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**INDUSTRIAL ACCIDENTS AND LOSS OF EARNING POWER:
GERMAN EXPERIENCE IN 1897 AND 1907.**

BY HENRY J. HARRIS, PH. D.

SUMMARY.

In order to indicate the lines on which measures for the prevention of industrial accidents and for the medical treatment of injured workmen may be directed, the Imperial Insurance Office of Germany makes a practice of publishing, at 10-year intervals, special studies of the industrial accidents compensated under the national accident insurance system for workmen. Some of the facts brought out by the study of the industrial accidents compensated in the year 1907 may be briefly summarized as follows:

The information relates only to serious industrial accidents—namely, those resulting either in disability lasting longer than 13 weeks or in death—which were compensated in the year 1907. The much larger number of accidents causing disability of shorter duration is not included.

Expressed in terms of workmen who had been employed 300 days in the year, the number of persons included in this study was 8,600,000.

About one workman out of every 100 received injuries causing serious disability or death, the average rate being 9.44 per 1,000 full-time workmen.

In the period 1897 to 1907 there has been—

A decrease in the rate for accidents causing death.

A decrease in the rate for accidents causing total permanent disability.

A decrease in the rate for accidents causing partial permanent disability.

A marked increase in the rate for accidents causing temporary disability lasting longer than 13 weeks.

Workmen employed in teaming, hauling, etc., have the highest accident rate; workmen engaged in the tobacco industry have the lowest.

Arranged in order, the highest coming first, the following 10 industry groups show the highest accident rates: Teaming and hauling, flour milling, mining, quarrying, woodworking, brewing, engineering construction, inland navigation, iron and steel, and express and storage.

Arranged in order, the lowest coming first, the following 10 industry groups show the lowest accident rates: Tobacco, clothing, textiles, printing, pottery, paper, glass, railways (private), chimney sweeping, and marine navigation.

The accident rate for males is higher than the rate for females.

Injuries to workmen occur with some uniformity throughout the various months of the year, with a slightly higher rate in October.

Workmen are injured more frequently on Monday forenoon and on Saturday afternoon than during the rest of the week.

Workmen are injured more frequently in the latter part of the forenoon and in the latter part of the afternoon than during the rest of the day.

Of the 81,248 workmen injured, about 5 per cent were injured during the first hour that they were at work, 8.6 per cent were injured during the second hour, 9.2 per cent during the third hour, 11.3 per cent during the fourth hour, and 12.2 per cent during the fifth hour, the highest for the day; for the rest of the working day the percentage is irregular.

Workmen are injured most frequently by fractures, contusions, etc., and these injuries occur most frequently to the arms and legs.

Workmen are injured more frequently if they have been employed in an establishment for but a short period of time; considering only the first year of the workman's employment in an establishment, those employed a shorter period of time are injured more frequently than those employed for a longer period.

Workmen are injured more frequently if they have been employed in an occupation for but a short period of time; considering only the first year of the workman's employment in an occupation, those employed for a shorter period of time are injured more frequently than those employed for a longer period.

Workmen are injured most frequently by working machinery (presses, lathes, looms, etc.); arranged in order, the highest coming first, the five most frequent causes of injury are: First, working machinery; second, collapse, fall, etc., of materials; third, loading, unloading, etc.; fourth, falls, falling from ladders, stairs, etc.; and fifth, railway operation.

Workmen receive fatal injuries most frequently from the collapse, fall, etc., of materials; arranged in order, the highest coming first, the five most frequent causes of fatal injury are: First, collapse, fall, etc., of materials; second, railway operation; third, falls, falling from ladders, stairs, etc.; fourth, inflammable, hot, or corrosive substances, etc.; and fifth, teaming, hauling, draying, etc.

Of the injured workmen sustaining serious injuries, about 50 per cent were still disabled to a greater or less extent at the end of five years.

Workmen injured by accidents due to the fault of fellow workmen formed 5.9 per cent, by accidents due to the fault of the employer

12.6 per cent, by accidents due to the general hazard of the industry 37.7 per cent, and by accidents due to their own fault 41.3 per cent of all the injured persons studied.

INTRODUCTION.

As stated above, the Imperial Insurance Office of Germany makes a practice of issuing, at 10-year intervals, special studies of the principal facts regarding the accidents compensated in the selected year. The principal purpose of these studies is to indicate the possibilities of improvement in the prevention of accidents and in the medical, surgical, etc., treatment of the injured workmen with the view of restoring the largest possible measure of their earning capacity. A summary of the information contained in special studies of industrial accidents compensated in the years 1887 and 1897 is given in the Twenty-fourth Annual Report of the Commissioner of Labor, but the study relating to the accidents compensated in the year 1907 was not received in time to be included in the report.

The national compulsory accident insurance system of Germany includes practically all the manufacturing, building, extractive, and transportation industries of the country, and the study of the accidents compensated under the national system includes nearly all of the accidents occurring in the course of employment of a workman. Having at their disposal information relating to accidents covering a period of 25 years, the experts of the insurance office have been enabled to present the salient facts regarding industrial accidents in a manner which makes the material of great value to other countries; in addition, certain facts regarding the condition of the injured persons are of service in suggesting the best methods of administering a system of industrial accident insurance, such, for instance, as the advantage of a system of pension payments as contrasted with that of lump-sum payments.

Under the German system the accident insurance is administered by mutual associations of employers, the employers in each industry being organized into one or more associations; these administrative organizations are used in the studies of accidents as the basis of classifying the industries of the country into industrial groups, and in the statistical tables given below an industrial group means a group of one or more of these associations; for purposes of reference the official number of the association is given each time the group is referred to.

The employers' mutual accident insurance organizations make provision only for those accidents which result in death or in disability lasting longer than 13 weeks. Another series of organizations, the sickness insurance funds, makes provision for accidents causing disability of less than 13 weeks. But there is very little information regarding the accident experience of this group of organizations. In

the following pages the accidents included are only those which caused death and those which caused disability lasting longer than 13 weeks.

The employers' mutual accident associations defray the cost of the accident insurance by means of assessments based on the amount of their pay rolls, modified by a system of risk rating based on the number of accidents occurring in the various plants; it is directly to the financial interest of each employer to adopt all possible means for the prevention of accidents, and since compensation is paid to the injured workman in the form of a pension during disability, any betterment in the physical condition of the injured workman which would improve his earning capacity thereby reduces the financial burden on the employers. These facts, in addition to humanitarian considerations, have led the employers' associations to make heavy expenditures in the enforcement of preventive measures and in the medical treatment of the injured workman. Thus in 1897 the expenditures for medical treatment were \$237,747, and in 1907 they had increased to \$505,250; for the enforcement of preventive measures expenditures in 1897 were \$246,769, and in 1907 were \$355,400.

SPECIAL INVESTIGATIONS OF ACCIDENTS.

The first special study of industrial accidents in Germany included accidents occurring in the year 1881;¹ this study formed the basis of the provisions contained in the bill for the accident insurance system, which was later enacted into the law of July 6, 1884. The 1881 study was made for a special purpose, and later investigations were planned on such entirely different lines that the information presented in the 1881 report is not comparable with the data published in the succeeding reports.

The accident insurance system began operations October 1, 1885, and as soon as the system had been in operation for a little more than two years the first detailed study of the industrial accidents compensated under the law of July 6, 1884, was made; the first study related to the industrial accidents compensated in the year 1887,² and the form used in that investigation has been followed closely in the investigations of 1897³ and 1907.⁴ In each case the data relate to accidents which were compensated in the years mentioned and not to the accidents occurring in those years.

The three studies just mentioned related to accidents in the manufacturing and similar industries, in the building trades, in the extractive industries, and in transportation; studies of accidents

¹ Published in Statistik des Deutschen Reichs, Erste Reihe, Band 53, Ergänzungsheft.

² Amtliche Nachrichten des Reichs-Versicherungsamts 1890, p. 199 et seq.

³ Amtliche Nachrichten des Reichs-Versicherungsamts 1899 Beiheft; 1900 Beiheft 1, 2. Gewerbe-Unfallstatistik für das Jahr 1897.

⁴ Amtliche Nachrichten des Reichs-Versicherungsamts, 1910, I Beiheft, I-III Teil. Gewerbe-Unfallstatistik für das Jahr 1907.

compensated under the law relating to insurance of accidents in the agricultural industries were made in the years 1891¹ and 1901² on practically the same plan. A discussion of these data will be found in the Twenty-fourth Annual Report of the Commissioner of Labor (Vol. I, pp. 1124 to 1176).

SCOPE OF THE INVESTIGATION.

The scope of the study of the accidents compensated in the year 1907 is shown in Table 1. The first line in the table gives the grand total for all the insured persons and all the establishments included, and comprises establishments engaged in manufacturing and similar industries, in building trades, in navigation, and in Government plants. The second line shows the total for all the establishments engaged in manufacturing and similar industries, in the building trades and in navigation, but does not include certain kinds of work, the insurance of which is conducted by the organizations called subsidiary insurance institutes. The third line of the table gives separately the total for the subsidiary institutes just mentioned which, however, include only work in building trades, in engineering construction, and in navigation. The fourth line of the table gives the total for work conducted by the public authorities and comprises work in Government plants, such as factories, postal and telegraph work, railroads, building operations, navigation, and work similar to navigation, such as dredging, towing, etc. Following these tables are given the data for the various industry groups, each employers' accident association or group of associations being given separately. At the bottom of the table are given the data for establishments and operations conducted by the public authorities, the general character of the work being readily understood from the designations used in the table. The form used in this table is followed throughout the entire study.

The total number of establishments subject to the insurance in the year 1907 was 673,095; this number, however, does not include the number of establishments conducted by public authorities, nor the establishments whose insurance was conducted by the subsidiary institutes. The largest number of establishments is found in the building trades (associations 43-54) with 159,548, the express and storage industries (association 58) with 64,771, the woodworking industries (associations 31-34) with 61,495, the meat-products industries (association 65) with 56,500, the blacksmithing, etc., industries (association 66) with 54,728. These industries, it will be noted, are those in which the small-sized establishment prevails, and except in

¹ Amtliche Nachrichten des Reichs-Versicherungsamts, 1893, p. 231 et seq.

² Amtliche Nachrichten des Reichs-Versicherungsamts, 1904, I-II Beiheft. Unfallstatistik für Land und Forstwirtschaft, 1901.

the case of the building trades these industries are not among the five industries in which the largest number of insured persons is engaged.

The average number of persons subject to the insurance in the year 1907 was 9,879,016. For insurance purposes the average number of insured persons does not give an accurate statement of the number of persons subject to the hazard of the industries in which they are engaged; for this reason an abstract workman, called a "full-time workman," is used and the number of such workmen is found by taking the number of days' work performed and dividing this number by 300 days. Thus if an establishment is in operation 300 days in the year and employs 200 men, the number of full-time workmen is 200; if this establishment were in operation but 150 days during the year, the number of full-time workmen would be 100; by this method it is possible to make accurate comparisons between the various industry groups, some of which may be seasonal in character, while others may work continuously during the entire year. In the tables following the number of full-time workmen has generally been used. In the year 1907 the total number of full-time workmen included in the insurance was 8,604,155. The industry groups employing the largest number of full-time workmen are the iron and steel group (associations 4-11) with 1,211,881 full-time workmen, the building trades (associations 43-54) with 983,499, the textiles (associations 20-27) with 912,594, and the mining industries (association 1) with 732,584, though the State railway establishments employed 458,953 full-time workmen; none of the other industry groups employ more than 450,000 full-time workmen.

The number of persons killed or injured for whom compensation was paid for the first time in 1907 was 81,248. It should be stated that in this table and in the following tables the number of persons compensated in the year 1907 is assumed to be the number of accidents, each person killed or injured being counted as one accident. As the number of persons employed in the various industry groups varies so greatly, a comparison of the total number of persons compensated in each industry group merely indicates the relative amount of work performed by the insurance organizations in the different industries.

The total number of persons compensated for the first time in 1907 formed 9.44 per 1,000 full-time workers; the number of persons compensated in industries, building trades, and navigation formed 9.58 per 1,000 full-time workers, while in 1897 this proportion was 8.07 per 1,000 full-time workers. The increase in the accident rate is so marked that it has been made the subject of special study and the results are given on pages 15 to 18.

The number of persons for whom accident reports were made in the year 1907 was 516,366, this being 60.01 per 1,000 full-time workers in

that year. Under the German insurance system, disability lasting less than 13 weeks is cared for by a system of sickness insurance funds, so that the vast majority of accidents are not handled by the accident associations; in addition, reports of accidental injuries are frequently made for the purpose of establishing a possible claim of the workman for compensation, but which official investigation later proves not to have been industrial accidents within the meaning of the law. An accident report, in fact, means merely a notification that a workman claims to have been injured and intends to apply for compensation, even though the case may be a doubtful one. These data are therefore of questionable value and have not been made the subject of further study in the investigations conducted by the Imperial Insurance Office.

TABLE 1.—SCOPE OF THE INVESTIGATION: NUMBER OF ESTABLISHMENTS, AVERAGE NUMBER OF PERSONS INSURED, NUMBER OF FULL-TIME WORKERS INSURED, AND NUMBER OF INJURED PERSONS COMPENSATED FOR THE FIRST TIME IN 1907 AND 1897.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft, I Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 2 to 191.]

Association number.	Industry, etc.	Number of establishments in 1907.	Average number of insured persons in 1907.	Number of full-time insured workers in 1907.	Number of persons killed or injured—						
					Compensated for the first time in 1907.	Per 1,000 full-time workers to whom compensation was paid for the first time in—		For whom accident reports were made—		Per 1,000 full-time workers in—	
						In 1907.		In 1907.		In 1907.	
						1907.	1897.	1907.	1897.	1907.	1897.
A. TOTALS.											
	Grand total.....	(1)	9,879,016	8,604,155	81,248	9.44	(1)	516,366	60.01	(1)	
	Industrial accident associations (not including institutes).....	673,095	9,018,367	7,860,780	75,370	9.58	8.07	465,224	59.18	48.81	
	Subsidiary institutes of building trades, engineering, and navigation associations.....	(1)	136,944	81,164	1,345	16.57	(1)	3,068	37.80	(1)	
	Public authorities.....	(1)	723,705	662,211	4,533	6.85	(1)	48,074	72.60	(1)	
B. GROUPS OF ASSOCIATIONS.											
1	Mining.....	2,258	732,584	732,584	11,381	15.54	12.09	92,455	126.20	98.16	
2	Quarrying.....	12,779	476,691	174,446	2,677	15.35	11.94	12,001	68.79	47.64	
3	Fine mechanical products.....	5,802	222,958	222,958	1,481	6.64	5.38	10,336	46.36	32.89	
4-11	Iron and steel.....	40,276	1,249,681	1,211,881	14,063	11.62	8.92	117,868	97.26	84.87	
12,13	Metal working.....	5,934	216,738	200,929	1,533	7.63	4.21	7,686	38.25	30.83	
14	Musical instruments.....	1,203	54,943	32,504	225	6.92	3.96	1,126	34.64	20.95	
15	Glass.....	960	85,636	77,850	347	4.46	4.07	2,634	33.83	23.63	
16	Pottery.....	1,349	91,447	91,447	310	3.39	2.33	1,689	18.47	13.37	
17	Brick and tile making.....	11,552	293,126	201,412	1,931	9.59	6.71	7,073	35.12	24.96	
18	Chemicals.....	8,618	214,904	206,263	2,038	9.88	7.76	13,034	63.19	52.68	
19	Gas and water works.....	2,596	67,452	67,452	435	6.45	5.14	4,884	72.41	66.43	
20	Linen.....	552	53,830	53,830	280	4.76	4.49	1,038	17.64	14.93	
27	Silk.....	2,251	72,032	72,032	93	1.29	1.26	520	7.22	5.50	
20-27	Textiles (including linen and silk).....	15,457	914,033	912,594	2,739	3.00	3.25	12,669	13.88	13.17	
28	Paper making.....	1,264	83,335	86,087	793	9.21	9.27	3,808	44.23	38.80	

¹ Not reported.

