

Michigan Law Review

Volume 10 | Issue 5

1912

The Economic and Legal Basis of Compulsory Industrial Insurance for Workmen I

James Harrington Boyd

Follow this and additional works at: <https://repository.law.umich.edu/mlr>



Part of the [Insurance Law Commons](#), and the [Labor and Employment Law Commons](#)

Recommended Citation

James H. Boyd, *The Economic and Legal Basis of Compulsory Industrial Insurance for Workmen I*, 10 MICH. L. REV. 345 (1912).

Available at: <https://repository.law.umich.edu/mlr/vol10/iss5/1>

This Article is brought to you for free and open access by the Michigan Law Review at University of Michigan Law School Scholarship Repository. It has been accepted for inclusion in Michigan Law Review by an authorized editor of University of Michigan Law School Scholarship Repository. For more information, please contact mlaw.repository@umich.edu.

MICHIGAN LAW REVIEW

VOL. X.

MARCH, 1912

No. 5

THE ECONOMIC AND LEGAL BASIS OF COMPULSORY INDUSTRIAL INSURANCE FOR WORKMEN.*

I.

IT is proposed to present to the readers of the MICHIGAN LAW REVIEW, the economic and legal basis for the substitution of a new remedy, namely, compulsory industrial insurance for workmen, in lieu of the common and statutory liability law remedies, as a means for compensating workmen who are injured in the due course of their employment.

In Part I, it will be shown not only that the common (and liability) law remedy in its present form does not furnish compensation of any kind in to exceed 12% of the cases of injuries to employees, and even in those cases in which compensation is paid, the compensation paid does not on the average exceed one-fifth of what is regarded as adequate compensation, but also that no modification of the common law remedy can be made whereby these results will be *materially* improved. Hence that the old common law remedy must be abandoned and a new remedy substituted therefor.

In Part II, we shall give an analysis of the legal principles involved in the substitution of compulsory industrial insurance for workmen in lieu of the common and statutory liability laws as a remedy for compensating workmen who are injured in the due course of their employment—for example, an analysis of the legal principles which

* This article is adapted from the brief filed by the special counsel for the State of Ohio in State of Ohio ex rel, Wallace D. Yapple, Plaintiff, v. David S. Cramer, Treasurer, Defendant, in the Supreme Court of Ohio, which raised the issue of the constitutionality of the Ohio Workmen's Compensation Act. The court on January 16, 1912, handed down its decision unanimously sustaining the Act.

lie at the foundation of the OHIO WORKMEN'S COMPENSATION ACT,¹ along with a brief resume of the fundamental provisions of compensation acts for workmen in other States of America.

PART I.

Statistical Studies exhibiting the economic effects of the operation of the Common Law, of the Liability Laws and Compulsory Industrial Insurance on society, workmen and their dependents on account of injuries received by the workmen in the due course of their employment.

In the evolution of economic and sociological problems of a nation, already largely industrialized, gross inequalities in the material condition of the different classes of its citizens arise, and when the public mind becomes conscious of the hardships flowing from these inequalities, the legislative and judicial arms of the State are called upon to regulate, to equalize, and to adjudicate equitably such economic abuses and hardships.

The first steps to be taken in adjusting and relieving society of the said abuses are to inquire into and determine what the exact causal facts are, from which flow these abuses, before the legislative and judicial arms of the State can formulate and apply a just and equitable remedy. It is the determination of the causal facts of these economic abuses and the magnitude of their evil effects that constitute the most difficult step to accomplish, and upon the clear determination of which the legislatures and the courts of last resort insist first upon knowing, before they will enact and sustain the putting into operation of an adequate remedy for the injurious economic abuses involved in the subject of this paper.

Therefore, the discussion of "what provisions can be made for workingmen and their dependents, to avoid the economic insecurity which accompanies the modern wage system" resolves itself into the following plan:

(A) The location and determination of the causal facts and their fundamental characteristics which produce the economic insecurity of workingmen, and characteristics which accompany the modern wage system, shall first be analyzed.

(B) In the second place we shall point out precisely what the remedy to cure these economic inequalities is, and in what way the legislative and judicial authorities of the States can put the proposed remedy into operation and perpetuate the same.

¹ 102 Ohio Laws, pp. 524-533; 196 and 404.

(A) STATISTICAL INVESTIGATION AND DETERMINATION OF THE CAUSAL FACTS WHICH SHOW THE CHARACTER AND EXTENT OF THE ECONOMIC INSECURITY OF WORKINGMEN AND THEIR DEPENDENTS WHICH ACCOMPANY THE MODERN WAGE SYSTEM.

STATISTICAL EXPERIENCE OF WORKINGMEN UNDER THE OPERATION OF COMPULSORY STATE INSURANCE IN GERMANY.

In 1887 there were insured against sickness and accidents in Germany 3,861,560 workingmen among 319,453 establishments,² and the number of notices of accidents was 106,001. A special analysis of the different elements of the causes of these accidents will be found below:

	Persons Insured.
In 1907, insured in Germany against accidents: ³	
Industrial, building, and marine trade associations (associations, 66; establishments, 637,118).....	9,018,367
Agriculture and forestry trade associations (associations, 48; establishments, 4,710,401)	11,189,071
State executive boards (boards, 535).....	964,589
	<u>21,172,027</u>
In 1897 there were insured in Germany against accidents in the same associations and 409 State executive boards, in round numbers ⁴	18,500,000

THE QUESTION OF FAULT AND PREVENTION OF ACCIDENTS—COMPENSATION—GERMAN STATISTICS.

TABLE NO. X.—*Accident statistics of industries for the 3 years, 1887 and 1897⁴ and 1907⁵ under German law.*

	1887	1897	1907 (46,000 accidents)
By fault of—	Per cent.	Per cent.	Per cent.
Employer	20.47	17.30	16.81
Employee	26.56	29.74	28.89
Both parties	8.01	10.14	9.94
Due to negligence of the parties.....	55.04	57.18	55.64
Due to inevitable risks of the industries and other causes.....	<u>44.96</u>	<u>42.82</u>	<u>44.36</u>
	100.00	100.00	100.00

This table, covering a period of 20 years of experience, shows not only the elements of fault which enter into the problem, but also supplies a valuable basis for further improvements of preventive

² Fourth Special Report of the Commissioner of Labor, 1893, p. 82.

