity of worshipping at this national shrine, and of mingling these few

days with the good people of this State and city, whose charming personality has touched the hearts of each and every delegate at this convention.

The appreciation of this convention is also expressed to Gov. John Garland Pollard and the State and city officials who so graciously welcomed us and who so convincingly expressed the friendliness and hospitality of their people. [Adopted.]

Resolved, That the association place on record its acknowledgment of the debt we owe to our secretary, Ethelbert Stewart, for his invaluable service to this association and the great cause of workmen's compensation in general, in which we are all so interested. We recognize that without the assistance of the departmental bureau over which he presides this association could not have attained the success it has. At the same time his own personal guiding hand and mind as the association secretary for so many years is recognized as the balance weight and mainspring of the association's activities. Commissioner Stewart's whole life has been devoted to the service of his fellow men, and while we recognize signs of winter's whiteness on his head and brow, yet we are glad to see that the warmth of summer is still in his heart, and the members of this association express the earnest hope and prayer that he may long be spared to carry on the great work that he loves so well. [Adopted.]

Resolved, That this association also desires to place on record its appreciation of the services rendered this association during the past 10 years by Senator F. A. Duxbury, of Minnesota. Senator Duxbury has been a large factor in the success of this association, and particularly in the work of the annual conventions, which he has always regularly attended, and it may with propriety be said that for several years Senator Duxbury's unusual qualifications have made him easily one of the most useful members of this organization. The members learn with much regret of his retirement from the active work of compensation administration; we wish to remind Senator Duxbury, however, that notwithstanding this he is still an honorary life member of this association, and the hope is expressed that he will be able to continue in attendance at our annual conventions and give us of his wisdom, counsel, and advice and the benefit of his genial personality. [Adopted.]

Resolved, That this association express its thanks to the American Tobacco Co., to Edgeworth Smoking Tobacco Co., to the James River Bridge Co., Virginia Manufacturers Association, and all others who have helped make our stay so delightful in the city of Richmond; and to those who cooperated with us by giving us of their time and the benefit of their valuable experience in adding so much to the interest of the program of this convention.

To our good president, Col. Parke P. Deans, of Virginia, and to his lovely wife, and to his associates and staff on the Virginia Industrial Commission and their charming wives, whose untiring efforts have been manifested in the delightful hospitality enjoyed throughout our stay in this wonderful city, this association extends its very deep appreciation. [Adopted.]

WELLINGTON T. LEONARD, *Chairman.*
H. M. STANLEY.
GEO. A. KINGSTON.
D. D. GARCELON.
JOS. A. PARKS.

President DEANS. Now we will have the report of the committee on officers' reports, by Mr. Wilcox.

REPORT OF COMMITTEE ON RECOMMENDATIONS IN OFFICERS' REPORTS

The committee recommends the following:

1. That the secretary of this association compile as promptly as possible the American experience in regard to widows' compensation cases, now on file, and that he be authorized to make such expenditures as may be necessary for clerical and expert assistance in this work.

2. That this association accept the invitation of the National Council on Compensation Insurance for the naming of a joint committee to study and revise the various blanks and forms used in connection with compensation administration, and to that end that the executive committee nominate promptly this association's representatives on the committee.

3. That the committee on safety acknowledge the interest of the association in the establishment of the course in safety engineering adopted by the Department of Industrial Engineering of the University of Pittsburgh under the direction of Prof. John W. Hallock; and that they ascertain from Professor Hallock what if any cooperation we may render in the work, and what if any encouragement we may lend to other educational institutions in similar work.

FRED M. WILCOX, *Chairman.*
WALTER O. STACK.
O. F. MCSHANE.
F. M. WILLIAMS.
LEE OTT.

[The report of the committee was adopted.]

[The report of the nominating committee was presented and adopted. The list of officers will be found on p. 291. Columbus, Ohio, was chosen as the place of the next meeting.]