² Including blacksmithing, etc.

TABLE 1.—SCOPE OF THE INVESTIGATION: NUMBER OF ESTABLISHMENTS, AVERAGE NUMBER OF PERSONS INSURED, NUMBER OF FULL-TIME WORKERS INSURED, AND NUMBER OF INJURED PERSONS COMPENSATED FOR THE FIRST TIME IN 1907 AND 1897—Concluded.

Asso- cia- tion num- ber.	Industry, etc.	Num- ber of estab- lish- ments in 1907.	Average number of insured persons in 1907.	Number of full- time insured workers in 1907.	Number of persons killed or injured—						
					Com- pen- sated for the first time in 1907.	Per 1,000 full-time workers to whom compensa- tion was paid for the first time in—		For whom accident reports were made—			
						1907.	1897.	In 1907		Per 1,000 full-time workers in—	
								1907.	1897.	1907.	1897.
B. GROUPS OF ASSOCIATIONS—concluded.											
29	Paper products.....	3,803	131,360	131,360	500	3.81	3.39	3,799	28.92	21.84	
30	Leather.....	6,157	79,146	75,262	537	7.14	5.23	2,072	27.53	20.85	
31-34	Woodworking.....	61,495	431,980	397,707	5,280	13.28	11.77	20,603	51.80	51.30	
35	Flour milling.....	28,313	63,930	63,930	1,027	16.06	13.51	3,360	52.56	40.85	
36	Food products.....	10,636	142,119	125,843	789	6.27	6.79	3,475	27.61	22.16	
37	Sugar.....	419	93,384	55,844	508	9.10	7.89	2,693	48.22	45.87	
38	Dairying, distilling, and starch.....	8,203	50,286	50,478	409	8.10	7.67	1,905	37.74	27.43	
39	Brewing and malting.....	9,354	110,213	123,217	1,608	13.05	11.31	14,341	116.39	93.36	
40	Tobacco.....	6,919	165,337	165,337	81	.49	.42	716	4.33	3.66	
41	Clothing.....	8,269	267,576	240,819	676	2.81	2.18	3,199	13.28	9.03	
42	Chimney sweeping.....	3,861	5,686	5,686	34	5.98	6.14	225	39.57	21.82	
43-54	Building trades (not in- cluding institutes).....	159,548	1,365,161	983,499	11,031	11.22	11.14	53,682	54.58	50.52	
55	Printing and publishing.....	7,061	169,813	141,666	428	3.02	2.66	2,818	19.89	12.77	
56	Private railways.....	170	27,622	30,238	168	5.56	5.86	2,292	75.80	60.70	
57	Street and small railroads.....	449	67,276	69,465	485	6.98	5.14	5,128	73.82	63.50	
58	Express and storage.....	64,771	346,756	346,756	3,932	11.34	12.36	20,937	60.38	67.07	
59	Livery, drayage, cartage, etc.....	33,242	97,842	93,932	2,500	26.61	16.97	8,283	88.18	60.64	
60-62	Inland navigation.....	18,890	63,716	56,782	753	11.82	11.35	3,885	68.42	69.64	
63	Marine navigation (not including institute).....	1,602	79,005	73,780	459	6.22	8.95	3,804	51.56	53.57	
64	Engineering, excavating, etc. (not including in- stitute).....	18,627	297,560	165,447	2,143	12.95	11.85	12,813	77.44	52.88	
65	Meat products.....	56,500	104,645	127,318	1,120	8.80	7.03	4,338	34.07	25.28	
66	Blacksmithing, etc.....	54,723	154,426	118,007	929	7.87	(¹)	3,593	30.45	(¹)	
C. PUBLIC AUTHORITIES.											
	Establishments of the naval administration.....	(²)	21,457	19,467	105	5.39	5.91	1,155	59.33	33.90	
	Establishments of the military administration.....	(²)	41,606	39,233	157	4.00	5.82	1,079	27.50	39.87	
	Postal and telegraph ad- ministration.....	(²)	62,534	38,026	122	3.21	5.66	1,854	48.76	11.85	
	Railway administration.....	(²)	435,538	458,953	3,316	7.23	7.03	33,873	84.70	64.81	
	Dredging, towing, etc.....	(²)	6,400	6,513	79	12.13	11.56	726	111.47	133.14	
	Building operations (States and Empire).....	(²)	48,313	31,384	248	7.90	6.59	1,591	50.69	36.54	
	Marine navigation.....	(²)	731	685	1	1.46	9.03	26	37.97	36.10	
	Building operations of local governments.....	(²)	107,126	67,950	505	7.43	5.99	2,770	40.77	21.03	

¹ Included in associations 4-11.

² Not reported.

SEX AND AGE OF THE INJURED PERSONS.

The accident rate in the various industries, with the injured, etc., persons classed according to age and sex, is shown in Table 2. Where the number of injured, etc., persons was large enough to compute rates for the separate industries in each group of industries, the subgroups are given.

The average accident rate for all insured persons in 1907 was 9.44 per 1,000 full-time workers—in other words, approximately 1 per cent of the persons covered by the industrial insurance system received injuries during the year. The fact of greatest interest in the report is the relative standing of the various industries as disclosed by the accident rates. The industry group which in 1907 had the greatest proportion of injured employees was that designated "livery, drayage, cartage, etc." (association 59), which had a rate of 26.61; the group with the next highest rate is that of flour milling (association 35), with an accident rate of 16.06 per 1,000 full-time workers. The groups of mining (association 1) and quarrying (association 2) had each a rate of over 15 per 1,000 full-time workers. Following these come woodworking (associations 31-34) with 13.28, brewing and malting (association 39) with 13.05; engineering, excavating, etc. (association 64), with 12.95, inland navigation (associations 60-62) with 11.82, iron and steel (associations 4-11) with 11.62, express and storage (association 58), with 11.34, and the building trades (associations 43-54) with 11.22 per 1,000 full-time workers. All of the other groups of industries had a rate of less than 10 per 1,000 full-time workers.

There are seven groups with rates of less than 5 per 1,000 full-time workers; the tobacco group (association 40) has the lowest rate of any of those in the table, with only 0.49 per 1,000 full-time workers; this is followed by clothing (association 41) with 2.81, textiles (associations 20-27) with 3.00, printing and publishing (association 55) with 3.02, pottery (association 16) with 3.39, paper products (association 29) with 3.81, and glass (association 15) with 4.46 per 1,000 full-time workers. There are 17 groups with rates over 5 and less than 10 per 1,000.

The part of the table giving the accident rates for the subdivisions shows that in a number of the subgroups of industries the accident rate is unusually high; in the case of tenders of motors, etc., engaged in the building trades (associations 43-54), 55.04 per 1,000 full-time workers received injuries requiring compensation; five other subgroups of industries had such rates in excess of 25 per 1,000 full-time workers, namely, hauling of goods, etc. (association 59), shops engaged in iron work, structural work, etc. (associations 4-11), miscellaneous work of commercial establishments (association 58), express workers, furniture movers, etc. (association 58), boiler workers, etc. (associations 4-11).

For female adults the subgroups of industries show a number of high accident rates, though these rates are to be accepted with caution because of the small number of persons engaged in the occupation. In the subgroup blacksmithing, farriers, etc. (association 66),

there is a rate of 80 per 1,000 full-time workers (women); in the subgroup hauling of goods, etc. (association 59), there is a rate of 43.33 (women); in group coal and wood dealers (association 58) the rate is 35.78 (women); in two subgroups of the building trades, namely, tinsmiths and carpenters (associations 43-54), the rates are respectively 22.22 and 21.28 per 1,000 full-time workers (women). None of the other subgroups or groups of industries has a rate for female adults in excess of 15 per 1,000 full-time workers (women).

In the case of young persons there are also a number of high accident rates, but here also it is probable that such rates have been unduly influenced by the fact that the number of persons exposed to the risk is small and inadequate for the computation of rates. In the subgroup tenders of motors, etc. (associations 43-54), boys under 16 years had a rate of 139.07 per 1,000 full-time workers (boys); the subgroup hauling of goods, etc. (association 59), had a rate for boys under 16 of 34.90 per 1,000 full-time workers (boys); subgroup flour mills, etc. (association 35), had a rate of 22.01 per 1,000 full-time workers (boys). None of the other subgroups had a rate in excess of 20 per 1,000 full-time workers (boys). In the case of girls under 16 the same caution as to the adequacy of the number of cases for forming a rate must be observed; the subgroup construction of railways, etc. (association 64), the rate for girls under 16 was 68.97 per 1,000 full-time workers (girls). In the storage and transportation of beers and wines, etc. (association 58), the rate for girls under 16 was 45.45 per 1,000 full-time workers (girls). Aside from these two rates, none of the other subgroups showed rates in excess of 12 per 1,000 full-time workers.

In general the accident rates for male adults are higher than the rates for female adults; it may be assumed that the heavier and the more dangerous work is performed by men and the accident rates naturally reflect this state of affairs. There are four cases (associations 55, 59, 64, and 66) in which the accident rates of the industry groups for female adults are higher than the rates for men; three of these—namely, livery, drayage, cartage, etc. (59); engineering, excavating, etc. (64), and blacksmithing, etc. (66)—are groups in which the number of women employed is small and the accident rates are therefore subject to greater fluctuations than would be the case if the numbers were larger. It is also obvious that these industries contain occupations not adapted for the weaker physique of women, and two of them (livery, drayage, etc., and engineering, excavating, etc.) show accident rates for men which are among the highest rates given in the table. The group printing and publishing (association 55) has an accident rate for men of 2.60 and for women of 3.93 per 1,000 full-time workers of the same sex and age group. The experience of the Leipzig Sick Fund (Twenty-fourth Annual Report of the Commis-

sioner of Labor, Vol. I, pp. 1321 and 1323) shows that for all accidents (industrial and nonindustrial) the males engaged in printing and publishing had a rate of 50.4 per 1,000 members, while for females the rate was 36.1; the rate of the accident association for the accidents resulting in death or in disability of more than 13 weeks seems to indicate that accidents in the printing industries are more serious in the case of women than in the case of men.

The data as to the relative hazard of the various industries may be summed up by stating that establishments in which a high accident rate was to have been expected, such as underground work (e. g., mining, quarrying, etc.), operations especially exposed to the dangers of the elements (e. g., navigation), as a matter of fact do show a high rate of injuries. The rates for these industries are exceeded by those industries using mechanical apparatus of various kinds, such as the haulage, drayage, etc., the milling industries, etc. Likewise the establishments which use a large amount and variety of machinery, such as the iron and steel, the woodworking, etc., industries, also show high accident rates, though in these establishments the hazard of the machinery is reduced by careful and continuous supervision, training of the workers, use of safety appliances, etc.

TABLE 2.—SEX AND AGE OF INJURED PERSONS: NUMBER OF ESTABLISHMENTS AND FULL-TIME WORKERS, AND NUMBER PER 1,000 FULL-TIME WORKERS OF PERSONS KILLED OR INJURED, BY INDUSTRIES AND SEX, 1907.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft, I Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 1 to 293.]

Asso- cia- tion num- ber.	Industry, etc.	Number of estab- lish- ments.	Number of full- time workers.	Persons injured, etc., receiving compensa- tion for the first time in 1907.					
				Total num- ber.	Per 1,000 full-time workers of the same age and sex.				
					Total.	Adults (16 and over).		Young per- sons (under 16).	
						Male.	Fe- male.	Male.	Fe- male.
A. TOTALS.									
	Grand total.....	(¹)	8,604,155	81,248	9.44	10.92	2.66	5.76	1.95
	Industrial accident associations (not including institutes).....	673,095	7,860,780	75,370	9.58	11.24	2.60	5.75	1.95
	Subsidiary institutes of building trades, engineering, and naviga- tion associations.....	(¹)	81,164	1,345	16.57	16.81	9.17	23.19	.....
	Public authorities.....	(¹)	662,211	4,533	6.85	7.03	3.96	4.03	.....
B. GROUPS OF ASSOCIATIONS.									
1	Mining:								
	Total.....	2,258	732,584	11,381	15.54	15.94	4.71	9.14	4.44
	Hard coal.....	328	537,187	9,349	17.40	17.76	6.35	10.90	11.49
	Soft coal.....	499	46,395	601	12.95	13.16	3.46	.....	.....
	Ore.....	801	71,620	691	9.65	10.30	2.29	5.23	2.03

¹ Not reported.

TABLE 2.—SEX AND AGE OF INJURED PERSONS: NUMBER OF ESTABLISHMENTS AND FULL-TIME WORKERS, AND NUMBER PER 1,000 FULL-TIME WORKERS OF PERSONS KILLED OR INJURED, BY INDUSTRIES AND SEX, 1907—Continued.

Asso- ciation num- ber.	Industry, etc.	Number of estab- lish- ments.	Number of full- time workers.	Persons injured, etc., receiving compensa- tion for the first time in 1907.					
				Total num- ber.	Per 1,000 full-time workers of the same age and sex.				
					Adults (16 and over).		Young per- sons (under 16).		
					Total.	Male.	Fe- male.	Male.	Fe- male.
B. GROUPS OF ASSOCIATIONS— continued.									
2	Quarrying: Total.....	12,779	174,446	2,677	15.35	15.63	7.03	9.34	5.15
	Open air.....	8,614	86,462	1,502	17.37	17.60	9.22	11.70	.....
	Cement factories, mills for working minerals, marble, etc.....	295	29,040	363	12.50	12.78	5.36	6.83	.....
3	Fine mechanical products: Total.....	5,802	222,958	1,481	6.64	7.09	4.22	5.51	2.43
	Electro-technical establish- ments.....	1,670	94,594	809	8.55	9.29	4.57	6.67	.....
4-11	Iron and steel: Total.....	40,276	1,211,881	14,083	11.62	12.24	5.36	6.98	5.14
	Machine building, machine shops, etc.....	10,914	514,793	4,882	9.48	9.72	3.99	7.34	.....
	Boiler works.....	608	21,676	544	25.10	26.11	.....	7.02	.....
	Iron, structural, etc., shops.....	600	32,236	996	30.90	31.62	.....	16.68	.....
	Wagon and carriage building.....	166	37,912	411	10.84	11.12	.....	9.64	.....
	Shipbuilding.....	169	33,488	582	17.38	17.84	.....	8.21	.....
	Lock making, etc.....	16,486	95,358	630	6.61	7.47	6.49	4.47	9.58
	Iron and steel wares, includ- ing blacksmithing.....	4,145	79,206	493	6.22	6.41	4.90	5.35	4.26
	Sheet iron works, not includ- ing boiler works.....	1,932	46,678	337	7.22	7.36	6.83	6.75	6.76
	Blast furnaces.....	643	191,648	3,323	17.34	17.70	8.42	12.75	8.13
	Engine works.....	9,273	20,953	404	19.28	19.49	14.89	15.63	.....
12, 13	Metal working: Total.....	5,934	200,929	1,533	7.63	8.37	7.56	3.31	2.06
	Metal ware factories.....	2,022	95,322	871	9.14	9.07	11.72	3.84	2.71
14	Musical instruments.....	1,203	32,504	225	6.92	7.23	4.64	6.58	.....
15	Glass.....	960	77,850	347	4.46	5.22	2.16	2.06	1.24
16	Pottery.....	1,349	91,447	310	3.39	4.36	1.25	2.34	1.19
17	Brick and tile: Total.....	11,582	201,412	1,931	9.59	10.09	4.51	10.88	5.03
	Brickmaking and clay digging.....	10,839	190,955	1,772	9.28	9.75	4.31	10.97	5.30
18	Chemicals: Total.....	8,618	206,263	2,038	9.88	11.45	3.60	6.59	2.29
	Chemical factories, inorganic acids and alkalies.....	277	34,521	384	11.12	11.43	4.98	1.59	.....
19	Gas and water works: Total.....	2,596	67,452	435	6.45	6.51	3.21	.....	.....
	Gas works.....	1,354	52,687	335	6.36	6.40	4.55	.....	.....
20-27	Textiles: Total.....	15,457	912,594	2,739	3.00	4.25	1.84	3.35	1.86
	Spinning factories, wadding factories, etc.....	3,583	199,273	870	4.37	6.29	3.33	4.64	3.08
	Weaving factories (not includ- ing wool weaving with spin- ning) with and without bleaching, dyeing, etc.....	5,648	309,000	504	1.63	2.32	1.02	1.45	1.32
	Wool weaving with spinning, bleaching, dyeing, etc. (cloth weaving).....	879	76,201	333	4.37	5.35	3.17	6.43	1.78
	Bleaching, dyeing, printing, and finishing, etc.....	3,248	104,385	495	4.74	5.46	2.44	5.33	3.33

TABLE 2.—SEX AND AGE OF INJURED PERSONS: NUMBER OF ESTABLISHMENTS AND FULL-TIME WORKERS, AND NUMBER PER 1,000 FULL-TIME WORKERS OF PERSONS KILLED OR INJURED, BY INDUSTRIES AND SEX, 1907—Continued.