³ Frankel and Dawson, *Workingmen's Insurance in Europe*, 1910, p. 101.

⁴ Dr. George Zacher, *Introduction to Workmen's Insurance in Germany*.

⁵ Bulletin of Bureau of Labor, 1908, p. 120.

measures, since from 55 to 57 per cent of all accidents are due either to the fault of the employer, employee, or their combined negligence.

It is of interest in this connection that the tables of the Minnesota and Wisconsin labor departments ascribe from 40 to 50 per cent of all industrial accidents, on the average, as due solely to the inevitable risks of the business. The Austrian tables show 70 per cent are attributed to this cause.⁶

It is first to be noted that this Table No. X represents the experience of the operation of the compulsory German State Insurance Law, for a period of 25 years, under the operation of which, from 4,000,000 to 21,000,000 workingmen engaged in all possible industrial, Governmental, and agricultural occupations of a great nation, with respect to the determination of the element of fault entering into the causes of accidents to workmen. We shall define the natural hazard of any occupation by the equation:

Inevitable risk + combined negligence of both employer and employee = natural hazard.

From Table No. X it follows:

	1887	1897	1907
Fault of both parties.....	8.01	10.14	9.94
Inevitable risks	44.96	42.82	44.36
Natural hazard	52.97	52.96	54.30
Average, 53.41 per cent.			

During the period 1887-1897 there were put under the operation of the German law the workingmen employed in the occupations of agriculture, forestry, building trades, to the number of 12,500,000, who heretofore were not insured.⁷ This large class of workingmen were the most ignorant and poorest trained of all the workingmen insured under the law. You note that the per cent of the causes of accidents attributable to the negligence of the employee increased from 26.56 per cent in 1887 to 29.74 per cent in 1897, an increase of almost 3 per cent. During the next decade, 1897-1907, this element of fault fell from 29.74 per cent to 28.89 per cent while the number of such workingmen remained practically at the 12,000,000 mark. This is due to a gradual improvement of the ways and means of preventing accidents so carefully studied in Germany.

The superior intelligence of the employers made a more marked improvement in the reduction of the element of fault due to the employer's negligence.

⁶ Report of the New York Commission, p. 25.

⁷ Frankel & Dawson, Workingmen's Insurance in Europe, p. 101.

Thus the causes of accidents attributable to the employer in 1887 was 20.47 per cent; in 1897 it fell to 17.30 per cent; and during the next decade it fell to 16.81 per cent in 1907. But, notwithstanding these improvements in the reduction of the element of fault, yet the per cent of the causes of accidents due to natural hazard remains practically constant, as shown at 53.41 per cent.

An analysis of the experience of foregoing millions of workmen under the operation of the compulsory state insurance in Germany for two and one-half decades, 1883-1887, 1887-1908, with respect to the elements of fault of the employer, of the fault of the employee, and the inevitable risks of the business are given in Table No. X.

This leads us to the first fundamental conclusion of primary evidence in our problem:

That no matter how careful the employer is, or how careful the employee may be, or how high the efficiency of the State may rise in the application of ways and means in the prevention of accidents, the natural hazard remains practically constant. That on the average of from 52 per cent to 53 per cent of the cause of all accidents are due to the natural hazard of the business.

This is the first element of insecurity of workingmen under the modern wage system, for the reason that an injured workman can not recover at all in an action at law for damages on account of an accident received while working for his master until he can prove that his master was negligent and that that negligence was a contributing cause to his injury.

The object of giving an injured workman a cause of action for such injuries as are the subject of this paper is not only to compensate the workman (especially in the case of death or total disability), but principally to furnish some compensation to his dependents, who might become public charges when their means of support are cut off by such an accident.

The entire equity side of our court has been built up on the theory that justice should be done between man and man when the common law does not furnish any remedy or does not furnish an adequate remedy.

Here in this problem there is the one element alone of 52 per cent of all cases of injury which the common law does not presume to furnish any relief at all—none for the injured workman and none for the dependents who, in most of such cases, must be supported by the community in which they live. This leads us to the second fundamental conclusion of primary evidence in our problem.

Table No. X shows us that the element of the causes of accidents

which were attributable to the workmen's own negligence (taking the workmen of a State or nation as a whole) is on the average:

$\frac{1}{3}(26.56 \text{ per cent} + 29.74 \text{ per cent} + 28.89 \text{ per cent}) = 28.39 \text{ per cent.}$

The effect on dependents is just the same whether the cause of the injury was due to the negligence of the employee, to that of the employer, or to the natural hazard of the business. The common law in theory denies the injured workman relief in all of these cases, to-wit, 28.39 per cent, and, further, there is no cause of action at all in the 53.41 per cent of the cases due to the natural hazard. Or in the combination of the two elements, natural hazard and negligence of the workmen, that is, in 81.80 per cent of the cases of injury the common law does not presume to furnish any compensation either to the workman or his dependents.

The third conclusion of primary evidence in our problem relating to the economic insecurity of the workingman under the modern wage system in the United States is:

That the per cent of cases of injuries to workingmen, the causes of which are attributable to the negligence of the employer, is on the average (Table No. X) but 18.53 per cent of the cases. This is the third cause of the economic insecurity of workingmen under the modern wage system.

It is susceptible of proof that the foregoing elements of negligence of employer, employee, and natural hazard are practically the same in the United States as they are in Germany.

The discussion to immediately follow will show, in presenting the "Statistical experience of workingmen under the common law and liability laws in the United States," immediately below, that while in theory the common-law remedy furnishes compensation in 18.53 per cent of cases of injuries to workingmen, that, however, in practice that compensation in any amount is paid in less than 6 per cent to less than $12\frac{1}{2}$ per cent of the cases, and then only in amounts about one-fifth of adequate compensation.