[A motion was made that the tabulation of officers in the front of the printed proceedings of the association be corrected so as to show as a former president Mr. Yaple, of Ohio, and an amendment to the motion was made, seconded, and carried that the matter be left in the hands of the secretary-treasurer in compiling the report.]

[Mr. Wellington T. Leonard, the incoming president, took the chair, and expressed his appreciation of the honor conferred upon him.]

President LEONARD. I believe one report has been omitted. Mr. Wenzel.

REPORT OF THE COMMITTEE ON AMENDMENT OF THE CONSTITUTION

By R. E. WENZEL, *Chairman*

Your committee has had under consideration the resolution for amendment of section 4 of Article VII of the constitution, and we now offer it to you in the following form:

That section 4 of Article VII be rewritten so as to read as follows:

SEC. 4. If, for any reason, an officer of this association, during the term for which he was chosen, shall cease to be an official of any agency entitled to active membership, he may serve out his term of office in this association; but if, for any reason, a vacancy occurs, the executive committee shall appoint a successor to serve for the remainder of the term.

[The report was adopted.]

[Meeting adjourned.]

Appendixes

Appendix A.—Officers and Members of Committees for 1931–32

President, Wellington T. Leonard, chairman Ohio Industrial Commission.
Vice president, Joel Brown, chairman Idaho Industrial Accident Board.
Secretary-treasurer, Ethelbert Stewart, United States Commissioner of Labor Statistics.

EXECUTIVE COMMITTEE

Wellington T. Leonard, Ohio Industrial Commission.
Joel Brown, Idaho Industrial Accident Board.
Ethelbert Stewart, United States Commissioner of Labor Statistics.
Parke P. Deans, Virginia Industrial Commission.
L. W. Hatch, New York Department of Labor.
W. H. Horner, Pennsylvania Department of Labor and Industry.
George A. Kingston, Ontario Workmen's Compensation Board.
G. Clay Baker, Kansas Commission of Labor and Industry.
R. E. Wenzel, North Dakota Workmen's Compensation Bureau.

COMMITTEE ON STATISTICS AND COMPENSATION INSURANCE COSTS

Chairman, L. W. Hatch, New York Department of Labor.
Secretary, Charles E. Baldwin, Assistant Commissioner, United States Bureau of Labor Statistics.
James J. Donohue, Connecticut Board of Compensation Commissioners.
Charles R. Blunt, New Jersey Department of Labor.
Albert E. Brown, Maryland Industrial Accident Commission.
E. I. Evans, Ohio Department of Industrial Relations.
O. A. Fried, Wisconsin Industrial Commission.
Sharpe Jones, Georgia Industrial Commission.
George A. Kingston, Ontario Workmen's Compensation Board.
William J. Maguire, Pennsylvania Department of Labor and Industry.
Howard B. Myers, Illinois Department of Labor.
Joseph A. Parks, Massachusetts Department of Industrial Accidents.
W. C. Preckel, North Dakota Workmen's Compensation Bureau.
O. E. Sharpe, Quebec Workmen's Compensation Commission.

MEDICAL COMMITTEE

Chairman, H. H. Dorr, M. D., Ohio.
Maurice S. Avidan, M. D., New Jersey.
D. E. Bell, M. D., Ontario.
Oliver J. Fay, M. D., Iowa.
G. H. Gehrmann, M. D., Delaware.
M. R. Gibbons, M. D., California.
Russel Kessel, M. D., West Virginia.
A. C. Kingsley, M. D., Arizona.
M. D. Morrison, M. D., Nova Scotia.
Vinton A. Muller, M. D., Nevada.
C. W. Roberts, M. D., Georgia.
H. U. Stephenson, M. D., Virginia.