Association number.	Industry, etc.	Number of establishments.	Number of full-time workers.	Persons injured, etc., receiving compensation for the first time in 1907.					
				Total number.	Per 1,000 full-time workers of the same age and sex.				
					Total.	Adults (16 and over).		Young persons (under 16).	
						Male.	Female.	Male.	Female.
B. GROUPS OF ASSOCIATIONS—continued.									
28	Paper making: Total.....	1,264	86,087	793	9.21	11.11	2.49	8.20	1.14
	Paper factories.....	495	49,105	417	8.49	11.10	.99	8.84	1.52
29	Paper products.....	3,803	131,360	500	3.81	4.23	3.17	5.12	3.22
30	Leather: Total.....	6,157	75,262	537	7.14	7.79	3.07	4.85	3.72
	Leather making.....	1,787	41,301	392	9.49	9.82	5.85	7.62	3.16
31-34	Woodworking: Total.....	61,495	397,707	5,280	13.28	14.66	2.71	5.98	1.48
	Wood sawing and storing.....	6,991	84,602	1,941	22.94	23.40	7.92	18.37	10.20
	Making of smooth woodenware.....	45,922	225,117	2,575	11.44	12.45	3.72	4.25	1.22
35	Flour milling: Total.....	28,313	63,930	1,027	16.06	15.95	12.97	24.79	18.18
	Flour mills with roller process, elevators, etc., seed, and oil mills, etc.....	27,476	55,070	820	14.89	14.76	14.39	22.01	.....
36	Food products.....	10,636	125,843	789	6.27	8.00	4.14	5.72	2.61
37	Sugar, etc.: Total.....	419	55,844	508	9.10	9.76	3.08	2.68	.....
	Sugar factories.....	373	41,642	381	9.15	9.60	3.66	3.60	.....
38	Dairying, distilling, and starch.....	8,203	50,478	409	8.10	9.10	4.18	4.77	1.86
39	Brewing and malting: Total.....	9,354	123,217	1,608	13.05	13.18	9.08	13.09	.....
	Breweries.....	7,042	109,283	1,483	13.57	13.67	10.19	13.73	.....
40	Tobacco.....	6,919	165,337	81	.49	.99	.25	.58	.21
41	Clothing: Total.....	8,269	240,819	676	2.81	4.67	1.39	4.54	1.01
	Shoe factories.....	2,041	66,697	343	5.14	6.85	1.04	6.26	1.34
42	Chimney sweeping.....	3,861	5,686	34	5.98	6.63	.....	2.32	.....
43-54	Building trades (not including institutes): Total.....	159,548	983,499	11,031	11.22	11.60	9.25	5.26	10.08
	Masons.....	58,339	497,968	4,943	9.93	10.19	8.64	4.88	9.28
	Carpenters.....	31,040	123,197	1,866	15.15	15.70	21.28	6.72	.....
	Tinsmiths.....	19,543	52,735	407	7.72	7.88	22.22	6.38	.....
	Roofers.....	12,770	21,511	511	23.76	24.51	.....	12.14	.....
	Painters.....	36,673	103,928	503	4.84	5.19	10.99	1.82	.....
	Stonecutters and stucco workers.....	9,055	43,075	386	8.96	9.13	7.66	5.79	.....
	Tenders of motors (prime movers), boilers, machines, etc., mechanical woodworking.....	6,136	14,825	816	55.04	54.28	.....	139.07	.....
55	Printing and publishing: Total.....	7,061	141,666	428	3.02	2.60	3.93	3.47	6.11
	Book printing.....	6,887	112,064	369	3.29	2.66	5.00	3.63	8.87
56	Private railways.....	170	30,238	168	5.56	5.62	2.65	7.19	.....
57	Street and small railroads: Total.....	449	69,465	485	6.98	7.03	3.42	6.87	.....
	Street railways.....	188	56,318	370	6.57	6.60	4.15	5.75	.....

TABLE 2.—SEX AND AGE OF INJURED PERSONS: NUMBER OF ESTABLISHMENTS AND FULL-TIME WORKERS, AND NUMBER PER 1,000 FULL-TIME WORKERS OF PERSONS KILLED OR INJURED, BY INDUSTRIES AND SEX, 1907—Concluded.

Asso- ciation num- ber.	Industry, etc.	Number of estab- lish- ments.	Number of full- time workers.	Persons injured, etc., receiving compensa- tion for the first time in 1907.					
				Total number.	Per 1,000 full-time workers of the same age and sex.				
					Total.	Adults (16 and over).		Young per- sons (under 16).	
						Male.	Fe- male.	Male.	Fe- male.
B. GROUPS OF ASSOCIATIONS— concluded.									
58	Express and storage: Total.....	64, 771	346, 756	3, 932	11. 34	14. 58	2. 67	1. 60	0. 99
	Coal and wood dealers.....	2, 996	17, 951	448	24. 96	24. 84	35. 78	5. 32	.....
	Building material dealers (beams and lumber).....	3, 915	27, 169	625	23. 00	24. 17	7. 75	2. 83	.....
	Beer, wine, etc., and ice dealers	7, 108	23, 800	351	14. 75	15. 54	9. 83	4. 73	45. 45
	Dealers in agricultural prod- ucts.....	6, 478	23, 425	318	13. 58	14. 83	4. 18	2. 95	.....
	Express and furniture movers.	1, 740	21, 678	581	26. 80	27. 72	4. 35	3. 38	.....
	Miscellaneous work of com- mercial establishments (packers, gaugers, etc.).....	1, 151	26, 077	745	28. 57	30. 33	5. 12	4. 29	.....
59	Livery, drayage, cartage, etc.: Total.....	33, 242	93, 932	2, 500	26. 61	26. 51	36. 33	31. 91	.....
	Hauling passengers and postal matter.....	11, 559	34, 466	396	11. 49	11. 47	.....	19. 51	.....
	Hauling of goods, furniture, etc., heavy moving, etc.....	22, 016	52, 804	1, 915	36. 27	36. 25	43. 33	34. 90	.....
60-62	Inland navigation: Total.....	18, 890	56, 782	1, 753	11. 82	13. 81	13. 70	5. 08	.....
	River and canal shipping.....	16, 193	30, 411	1, 330	10. 49	11. 21	.....	4. 01	.....
63	Marine navigation (not including institute): Total.....	1, 602	73, 780	459	6. 22	6. 31	1. 54	3. 68	.....
	Merchant marine, steamers... Engineering, excavating, etc. (not including institute): Total.....	323	59, 908	311	5. 19	5. 25	1. 54	4. 12	.....
64	Construction of railways, har- bor work, fortification work. Cable laying, sewer, gas, wa- ter, and other conduit in- stallation.....	4, 322	78, 782	1, 197	15. 19	15. 22	11. 57	15. 97	68. 97
	Meat products: Total.....	4, 042	26, 428	303	11. 47	11. 55	.....	8. 00	.....
65	Meat packing, slaughtering, etc. Total.....	56, 500	127, 318	1, 120	8. 80	10. 06	2. 45	13. 51	2. 03
	Blacksmithing, etc.: Total.....	55, 674	119, 479	1, 045	8. 75	10. 11	2. 27	13. 53	2. 05
66	Blacksmithing, farriers, iron and steel wares.....	54, 728	118, 007	929	7. 87	8. 21	14. 84	4. 44	10. 00
	Blacksmithing, farriers, iron and steel wares.....	54, 053	107, 035	821	7. 67	8. 04	80. 00	4. 22	.....
C. PUBLIC AUTHORITIES.									
	Establishments of the naval ad- ministration.....	(²)	19, 467	105	5. 39	5. 39	8. 93	2. 98	.....
	Establishments of the military administration.....	(²)	39, 233	157	4. 00	4. 82	2. 09	13. 16	.....
	Postal and telegraph adminis- tration.....	(²)	38, 026	122	3. 21	3. 21	3. 22	.....	.....
	Railway administration.....	(²)	458, 953	3, 316	7. 23	7. 31	4. 57	3. 71	.....
	Dredging, towing, etc.....	(²)	6, 513	79	12. 13	12. 14	.....	.....	.....
	Building operations (States and Empire).....	(²)	31, 384	243	7. 90	7. 80	16. 13	5. 00	.....
	Marine navigation.....	(²)	685	1	1. 46	1. 50	.....	.....	.....
	Building operations of local gov- ernments.....	(²)	67, 950	505	7. 43	7. 39	9. 97	5. 36	.....

¹ Including 9 injured persons in foreign establishments.

² Including 6 injured persons in foreign establishments.

³ Not reported.

INCREASE IN THE GENERAL ACCIDENT RATE.

The increase in the accident rate during the period 1897 to 1907 has been made the subject of special attention, and in order to disclose its extent Table 3 shows the number of persons killed or injured per 1,000 full-time workers for each industry group.

The increase in this rate for all establishments, except those conducted by public authorities, is best shown in the second line of figures in Table 3.

The increases in the accident rates must be considered in connection with the degree of disability caused by the injuries. The following table classifies the injuries according to whether they result in death, in total permanent disability, in partial permanent disability, or in temporary disability:

NUMBER OF FULL-TIME WORKERS, NUMBER OF INJURED PERSONS, AND NUMBER PER 1,000 FULL-TIME WORKERS KILLED OR INJURED BY ACCIDENTS COMPENSATED FOR THE FIRST TIME IN EACH YEAR OF THE PERIOD 1897 TO 1907, INSURED IN INDUSTRIAL ACCIDENT ASSOCIATIONS.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts 1899 to 1909.]

Years.	Number of full-time workers.	Number of injured persons compensated for the first time.	Number of persons per 1,000 full-time workers compensated for the first time for accidents resulting in—				Total.
			Death.	Permanent disability.		Temporary disability of over 13 weeks.	
				Total.	Partial.		
1897.....	5,170,366	41,746	0.82	0.12	4.11	3.02	8.07
1898.....	5,462,829	44,881	.85	.10	4.09	3.18	8.22
1899.....	5,781,405	49,175	.83	.10	4.12	3.46	8.51
1900.....	6,021,856	51,097	.85	.10	4.11	3.52	8.58
1901.....	6,000,615	55,525	.83	.10	4.36	3.96	9.25
1902.....	6,226,584	57,244	.73	.10	4.28	4.08	9.10
1903.....	6,553,514	60,550	.72	.09	4.19	4.24	9.24
1904.....	6,868,406	65,205	.72	.09	4.20	4.48	9.49
1905.....	7,150,842	68,360	.72	.08	4.11	4.64	9.55
1906.....	7,512,728	71,227	.72	.08	4.01	4.67	9.48
1907.....	7,869,421	75,370	.77	.07	3.85	4.89	9.58

It will be remembered that the data in this study include only those accidents resulting in disability lasting longer than 13 weeks or in death.

The change from the general accident rate of 8.07 in 1897 to 9.58 in 1907 represents an increase of 1.51 per 1,000 full-time workers or of 18.7 per cent in the rate. This rate is composed of accidents resulting in death, in total permanent disability, in partial permanent disability, or in temporary disability of over 13 weeks. The detailed information contained in the report shows that there has been a decrease in the fatal rate, a decrease in the rate for total permanent disability, a decrease in the rate for partial permanent disability, but a marked increase in the rate for temporary disability. The increase in the general rate, therefore, is due entirely to the increase in the less serious

cases of injury. The average rate for all establishments also fails to give as accurate an impression of the tendency as do the rates for the various industry groups.

All except seven of the industry groups show an increase in the number of persons injured per 1,000 full-time workers; the group livery, drayage, cartage, etc., increased from 16.97 in 1897 to 26.61 per 1,000 full-time workers in 1907; the group flour milling increased from 13.51 in 1897 to 16.06 per 1,000 full-time workers in 1907; the group mining, etc., increased from 12.09 in 1897 to 15.54 per 1,000 full-time workers in 1907; the group quarrying increased from 11.94 in 1897 to 15.35 per 1,000 full-time workers in 1907. These groups with high accident rates indicate the general tendency of the great majority of the industries to have a higher accident rate. As already stated, seven of the groups show decreases in the rate per 1,000 full-time workers; these are textiles with a decrease from 3.25 in 1897 to 3 in 1907, paper making from 9.27 to 9.21, food products from 6.79 to 6.27, chimney sweeping from 6.14 to 5.98, private railways from 5.86 to 5.56, express and storage from 12.36 to 11.34, while marine navigation shows a considerable decrease from 8.95 in 1897 to 6.22 per 1,000 full-time workers in 1907. With the exception of the last-named group, all of the decreases are comparatively slight. The increases, on the other hand, are in many cases quite marked.

The accident rate for workers engaged in Government industrial plants and operations shows some fluctuations during the period given in the preceding table, being highest in 1903, when it was 7.66 per 1,000 full-time workers, and lowest in 1897, when it was 6.79 per 1,000 full-time workers; since 1903 the general tendency has been for the rate to decrease.

The increase in the number of accidents has been so marked that the Imperial Insurance Office sent a circular letter to each of the accident associations in order to determine the cause. The returns showed that the increase was principally due to the following causes: Stricter control in regard to reporting accidents, employment of untrained and inexperienced workmen, more frequent prosecution of claims by the injured persons because of their better knowledge of the law, better knowledge of the literal definition of what is an "industrial accident," increase of the cases in which the officials of the insurance system admitted a causal connection between an existing malady or weakness and its aggravation by an accident, the frequent granting of a transitory or "accustoming" pension in cases where strictly speaking there was no longer a loss of earning power, and finally the frequency of changes in the personnel of the labor force of the plant.

According to the report, an increasing accident rate is an unfortunate but at the same time a well established and natural accompaniment of the industrial development of a country; in a time of indus-

trial activity new and often inexperienced employees are taken on, and all employees are urged to turn out a maximum product in order to make the fullest possible use of the machinery, and naturally a higher accident rate results. It may also be noted that in times of depression, sending workmen from one establishment or occupation to another is likely to result in an increase in the number of accidents.

TABLE 3.—INCREASE IN THE GENERAL ACCIDENT RATE: NUMBER OF PERSONS KILLED OR INJURED PER 1,000 FULL-TIME WORKERS, 1897 TO 1907, BY INDUSTRY GROUPS.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft, I Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 18* to 23*.]