STATISTICAL EXPERIENCE OF WORKINGMEN UNDER THE OPERATION OF
LIABILITY LAWS AND OBLIGATORY INDUSTRIAL IN-
SURANCE (GERMANY).

Under our common law and that of England an employee injured in an industrial accident, being without fault and able to prove that his employer was negligent, can recover damages for his injuries.

The plaintiff can not recover, however, if the defendant can prove—

(a) That the plaintiff's negligence contributed to the cause of the accident; or

(b) That the negligence of a fellow-servant contributed to the cause of the accident; or

(c) That the plaintiff assumed the risk, even though the defendant was negligent.

We now inquire, with what efficiency do the common-law remedies operate in compensating persons injured in industrial accidents?

We give the result of six investigations of wide scope, to-wit:

I. The report of the Employer's Liability Commission of New York State.

II. The Pittsburgh Survey, six volumes, the Russell Sage Foundation, 1910.

III. Wisconsin Bureau of Labor and Industrial Statistics, report for 1909.

IV. The report of the Employer's Liability Commission of Illinois, 1910.

V. The report of the Employer's Liability Commission of Ohio 1911.

VI. European experience, that of Germany in particular.

I. NEW YORK STATE.

During the years 1906, 1907, and 1908, 10 insurance companies, which keep employers' liability records, doing business in New York, received in premiums from—

Employers	\$23,524,000
Paid to injured employees.....	8,560,000
Waste	⁸ \$14,964,000

Nothing could more strikingly set forth the waste of the present system. Only 36.34 per cent of what employers pay in premiums for liability insurance is paid in settlement of claims and suits. Thus, for every \$100 paid out by employers for protection against liability to their injured workmen, less than \$37 is paid to those workmen; \$63 goes to pay the salaries of attorneys and claim agents whose business it is to defeat the claims of the injured, to the cost of soliciting business, to the cost of administration, to court costs, and to profit.

Out of this 36.34 per cent the injured employee must pay his attorney. The same report shows that the attorney gets 26.13 per cent of what is paid to the injured employee. This investigation

⁸ First report of the Employers' Liability Commission, New York, p. 31.

covers 46 cases where the recovery was above \$1,500 each. In small recoveries the attorney fees take a larger proportion. This report shows that not more than somewhere between 20 and 25 per cent of the money paid by the employing class goes actually into the pockets of injured workmen for their dependent families in death cases.

II. PITTSBURGH SURVEY.

The investigation recently conducted in Allegheny County, Pa., under the direction of the Pittsburgh survey showed that out of 355 cases of men killed in industrial accidents, all of whom were contributing to the support of others and two-thirds of whom were married, 89 of the families left received not more than \$100, and 61 families received something more than this \$100. In other words, 57 per cent of these families were left by their employers to bear the entire burden of income loss and granting that all unknown amounts would be decided for the plaintiffs, only 26 per cent received in compensation for the death of a regular income provider more than \$500, a sum which would approximate one year's income of the lowest paid of the workers killed.

The proportion of the loss borne by employers in injury cases does not differ greatly from that in death cases.

Thus, out of 288 injury cases, of the married men alone, 56 per cent received no compensation; of single men contributing to the support of others, 69 per cent received no compensation; of single men without dependents, 80 per cent received no compensation.

III. WISCONSIN BUREAU OF STATISTICS.

The great financial losses borne by the workmen are set forth by the Wisconsin bureau of labor and statistics in the following report of 306 non-fatal cases of injuries:

	Cases	Per cent.
Received nothing from employer.....	72	23.5
Received amount of doctor bill only.....	99	32.4
Received amount of part of doctor bill only.....	15	4.9
Received something in addition to doctor bills.....	91	29.7
Received something but not doctor bills.....	29	9.5
	<hr/>	<hr/>
Total	306	100.0

In other words, we may say that in two-thirds of the cases part or all of the doctor bills were paid, but in less than one-third was anything more paid, and in about one-fourth of the cases nothing whatever was paid.

Of 131 non-fatal cases in Wisconsin, concerning which reports were secured by factory inspectors, the following disposition was made:

	Cases	Per cent.
Received nothing from employer.....	28	21.37
Received doctor bills only	56	42.75
Received something—doctor bills.....	10	7.63
Received something, but not doctor bills.....	34	25.96
Not settled	3	2.29
Total	131	100.00

IV. ILLINOIS, REPORT OF COMMISSION.

The employers' liability commission of the State of Illinois has recently made a report of its investigation of industrial accidents and employers' liability at a cost of \$10,000. I give you a condensed statement of the results of the investigation of the Illinois commission in the language of Edwin R. Wright, secretary of the commission.

More than 5,000 individual accidents were investigated and recorded, together with comparative figures and analysis. A few words as to what the report shows may be of value:

Six hundred and fourteen fatal accidents are recorded.

The families of 214 of these workers received nothing in return for the loss of the bread-winner.

One hundred and eleven damage suits are pending in court.

Twenty-four cases have been settled through court proceedings.

Two hundred and eighty-one families settled direct with the employer.

Skilled railroad employees, in settlement for death claims, averaged about \$1,000; steel workers, \$874; railroad laborers, \$617; skilled building tradesmen, \$348; skilled electric railway employees, \$310; unclassified workmen, \$311; miscellaneous trades, \$292; packing-house employees, \$234; general laborers, \$154; mine workers, \$155; electric railway laborers, \$75; teamsters, none; building laborers, none.

A further summary may be offered. Of every 100 industrial accidents, 15 go to court—7 are lost and 8 win. Ninety-two injuries out of every 100 receive no compensation. This includes both fatal and non-fatal accidents.

Another interesting feature is this: A thorough search through the record reveals 53 fatal cases of recent date. In fatal cases the usual defenses of the employer—the fellow-servant doctrine, assump-

tion of the risk, etc.—did not apply or there would not have been a recovery at all.