COMMITTEE ON SAFETY AND SAFETY CODES

Chairman, S. Kjaer, United States Bureau of Labor Statistics.
Vice Chairman, Thomas P. Kearns, Ohio Department of Industrial Relations.
Matt H. Allen, North Carolina Industrial Commission.
Will J. French, California Department of Industrial Relations.
A. B. Funk, Iowa Workmen's Compensation Service.
Harry D. Immel, Pennsylvania Department of Labor and Industry.
R. McA. Keown, Wisconsin Industrial Commission.
R. B. Morley, Ontario Workmen's Compensation Board.
E. B. Patton, New York Department of Labor.
L. M. Rickerd, Washington Department of Labor and Industries.
John Roach, New Jersey Department of Labor.
Charles H. Weeks, New Jersey Department of Labor.
R. E. Wenzel, North Dakota Workmen's Compensation Bureau.

ELECTRICAL SAFETY CODE COMMITTEE

Chairman, Charles H. Weeks, New Jersey Department of Labor.
Levin J. Chase, New Hampshire Bureau of Labor.
J. Fred Cherry, Virginia Industrial Commission.
L. L. Elden, Massachusetts Department of Industrial Accidents.
B. T. Foster, Delaware Industrial Accident Board.
C. P. Keogh, New York Department of Labor.
E. Kimball, California Department of Industrial Relations.
A. H. Meier, Indiana Industrial Board.
George F. Sheridan, New York Department of Labor.
J. E. Wise, Wisconsin Industrial Commission.

COMMITTEE ON FORMS

Chairman, W. H. Horner, Pennsylvania Department of Labor and Industry.
A. J. Altmeyer, Wisconsin Industrial Commission.
Robert E. Grandfield, Massachusetts Department of Industrial Accidents.
Miss R. O. Harrison, Maryland Industrial Accident Commission.
Hal M. Stanley, Georgia Industrial Commission.
Sidney W. Wilcox, New York Department of Labor.

COMMITTEE ON REHABILITATION

Chairman, G. Clay Baker, Kansas Commission of Labor and Industry.
Fred W. Armstrong, Nova Scotia Workmen's Compensation Board.
Donald D. Garcelon, Maine Industrial Accident Commission.
Hal M. Stanley, Georgia Industrial Commission.
Fred M. Wilcox, Wisconsin Industrial Commission.

COMMITTEE ON WORKMEN'S COMPENSATION LEGISLATION

Chairman, Abel Klaw, Delaware Industrial Accident Board.
O. F. McShane, Utah Industrial Commission.
Charles F. Sharkey, United States Bureau of Labor Statistics.

Appendix B.—Constitution of the International Association of Industrial Accident Boards and Commissions

ARTICLE I

This organization shall be known as the International Association of Industrial Accident Boards and Commissions.

ARTICLE II—*Objects*

SECTION 1. This association shall hold meetings once a year, or oftener, for the purpose of bringing together the officials charged with the duty of administering the workmen's compensation laws of the United States and Canada to consider, and, so far as possible, to agree on standardizing (a) ways of cutting

down accidents; (b) medical, surgical, and hospital treatment for injured workers; (c) means for the reeducation of injured workmen and their restoration to industry; (d) methods of computing industrial accident and sickness insurance costs; (e) practices in administering compensation laws; (f) extensions and improvements in workmen's compensation legislation; and (g) reports and tabulations of industrial accidents and illnesses.

SEC. 2. The members of this association shall promptly inform the United States Bureau of Labor Statistics and the Department of Labor of Canada of any amendments to their compensation laws, changes in membership of their administrative bodies, and all matters having to do with industrial safety, industrial disabilities and compensation, so that these changes and occurrences may be noted in the Monthly Labor Review of the United States Bureau of Labor Statistics and the Canadian Labor Gazette.

ARTICLE III—*Membership*

SECTION 1. Membership shall be of two grades, active and associate.

SEC. 2. *Active membership.*—Each State of the United States and each Province of Canada having a workmen's compensation law, the United States Employees' Compensation Commission, the United States Bureau of Labor Statistics, and the Department of Labor of Canada shall be entitled to active membership in this association. Only active members shall be entitled to vote through their duly accredited delegates in attendance on meetings.