Association number	Industry, etc.	Number of persons killed or injured per 1,000 full-time workers in—										
		1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
A. TOTALS.												
	Grand total.....	8.08	8.18	8.47	8.54	9.16	9.13	9.21	9.41	9.46	9.38	9.44
	Industrial accident associations (not including institutes).....	8.07	8.22	8.51	8.58	9.25	9.19	9.24	9.49	9.55	9.48	9.58
	Subsidiary institutes of building trades, engineering, and navigation associations.....	17.89	13.82	14.14	14.61	15.31	15.59	17.06	17.76	14.92	16.35	16.57
	Public authorities.....	6.79	6.82	7.13	7.11	7.24	7.41	7.66	7.20	7.42	7.16	6.85
B. GROUPS OF ASSOCIATIONS.												
1	Mining.....	12.09	12.77	12.10	12.19	13.06	13.53	14.59	15.46	15.53	15.70	15.54
2	Quarrying.....	11.94	11.38	12.40	12.44	14.78	15.33	14.91	14.83	15.14	14.98	15.35
3	Fine mechanical products.....	5.38	5.51	5.14	5.26	6.78	5.89	5.82	6.43	7.06	6.68	6.64
4-11	Iron and steel.....	28.92	29.76	30.05	30.07	31.99	31.45	31.25	31.62	31.45	31.55	31.62
12, 13	Metal working.....	4.21	4.34	4.42	4.75	5.09	5.23	5.11	5.24	5.37	5.04	6.92
14	Musical instruments.....	3.96	4.35	5.04	4.94	5.26	4.28	4.92	4.59	5.08	4.68	4.46
15	Glass.....	4.07	4.31	4.87	4.19	4.77	4.28	4.72	4.59	5.08	4.68	4.46
16	Pottery.....	2.33	2.38	2.04	2.73	3.01	3.06	2.73	3.23	3.31	3.08	3.39
17	Brick and tile making.....	6.71	6.49	7.34	8.60	8.24	8.74	7.85	8.61	9.42	8.99	9.59
18	Chemicals.....	7.76	7.09	7.79	8.39	9.04	7.85	7.98	8.65	8.71	9.24	9.88
19	Gas and water works.....	5.14	5.39	5.20	5.42	6.10	5.94	6.96	6.78	6.44	6.23	6.45
20	Linen.....	4.49	4.17	5.16	4.32	4.49	4.65	3.80	4.52	3.97	4.91	4.76
27	Silk.....	1.26	1.54	1.41	1.64	1.69	1.31	1.36	1.44	1.46	1.30	1.29
20-27	Textiles, including linen and silk.....	3.25	3.13	3.34	3.45	3.21	3.01	3.04	3.00	3.07	3.07	3.00
28	Paper making.....	9.27	9.23	8.81	8.96	10.66	9.83	9.52	9.51	9.65	9.00	9.21
29	Paper products.....	3.39	3.19	3.28	3.58	3.45	3.16	3.41	3.53	4.08	3.81	3.81
30	Leather.....	5.23	5.98	4.96	6.06	6.66	6.15	6.53	6.45	6.51	6.36	7.14
31-34	Woodworking.....	11.77	12.07	13.00	12.93	13.35	12.35	12.41	12.68	13.05	13.19	13.28
35	Flour milling.....	13.51	13.32	14.43	13.83	14.49	14.96	15.67	16.18	16.24	15.72	16.06
36	Food products.....	6.79	5.29	5.86	5.97	6.40	6.33	5.71	5.99	5.69	5.39	6.27
37	Sugar.....	7.89	7.41	8.74	8.41	7.97	9.23	8.27	9.00	8.41	8.86	9.10
38	Dairying, distilling, and starch.....	7.67	7.96	9.01	7.57	8.22	8.36	7.38	8.33	8.68	8.02	8.10
39	Brewing and malting.....	11.31	10.87	11.21	12.17	11.58	11.88	12.78	13.22	13.08	11.93	13.05
40	Tobacco.....	.42	.45	.46	.61	.54	.59	.65	.53	.48	.56	.49
41	Clothing.....	2.18	2.67	2.65	2.70	3.29	2.72	2.85	3.07	2.67	2.88	2.81
42	Chimney sweeping.....	6.14	5.50	5.14	4.48	4.42	5.27	5.39	5.27	5.27	4.71	5.93
43-54	Building trades (not including institutes).....	11.04	10.77	10.92	10.72	11.44	12.16	11.34	11.24	11.04	10.77	11.22
55	Printing and publishing.....	2.66	2.05	2.31	2.66	2.52	2.84	2.45	3.12	3.16	3.02	3.06
56	Private railways.....	5.86	4.61	5.72	4.53	5.37	6.26	6.68	5.65	5.78	6.57	5.52
57	Street and small railroads.....	5.14	5.65	7.07	6.58	8.00	8.36	9.79	7.13	7.60	7.45	6.98
58	Express and storage.....	12.86	12.19	13.95	14.15	14.52	13.90	13.57	11.62	12.53	12.23	11.34
59	Livery, drayage, cartage, etc.....	16.97	18.14	16.50	15.11	20.11	20.22	24.12	22.68	25.31	24.14	26.61
60-62	Inland navigation.....	11.35	10.70	11.73	11.74	13.84	12.97	13.69	15.02	14.31	14.11	11.82
63	Marine navigation (not including institute).....	8.95	8.01	9.02	8.00	7.30	7.67	6.49	6.72	6.50	6.70	6.22
64	Engineering, excavating, etc. (not including institute).....	11.85	12.38	12.82	12.82	13.87	16.61	16.24	15.17	14.74	12.74	12.95
65	Meat products.....	7.03	7.13	8.08	7.66	10.05	9.19	9.90	10.17	10.02	8.90	8.80
66	Blacksmithing, etc.....	(¹)	(¹)	(¹)	(¹)	(¹)	3.61	5.89	8.77	7.79	8.63	7.87

¹ Not including subsidiary institute of the navigation accident association.

² Including blacksmithing, etc.

³ Included in associations 4-11.

TABLE 3.—INCREASE IN THE GENERAL ACCIDENT RATE: NUMBER OF PERSONS KILLED OR INJURED PER 1,000 FULL-TIME WORKERS, 1897 TO 1907, BY INDUSTRY GROUPS—Concluded.

Asso- cia- tion num- ber.	Industry, etc.	Number of persons killed or injured per 1,000 full-time workers in—										
		1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
	C. PUBLIC AUTHORITIES.											
	Establishments of the naval administration....	5.91	6.55	7.58	10.56	9.54	10.28	9.47	6.35	4.69	4.80	5.39
	Establishments of the military administration....	5.82	6.01	6.13	4.69	4.22	5.40	6.01	4.81	4.37	4.22	4.00
	Postal and telegraph administration.....	5.66	4.89	5.19	6.23	5.45	4.91	4.24	3.36	4.06	3.70	3.21
	Railway administration....	7.03	7.06	7.33	7.33	7.48	7.68	7.82	7.63	8.14	7.71	7.23
	Dredging, towing, etc.....	11.56	9.31	12.65	10.80	14.01	12.99	10.94	13.15	15.75	11.85	12.13
	Building operations (States and Empire)....	6.59	6.50	7.65	7.03	8.42	8.11	8.55	7.78	7.17	7.39	7.90
	Marine navigation.....	9.03	3.98	7.29	9.74	11.86	12.20	22.47	6.70	3.33	8.10	1.46
	Building operations of local governments.....	5.99	6.26	5.84	5.92	6.04	5.81	7.58	6.87	6.19	7.18	7.43

TIME WHEN THE ACCIDENT OCCURRED.

MONTH OF THE YEAR.

The month of the year in which the accident occurred is shown in Table 4.

The grand total for all insured establishments in 1907 indicates that the accidents are distributed with a fair degree of uniformity throughout the year; the highest proportion in any one month was that for October, when it was 9.39 per cent of all the accidents occurring in the year, while the month of August, with 8.87 per cent, came second. The month of February having but 28 days naturally had the smallest proportion, with 7.22 per cent of the total number of accidents; in some of the industry groups the distribution of the accidents reflects the seasonal character of the industries; thus in the industry of inland navigation, the association for inland navigation of West Germany (association 60) fluctuates between 5.07 per cent in January and 11.96 per cent in September; in the building trades the Hamburg Building Trades Association (association 43) fluctuates between 4.95 per cent in January and 11.08 per cent in May. Some of the industries in which such fluctuations would not ordinarily be expected show also a wide difference in the proportion of accidents occurring in the different months during the year; thus the fine mechanical products association (association 3) had only 6.62 per cent of its accidents in the month of May, while 9.79 per cent occurred in the month of January.

INDUSTRIAL ACCIDENTS IN GERMANY, 1897 AND 1907. 19

TABLE 4.—TIME OF ACCIDENT, MONTH OF YEAR: PER CENT OF PERSONS INJURED, BY MONTH IN WHICH ACCIDENTS OCCURRED.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft, I Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 300 to 309.]

Asso- cia- tion num- ber.	Industry and cases com- pensated.	Per cent of persons reported injured during—											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
A. TOTALS.													
Grand total:													
	1907.....(81,248 cases) ..	8.48	7.22	7.83	7.78	8.15	8.35	8.54	8.87	8.32	9.39	8.62	8.45
	1897.....(45,971 cases) ..	7.93	7.03	7.69	7.42	8.41	8.30	9.23	8.78	9.08	9.21	8.69	8.23
Industrial accident associa- tions (not including insti- tutes):													
	1907.....(75,370 cases) ..	8.52	7.23	7.80	7.75	8.12	8.36	8.51	8.92	8.34	9.39	8.63	8.43
	1897.....(41,746 cases) ..	7.85	7.12	7.70	7.38	8.41	8.21	9.23	8.53	9.11	9.28	8.68	8.20
Subsidiary institutes of build- ing trades, engineering, and navigation accident associa- tions:													
	1907.....(1,345 cases) ..	4.83	4.46	9.00	10.86	11.82	10.48	11.00	8.48	7.96	8.10	7.73	5.28
	1897.....(1,155 cases) ..	6.06	4.50	6.32	7.97	11.26	12.80	11.52	10.13	7.36	7.71	7.53	6.84
Public authorities:													
	1907.....(4,533 cases) ..	8.85	7.88	7.97	7.31	7.60	7.51	8.26	8.10	7.94	9.80	8.74	10.04
	1897.....(3,070 cases) ..	9.76	6.73	8.07	7.71	7.41	7.87	8.36	7.55	9.33	8.79	9.14	9.23
B. GROUPS OF ASSOCIATIONS.													
1	Mining:												
	1907.....(11,381 cases) ..	10.18	7.93	8.85	7.32	7.84	8.08	7.72	8.75	8.16	8.64	8.50	8.03
	1897.....(5,670 cases) ..	8.75	8.79	8.84	7.41	7.90	7.36	8.75	7.66	8.70	9.24	8.17	8.43
2	Quarrying:												
	1907.....(2,677 cases) ..	7.81	7.93	9.05	8.07	8.79	8.67	8.04	7.89	7.93	9.38	8.18	8.26
	1897.....(1,554 cases) ..	6.89	7.92	8.24	7.34	9.21	7.66	9.92	8.52	9.34	8.50	7.86	8.30
3	Fine mechanical products:												
	1907.....(1,481 cases) ..	9.79	9.12	7.83	7.49	6.62	7.83	8.17	8.24	8.71	9.05	8.98	8.17
	1897.....(567 cases) ..	8.13	6.89	8.30	7.42	7.60	7.24	8.48	10.07	9.36	10.42	8.69	7.40
IRON AND STEEL¹													
4	South German iron and steel:												
	1907.....(2,105 cases) ..	8.79	7.27	7.98	7.98	6.37	6.79	8.12	9.41	9.60	11.06	9.31	7.32
	1897.....(1,093 cases) ..	7.87	8.33	6.40	6.95	6.95	7.87	9.33	9.33	10.16	11.25	8.42	7.14
5	Southwest German iron:												
	1907.....(821 cases) ..	8.65	6.46	9.14	8.77	9.50	8.04	7.92	8.28	7.43	9.00	7.55	9.26
	1897.....(301 cases) ..	7.31	10.63	4.32	9.97	7.31	8.97	6.31	7.97	9.63	12.96	4.65	9.97
6	Rhineland-Westphalian fur- nace and rolling works:												
	1907.....(2,748 cases) ..	9.50	8.11	7.75	7.96	7.28	8.81	8.52	7.46	7.35	8.37	9.86	9.13
	1897.....(1,127 cases) ..	8.16	8.87	8.78	8.16	7.72	7.46	9.76	8.43	8.34	8.61	8.34	7.37
7	Machine building and small iron wares:												
	1907.....(2,308 cases) ..	8.06	6.72	8.19	8.02	7.93	8.24	7.89	9.41	8.58	10.14	8.32	8.50
	1897.....(936 cases) ..	7.27	7.70	8.24	6.42	7.70	7.49	8.88	8.98	8.45	9.09	10.27	9.51
8	Saxony-Thuringian iron and steel:												
	1907.....(1,104 cases) ..	9.24	8.51	7.71	8.15	6.97	7.25	9.87	8.70	8.42	8.97	7.88	8.33
	1897.....(738 cases) ..	7.24	7.36	7.49	7.99	8.25	9.14	9.77	10.28	9.14	7.36	7.99	7.99
9	Northeast iron and steel:												
	1907.....(1,510 cases) ..	8.61	8.15	7.35	8.61	7.42	8.74	7.02	9.21	8.74	9.27	9.07	7.81
	1897.....(746 cases) ..	9.25	7.77	8.71	6.30	7.77	8.18	8.85	10.05	8.04	7.65	9.52	7.91
10	Silesian iron and steel:												
	1907.....(1,813 cases) ..	9.10	8.16	7.12	7.67	8.99	10.15	7.67	8.71	7.17	10.09	7.56	7.61
	1897.....(957 cases) ..	10.24	7.63	7.94	7.31	9.72	7.94	7.94	9.40	7.32	7.94	8.78	7.84
11	Northwest iron and steel:												
	1907.....(1,674 cases) ..	9.74	9.09	6.87	7.83	6.81	7.35	8.13	7.47	8.07	11.06	8.37	9.27
	1897.....(925 cases) ..	10.17	8.44	9.85	6.82	7.68	8.98	7.90	7.47	8.01	7.47	8.66	8.55
METAL WORKING.													
12	South German precious and nonprecious metal work- ing:												
	1907.....(424 cases) ..	7.55	8.25	8.73	8.02	9.67	5.19	8.49	8.73	8.25	8.25	8.96	9.91
	1897.....(199 cases) ..	12.06	10.05	7.04	4.52	10.54	5.53	7.54	5.03	10.05	9.55	8.54	9.55
13	North German metal work- ing:												
	1907.....(1,109 cases) ..	7.12	8.03	9.02	8.39	9.37	7.48	7.66	9.65	7.39	8.66	8.75	8.48
	1897.....(335 cases) ..	8.66	5.67	6.87	10.15	8.66	7.76	9.55	7.76	7.76	10.15	8.06	8.95

¹ Including blacksmithing, etc., in 1897.

TABLE 4.—TIME OF ACCIDENT, MONTH OF YEAR: PER CENT OF PERSONS INJURED, BY MONTH IN WHICH ACCIDENTS OCCURRED—Continued.