For these—the very pick of industrial cases—the average recovery for death was only \$1,877.36. Of this an average amount of \$750.95 was paid to attorneys or expended in court fees, etc., leaving an actual payment of \$1,126.41 to the family of the dead worker. Thirty-four widows were compelled to seek employment and 65 children left school to help keep the wolf from the door.

V. OHIO STATISTICS.

We next give results of the investigations of the economic effects of industrial accidents on workingmen and their dependents, for the period of 1905-1910, in Cuyahoga County (Cleveland), Ohio, both for fatal and non-fatal accidents, by the Employers' Liability Commission of Ohio, under the direction of James Harrington Boyd, Chairman, and Emile E. Watson, investigator in chief.⁹

TABLE I.—*Per cent receiving settlement in fatal cases.*

Civil status of decedent.	Number of cases taken from coroner's records.	Number receiving settlement through probate court.	Number settling without going to probate court.	Number securing awards in the court of common pleas.	Per cent. securing settlement.	Per cent. not securing settlement.
Married	115	37	10	1	41.7	58.3
Single	60	14	..	1	25.0	75.0
Total	175	51	10	2	36.0	64.0

A settlement was made with the dependents in 36 per cent of all the cases, and in 42 per cent of those in which the decedent left a widow. In practically all of these cases an amicable settlement was made with the representative of the deceased, appointed by the probate court, either out of court in the first instance or after the institution of a suit.

THE AVERAGE AMOUNT RECEIVED IN SETTLEMENT.

An examination of 285 fatal cases proved that the average amount paid per case was \$838.61. In 176 of these cases the decedent left

⁹ See Report of the Employers' Liability Commission of Ohio, Pt. I, pp. xxxv-xliv.

a widow, and the average settlement was \$1,056. The exact figures are given in Table No. II below:

TABLE II.—Average amount received in death cases.

Civil status of decedent.	Number of cases.	Average amount received.
Married	176	\$1,056.51
Single	109	485.87
Total	285	\$ 838.61

The amount received varied from funeral expenses to \$5,000. In the case of the dependents of 109 single workmen killed; the average amount received was \$485. 87.

TABLE III.—Average amount of settlement of fatal cases within specified limits, as shown by court records.

Range of amount of settlement.	Court in which settlement was made.	Number of cases.	Average amount of settlement.
Up to \$300.....	Common pleas court.....	15	\$ 178.93
	United States circuit court.....	4	187.50
	Probate court	116	161.05
	Total	135	\$ 163.83
300 to \$1,000....	Common pleas court.....	14	\$ 542.85
	United States circuit court.....	10	587.54
	Probate court	83	507.78
	Total	107	\$ 519.81
\$1,000 to \$2,000..	Common pleas court.....	8	\$1,231.25
	United States circuit court.....	14	1,290.00
	Probate court	49	1,270.59
	Total	71	\$1,269.98
\$2,000 to \$4,000...	Common pleas court	6	\$2,241.67
	United States circuit court.....	7	2,364.28
	Probate court	29	2,704.13
	Total	42	\$2,581.13

\$4,000 and over... Common pleas court	1	\$4,500.00
United States circuit court.....	6	5,419.17
Probate court	8	4,687.74
Total	15	\$4,991.66
Total in common pleas court	45	\$ 915.20
Total in United States circuit court...	40	1,775.26
Total in probate court.....	285	838.61
Total	370	\$ 949.19

The following conclusions from Table III:

First. That the total amount of compensation received by the dependents of 313 workmen out of a total number of 370 killed (or 87.86 per cent) of those receiving settlement is \$165,905.35, which is only 47.81 per cent of the total amount, \$351,200.35, paid to the dependents of the 370 workmen killed; that the total amount of compensation received by the dependents of 57 of these 370 workmen killed (or 12.14 per cent of those receiving settlement) is \$183,295, which is 52.19 per cent of the total amount paid the dependents of the 370 workers.

Second. That on the average in Ohio, taking the best 15 cases out of the 370 families left dependent by death of the breadwinners, receive on the average \$4,991.66. Deducting now (see Table IV on p. 738) 25 per cent for attorney fees and \$300 for doctors' bills, funeral expenses, and interest due to delays in making settlements (assuming that the largest damages are paid to the earners of the largest wages), we have \$3,443.75 as the maximum compensation paid under the present system on an average for each of the best 4 cases out of 100 families left dependent when the head of the family is killed in industrial employment. The obligatory industrial insurance act passed by both houses of the Legislature of Ohio in May, 1911, provides a maximum of \$3,400 and a minimum of \$1,500, and doctors' bills and funeral expenses not to exceed \$200.

ATTORNEY FEES.

It was intended to give in Table No. IV an accurate idea of what per cent of the amount of settlement is retained by the plaintiff's attorney as remuneration for his services. Specific amounts were ascertained in so few cases however that the table as given will be misleading unless taken with a few grains of allowance. The great majority of the cases included in it were settled either out of court

or before going to trial. The average for these cases is shown to be about 24 per cent, and this includes both fatal and non-fatal cases.

The table shows that approximately one-fourth of the amount received was paid out as plaintiffs' attorney fees and as court costs.

TABLE IV.—*Attorney fees.*

Court.	Number of cases in which amount of fees was ascertained.	Total amount of settlement.	Total amount of attorneys' fees.	Per cent.
Common pleas	53	\$78,500	\$20,650.82	26.3
United States circuit court..	13	56,850	14,100.00	24.6
Probate-court	88	97,862	19,918.73	20.3

SOCIAL AND ECONOMIC RESULTS OF ACCIDENTS.

An individual investigation to determine the social and economic conditions of families deprived by industry of their breadwinners was made in 86 cases. The results, as compiled in table No. V, show that nearly 56 per cent of the widows were compelled to go to work, and at an average weekly wage of \$5.51. Altogether in these homes there were 178 children, about 70 per cent of whom were under 12; 59 per cent of the others were forced to go to work. The wretched condition in which some of these families were found can not be depicted by means of tables.