SEC. 3. *Associate membership.*—Any organization or individual actively interested in any phase of workmen's compensation or social insurance may be admitted to associate membership in this association by vote of the executive committee. Associate members shall be entitled to attend all meetings and participate in discussions, but shall have no vote either on resolutions or for the election of officers in the association.

SEC. 4. *Honorary life membership.*—Any person who has occupied the office of president or secretary of the association shall be ex officio an honorary life member of the association with full privileges.

ARTICLE IV—*Representation*

SECTION 1. Each active member of this association shall have one vote.

SEC. 2. Each active member may send as many delegates to the annual meeting as it may think fit.

SEC. 3. Any person in attendance at conferences of this association shall be entitled to the privileges of the floor, subject to such rules as may be adopted by the association.

ARTICLE V—*Annual dues*

SECTION 1. Each active member shall pay annual dues of $50, except the United States Employees' Compensation Commission, the United States Bureau of Labor Statistics, and the Department of Labor of Canada, which shall be exempt from the payment of annual dues: *Provided*, That the executive committee may, in its discretion, reduce the dues for active membership for those jurisdictions in which no appropriations are made available for such expenditures, making it necessary that the officials administering the law pay the annual dues out of their own pockets for the State.

SEC. 2. Associate members shall pay $10 per annum.

SEC. 3. Annual dues are payable any time after July 1, which date shall be the beginning of the fiscal year of the association; dues must be paid before the annual meeting in order to entitle members to representation and the right to vote in the meeting.

ARTICLE VI—*Meetings of the association*

SECTION 1.—An annual meeting shall be held at a time to be designated by the association or by the executive committee. Special meetings may be called by the executive committee. Notices for special meetings must be sent out at least one month in advance of the date of said meetings.

SEC. 2. At all meetings of the association the majority vote cast by the active members present and voting shall govern, except as provided in Article X.

ARTICLE VII—*Officers*

SECTION 1. Only officials having to do with the administration of a workmen's compensation law or bureau of labor may hold an office in this association, except as hereinafter provided.

SEC. 2. The association shall have a president, vice president, and secretary-treasurer.

SEC. 3. The president, vice president, and secretary-treasurer shall be elected at the annual meeting of the association and shall assume office at the last session of the annual meeting.

SEC. 4. If, for any reason, an officer of this association, during the term for which he was chosen, shall cease to be an official of any agency entitled to active membership, he may serve out his term of office in this association; but, if, for any reason, a vacancy occurs, the executive committee shall appoint a successor to serve for the remainder of the term.

ARTICLE VIII—*Executive committee*

SECTION 1. There shall be an executive committee of the association, which shall consist of the president, vice president, the retiring president, secretary-treasurer, and five other members, elected by the association at the annual meeting.

SEC. 2. The duties of the executive committee shall be to formulate programs for all annual and other meetings and to make all needed arrangements for such meetings; to pass upon applications for associate membership; to fill all offices which may become vacant; and in general to conduct the affairs of the association during the intervals between meetings. The executive committee may also reconsider the decision of the last annual conference as to the next place of meeting and may change the place of meeting if it is deemed expedient.

ARTICLE IX—*Quorum*

SECTION 1. The president or the vice president, the secretary-treasurer or his representative, and one other member of the executive committee shall constitute a quorum of that committee.

ARTICLE X—*Amendments*

This constitution or any clause thereof may be repealed or amended at any regularly called meeting of the association. Notice of any such changes must be read in open meeting on the first day of the conference, and all changes of which notice shall have thus been given shall be referred to a special committee, which shall report thereon at the last business meeting of the conference. No change in the constitution shall be made except by a two-thirds vote of the members present and voting.

Appendix C.—List of Persons Who Attended the Eighteenth Annual Meeting of the International Association of Industrial Accident Boards and Commissions, Held at Richmond, Va., October 5–8, 1931

CANADA

Nova Scotia

F. W. Armstrong, workmen's compensation board, Halifax.

Ontario

George A. Kingston, workmen's compensation board, Toronto.
Mrs. George A. Kingston, Toronto.
R. B. Morley, Industrial Accident Prevention Associations, Toronto.
J. F. H. Wyse, Ontario Safety League, Toronto.