Asso- cia- tion num- ber.	Industry and cases com- pensated.	Per cent of persons reported injured during—											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
B. GROUPS OF ASSOCIATIONS—Continued.													
14	Musical instruments:												
	1907.....(225 cases)...	12.00	6.67	8.44	8.89	9.78	8.00	7.11	8.44	8.44	6.23	8.89	7.11
	1897.....(89 cases)...	8.99	13.48	8.99	7.87	10.11	4.49	4.49	11.24	6.75	4.49	8.99	10.11
15	Glass:												
	1907.....(347 cases)...	11.52	9.51	5.48	7.78	6.63	9.51	7.78	7.78	5.76	8.07	11.53	8.65
	1897.....(235 cases)...	7.66	7.66	8.51	6.82	8.51	9.36	7.23	11.06	8.51	8.09	9.36	7.23
16	Pottery:												
	1907.....(310 cases)...	10.36	10.03	8.74	6.80	6.80	5.18	9.06	7.44	9.71	10.68	8.09	7.11
	1897.....(166 cases)...	7.23	13.86	12.05	9.04	4.82	4.82	6.63	6.02	9.64	8.43	6.63	10.83
17	Brick and tile making:												
	1907.....(1,931 cases)...	7.35	6.53	5.80	9.79	9.89	10.10	10.66	10.36	7.77	7.92	6.68	7.15
	1897.....(1,085 cases)...	7.14	4.73	6.22	8.35	13.64	10.48	12.52	11.32	8.44	5.66	5.29	6.21
18	Chemicals:												
	1907.....(2,038 cases)...	9.09	6.48	6.53	8.55	8.84	8.45	8.74	8.15	7.81	8.40	9.53	9.43
	1897.....(1,007 cases)...	7.35	6.36	7.75	6.85	7.75	9.33	8.44	8.64	11.22	7.94	8.94	9.43
19	Gas and water works:												
	1907.....(435 cases)...	10.79	7.59	7.36	6.90	7.36	7.36	6.67	7.59	7.82	8.05	10.11	12.40
	1897.....(179 cases)...	12.28	10.06	4.47	7.26	6.15	11.17	7.82	7.82	6.15	7.82	10.06	8.94
TEXTILES.													
20	Linens:												
	1907.....(280 cases)...	10.36	6.79	9.29	8.57	7.14	7.14	7.14	10.00	11.07	9.64	6.43	6.43
	1897.....(202 cases)...	9.41	6.93	5.45	8.91	10.39	6.93	11.87	8.42	5.45	8.91	7.92	9.41
21	North German textile:												
	1907.....(546 cases)...	8.97	7.88	7.88	7.52	9.34	6.59	8.61	9.52	7.69	8.79	7.69	9.52
	1897.....(343 cases)...	9.65	10.23	7.60	6.14	6.43	5.26	9.65	7.02	7.31	10.53	11.40	8.78
22	South German textile:												
	1907.....(291 cases)...	10.00	8.62	8.97	7.93	5.86	5.86	7.24	8.62	10.00	11.04	7.93	7.93
	1897.....(228 cases)...	8.33	7.46	8.33	7.02	8.77	5.26	9.21	8.77	13.60	9.21	7.02	7.02
23	Silesian textile:												
	1907.....(187 cases)...	12.83	10.16	6.95	7.49	4.28	7.49	9.09	9.09	9.09	6.95	9.09	7.49
	1897.....(181 cases)...	8.84	10.50	7.18	4.43	6.08	8.84	11.60	9.94	5.53	11.60	7.73	7.73
24	Alsace-Lorraine textile:												
	1907.....(227 cases)...	12.39	6.64	8.85	4.87	6.64	9.73	7.08	9.29	9.73	7.96	6.19	10.63
	1897.....(203 cases)...	9.36	8.87	6.40	4.44	13.30	6.40	10.94	7.88	9.36	4.93	7.88	10.34
25	Rhineland-Westphalian tex- tile:												
	1907.....(440 cases)...	8.66	7.29	9.34	6.38	7.97	7.97	7.97	7.74	10.25	11.39	6.60	8.44
	1897.....(387 cases)...	9.30	7.24	8.53	7.49	9.03	7.24	8.01	8.53	10.08	8.79	5.68	10.08
26	Saxony textile:												
	1907.....(675 cases)...	10.66	9.48	9.63	7.70	7.41	9.33	6.37	9.04	7.56	5.04	8.89	8.89
	1897.....(782 cases)...	8.06	9.59	8.06	8.70	7.16	7.29	8.57	7.93	8.31	9.84	7.03	9.46
27	Silk:												
	1907.....(93 cases)...	11.82	7.54	3.23	9.68	9.68	6.45	8.60	11.82	11.82	6.45	3.23	9.68
	1897.....(68 cases)...	16.18	5.88	7.35	5.88	4.42	4.42	5.88	7.35	5.88	7.35	7.35	22.06
28	Paper making:												
	1907.....(793 cases)...	8.70	7.69	8.32	7.44	7.19	10.09	6.69	9.33	7.06	9.33	7.44	10.72
	1897.....(592 cases)...	7.77	8.28	8.45	8.11	8.28	7.94	8.61	9.63	10.47	7.26	8.61	6.59
29	Paper products:												
	1907.....(500 cases)...	5.60	8.20	8.20	7.20	9.40	8.60	7.20	7.60	9.60	11.40	9.40	7.60
	1897.....(271 cases)...	6.64	8.49	8.12	7.38	8.12	9.59	7.01	6.27	8.12	11.07	8.86	10.33
30	Leather:												
	1907.....(537 cases)...	8.94	7.26	10.06	7.26	8.94	8.01	6.89	6.52	9.31	8.57	9.30	8.94
	1897.....(292 cases)...	7.53	9.59	5.14	6.51	7.88	6.16	7.53	10.27	8.56	11.99	9.25	9.59
WOODWORKING.													
31	Saxony woodworking:												
	1907.....(484 cases)...	8.47	8.68	8.88	7.02	8.06	6.61	10.95	9.30	7.44	9.30	7.85	7.44
	1897.....(252 cases)...	8.33	12.69	6.35	10.31	5.56	9.92	6.75	7.54	6.75	7.94	7.94	9.92
32	North German woodworking:												
	1907.....(3,344 cases)...	9.06	7.60	8.20	7.51	7.90	7.66	8.20	8.47	8.47	9.24	8.44	9.25
	1897.....(1,872 cases)...	9.30	8.39	7.38	7.43	8.61	8.77	8.93	8.44	8.07	8.93	8.07	7.68
33	Bavarian woodworking:												
	1907.....(631 cases)...	8.08	8.08	6.66	8.87	7.61	9.51	8.08	12.36	7.13	8.08	7.14	8.40
	1897.....(392 cases)...	9.18	9.69	8.16	7.92	6.63	5.62	8.16	11.48	10.71	8.16	6.63	7.66
34	Southwest German wood- working:												
	1907.....(821 cases)...	6.58	7.55	8.16	7.19	10.72	10.84	9.74	6.94	8.53	9.26	8.40	6.09
	1897.....(352 cases)...	8.24	4.83	11.08	5.97	8.81	7.95	11.93	9.66	11.36	7.39	8.52	4.48
35	Flour milling:												
	1907.....(1,027 cases)...	9.93	8.96	8.76	5.75	7.89	7.98	7.12	9.44	7.79	9.15	9.54	7.69
	1897.....(1,007 cases)...	11.01	8.94	8.54	7.25	8.04	6.26	7.05	9.04	8.44	8.94	9.24	7.25
36	Food products:												
	1907.....(789 cases)...	8.37	7.35	7.10	7.86	7.73	9.31	7.98	7.86	8.37	11.02	9.37	7.86
	1897.....(340 cases)...	8.55	7.08	6.19	5.60	10.03	9.44	9.73	9.14	7.96	9.47	9.14	7.67

TABLE 4.—TIME OF ACCIDENT, MONTH OF YEAR: PER CENT OF PERSONS INJURED, BY MONTH IN WHICH ACCIDENTS OCCURRED—Continued.

Asso- cia- tion num- ber.	Industry and cases com- pensated.	Per cent of persons reported injured during—											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
B. GROUPS OF ASSOCIATIONS—Continued.													
37	Sugar:												
	1907..... (508 cases) ..	7.28	5.71	4.92	5.51	4.72	2.56	5.71	6.89	8.07	17.72	16.54	14.37
	1897..... (509 cases) ..	8.06	4.91	4.72	6.88	2.95	5.89	4.52	5.50	6.88	18.66	18.66	12.37
38	Dairying, distilling, and starch:												
	1907..... (409 cases) ..	9.29	10.27	7.58	6.60	6.85	6.85	5.87	6.36	5.87	11.74	10.51	12.21
	1897..... (360 cases) ..	13.06	11.94	8.61	7.50	5.28	4.72	5.28	6.94	7.22	8.06	7.22	14.17
39	Brewing and malting:												
	1907..... (1,608 cases) ..	10.63	8.15	6.72	5.41	6.90	8.27	8.64	9.64	7.21	8.40	8.15	11.88
	1897..... (1,142 cases) ..	11.07	7.71	6.91	6.82	8.50	9.21	7.71	7.53	6.91	7.53	9.12	10.98
40	Tobacco:												
	1907..... (81 cases) ..	11.11	6.17	7.41	8.64	4.95	7.41	8.64	11.11	13.58	6.17	8.64	6.17
	1897..... (87 cases) ..	12.27	7.17	10.52	5.26	.....	5.26	8.77	12.27	1.75	7.08	5.26	19.29
41	Clothing:												
	1907..... (676 cases) ..	9.47	7.25	7.10	8.88	6.95	7.25	9.17	7.40	8.88	9.75	9.02	8.88
	1897..... (295 cases) ..	11.26	7.17	9.90	6.48	8.19	5.12	8.53	8.87	5.46	8.87	9.90	10.25
42	Chimney sweeping:												
	1907..... (34 cases) ..	8.82	8.82	11.76	11.76	5.89	5.89	5.89	11.76	8.82	5.89	5.89	8.82
	1897..... (38 cases) ..	21.62	10.81	8.11	5.41	5.41	2.70	13.51	2.70	.....	13.51	10.81	5.41
BUILDING TRADES (NOT INCLUDING INSTITUTES).													
43	Hamburg building trades:												
	1907..... (505 cases) ..	4.95	5.74	7.15	7.52	11.06	10.10	9.90	10.88	8.73	7.52	6.73	9.70
	1897..... (302 cases) ..	3.32	3.65	5.65	6.64	7.64	11.63	7.97	11.30	12.96	8.97	11.96	8.31
44	Northeast building trades:												
	1907..... (1,927 cases) ..	5.29	4.88	7.84	9.39	8.93	8.67	9.65	9.65	9.91	10.53	7.99	7.27
	1897..... (1,680 cases) ..	4.70	3.28	6.01	7.68	9.94	9.17	11.90	9.70	11.31	10.24	10.18	5.89
45	Silesian-Posen building trades:												
	1907..... (1,084 cases) ..	4.89	3.51	7.11	7.85	8.59	10.16	12.00	11.63	10.62	10.16	7.85	5.63
	1897..... (717 cases) ..	3.35	2.80	6.69	9.48	8.65	9.90	10.74	12.41	12.69	11.99	6.56	4.74
46	Hanover building trades:												
	1907..... (629 cases) ..	5.90	4.14	6.86	7.18	7.50	11.80	10.53	10.05	10.21	9.25	8.61	7.97
	1897..... (467 cases) ..	3.28	2.84	9.41	9.41	10.28	9.85	10.94	8.10	10.72	9.41	9.85	5.91
47	Magdeburg building trades:												
	1907..... (389 cases) ..	5.17	4.39	7.22	6.98	9.82	11.89	9.82	10.08	8.01	11.89	9.56	5.17
	1897..... (179 cases) ..	2.80	2.80	7.26	12.29	8.94	11.17	16.76	7.26	8.94	7.26	7.26	7.26
48	Saxony building trades:												
	1907..... (1,109 cases) ..	4.78	3.79	4.69	8.21	8.21	9.39	10.20	11.01	10.65	10.74	11.19	7.13
	1897..... (767 cases) ..	3.52	3.13	5.74	6.92	9.40	9.14	10.84	9.92	12.14	13.71	9.53	6.01
49	Thuringian building trades:												
	1907..... (391 cases) ..	4.36	6.39	8.18	7.67	11.51	7.67	10.74	10.49	6.91	9.46	9.97	6.65
	1897..... (239 cases) ..	2.09	3.35	8.79	8.37	7.95	8.37	13.38	10.46	14.22	11.30	7.95	3.77
50	Hessen-Nassau building trades:												
	1907..... (694 cases) ..	6.34	3.90	6.77	7.64	10.81	9.65	10.66	9.51	10.37	8.93	7.64	7.78
	1897..... (474 cases) ..	3.17	5.50	6.55	6.34	10.57	11.21	10.36	10.36	11.42	9.73	9.50	5.29
51	Rhineland-Westphalian building trades:												
	1907..... (1,855 cases) ..	7.01	5.24	6.69	7.76	8.19	7.65	9.70	9.65	9.16	10.62	10.03	8.30
	1897..... (1,063 cases) ..	5.08	4.43	6.40	5.94	8.37	7.24	11.38	12.32	10.25	10.72	10.91	6.96
52	Wurtemberg building trades:												
	1907..... (583 cases) ..	4.46	4.12	4.46	9.95	8.75	11.83	12.17	9.78	10.29	10.81	7.38	6.00
	1897..... (403 cases) ..	4.96	2.48	5.71	6.70	12.90	10.67	15.88	8.68	9.93	11.41	7.94	2.74
53	Bavarian building trades:												
	1907..... (1,149 cases) ..	4.44	4.44	6.70	9.40	9.66	11.23	12.96	10.27	7.05	10.10	7.48	6.27
	1897..... (1,175 cases) ..	4.86	5.36	6.98	9.87	10.30	9.53	11.83	9.70	9.38	8.17	8.00	6.04
54	Southwest building trades:												
	1907..... (716 cases) ..	5.59	3.77	6.01	4.89	10.06	9.92	10.75	11.87	7.96	12.56	10.06	6.56
	1897..... (474 cases) ..	3.38	4.22	5.70	6.75	9.28	10.13	10.76	11.39	12.86	10.76	8.44	6.33
55	Printing and publishing:												
	1907..... (428 cases) ..	7.94	8.18	6.31	7.24	11.21	7.48	8.64	5.62	6.54	9.81	10.75	10.28
	1897..... (252 cases) ..	9.52	7.94	9.52	5.17	8.33	7.14	8.33	6.75	9.92	7.54	9.92	9.92
56	Private railroads:												
	1907..... (168 cases) ..	2.98	8.93	8.32	7.74	7.14	10.70	7.74	6.55	8.32	9.57	7.14	14.87
	1897..... (125 cases) ..	8.06	12.10	6.45	1.61	8.87	3.23	6.45	8.87	12.90	6.45	9.68	10.80
57	Street and small railroads:												
	1907..... (485 cases) ..	8.25	8.66	7.22	7.01	7.84	7.01	8.04	9.69	7.84	8.66	10.71	9.07
	1897..... (168 cases) ..	7.14	8.93	4.77	8.93	8.33	8.93	11.31	9.52	3.57	10.71	5.36	12.50
58	Express and storage:												
	1907..... (3,932 cases) ..	9.51	7.53	7.33	7.53	7.25	7.07	7.89	8.90	7.71	9.82	9.31	10.15
	1897..... (1,426 cases) ..	10.53	6.95	7.93	7.72	7.30	6.88	7.16	6.46	8.63	9.96	9.68	10.80
59	Livery, drayage, cartage, etc.:												
	1907..... (2,500 cases) ..	8.84	7.60	7.96	8.28	8.40	7.76	9.32	9.28	8.08	8.92	7.32	8.24
	1897..... (1,242 cases) ..	9.57	8.45	6.76	5.72	7.17	9.18	9.18	8.78	9.10	9.74	7.57	8.78

TABLE 4.—TIME OF ACCIDENT, MONTH OF YEAR: PER CENT OF PERSONS INJURED, BY MONTH IN WHICH ACCIDENTS OCCURRED—Concluded.