TABLE V.—*Social and economic conditions.*

WIDOWS.

Number.	Number compelled to go to work.	Per cent. of those visited.	Number of those compelled to work whose wages were ascertained.	Per cent. of those who worked.	Average weekly wages.	
Widows' homes visited....	86	48	55.8	38	79.2	\$5.51

CHILDREN.

Ages.	Number.	Number to go to work.	
		Per cent.	
Under 12	124	..	00
12 to 18	45	27	or 60
18 to 21	9	5	or 55
Total	178	32	..

Fifty-six per cent of the widows visited and 18 per cent of the children were forced to go to work to earn a livelihood as a result of the industrial accidents.

NUMBER OF PAYMENTS, OUT OF THE TOTAL NUMBER OF EMPLOYEES INJURED, MADE IN THE SETTLEMENT OF SUITS BY LIABILITY INSURANCE COMPANIES.

In making settlements of 65,800 accidents covering a period of about eight years, in Cleveland, Ohio, the Aetna Liability Insurance Co. made payments of any kind in only 6 per cent of the cases.¹⁰

VI. GERMANY STATISTICS ANALYZED.

In 1887 there were insured in Germany 3,861,560 workmen among 319,453 establishments, and the number of notices of accidents was 106,001.

The German analysis of the 15,970 accidents which incapacitated workmen for more than 13 weeks shows:

That 19.76 per cent of the 15,970 or 3,156 injuries, were attributable to the fault of the employers.¹¹

That 25.64 per cent of the 15,970, or 4,094 injuries, were attributable to the fault of the injured.

That 54.60 per cent of the 15,970, or 8,720 injuries, were attributable to the fault of the injured and employer and inevitable risk when at work.¹¹

Thus 80.24 per cent of 15,970, or 12,834 injuries were attributable to the fault of the employee and the inherent dangers of the industry.

Now, 18.51 per cent of these 12,834 were killed, 2,375; 17.70 per cent of these 12,834 were totally disabled, 2,272; 50.88 per cent of these 12,834 were partly disabled, 6,590.

¹⁰ See Report of Employers' Liability Commission, Pt. II, p. 208.

¹¹ Fourth Special Report of the Commission of Labor, 1893, p. 83.

*Causes of accidents in 1887.*¹¹

Attributable causes.	Per cent.	Number.
Fault of employer:		
Insufficient apparatus for protection.....	10.64	1,700
Defective arrangement for carrying on business.....	7.03	1,122
Lack of directions or improper ones.....	2.09	334
Total	19.76	3,156
Fault of injured:		
Awkwardness or inattention	16.49	2,634
Disobedience to orders	5.17	825
Heedlessness	1.98	316
Failure to make use of protective apparatus.....	1.76	281
Unsuitable clothing24	38
Total	25.64	4,094
Fault of the employed and injured.....	4.45	711
Fault of third person, particularly a co-laborer.....	3.28	524
No fault which can be assigned.....	3.47	554
Inevitable risk when at work.....	43.40	6,931

Of these 12,834, 12.91 per cent were incapacitated for a time longer than 13 weeks, 1,657.

The result of the injured in the 15,970 cases are as follows:

It follows, therefore, that out of 15,970 employees whose injuries lasted more than 13 weeks, the common-law remedies would give 3,156 employees such compensation as a jury would assess after a trial and all appeals were settled.¹²

But the common law does not pretend to compensate dependents of the 2,375 killed in these accidents where the cause of death could not be attributed wholly to the fault of the employer. Nor does the common law pretend to compensate the 2,272 injured workmen who were disabled for life, the fault not being attributable to the employer.

Nor does the common law offer any remedy for compensating the 6,590 injured workmen who were partially disabled, the fault thereof not being traceable to the employer.

¹¹ Fourth Special Report of the Commission of Labor, 1893, p. 83.

¹² Schonberg, Handbuch, XXII, pp. 737-748.

Results of accidents in 1887.

Results.	Per cent.	Number.
Death	18.51	2,956
Incapacity for a time longer than 13 weeks.....	12.91	2,061
Lasting incapacity for work:		
Entire	17.70	2,827
Partial	50.88	8,126
Total	68.58	10,953

The State of Ohio now says that when 10,459 helpless and crippled persons and the dependents of 2,375 workmen killed have become paupers it will house them. (Prior to May, 1911.)

It is therefore the duty of the State to provide by industrial insurance or compensation act the means whereby 80 per cent of all workmen, who are now unable to do so, may protect themselves against the inevitable calamities of industrial activity. It is the duty of the State, to conserve the selfrespect of the family, which is the unit of the State.

The bulletin for the Bureau of Labor for January, 1908, gives, on page 120, the statistics of 46,000 industrial accidents collected by the German imperial insurance office.

The classification of the causes of the accidents is as follows:

1. Due to negligence or fault of employer.....	16.81
2. Due to joint negligence of the employer and injured employee.....	4.66
3. Due to negligence of co-employees (fellow servants).....	5.28
4. Due to "acts of God".....	2.31
5. Due to fault or negligence of employee.....	28.89
6. Due to inevitable accidents connected with the employment.....	42.05
Total	100.00

These figures grouped to correspond to those for one year, 1887, are:

1. Cause of accident attributable to employer.....	16.81
2. Cause of accidents attributable to employee.....	28.89
3. Due to the inherent risks of the business.....	54.30
Total	100.00

The agricultural laborers were admitted to insurance after 1887, and the act was made to cover a large additional class of less intelligent laborers.

VII. MISCELLANEOUS DATA.

The 19,000,000 workmen who earn on an average less than \$500 per annum, with their families, represent a population of 60,000,000 people.

Every civilized nation has decided that the product of labor of a given generation must support all during that time.¹³

Looked at from a purely commercial standpoint, that of rearing of men and women for the purpose of productive laborers, the elements of cost and waste have been studied with accurate results.