UNITED STATES

Connecticut

H. L. Alverson, Travelers Insurance Co., Hartford.
Albert J. Bailey, board of workmen's compensation commissioners, Norwich.
C. M. Davison, Travelers Insurance Co., Hartford.
J. R. Guilfoyle, Travelers Insurance Co., Hartford.
G. H. Lambeth, jr., Travelers Insurance Co., Hartford.
N. L. Lambeth, Travelers Insurance Co., Hartford.
J. M. Muldowney, Travelers Insurance Co., Hartford.
A. H. Sanford, Travelers Insurance Co., Hartford.
Frederic M. Williams, board of compensation commissioners, Waterbury.
Mrs. Frederic M. Williams, Waterbury.

Delaware

C. W. Dickey, E. I. du Pont de Nemours & Co. (Inc.), Wilmington.
Dr. G. H. Gehrmann, E. I. du Pont de Nemours & Co. (Inc.), Wilmington.
Robert K. Jones, industrial accident board, Wilmington.
Mrs. Robert K. Jones, Wilmington.
Abel Klaw, E. I. du Pont de Nemours & Co. (Inc.), Wilmington.
James B. McManus, industrial accident board, Wilmington.
G. H. Miller, E. I. du Pont de Nemours & Co. (Inc.), Wilmington.
Donald R. Morton, E. I. du Pont de Nemours & Co. (Inc.), Wilmington.
Dr. Richard H. Price, E. I. du Pont de Nemours & Co. (Inc.), Wilmington.
Emil J. Riederer, Atlas Powder Co., Wilmington.
Dr. Walter O. Stack, industrial accident board, Wilmington.
William J. Swain, industrial accident board, Wilmington.
Mrs. William J. Swain, Wilmington.

District of Columbia

Charles E. Baldwin, United States Bureau of Labor Statistics.
Clara M. Beyer, United States Children's Bureau.
Rollin M. Clark, United States Daily.
Frank J. Clayton, Federal Board for Vocational Education.
Marie Correll, United States Women's Bureau.
Major General H. L. Gilchrist, chief Chemical Warfare Service.
R. J. Hoage, United States Employees' Compensation Commission.
S. Kjaer, United States Bureau of Labor Statistics.
John A. Kratz, Federal Board for Vocational Education.
M. G. Lloyd, United States Bureau of Standards.
Leifur Magnusson, International Labor Office.
Mrs. Leifur Magnusson.
Frank H. Myers, attorney, 814 Securities Building.
Charles F. Sharkey, United States Bureau of Labor Statistics.
Ethelbert Stewart, Commissioner United States Bureau of Labor Statistics.
Glenn L. Tibbott, United States Bureau of Labor Statistics.

Georgia

Sharpe Jones, industrial commission, Atlanta.
Lewis D. Sharpe, Southern Bell Telephone & Telegraph Co., Atlanta.
Hal M. Stanley, industrial commission, Atlanta.

Idaho

Joel Brown, industrial accident board, Boise.
Mrs. Joel Brown, Boise.

Illinois

Howard B. Myers, department of labor, Chicago.

Iowa

A. B. Funk, workmen's compensation service, Des Moines.

Kansas

G. Clay Baker, commission of labor and industry, Topeka.
Harry C. Bowman, commission of labor and industry, Topeka.

Kentucky

V. C. McDonald, Bituminous Casualty Corporation, Louisville.

Maine

D. D. Garcelon, industrial accident commission, Augusta.

Maryland

Albert E. Brown, State industrial accident commission, Baltimore.
Miss Rowena O. Harrison, State industrial accident commission, Baltimore.
Edward B. Kloppel, Maryland Casualty Co., Baltimore.
W. B. Wyse, Baltimore.