Asso- ciation num- ber.	Industry and cases compen- sated.	Per cent of persons injured during—											
		Jan.	Feb.	Mar.	Apr.	Hay.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
B. GROUPS OF ASSOCIATIONS—Concluded.													
INLAND NAVIGATION.													
60	West German inland navigation:												
	1907.....(276 cases)...	5.07	6.52	9.42	7.25	10.87	7.97	5.80	7.25	11.96	7.61	10.14	10.14
	1897.....(155 cases)...	5.81	5.81	8.39	11.61	6.45	11.61	6.45	9.68	7.74	12.26	9.03	5.16
61	Elbe inland navigation:												
	1907.....(325 cases)...	5.23	3.39	9.85	11.38	8.92	11.38	8.92	10.77	5.54	5.54	9.23	9.85
	1897.....(216 cases)...	8.33	6.94	11.57	8.33	10.19	7.41	6.03	6.94	10.19	8.33	6.48	9.26
62	East German inland navigation:												
	1907.....(152 cases)...	3.95	2.63	6.58	11.84	11.18	12.50	4.61	11.18	9.21	6.58	12.50	7.24
	1897.....(156 cases)...	3.21	1.28	11.54	10.26	10.26	11.54	10.26	8.32	5.13	10.26	14.09	3.85
63	Marine navigation (not in- cluding institute):												
	1907.....(459 cases)...	5.66	10.68	13.51	6.32	6.32	7.63	6.75	8.28	6.97	9.80	9.15	8.93
	1897.....(397 cases)...	8.78	3.19	13.30	6.12	5.32	8.24	6.65	6.38	11.70	5.85	7.45	17.02
64	Engineering, excavating, etc. (not including institute):												
	1907.....(2,143 cases)...	7.98	5.23	7.56	7.56	9.01	9.01	8.54	8.63	9.05	10.35	8.59	8.49
	1897.....(1,226 cases)...	6.69	4.24	7.01	6.85	9.71	9.54	9.38	8.65	7.26	11.09	11.34	8.24
65	Meat products:												
	1907.....(1,120 cases)...	10.53	8.57	8.66	7.95	7.95	7.86	7.95	7.32	9.19	8.84	6.88	8.30
	1897.....(329 cases)...	6.69	6.39	7.29	6.99	7.29	9.42	9.12	12.76	12.16	5.78	6.99	9.12
66	Blacksmithing, etc.:												
	1907.....(929 cases)...	7.64	5.71	7.00	6.46	8.72	9.47	10.54	10.66	9.69	10.01	7.75	6.35
	1897.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
C. PUBLIC AUTHORITIES.													
Establishments of the naval administration:													
	1907.....(105 cases)...	5.71	5.71	7.62	8.58	5.71	9.52	9.52	11.43	9.52	8.58	7.62	10.48
	1897.....(86 cases)...	5.81	2.33	4.65	13.95	8.15	11.63	13.95	10.47	4.65	9.30	9.30	5.81
Establishments of the mili- tary administration:													
	1907.....(157 cases)...	8.92	8.28	9.55	11.46	4.47	7.01	12.10	8.92	7.64	6.37	5.73	9.55
	1897.....(190 cases)...	8.42	8.42	7.89	7.89	5.26	10.00	14.21	18.95	10.53	5.79	6.32	6.32
Postal and telegraph admin- istration:													
	1907.....(122 cases)...	4.92	4.92	6.56	7.38	3.28	5.74	8.20	12.29	8.20	12.29	9.02	17.20
	1897.....(54 cases)...	1.59	3.17	11.11	6.36	12.70	12.70	7.94	11.11	12.70	4.76	7.92	7.94
Railway administration:													
	1907.....(3,316 cases)...	8.93	8.27	8.07	7.05	7.49	7.49	8.12	7.76	8.06	10.44	8.51	9.81
	1897.....(2,233 cases)...	9.91	7.26	8.30	7.76	6.68	7.31	7.76	7.40	9.28	9.33	9.33	9.68
Dredging, towing, etc.:													
	1907.....(79 cases)...	10.13	3.80	11.39	12.66	10.13	6.33	5.06	10.13	6.33	6.33	11.38	6.33
	1897.....(52 cases)...	11.54	5.77	7.69	7.69	9.62	3.85	7.69	7.69	9.62	7.69	13.46	7.69
Building operations (States and Empire):													
	1907.....(248 cases)...	7.29	7.29	8.10	5.66	8.50	8.50	9.72	8.91	9.31	9.31	9.31	8.10
	1897.....(188 cases)...	12.97	2.70	5.95	5.41	9.73	8.11	8.65	8.65	9.73	8.65	8.65	10.80
Marine navigation:													
	1907.....(1 case).....					100.00							
	1897.....(5 cases).....			60.00		20.00		20.00					
Building operations of local governments:													
	1907.....(505 cases)...	10.50	7.33	7.33	6.73	9.70	7.52	7.52	7.72	6.73	7.14	10.69	11.09
	1897.....(262 cases)...	9.58	6.51	7.66	7.28	13.79	9.58	6.90	6.13	9.58	6.51	9.58	6.90

¹ Included in associations 4 to 11.

DAY OF THE WEEK.

The day of the week on which the accidents occurred is shown in Table 5.

As would naturally be expected, the smallest proportion of accidents occur on Sunday; in fact, it is in some respect surprising that the number of accidents on that day is as large as the table shows. For 1907 the grand total for all industries shows that 2.52 per cent of the accidents occurred on Sunday. Of the week days, Monday shows the highest proportion of accidents, this day having 16.94 per cent of the total. The proportion occurring on Tuesday is much less than that occurring on Monday, the proportion on Wednesday decreases still further, but on Thursday the proportion again increases and continues until Saturday, which has a proportion but slightly less than that for Monday. These proportions vary considerably from those shown by investigation of accidents in the year 1897. For the year 1897, Monday was also the day on which the highest proportion of accidents occurred, Tuesday showed a decrease, while Wednesday and Thursday had identically the same proportion, Friday had the lowest of any in the week, and Saturday showed a sharp increase over Friday, though still less than the proportion for Monday. The editors of the report suggest that the high accident rate for Monday, and also, perhaps, for Tuesday, may be caused by the holiday on Sunday; the use of alcohol and the fatigue following the Sunday holiday are suggested as the most likely causes of this higher proportion. In the following table special attention is given to the accident rates on Monday morning and Saturday afternoon.

For the separate industries, the accidents are distributed in practically the same way as shown by the total for all industries, though many of those groups show striking variations to the general rule of a lower proportion in the middle of the week with a high proportion at the beginning and end of the week. Thus, in case of the group designated as musical instruments (association 14) the highest proportion in 1907 occurs on Wednesday and Thursday with the lowest proportion on Tuesday and Saturday, while in 1897 the distribution followed the general rule; in the case of the South German Metal Working Association (association 12) the lowest proportion occurs on Saturday and the next lowest on Monday, with the highest on Tuesday, Friday, and Thursday. These exceptions, however, only emphasize the general rule that the first day of the week and the last day of the week contain the greatest risk for the workmen. The textile associations are conspicuous in having an unusually high proportion of their accidents on Saturday, and in some of the associations, such as the association for Alsace-Lorraine (association 24), the proportion is practically double what it was during the middle of the week.

TABLE 5.—TIME OF ACCIDENT, DAY OF WEEK: PER CENT OF PERSONS INJURED, BY DAY OF WEEK ON WHICH ACCIDENTS OCCURRED.

Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft, I Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 300 to 308.]

Association number.	Industry and cases compensated.	Per cent of persons reported injured on—						
		Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
A. TOTALS.								
	Grand total:							
	1907.....(81,248 cases)...	2.52	16.94	15.76	15.66	16.04	16.28	16.80
	1897.....(45,971 cases)...	2.24	17.33	16.65	15.71	15.71	15.38	16.96
	Industrial accident associations (not including institutes):							
	1907.....(75,370 cases)...	2.37	17.01	15.74	15.68	16.14	16.23	16.83
	1897.....(41,746 cases)...	2.15	17.45	16.67	15.71	15.71	15.34	16.97
	Subsidiary institutes of building trades, engineering, and navigation accident associations:							
	1907.....(1,345 cases)...	2.91	15.28	16.47	16.10	15.28	17.21	16.75
	1897.....(1,155 cases)...	1.04	16.90	15.77	16.64	16.37	16.64	16.64
	Public authorities:							
	1907.....(4,533 cases)...	4.91	16.25	15.83	15.19	14.57	16.77	16.48
	1897.....(3,070 cases)...	4.03	15.76	16.65	15.76	15.40	15.40	17.00
B. GROUPS OF ASSOCIATIONS.								
1	Mining:							
	1907.....(11,381 cases)...	2.94	16.06	16.00	14.87	15.83	17.44	16.86
	1897.....(5,670 cases)...	2.17	15.96	17.06	15.98	16.05	15.48	17.30
2	Quarrying:							
	1907.....(2,677 cases)...	1.54	16.88	15.49	16.32	16.54	16.35	16.88
	1897.....(1,544 cases)...	1.16	16.26	17.03	15.81	14.90	15.81	19.03
3	Fine mechanical products:							
	1907.....(1,481 cases)...	1.71	16.10	15.96	15.76	16.85	16.10	17.52
	1897.....(567 cases)...	1.59	16.35	19.05	14.69	15.58	16.81	15.93
IRON AND STEEL.¹								
4	South German iron and steel:							
	1907.....(2,105 cases)...	.76	16.26	15.74	17.45	17.17	16.45	16.17
	1897.....(1,093 cases)...	1.01	17.06	14.77	14.40	18.26	16.33	18.17
5	Southwest German iron:							
	1907.....(821 cases)...	5.61	14.63	14.02	16.59	15.49	15.73	17.93
	1897.....(301 cases)...	5.70	18.46	13.09	17.45	15.77	12.42	17.11
6	Rhineland-Westphalian furnace and rolling works:							
	1907.....(2,748 cases)...	5.42	16.05	15.47	15.03	15.29	15.69	17.05
	1897.....(1,127 cases)...	6.04	16.24	15.88	15.08	15.08	14.29	17.39
7	Machine building and small iron wares:							
	1907.....(2,308 cases)...	.91	16.96	15.92	15.79	16.53	15.40	18.49
	1897.....(936 cases)...	1.29	18.01	15.54	15.86	15.43	15.97	17.90
8	Saxony-Thuringian iron and steel:							
	1907.....(1,104 cases)...	1.10	15.07	14.25	17.08	20.09	16.44	15.97
	1897.....(788 cases)...	1.40	17.81	17.43	14.12	17.30	16.16	15.78
9	Northeast iron and steel:							
	1907.....(1,510 cases)...	1.52	16.77	16.37	15.24	16.77	15.31	18.02
	1897.....(746 cases)...	.68	17.30	17.70	17.43	17.30	14.46	15.13
10	Silesian iron and steel:							
	1907.....(1,813 cases)...	4.36	14.81	16.46	15.41	16.52	15.47	16.97
	1897.....(957 cases)...	3.47	16.72	16.51	14.62	15.14	15.77	17.77
11	Northwest iron and steel:							
	1907.....(1,674 cases)...	1.56	16.19	14.87	16.73	17.93	15.47	17.25
	1897.....(925 cases)...	.76	16.05	15.72	19.32	14.52	14.52	19.11
METAL WORKING.								
12	South German precious and non-precious metal working:							
	1907.....(424 cases)...	.47	15.88	18.25	16.11	17.54	17.77	13.98
	1897.....(199 cases)...	1.51	18.59	20.09	13.07	17.09	17.09	12.56
13	North German metal working:							
	1907.....(1,109 cases)...	.55	18.12	14.75	16.12	17.58	15.48	17.40
	1897.....(335 cases)...	.90	17.66	13.17	20.36	19.46	14.07	14.38
14	Musical instruments:							
	1907.....(225 cases)...		16.44	15.11	18.67	18.23	16.44	15.11
	1897.....(89 cases)...		21.45	11.36	16.94	14.88	14.92	20.45
15	Glass:							
	1907.....(347 cases)...	3.79	23.03	12.54	15.74	13.99	16.62	14.29
	1897.....(235 cases)...	9.01	15.45	17.17	19.31	10.30	16.74	12.02

¹ Including blacksmithing, etc., in 1897.

TABLE 5.—TIME OF ACCIDENT, DAY OF WEEK: PER CENT OF PERSONS INJURED, BY DAY OF WEEK ON WHICH ACCIDENTS OCCURRED—Continued.

Asso- ciation num- ber.	Industry and cases compensated.	Per cent of persons reported injured on—						
		Sun- day.	Mon- day.	Tues- day.	Wed- nesday.	Thurs- day.	Friday.	Satur- day.
B. GROUPS OF ASSOCIATIONS—Contd.								
16	Pottery:							
	1907.....(310 cases).....	0.98	16.61	19.54	17.59	16.61	11.73	16.94
	1897.....(166 cases).....	1.23	14.11	20.25	16.56	17.79	14.11	15.95
17	Brick and tile making:							
	1907.....(1,931 cases).....	1.25	17.54	15.67	17.60	14.26	16.61	17.07
	1897.....(1,065 cases).....	1.02	21.73	17.18	14.58	15.60	14.39	15.50
18	Chemicals:							
	1907.....(2,038 cases).....	3.42	17.91	14.83	16.52	15.23	16.82	15.57
	1897.....(1,007 cases).....	3.02	18.21	18.41	15.59	14.39	13.98	16.40
19	Gas and water works:							
	1907.....(435 cases).....	6.50	14.62	13.69	16.71	16.94	17.63	13.91
	1897.....(179 cases).....	6.21	16.95	10.73	16.38	18.08	13.57	18.08
TEXTILES.								
20	Linen:							
	1907.....(280 cases).....	.73	18.91	15.27	15.64	14.91	14.91	19.63
	1897.....(202 cases).....	1.00	10.95	16.92	15.92	14.93	15.92	24.36
21	North German textile:							
	1907.....(546 cases).....	1.48	17.04	16.30	14.07	14.81	16.30	20.00
	1897.....(343 cases).....	.29	16.22	16.81	10.91	17.70	17.70	20.37
22	South German textile:							
	1907.....(291 cases).....	.35	15.28	12.15	18.40	13.89	16.67	23.26
	1897.....(228 cases).....	.88	13.84	12.95	17.86	15.63	14.29	24.55
23	Silesian textile:							
	1907.....(187 cases).....	.55	18.23	16.57	12.15	18.78	11.60	22.12
	1897.....(181 cases).....	1.12	18.54	15.17	17.98	16.29	11.24	19.66
24	Alsace-Lorraine textile:							
	1907.....(227 cases).....	2.22	18.22	14.67	13.33	16.00	11.56	24.00
	1897.....(203 cases).....	2.01	15.58	13.57	12.06	16.08	17.09	23.61
25	Rhineland-Westphalian textile:							
	1907.....(440 cases).....	.69	14.09	15.00	15.00	16.36	15.68	23.18
	1897.....(387 cases).....		17.83	16.02	14.99	16.28	15.25	19.63
26	Saxony textile:							
	1907.....(675 cases).....	1.35	15.42	13.17	13.47	13.92	18.26	24.41
	1897.....(782 cases).....	.65	13.97	15.39	12.68	14.10	18.76	24.45
27	Silk:							
	1907.....(93 cases).....	3.23	10.75	12.90	16.13	15.05	13.98	27.96
	1897.....(68 cases).....		13.24	22.06	5.88	22.06	16.18	20.58
28	Paper making:							
	1907.....(793 cases).....	6.56	14.50	16.90	15.89	17.78	12.61	15.76
	1897.....(592 cases).....	4.40	15.40	14.72	17.26	15.40	16.41	16.41
29	Paper products:							
	1907.....(500 cases).....	1.00	15.63	17.64	17.64	16.23	13.83	18.03
	1897.....(271 cases).....	.37	18.96	17.47	15.24	15.99	13.75	18.22
30	Leather:							
	1907.....(537 cases).....	2.62	16.45	15.89	17.01	13.83	16.45	17.75
	1897.....(292 cases).....	2.08	17.65	16.96	12.46	20.76	16.26	13.83
WOODWORKING.								
31	Saxony woodworking:							
	1907.....(494 cases).....		15.42	13.96	18.96	17.71	14.79	19.16
	1897.....(252 cases).....		22.62	17.06	12.71	15.08	11.90	20.63
32	North German woodworking:							
	1907.....(3,344 cases).....	.75	18.18	16.62	16.20	15.75	15.99	16.51
	1897.....(1,872 cases).....	.91	17.97	17.60	16.31	15.77	15.34	16.10
33	Bavarian woodworking:							
	1907.....(631 cases).....	1.11	17.94	17.46	17.94	14.60	16.51	14.44
	1897.....(392 cases).....	.26	19.64	21.68	14.29	14.03	14.03	16.07
34	Southwest German woodworking:							
	1907.....(821 cases).....	.24	17.75	15.42	15.06	16.03	19.83	15.67
	1897.....(352 cases).....	.28	13.75	18.18	18.75	16.48	13.07	14.49
35	Flour milling:							
	1907.....(1,027 cases).....	3.12	18.99	13.53	16.16	16.75	15.87	15.58
	1897.....(1,007 cases).....	3.97	16.78	15.59	17.38	14.90	14.80	16.58
36	Food products:							
	1907.....(789 cases).....	3.18	15.46	13.81	16.73	16.48	16.00	17.74
	1897.....(340 cases).....	4.13	16.68	14.16	17.11	16.81	14.45	16.66
37	Sugar:							
	1907.....(508 cases).....	7.33	13.66	16.63	16.44	17.03	15.05	13.86
	1897.....(509 cases).....	9.88	16.21	14.82	13.44	14.62	13.82	16.21
38	Dairying, distilling, and starch:							
	1907.....(409 cases).....	6.61	15.89	12.47	17.60	17.85	16.62	12.96
	1897.....(360 cases).....	4.18	14.48	13.65	19.50	17.55	13.93	16.71

TABLE 5.—TIME OF ACCIDENT, DAY OF WEEK: PER CENT OF PERSONS INJURED, BY DAY OF WEEK ON WHICH ACCIDENTS OCCURRED—Continued.