There is the rearing of the children to the age of self-support, with the result that 13 per cent die during that period; during the assumed productive life of wage earners, it is estimated that the loss from death is 25 per cent in the United States.¹⁴ The loss through sickness is 6 per cent.¹⁵ Then you must add the cost, in money and time, of accidents and the support of the aged.

Under these conditions, it is claimed that the contract of labor through some inadvertence is made as though sickness, accident, invalidity, and old age had been permanently banished from the earth; that the daily wage is sufficient only for daily necessities; that a man entitled to support for a lifetime unwillingly consents to a wage based upon a portion of that lifetime, for the competition in the field of labor is among the strong, the able-bodied, the efficient.¹⁶

We are surprised when told that Germany's poorer classes, though less favored by circumstances, maintain a higher level of well-being and far higher level of vitality than those of the United States and England.¹⁷

In industries outside of agriculture, for the sake of comparison we might take \$600 per annum as a minimum wage, based upon a family of five.¹⁸

In Massachusetts during a period of great prosperity with the necessary attendant cost of living, out of 300,000 adult workmen, only two-fifths received as much as \$12 per week. Making only proper allowance for unemployment, this would amount to considerably less than \$600 per year.¹⁹ It has been said that the 18,000,000 wage earners of the United States receive an average wage of only \$400 per annum.²⁰

It is said that one-half of the families of the country and nine-tenths of those in the cities and industrial communities are property-

¹³ F. A. Walker, *The Wage Question*, p. 34.

¹⁴ F. A. Walker, *Wages*, p. 35.

¹⁵ C. S. Loch, *Insurance and Savings*, p. 50.

¹⁶ A. W. Lewis, *State Insurance*, p. 7.

¹⁷ A. Shodwell, *Industrial Insurance*, Vol. 2, p. 453.

¹⁸ J. A. Ryan, *A Living Wage*, p. 150.

¹⁹ Compare Massachusetts Labor Bulletin, No. 44, December, 1906, p. 430, with thirty-seventh annual report, 1906, Massachusetts Bureau of Statistics of Labor, pp. 279-281.

²⁰ Address before American Association for Advancement of Science, December 27, 1906, by H. L. Call.

less; that in a group of States, including Massachusetts, one-fifth are in poverty;²¹ that one-twentieth are paupers;²² that one-eighth of the families hold seven-eighths and 1 per cent hold over one-half of the property of the country;²³ and that 71. per cent of the people hold 5 per cent of the wealth;²⁴ that one-eighth of the families receive over one-half of the total income; and that two-fifths of the better-paid laborers receive more than the remaining three-fifths.²⁵

We can derive no comfort out of the statistics of savings-bank deposits. Take Massachusetts, where there seems to be an average deposit of about \$300. Investigation shows that, while far the largest number of deposits belong to the wage-earning class, the deposits of thirteen-fourteenths of the whole number are but slightly larger than those of the remaining one-fourteenth; that in a typical bank the average deposit of wage earners was less than \$75.²⁶

In England "it took 25 years of legislation to restrict a child of 9 to 69 hours per week."²⁷ "It took 75 years to ascertain that the factory act, instead of weakening, had strengthened her in the world's rivalry."²⁸

The assumption of any function by the State, like that of compulsory public education, is based upon higher grounds than compassion for a class. On what grounds does the State regulate the cholera, bubonic plague, and build and maintain institutions for paupers and for the insane? Why not begin higher up and prevent pauperism and assist those who do work of the nation and must fight its battles, who can not protect themselves from having an eye put out or an arm or leg cut off or their lives crushed out?

The fourth element which enters into the determination of the economic insecurity of workingmen under the modern wage system is the following: While, theoretically, injured workmen have a cause of action at law against their employer in 18.19 per cent of the cases of injuries to them (Table No. X), we learn further from this table that the per cent of accidents the causes of which are attributable to the combined negligence of the employer and employee is 9.94 per cent, and from VI German Statistics we learn that the portion of this 9.94 per cent which is due to the negligence of fellow

²¹ Hunter, pp. 43-60.

²² R. T. Ely, in *North American Review*, Vol. 152, p. 398.

²³ C. P. Spahr, *President Distribution of Wealth in the United States*, p. 69.

²⁴ G. K. Holmes, in *Political Science Quarterly*, Vol. III, pp. 593.

²⁵ G. K. Holmes, in *Political Science Quarterly*, Vol. III, pp. 128-129.

²⁶ Massachusetts Bureau of Labor Statistics, *Third Annual Report*, pp. 304-313; *Fourth Annual Report*, p. 192.

²⁷ Hutchinson and Harrison, p. 27.

²⁸ Traill, *Social England*, Vol. VI, p. 825.

servants is 5.28 per cent. But in the cases which come under the fellow-servant rule the injured workmen can not recover. Subtracting 5.28 per cent from the 18.19 per cent there is left only 12.91 per cent of the cases in which injured workmen can theoretically recover under the common and liability laws for personal injuries received while at work.

STATISTICAL RESULTS OF THE PER CENT OF WORKINGMEN WHO RECEIVE COMPENSATION UNDER THE OPERATION OF THE COMMON LAW AND LIABILITY LAWS.

Prior to the passage of compulsory State insurance in Germany, under the operation of common and liability laws injured workmen received compensation in only 10 per cent of the cases.²⁹

Turning now to the statistics given above under the operation of the common and liability laws in Illinois, something was paid the injured employees in 8 per cent of the cases; the statistics of New York State show that something was paid in one case out of eight, or in 12 per cent of the cases of injured workingmen;³⁰ that in Ohio liability insurance companies settled 65,800 cases of injured workmen in Cleveland, Ohio, making payments of any amount in only 6 per cent of the cases.³¹ (See Ohio statistics, Table VI.) Making allowance for the rotting of evidence between the time of the accident and that of the trial of the case, the statistics of the practical operation of workingman's ability to recover compensation in the United States verifies the German statistics that he can theoretically recover in about 12.91 per cent of the cases.