Massachusetts

Miss Ellen C. Barry, department of industrial accidents, Boston.
J. B. Everett, Liberty Mutual Insurance Co., Boston.
Chester E. Gleason, department of industrial accidents, Boston.
Joseph A. Parks, department of industrial accidents, Boston.
Mrs. Joseph A. Parks, Boston.

Minnesota

F. A. Duxbury, 1126 Minnesota Building, St. Paul.

New Jersey

Charles R. Blunt, commissioner of labor, Trenton.
Mrs. Charles R. Blunt, Trenton.
Charles E. Corbin, department of labor, Trenton.
Mrs. Charles E. Corbin, Trenton.
Dr. Henry H. Kessler, rehabilitation commission, Newark.
Mrs. Henry H. Kessler, Newark.
Charles H. Weeks, department of labor, Trenton.

New York

Cyril Ainsworth, American Standards Association, New York City.
A. Scott Anderson, Fidelity & Casualty Co. of New York, New York City.
Miss M. Ansel, reporter Master Reporting Co., New York City.
W. G. Bottimore, Glens Falls Indemnity Co., Commerce Casualty Co., Glens Falls.
C. S. Ching, United States Rubber Co., New York City.
W. Graham Cole, Metropolitan Life Insurance Co., New York City.
Robert M. Crater, American Telephone & Telegraph Co., New York City.
W. G. Gillson, Standard Oil Co. of New Jersey, New York City.
Leonard W. Hatch, industrial board, New York City.
Mrs. Leonard W. Hatch, New York City.
E. B. Patton, department of labor, New York City.
Mrs. E. B. Patton, New York City.
Frances Perkins, industrial commissioner, department of labor, New York City.
W. H. Quirk, Western Electric Co., New York City.
C. R. Riley, Glens Falls Indemnity Co., Commerce Casualty Co., Glens Falls.
William Schobinger, London Guarantee & Accident Co., Phoenix Indemnity Co., New York City.

Charles M. Senft, Globe Indemnity Co., New York City.
Charles G. Smith, State insurance fund, New York City.
Mrs. Charles G. Smith, New York City.
J. Frank Thompson, Bethlehem Steel Co., New York City.
Dr. C. H. Watson, American Telephone & Telegraph Co., New York City.
Sidney W. Wilcox, department of labor, Albany.
V. A. Zimmer, department of labor, New York City.

North Carolina

E. F. Carter, division of standards and inspection, Raleigh.
J. Dewey Dorsett, industrial commission, Raleigh.
John C. Root, industrial commission, Raleigh.
T. A. Wilson, industrial commission, Raleigh.

North Dakota

W. H. Stutsman, workmen's compensation bureau, Bismarck.
R. E. Wenzel, workmen's compensation bureau, Bismarck.
Mrs. R. E. Wenzel, Bismarck.

Ohio

Carl C. Beasor, industrial commission, Columbus.
Mrs. Carl C. Beasor, Columbus.
T. A. Edmonson, director department of industrial relations, Columbus.
Mrs. T. A. Edmonson, Columbus.
Miss Lucille Edmonson, Columbus.
E. I. Evans, industrial commission, Columbus.
Thomas P. Kearns, industrial commission, Columbus.
Mrs. Thomas P. Kearns, Columbus.
Wellington T. Leonard, chairman industrial commission, Columbus.
Mrs. Wellington T. Leonard, Columbus.
Dr. W. E. Obetz, industrial commission, Columbus.
George M. Trautman, Columbus Chamber of Commerce.
Mrs. George M. Trautman, Columbus.
Emile E. Watson, Columbus.

Pennsylvania

W. F. Ames, Bethlehem Steel Co., Bethlehem.
W. H. Horner, department of labor and industry, Harrisburg.
Walter Linn, secretary Pennsylvania Self-Insurers Association, Philadelphia.
William J. Maguire, department of labor and industry, Harrisburg.
Henry A. Reninger, Lehigh Portland Cement Co., Allentown.
Dr. Henry Field Smythe, University of Pennsylvania, Philadelphia.