Association number.	Industry and cases compensated.	Per cent of persons reported injured on—						
		Sun-day.	Mon-day.	Tues-day.	Wed-nesday.	Thurs-day.	Friday.	Satur-day.
B. GROUPS OF ASSOCIATIONS—Contd.								
39	Brewing and malting:							
	1907.....(1,608 cases).....	3.81	17.64	15.13	14.57	14.76	15.26	18.83
	1897.....(1,142 cases).....	4.09	19.57	18.15	12.28	14.86	13.61	17.44
40	Tobacco:							
	1907.....(81 cases).....		24.69	7.41	17.28	16.05	16.05	18.52
	1897.....(57 cases).....		14.04	19.30	10.53	21.05	17.54	17.54
41	Clothing:							
	1907.....(676 cases).....	.75	13.61	17.90	14.79	16.86	17.75	18.34
	1897.....(295 cases).....	1.38	13.15	19.72	13.49	17.30	17.30	17.66
42	Chimney sweeping:							
	1907.....(34 cases).....		29.41	17.65	17.65	11.76	8.82	14.71
	1897.....(38 cases).....		19.44	25.00	16.67	13.89	5.56	19.44
BUILDING TRADES (NOT INCLUDING INSTITUTES).								
43	Hamburg building trades:							
	1907.....(505 cases).....	.40	17.66	16.27	15.08	17.25	15.28	18.06
	1897.....(302 cases).....	2.33	20.67	16.33	17.33	12.67	14.34	16.33
44	Northeast building trades:							
	1907.....(1,927 cases).....	.26	19.00	16.30	15.43	17.29	16.87	14.85
	1897.....(1,680 cases).....	.24	18.27	15.95	16.43	16.55	16.85	15.71
45	Silesian-Posen building trades:							
	1907.....(1,084 cases).....	.83	20.04	15.42	15.60	17.36	15.60	15.15
	1897.....(717 cases).....	.56	20.39	16.62	13.83	17.18	16.06	15.36
46	Hanover building trades:							
	1907.....(629 cases).....	.64	20.35	17.63	16.83	14.42	14.10	16.03
	1897.....(457 cases).....	.44	16.56	15.01	15.45	18.32	16.12	18.10
47	Magdeburg building trades:							
	1907.....(389 cases).....	1.04	17.62	19.43	17.61	14.51	16.84	12.95
	1897.....(179 cases).....	.56	22.91	19.55	15.08	16.20	12.85	12.85
48	Saxony building trades:							
	1907.....(1,109 cases).....	.73	16.62	18.17	15.16	17.08	16.89	15.35
	1897.....(767 cases).....	.13	19.97	14.98	15.64	17.22	14.85	17.21
49	Thuringian building trades:							
	1907.....(391 cases).....	.52	15.46	18.30	14.68	16.24	17.53	17.27
	1897.....(239 cases).....	.42	21.43	13.03	15.55	13.44	16.38	19.75
50	Hessen-Nassau building trades:							
	1907.....(694 cases).....	.14	16.14	17.00	18.16	16.28	15.71	16.57
	1897.....(474 cases).....		15.01	16.91	16.28	18.18	18.61	15.01
51	Rhineland - Westphalian building trades:							
	1907.....(1,855 cases).....	1.46	19.36	15.86	15.10	15.21	15.86	17.15
	1897.....(1,063 cases).....	.56	21.94	16.20	14.78	15.82	15.73	14.97
52	Wurttemberg building trades:							
	1907.....(583 cases).....	.34	17.90	18.24	16.53	14.46	15.32	17.21
	1897.....(403 cases).....	.50	17.66	17.66	16.17	13.43	18.91	15.67
53	Bavarian building trades:							
	1907.....(1,149 cases).....	.62	15.64	17.39	17.05	14.32	18.28	16.70
	1897.....(1,175 cases).....	.44	16.64	17.83	15.61	17.32	15.27	16.89
54	Southwest building trades:							
	1907.....(716 cases).....	.56	20.86	16.80	17.65	13.73	15.41	14.99
	1897.....(474 cases).....	.22	19.83	15.82	16.24	14.14	15.61	18.14
55	Printing and publishing:							
	1907.....(428 cases).....	2.57	15.89	14.95	18.46	15.19	12.15	20.79
	1897.....(252 cases).....	1.59	20.63	15.45	19.05	10.71	13.89	18.65
56	Private railways:							
	1907.....(168 cases).....	5.39	14.37	20.36	13.17	14.97	11.38	20.36
	1897.....(125 cases).....	7.43	17.36	15.70	9.92	14.88	14.88	19.83
57	Street and small railroads:							
	1907.....(485 cases).....	11.20	15.35	13.28	14.11	13.69	20.54	11.83
	1897.....(168 cases).....	9.82	14.11	20.86	12.88	13.50	10.43	18.40
58	Express and storage:							
	1907.....(3,932 cases).....	1.67	18.23	15.44	15.01	17.36	16.26	16.03
	1897.....(1,426 cases).....	2.68	18.62	16.87	16.44	13.21	15.67	16.51
59	Livery, drayage, cartage, etc:							
	1907.....(2,500 cases).....	4.89	20.09	15.22	13.06	15.22	14.54	16.98
	1897.....(1,242 cases).....	4.75	19.88	16.43	14.25	15.14	15.30	14.25
INLAND NAVIGATION.								
60	West German inland navigation:							
	1907.....(276 cases).....	6.57	16.06	16.42	15.33	17.52	15.33	12.77
	1897.....(155 cases).....	8.40	15.48	16.77	20.00	14.19	11.61	13.55
61	Elbe inland navigation:							
	1907.....(325 cases).....	5.26	18.27	14.55	13.31	14.86	17.34	16.41
	1897.....(216 cases).....	7.55	14.62	17.45	13.68	16.04	14.15	16.51

TABLE 5.—TIME OF ACCIDENT, DAY OF WEEK: PER CENT OF PERSONS INJURED, BY DAY OF WEEK ON WHICH ACCIDENTS OCCURRED—Concluded.

Asso- cia- tion num- ber.	Industry and cases compensated.	Per cent of persons reported injured on—						
		Sun- day.	Mon- day.	Tues- day.	Wed- nesday.	Thurs- day.	Friday.	Satur- day.
B. GROUPS OF ASSOCIATIONS—Concd.								
INLAND NAVIGATION—concluded.								
62	East German inland navigation:							
	1907.....(459 cases)...	8.67	16.67	10.66	12.67	18.00	17.33	16.00
	1897.....(156 cases)...	8.33	13.46	23.06	12.82	11.54	13.46	17.31
63	Marine navigation (not including institute):							
	1907.....(459 cases)...	9.31	16.41	12.64	14.63	16.85	13.53	16.63
	1897.....(397 cases)...	7.67	11.78	21.10	20.55	14.25	9.58	15.07
64	Engineering, excavating, etc. (not including institute):							
	1907.....(2,143 cases)...	1.73	17.17	15.45	15.63	16.43	17.07	16.52
	1897.....(1,226 cases)...	1.56	17.77	16.71	17.36	15.32	16.54	14.74
65	Meat products:							
	1907.....(1,120 cases)...	4.82	17.77	16.07	15.54	17.95	14.81	13.04
	1897.....(329 cases)...	3.04	19.14	16.41	16.72	15.20	14.29	15.20
66	Blacksmithing, etc.							
	1907.....(929 cases)...	1.97	15.85	15.30	13.88	14.43	19.23	19.34
	1897.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
C. PUBLIC AUTHORITIES.								
Establishments of the naval administration:								
	1907.....(105 cases)...		21.15	15.38	13.46	14.42	13.27	17.32
	1897.....(86 cases)...		14.46	24.10	19.28	15.66	13.25	13.25
Establishments of the military administration:								
	1907.....(157 cases)...	1.91	19.74	14.65	17.20	14.65	15.29	16.56
	1897.....(190 cases)...	.53	15.34	19.05	23.82	10.58	15.34	15.34
Postal and telegraph administration:								
	1907.....(122 cases)...	1.91	19.75	14.65	17.20	14.65	15.29	16.55
	1897.....(54 cases)...	11.54	9.62	17.31	5.77	21.15	21.15	13.46
Railway administration:								
	1907.....(3,216 cases)...	6.00	15.67	15.76	15.33	14.30	16.21	16.64
	1897.....(2,233 cases)...	5.07	15.79	16.02	15.07	15.16	15.29	17.60
Dredging, towing, etc.:								
	1907.....(79 cases)...		14.29	15.58	16.88	15.58	17.18	20.49
	1897.....(52 cases)...	1.96	19.61	13.73	13.73	23.51	13.73	13.73
Building operations (States and Empire):								
	1907.....(248 cases)...	.82	16.39	13.06	14.75	14.75	18.84	16.39
	1897.....(188 cases)...	.62	15.17	17.42	17.98	21.35	10.67	16.79
Marine navigation:								
	1907.....(1 case)...			100.00				
	1897.....(5 cases)...		20.00			20.00	60.00	
Building operations of local governments:								
	1907.....(505 cases)...	2.61	17.84	17.03	14.63	14.83	17.43	15.63
	1897.....(262 cases)...	.39	16.99	18.15	15.44	13.90	18.53	16.60

¹ Included in associations 4 to 11.

HOUR OF THE DAY.

Table 6 shows the distribution of the accidents throughout the various hours of the day, and in addition gives the proportion occurring on Monday morning and Saturday afternoon. In connection with this table attention should be called to Table 10, which shows the number of hours the injured person had been at work on the day when the accident occurred.

In Table 6 the day is divided into eight periods of three hours each; the result of this division is that there are only four periods for the time comprised between 6 a. m. and 6 p. m. As

was to be expected, the last period of the morning and the second period of the afternoon show the highest proportion of the accidents, in each case in 1907 and with but one exception in 1897, the first half being approximately 50 per cent of the proportion occurring in the second half of the day. Approximately 55 per cent of the accidents occur in the periods 9 to 12 a. m. and 3 to 6 p. m.; some of the groups of industries show an even more striking concentration of the accidents in the last period of the morning and in the second period of the afternoon; thus the metal-working association for south Germany (association 12) had 37.23 per cent of its accidents in the period 9 to 12 a. m.; the brewing and malting group (association 39) in 1897 had 43.75 per cent of its accidents in the period 9 to 12 a. m. Especial interest attaches to the accident rates on Monday morning and Saturday afternoon; in the period 6 to 9 a. m. on Monday 2.56 per cent of the accidents occur. This is at the rate of 0.85 per cent per hour in this period. In the afternoon many of the associations had a high proportion of the accidents in the period between 3 and 6 o'clock. Thus the Hamburg Building Trades Association (association 43) had 36.51 per cent of the accidents at this period; in fact the building trades are conspicuous by the concentration of accidents in the second period of the afternoon.

The columns showing the accidents on Monday morning and Saturday afternoon emphasize the statements already made concerning the higher proportion of accidents occurring in these periods.

The best method of comparing the Monday and Saturday accidents with the other days of the week is to deduct the Monday or Saturday percentage from the percentages given in the first eight columns of the table and to assume that the remainder represents the proportion of accidents occurring on the other five days of the week; by this procedure the 2.52 per cent of the accidents occurring on Sunday is credited to the percentage computed for the five days other than Monday or Saturday and makes the contrast less than it actually is. In 1907, during the period 6 to 9 a. m. on Monday, 2.56 per cent of the accidents occurred, as contrasted with 2.26 per cent for the 6 to 9 period for the other five days of the week, or more than one-eighth higher; during the period 9 to 12 a. m. Monday, 4.78 per cent of the accidents occurred, as compared with 4.73 per cent for the other five days of the week, or slightly higher than the average. The higher rate on Monday morning was conspicuous during the early part of the forenoon. In 1897 the per cent of accidents occurring in the period 6 to 9 Monday morning was 2.34, as compared with 2.29 for the other five days; in the period 9 to 12 Monday morning, 4.84 per cent of the accidents occurred while during the other five days it was 4.94. The concentration of the accidents on Monday morning, therefore, was greater in 1907 than in 1897.

In 1907, on Saturday afternoon, the proportion of accidents occurring in the period 3 to 6 was 4.48 per cent, as compared with 4.37 per cent on the other five days of the week, or a difference of 0.11 per cent; in the period 6 to 9 p. m., however, the proportion on Saturday was 1.45 per cent, while on the other five days it was 1.56 per cent, or 0.11 per cent higher. In 1897 the per cent of accidents occurring during the period 3 to 6 on Saturday afternoon was 4.69 as compared with 4.34 on the other five days, or a difference of 0.35 per cent. For the period 6 to 9 the per cent of accidents was 1.55, while for the other five days it was 1.76 per cent, or 0.21 per cent higher. In 1907 the excess of accidents on Saturday afternoon was less than in 1897; while the 3 to 6 Saturday afternoon period shows an improvement in this respect during the 10-year interval, the concentration on Monday morning in 1907 has increased.

TABLE 6.—TIME OF ACCIDENT, HOUR OF THE DAY: PER CENT OF PERSONS INJURED, BY PERIODS IN WHICH ACCIDENTS OCCURRED.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft, I Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 300 to 308.]