The fifth element which enters into the determination of the "economic insecurity of workingmen under the modern wage system" is gathered from the miscellaneous data under "VII. Statistical experience, etc.," given above:

(a) That in the rearing of children to the age of self-support 13 per cent die during that period.

(b) That in the United States during the assumed productive life of wage earners it is estimated that the loss from death is 25 per cent.

(c) That the loss of wages through sickness of the workingmen is 6 per cent, saying nothing about the cost of supporting the aged, etc.

Lastly, there is still the very important sixth element of the said insecurity—that is, the average compensation received by the depen-

²⁹ Fourth Special Report of Commissioner Wright, in 1893.

³⁰ First Report New York Commission's Report, p. 25.

³¹ See Report of Employers' Liability Commission of Ohio, Pt. II, p. 208.

dents of a workman killed while at work under the present wage system.

Take the most favorable cases, called court cases; for example, in Ohio Table No. III, above. The average compensation received by the family of the worker in fatal cases is \$949. Deducting 25 per cent for attorney fees and \$212 for funeral expenses and the costs of delay of settlement, and you have a net compensation of \$500. Under the Ohio law, just passed, the workman receiving the average wages of \$12 per week would receive \$2,400.³² Thus the small per cent who receive any compensation under the present wage system receive on the average about one-fifth of what is regarded as a reasonably adequate compensation.

FUNDAMENTAL ECONOMIC CONCLUSIONS

That the foregoing statistical studies show conclusively that (and to what extent) the social and economic order of the people of the United States is gravely threatened in the permanency of its security by the economic insecurity of the workingmen which accompanies the modern wage system under the operation of the prevailing common and liability laws through which workingmen must seek compensation when they are injured in the due course of their employment, as depicted in the foregoing discussion.

Further, it should be said that the ultimate object of compulsory State insurance for workingmen is to conserve the normal capacity of the average worker of all the classes of workingmen and to maintain the same at the highest possible efficiency.

B.—REMEDIES, AND REMEDY PROPOSED AND ENACTED BY OHIO.

In looking toward remedies, the German plan of insurance against accidents had paid out during the last 20 years ending in 1904, \$802,000,000. Of this total sum \$555,750,000 was paid on account of sickness insurance, \$232,750,000 on account of accidents, and \$13,500,000 on account of invalidism and old age.

To the fund necessary to make these payments the employer contributed \$424,500,000. The employees contributed \$377,000,000 and the Imperial Government paid a portion of the cost of administration and a small portion of the funds necessary to take care of invalidism and old age (50 marks in each case insured).

The general rules are, in respect to the raising of the insurance fund, that the employees should pay two-thirds of the fund necessary

³² In the opinion of the writer the scientific and economic value to society of the statistical results which are set forth in Table X, used above, are, of all the economic statistics known to the writer, of the greatest importance; and that the conclusions derived by means thereof are new discoveries on the field of political economy.

to take care of sick insurance, which lasts for 13 weeks, and the employers pay one-third. In the case of accident insurance the employers pay 85 per cent and the employees 15 per cent. In the case of invalidism and old-age insurance the Imperial Government pays \$12.50 for each person injured, and the remainder of the fund is paid half and half by the employers and employees.

The German plan in 1907 had 27,172,000 workingmen insured against sickness, accidents, and old age out of a population of 62,000,000 people.

Now, briefly, the English plan, which in 1908 had 13,000,000 workingmen insured, is the following:

In case of death the compensation paid is at most three years' wages, at £300, or \$1,460, with a minimum payment of three years' wages at £150, or \$730. In case of disability which lasts longer than one week the compensation paid is one-half week's average wage, not to exceed \$4.87, as long as the disability lasts. Responsibility for the payment of the compensation rests solely on the employers, and they are not required to insure. In both the German and English plans the rules of contributory negligence, assumption of risk, and the fellow-servant rules are abolished, and the only kind of negligence recognized is that of malicious negligence on the part of the employer or employee.

Now, the common law does not presume to furnish a plan of relief except where it can be proven that the defendant is at fault; therefore the common law does not presume to furnish any relief for something like 80 per cent of all workingmen injured and killed in the United States, and the lowest estimate of the number of persons injured and killed in the industrial accidents in 1909 is 536,000 people.

In the battle of Gettysburg, which lasted three days in actual fighting, there were killed and wounded and missing 43,500 soldiers, and if, therefore, you were to have a battle of Gettysburg in one of each of 12 divisions of the United States, one in one month, say, in the neighborhood of Boston, and the next month in the neighborhood of New York City, a third at Washington, a fourth at New Orleans, a fifth at Cincinnati, one at Pittsburgh, a seventh at Chicago, one at St. Louis, one in Minneapolis, one in Denver, one at Portland, Ore., and wind up at the end of the year at San Francisco, you would not create quite the damage and destruction which takes place in the conduct of our industries for one year; yet the common law does not pretend to furnish any relief or remedy, only in those cases in which the employer is negligent, and the best figures indicate that it does

not exceed 20 per cent of all injuries, and even the part of that relief which reaches the employees is less than one-fifth of what the employers pay out to protect themselves against the liability arising out of injuries to workmen in industrial accidents.

A SPECIFIC PROVISION AGAINST THE ECONOMIC INSECURITY OF WORKINGMEN IN THE UNITED STATES.

Legislative agents and those best informed on the subject of compensating the workmen injured in the due course of their employment agree that the most just and efficient remedy is that known as industrial insurance along the lines of the German plan.

The most concrete illustration of the adaptation of the German plan of industrial insurance to the compensation of injured workmen now proposed in the United States can best be illustrated by the comparison of the proposed plan of workmen's compensation drawn up by the employers' liability commission of Ohio with the present employers' liability in Ohio. The following statistical data is taken from the report of the experts for the Ohio commission which was prepared by Emile E. Watson, investigator in chief.³³ The facts and the proposed Ohio law are fairly typical of the conditions and the proposed remedies in respect to industrial insurance as they exist today in the United States. They are of the highest scientific importance. The results are briefly summarized in the following paragraphs. Under "V. Ohio statistics," consult Tables Nos. I to V in verifying the following calculations:

1. (a) Under the present system the Ohio workman who is killed while at his employment gets an average settlement of $\$958 \times 37 \div 100$, or $\$344.88$.