Rhode Island

Daniel F. McLaughlin, commissioner of labor, Providence.
Mrs. Daniel F. McLaughlin, Providence.

Utah

O. F. McShane, industrial commission, Salt Lake City.

Virginia

E. V. Albrechtson, du Pont Rayon Co., Richmond.
R. N. Anderson, State board of education, Richmond.
Wallace C. Anderson, Employers' Liability Assurance Corporation, Richmond.
Mrs. Wallace C. Anderson, Richmond.
Mrs. Fannie Ashlin, industrial commission, Richmond.
Lawrence Berry, office of commissioner of agriculture, Richmond.
Mrs. Lawrence Berry, Richmond.

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R. T. Bowden, Virginia Federation of Labor, Richmond.
Dr. C. B. Bowyer, Stonega Coke & Coal Co., Big Stone Gap.
J. H. Bradford, director of the budget, Richmond.
W. F. Bursey, industrial commission, Richmond.
Mrs. W. F. Bursey, Richmond.
G. A. Butler, Lone Star Cement Co., Norfolk.
Dr. Dean Cole, Richmond.
E. R. Combs, comptroller of Virginia, Richmond.
G. H. Crosby, jr., Travelers Insurance Co., Richmond.
Mrs. Solon B. Cousins, Richmond.
W. B. Davis, Tubize Chatillon Corporation, Hopewell
Col. Parke P. Deans, chairman industrial commission, Richmond.
Mrs. Parke P. Deans, Richmond.
Henry J. Decker, American Mutual Liability Insurance Co., Richmond.
T. E. Downs, American Tobacco Co., Richmond.
Frank P. Evans, industrial commission, Richmond.
E. F. Fielder, Atmospheric Nitrogen Corporation, Hopewell.
E. T. FitzGerald, Camp Manufacturing Co., Franklin.
Donald N. Frazier, American Mutual Liability Insurance Co., Richmond.
C. J. Fryer, Royal Indemnity Co., Richmond.
Dr. R. Finley Gayle, jr., Richmond.
H. E. Gibson, Benedict Coal Corporation, St. Charles.
A. A. Giese, Newport News Shipbuilding & Drydock Co., Newport News.
J. A. Gobel, Maryland Casualty Co., Richmond.
Dr. William Tate Graham, Richmond.
Dr. S. E. Gunn, Tubize Chatillon Corporation, Hopewell.
Lottie L. Haile, industrial commission, Richmond.
John Hopkins Hall, jr., commissioner of labor and industry, Richmond.
Mrs. John Hopkins Hall, jr., Richmond.
Dr. Sydney B. Hall, superintendent of public instruction, Richmond.
W. H. Haviland, Lumbermen's Mutual Casualty Co., Richmond.
Dr. H. T. Hawkins, Du Pont Rayon Co., Waynesboro.
W. H. Heintzman, Virginia Electric & Power Co., Petersburg.
J. R. A. Hobson, Virginia Manufacturers Association, Richmond.
H. Lester Hooker, State corporation commission, Richmond.
Ralph W. Howe, Globe Indemnity Co., Richmond.
Dr. J. Morrison Hutcheson, Richmond.
P. W. Hutcheson, Richmond.
Dr. Frank S. Johns, Johnston-Willis Hospital, Richmond.
Miss Mary Yancey Johnson, industrial commission, Richmond.
C. F. Joyner, jr., assistant motor vehicle commissioner, Richmond.
Mrs. C. F. Joyner, jr., Richmond.
J. C. Kidd, Fidelity & Casualty Co. of New York, Richmond.
Dr. A. M. Kimbrough, Richmond.
C. G. Kizer, industrial commission, Richmond.
Mrs. C. G. Kizer, Richmond.
George W. Koiner, commissioner of agriculture, Richmond.
Merrill C. Lee, Richmond.
Glen Leet, department of public welfare, Richmond.
Dr. Lee S. Liggan, American Tobacco Co., Richmond.
R. T. Little, Maryland Casualty Co., Richmond.
Dr. H. G. Longaker, Newport News Shipbuilding & Drydock Co., Newport News.
Frank G. Louthan, Virginia Manufacturers Association, Richmond.
Mrs. Frank G. Louthan, Richmond.
Miss Violet McDougall, secretary to the governor, Richmond.
K. McWhorter, Virginia Electric & Power Co., Richmond.
S. C. MacIntire, jr., Common Brick Manufacturers Association, Richmond.
C. F. McNeil, Travelers Insurance Co., Richmond.
Charles F. Maguire, Du Pont Rayon Co., Waynesboro.
Dr. H. Page Mauck, Richmond.
B. H. Menke, Liberty Mutual Insurance Co., Richmond.
Wade M. Miles, industrial commission, Richmond.
Samuel Chiles Mitchell, professor of history, University of Richmond.
C. H. Morrissett, Virginia Department of Taxation, Richmond.
T. A. Murphy, The Travelers, Richmond.
W. H. Nickels, jr., industrial commission, Richmond.

Mrs. W. H. Nickels, jr., Richmond.
A. K. Nissimer, Du Pont Rayon Co., Richmond.
E. T. Pace, Virginia Electric & Power Co., Richmond.
Dr. William H. Parker, American Tobacco Co., Richmond.
Edward M. Parrish, Aetna Life Insurance Co., Richmond.
R. R. Parrish, Aetna Life Insurance Co., Richmond.
C. C. Pettman, American Tobacco Co., Richmond.
Hon. John Garland Pollard, Governor of Virginia, Richmond.
James H. Price, Lieutenant Governor of Virginia, Richmond.
H. F. Primrose, American Tobacco Co., Richmond.
Stuart Ragland, Ragland, Brockenbrough & Tabb, Richmond.
David Ratcliffe, New Amsterdam Casualty Co., Richmond.
Giles M. Robertson, State highway department, Richmond.
W. L. Robinson, industrial commission, Richmond.
Mrs. W. L. Robinson, Richmond.
Benjamin Ruffin, Richmond.
C. B. Samuels, Atmospheric Nitrogen Corporation, Hopewell.
C. I. Sanders, Travelers Insurance Co., Richmond.
Dr. W. T. Sanger, president, Medical College of Virginia, Richmond.
John R. Saunders, Attorney General of Virginia, Richmond.
R. L. Savage, jr., United States Fidelity & Guaranty Co., Richmond.
Willis Shackelford, Du Pont Rayon Co., Richmond.
F. H. Smith, Abingdon.
J. P. Spearman, American Tobacco Co., Richmond.
Jeffrey F. Stanbach, Richmond Face Brick Co., Richmond.
Dr. H. U. Stephenson, industrial commission, Richmond.
Mrs. H. U. Stephenson, Richmond.
Herbert Thompson, Virginia Electric & Power Co., Richmond.
Dr. B. A. Tilghman, Du Pont Rayon Co., Richmond.
Paul F. Turner, Du Pont Rayon Co., Waynesboro.
Maurice Tyler, Richmond.
Dr. Warren T. Vaughan, Richmond.
Dr. F. J. Wampler, Medical College of Virginia, Richmond.
W. O. Wheary, supervising engineer, Richmond.
Miss Elaine Wheary, Richmond.
E. Ray Winters, Lumbermen's Mutual Casualty Co., Richmond.

West Virginia

Lewis J. Frey, workmen's compensation department, Charleston.
Mrs. Lewis J. Frey, Charleston.
Dr. Russel Kessel, workmen's compensation department, Charleston.
Lee Ott, State compensation commissioner, Charleston.
J. W. Smiley, workmen's compensation department, Charleston.

Wisconsin

Fred M. Wilcox, chairman industrial commission, Madison.

INDEX TO PROCEEDINGS OF INTERNATIONAL ASSOCIATION OF INDUSTRIAL ACCIDENT BOARDS AND COMMISSIONS, 1931

Subject Index

A

Name Index