(b) Under the proposed workmen's compensation plan he would receive an average settlement of $\$2,200$.

2. (a) Under the present system the widow and the children of the injured are obliged to pay 24 per cent of this $\$344.88$ to lawyers and to the courts. (b) Under the proposed workmen's compensation plan they will receive all the $\$2,200$, not having to pay 1 cent of it to lawyers or anybody else in order to secure it.

3. (a) Under the present system only 36 per cent of those workmen who are killed while at their work receive anything at all, leaving 64 per cent absolutely nothing. (b) Under the proposed workmen's compensation plan every workman killed, not by his own wilful carelessness, or in other words, by suicide, will receive full compensation, meaning that from 80 to 95 per cent are to receive compensation.

³³ Report of the Employers' Liability Commission of Ohio, Pt. I, p. 35.

4. (a) Under the present system, of this 36 per cent who actually get anything at all 60 per cent get somewhere between \$50 and \$500, and 12 per cent of those injured get more than 50 per cent of the total amount that is paid out for injuries. (b) Under the present system not only will the 80 to 95 per cent receive on an average of \$2,200 each, but the difference in wages; for instance, where the workman receives a wage of \$2 a day and is killed, his widow and children will receive a compensation of \$2,160, whereas the widow and children of the workman who receives \$3 a day will get \$3,140.

5. (a) Under the present system, where the workman is killed the widow and children of the 36 per cent who get anything at all have to wait from one to five years before they get it, in which period the widow has buried her husband, the wages of the husband have stopped coming in on Saturday night, and as a consequence the mother has been forced from her home to the washtub or the scrub rag, and part of the children have been taken from school to live a life of slavery and drudgery; they have been forced to live in hovels because rent was cheap there, and in this way tuberculosis and typhoid fever are contracted. (b) Under the proposed workmen's compensation plan there is no delay whatever—the \$2,200 (the average compensation received) being paid at once. As a rule this amount is not to be paid in a lump sum, but in the same manner as the husband received his regular weekly wage. In this way the widow will not be forced to lower the standard of living for herself and her children, and she will be shielded from the washtub and the scrub rag and be enabled to keep her children in school until she has educated them.

6.(a) The present system results in 56 per cent of the widows and 18 per cent of the children of the injured workman going to work in order to earn a livelihood, because of the great mass who receive nothing and because of the court delay and costs involved to those who actually do receive something. (b) Workmen's compensation plan will result in not more than 10 per cent of the mothers and 4 per cent of the children going to work as a result of the death of the breadwinner, because there will be from 80 to 95 per cent who will receive compensation of a uniform nature—an average compensation of \$2,200—without any costs and without any delay in securing the same.³⁴

³⁴ The proposed workmen's compensation plan pays a maximum of \$3,400 and a minimum of \$1,500 for death to those having dependents. Funeral expenses not to exceed \$200 are allowed in addition to those where death occurred within one year after the accident and as a result thereof.

Every employer who fails to come under this workmen's compensation plan is denied the protection of the fellow-servant, contributory negligence, and assumed risk doctrines.

The employee who is working under an employer who has come under the compensation plan is required to accept terms of settlement as prescribed by the compensation plan.

The State is made custodian of a fund which is created for the purpose of taking care of all claims which arise under the workmen's compensation plan. Into this fund the employer pays three-fourths, the employee one-fourth. It is impossible to determine at this time what amount this will require of the employee, but it will range between \$1 and \$2 per year, resulting of course in the most economical and serviceable insurance.

The argument for making both employer and employee a party to this fund is that both parties may stand in vital relation to it, every employer will take it as his business to force the careless employer to most carefully protect his men because to the extent that accidents are increased or diminished his premium is increased or diminished; likewise the employee, being a party to this fund, makes it his business to whip his fellow-workingmen into exercising care, because to the degree that the workingman is careless his premium is increased.

(a) Where the injury results in total disability the injured workman received 60 per cent of wage, but same not to continue for longer than 300 weeks, and to aggregate not more than \$3,400 nor less than \$1,500. (b) Where the injury results in partial disability the injured person receives 60 per cent of the impairment of his earning capacity as long as this impairment lasts, but his wages not to exceed \$12 nor to be less than \$5 per week, and not to aggregate more than \$3400 nor less than \$1,550. (c) Where the injury results in total permanent disability the injured workingman received a life pension based on 60 per cent of his wages. In addition to the foregoing, first medical aid and hospital expenses are allowed, not to exceed \$150. In other words, by having the employer and employee parties to this compensation fund they will be financially interested, and therefore will always safeguard their fellowmen and the fund created by them; the tendency will be the great safeguard in the prevention of accidents, which is especially sought by the proposed compensation act.

Briefly summarized, under the present system the widow and children of the injured workingmen of Ohio are receiving an average of \$344.88, 20 per cent of which goes as attorney fees and court costs.

There is the delay of from one to five years in receiving the same. Only 36 per cent of this number get something between \$50 and \$500. Because of the enormous percentage receiving nothing, because of the very small amount paid to those who actually receive settlement, and because of the costs and delay to those few (about 12 per cent) who receive substantial amounts, 56 per cent of the widows and 18 per cent of the children are forced from the home and school to gain a livelihood. Whereas, under the proposed workmen's compensation plan the widow and children will receive an average of \$2,200. There will be no cost or delay in securing the \$2,200. From 80 to 95 per cent will receive compensation uniform in its nature, and because of the amount paid and because there is no expense or delay incurred in receiving the same, not more than 10 per cent of the widows and 4 per cent of the children will be driven from the home and school to earn a livelihood.

JAMES HARRINGTON BOYD.

TOLEDO, OHIO.

[To be Continued]