Asso- ciation num- ber.	Industry and cases com- pensated.	Per cent of persons reported injured in the specified periods.											
		Antemeridian.				Postmeridian.				Monday, a. m.		Saturday, p. m.	
		12 to 3.	3 to 6.	6 to 9.	9 to 12.	12 to 3.	3 to 6.	6 to 9.	9 to 12.	6 to 9.	9 to 12.	3 to 6.	6 to 9.
A. TOTALS.													
Grand total:													
	1907.....(81,248 cases)...	1.93	2.55	13.87	28.42	13.81	26.32	9.25	3.85	2.56	4.78	4.48	1.45
	1897.....(45,971 cases)...	1.37	2.26	13.79	29.52	12.67	26.39	10.36	3.64	2.34	4.84	4.69	1.55
Industrial accident associa- tions (not including in- stitutes):													
	1907.....(75,370 cases)...	1.80	2.34	13.89	28.41	13.86	26.59	9.31	3.80	2.57	4.80	4.48	1.47
	1897.....(41,746 cases)...	1.32	2.26	13.86	29.61	12.61	26.37	10.51	3.46	2.38	4.88	4.66	1.57
Subsidiary institutes of building trades, engineer- ing, and navigation acci- dent associations:													
	1907.....(1,345 cases)...	1.07	.77	12.36	32.08	15.50	31.24	6.21	.77	2.08	4.83	5.80	.74
	1897.....(1,155 cases)...	.....	.....	12.81	32.02	15.00	31.47	8.05	.65	1.56	5.54	5.63	.87
Public authorities:													
	1907.....(4,533 cases)...	4.32	6.44	13.82	27.56	12.50	20.51	9.06	5.79	2.54	4.48	3.97	1.28
	1897.....(3,070 cases)...	2.58	3.07	13.15	27.30	12.80	24.86	9.24	7.00	2.08	3.94	4.60	1.56
B. GROUPS OF ASSOCIA- TIONS.													
1	Mining:												
	1907.....(11,381 cases)...	5.90	5.34	14.77	23.81	13.90	13.86	11.95	10.47	3.59	3.64	2.17	1.97
	1897.....(5,670 cases)...	4.12	5.46	14.57	28.28	12.90	13.63	11.21	9.83	2.73	4.53	2.42	2.05
2	Quarrying:												
	1907.....(2,677 cases)...	.84	1.60	15.49	26.67	14.38	30.68	7.78	2.56	2.69	4.59	5.72	1.27
	1897.....(1,544 cases)...	.98	.70	13.87	30.77	13.73	30.17	8.08	1.70	2.06	4.38	5.28	1.61
3	Fine mechanical products:												
	1907.....(1,481 cases)...	.90	.48	14.27	33.56	15.30	26.60	6.89	2.00	2.90	5.13	4.93	1.35
	1897.....(567 cases)...	.90	.90	10.39	33.15	15.41	29.39	8.06	1.80	1.59	6.17	5.47	.35
IRON AND STEEL.¹													
4	South German iron and steel:												
	1907.....(2,105 cases)...	.48	1.15	15.19	29.55	13.26	31.91	7.35	1.11	2.28	4.99	4.94	.90
	1897.....(1,093 cases)...	.38	1.54	13.94	31.06	11.35	29.23	10.19	2.31	2.10	4.67	5.76	2.38
5	Southwest German iron:												
	1907.....(821 cases)...	2.32	7.46	13.81	24.82	14.30	18.09	10.64	8.56	2.92	3.65	3.78	1.58
	1897.....(301 cases)...	4.42	5.10	11.56	27.55	11.20	20.75	9.18	10.24	1.00	6.31	3.65	1.00

¹Including blacksmithing, etc.

TABLE C.—TIME OF ACCIDENT, HOUR OF THE DAY: PER CENT OF PERSONS INJURED, BY PERIODS IN WHICH ACCIDENTS OCCURRED.—Continued.

Asso- cia- tion num- ber.	Industry and cases com- pensated.	Per cent of persons reported injured in the specified periods.											
		Antemeridian.				Postmeridian.				Monday, a. m.		Saturday, p. m.	
		12 to 3.	3 to 6.	6 to 9.	9 to 12.	12 to 3.	3 to 6.	6 to 9.	9 to 12.	6 to 9.	9 to 12.	3 to 6.	6 to 9.
B. GROUPS OF ASSOCIATIONS—Continued.													
IRON AND STEEL—concluded.													
6	Rhineland-Westphalian furnace and rolling works: 1907.....(2,745 cases) ..	4.23	8.10	13.50	20.87	11.31	21.27	10.62	10.10	2.29	3.42	3.93	1.64
	1897.....(1,127 cases) ..	4.21	8.78	13.53	25.27	9.95	19.90	9.68	8.68	2.57	3.73	3.99	1.77
7	Machine building and small iron wares: 1907.....(2,308 cases) ..	.92	1.45	12.27	29.58	11.79	29.23	12.80	1.96	1.78	5.29	4.68	1.65
	1897.....(936 cases) ..	.57	.68	12.63	29.47	12.51	27.42	14.63	2.09	2.67	4.81	6.30	1.92
8	Saxony-Thuringian iron and steel: 1907.....(1,104 cases) ..	1.19	.73	14.76	31.16	12.65	30.16	7.61	1.74	1.81	4.71	4.80	1.00
	1897.....(788 cases) ..	.26	.78	11.64	32.86	11.64	32.99	8.80	1.03	1.14	6.22	5.58	1.62
9	Northeast iron and steel: 1907.....(1,510 cases) ..	.80	.87	13.66	31.05	14.86	31.58	5.66	1.52	1.85	4.97	5.96	.60
	1897.....(746 cases) ..	.56	.84	11.31	34.22	11.31	31.01	9.78	.97	2.28	6.03	4.96	1.07
10	Silesian iron and steel: 1907.....(1,813 cases) ..	3.29	5.57	15.22	24.41	11.20	25.14	8.42	6.75	2.92	3.92	3.92	1.54
	1897.....(957 cases) ..	1.31	3.16	16.90	26.83	10.47	26.17	10.14	5.02	2.61	5.12	3.97	1.67
11	Northwest iron and steel: 1907.....(1,674 cases) ..	1.27	1.33	13.58	33.23	12.19	30.62	5.70	2.08	2.69	5.79	5.20	1.14
	1897.....(925 cases) ..	.69	1.73	13.26	31.83	12.23	30.91	7.73	1.62	1.73	6.05	6.49	.86
METAL WORKING.													
12	South German precious and nonprecious metal work- ing: 1907.....(424 cases) ..	.24	.96	12.89	37.23	11.93	32.22	3.57	.96	2.36	7.31	4.25	.24
	1897.....(199 cases) ..	.....	.....	11.56	37.68	11.06	30.15	8.54	1.01	2.51	5.53	3.02	.50
13	North German metal work- ing: 1907.....(1,109 cases) ..	1.09	1.73	13.55	30.91	14.09	29.91	6.64	2.08	2.34	5.32	5.32	.99
	1897.....(335 cases) ..	.61	1.23	14.15	25.85	13.54	31.69	10.15	2.78	3.58	4.48	4.78	.90
14	Musical instruments: 1907.....(225 cases) ..	.....	.45	13.06	32.88	14.86	31.98	6.77	.....	1.33	7.11	4.44	.44
	1897.....(89 cases) ..	.....	.....	16.67	29.76	14.29	33.33	5.95	.....	1.12	6.74	6.74	1.12
15	Glass: 1907.....(347 cases) ..	2.92	6.12	18.36	25.37	11.66	19.24	12.24	4.09	4.61	6.05	2.02	2.02
	1897.....(235 cases) ..	.92	5.96	11.93	28.90	10.09	24.31	11.01	6.88	2.98	2.55	3.83	1.70
16	Pottery: 1907.....(310 cases) ..	.67	1.68	15.10	29.53	13.09	28.52	8.39	3.02	3.23	4.84	5.16	.97
	1897.....(166 cases) ..	2.00	2.00	18.67	26.67	10.67	27.32	10.67	2.00	1.81	2.41	4.22	1.20
17	Brick and tile making: 1907.....(1,831 cases) ..	.31	1.88	17.30	30.06	13.49	26.97	8.94	1.05	3.47	4.40	4.35	1.71
	1897.....(1,085 cases) ..	.67	2.12	14.92	30.70	11.45	26.85	12.32	.97	2.95	7.19	4.15	1.94
18	Chemicals: 1907.....(2,038 cases) ..	2.16	2.26	14.85	30.05	11.93	26.57	7.65	4.53	2.94	5.15	3.63	.83
	1897.....(1,007 cases) ..	1.78	3.14	13.73	29.45	10.48	25.16	11.64	4.62	2.68	4.57	3.97	1.69
19	Gas and water works: 1907.....(435 cases) ..	3.76	3.06	14.35	28.00	13.65	22.59	8.24	6.35	2.07	4.83	3.45	.92
	1897.....(179 cases) ..	4.79	.60	2.40	14.97	20.96	17.37	28.14	10.77	1.68	4.47	4.47	1.68
TEXTILES.													
20	Linen: 1907.....(280 cases) ..	.....	.74	22.51	31.37	15.50	25.46	3.32	1.10	5.00	5.36	5.00	.86
	1897.....(202 cases) ..	.62	.....	15.63	36.46	16.15	23.44	7.80	.....	2.97	3.96	5.45	.99
21	North German textile: 1907.....(546 cases) ..	.19	1.67	19.29	31.73	11.87	30.61	4.27	.37	4.40	5.81	7.69	.18
	1897.....(343 cases) ..	.31	.31	18.01	27.95	12.42	30.12	10.25	.63	4.37	4.06	7.87	.87
22	South German textile: 1907.....(291 cases) ..	.....	.....	17.01	33.33	17.36	28.82	3.13	.35	3.09	3.78	7.22	.34
	1897.....(228 cases) ..	.46	.92	17.34	33.53	11.87	28.31	6.39	1.88	2.19	3.51	7.89	.88
23	Silesian textile: 1907.....(187 cases) ..	.....	1.66	25.41	23.20	14.92	27.07	6.63	1.11	3.74	4.81	5.88	.57
	1897.....(181 cases) ..	.....	1.16	16.28	31.40	17.44	23.26	9.30	1.16	3.31	6.08	4.97	1.05
24	Alsace-Lorraine textile: 1907.....(227 cases) ..	.....	.45	18.57	31.43	12.16	31.53	4.51	1.35	2.64	4.41	7.93	1.32
	1897.....(203 cases) ..	1.58	.53	16.32	31.58	16.32	26.84	6.30	.53	1.97	4.43	9.36	.49

TABLE 6.—TIME OF ACCIDENT, HOUR OF THE DAY: PER CENT OF PERSONS INJURED, BY PERIODS IN WHICH ACCIDENTS OCCURRED—Continued.

Association number.	Industry and cases compensated.	Per cent of persons reported injured in the specified periods.											
		Antemeridian.				Postmeridian.				Monday, a. m.		Saturday, p. m.	
		12 to 3.	3 to 6.	6 to 9.	9 to 12.	12 to 3.	3 to 6.	6 to 9.	9 to 12.	6 to 9.	9 to 12.	3 to 6.	6 to 9.
B. GROUPS OF ASSOCIATIONS—Continued.													
TEXTILES—concluded.													
25	Rhineland-Westphalian textile:												
	1907.....(440 cases)..	0.23	0.46	11.81	32.41	16.67	26.85	9.49	2.08	1.82	4.55	6.36	0.99
	1897.....(387 cases)..	.27	.55	13.23	27.30	14.32	30.54	12.16	1.63	2.07	5.68	7.49	.78
26	Saxony textile:												
	1907.....(675 cases)..	.91	1.06	17.52	30.51	13.75	27.79	7.85	.91	2.52	5.04	6.67	1.33
	1897.....(782 cases)..	.26	.93	18.15	29.01	12.72	27.95	9.93	1.05	3.32	3.84	8.18	1.41
27	Silk:												
	1907.....(93 cases)..	1.06	1.08	11.83	34.40	8.60	32.25	7.53	3.23	1.08	1.08	7.53	1.08
	1897.....(68 cases)..			16.13	20.97	8.06	35.48	16.13	3.23	4.41		7.35	1.47
28	Paper making:												
	1907.....(793 cases)..	3.84	6.79	15.75	24.46	12.68	19.08	9.35	8.05	2.65	3.66	3.28	1.51
	1897.....(592 cases)..	3.94	4.48	16.13	26.70	10.75	21.68	9.68	6.64	3.04	3.55	4.22	1.52
29	Paper products:												
	1907.....(500 cases)..	.20	.40	12.96	34.41	15.18	30.77	5.87	.21	1.80	4.40	5.20	.80
	1897.....(782 cases)..		.39	19.38	27.92	12.02	30.32	9.58	.39	4.80	3.69	6.64	.74
30	Leather:												
	1907.....(537 cases)..		.98	13.58	35.04	14.57	28.35	6.69	.79	1.49	4.10	3.72	.56
	1897.....(292 cases)..	.75	1.18	12.41	32.71	12.73	29.37	9.77	1.13	.68	4.45	3.08	.68
WOODWORKING.													
31	Saxony woodworking:												
	1907.....(484 cases)..	1.26	.21	14.92	29.62	13.87	28.99	9.87	1.26	2.27	4.13	3.51	1.45
	1897.....(252 cases)..		.41	15.04	32.52	13.41	28.05	8.13	2.44	2.38	7.94	4.37	1.98
32	North German woodworking:												
	1907.....(3,344 cases)..	.27	.48	13.73	33.31	13.55	30.49	7.27	.90	2.57	5.65	5.05	1.23
	1897.....(1,872 cases)..	.39	1.01	13.19	33.71	12.46	27.73	10.15	1.36	2.03	4.91	4.70	1.12
33	Bavarian woodworking:												
	1907.....(631 cases)..	.17	.83	13.43	31.51	14.93	33.17	5.64	.32	3.01	5.55	3.65	.79
	1897.....(392 cases)..	.82	1.09	11.41	30.71	13.32	32.34	9.51	.80	3.06	3.06	4.08	1.28
34	Southwest German woodworking:												
	1907.....(821 cases)..	.37	.37	15.12	29.12	13.14	31.83	8.43	1.12	3.05	4.87	4.63	1.71
	1897.....(352 cases)..	.29	2.02	12.39	34.01	11.53	27.67	10.36	1.73	1.70	4.26	3.41	1.70
35	Flour milling:												
	1907.....(1,027 cases)..	1.36	2.92	11.98	26.19	13.83	24.44	14.61	4.67	2.53	3.99	3.99	2.04
	1897.....(1,007 cases)..	1.30	3.10	14.39	24.88	14.49	24.88	11.99	4.97	2.28	3.38	4.57	2.48
36	Food products:												
	1907.....(789 cases)..	1.16	1.93	13.48	28.24	13.86	26.19	11.94	3.20	2.92	3.93	5.96	1.65
	1897.....(340 cases)..		2.43	17.33	28.97	12.16	26.44	10.33	2.34	1.47	3.82	5.00	1.47
37	Sugar:												
	1907.....(508 cases)..	3.98	4.98	15.34	25.10	12.95	22.51	9.16	5.98	2.56	3.35	3.74	1.57
	1897.....(509 cases)..	3.93	6.42	13.66	24.64	10.14	22.15	12.84	6.22	1.18	3.73	4.13	.98
38	Dairying, distilling, and starch:												
	1907.....(409 cases)..	.49	4.94	17.53	21.73	13.09	24.94	13.58	3.70	2.69	4.16	2.93	2.44
	1897.....(360 cases)..	1.15	3.34	12.98	24.33	9.35	28.72	16.03	4.10	2.22	5.28	4.17	2.22
39	Brewing and malting:												
	1907.....(1,608 cases)..	1.01	2.28	12.81	24.73	14.14	28.79	12.37	3.87	1.87	5.35	5.85	2.49
	1897.....(1,142 cases)..		4.17	10.42	43.75	14.58	16.67	10.41		2.89	5.34	5.08	3.06
40	Tobacco:												
	1907.....(81 cases)..			11.25	32.50	17.50	27.50	10.00	1.25	3.70	6.17	7.41	
	1897.....(57 cases)..		.72	17.56	28.32	9.68	31.18	11.11	1.43		5.26	3.51	1.75
41	Clothing:												
	1907.....(676 cases)..	.15	.15	13.31	33.27	11.39	31.07	10.36	.30	1.48	4.14	5.77	.89
	1897.....(295 cases)..		.44	15.12	34.02	14.09	30.93	5.34	.06	2.03	2.71	4.75	2.37
42	Chimney sweeping:												
	1907.....(34 cases)..			20.59	32.35	17.65	26.47		2.94	5.88	8.82	5.88	
	1897.....(38 cases)..			25.00	12.50	25.00	34.37		3.13	2.63			
BUILDING TRADES (NOT INCLUDING INSTITUTES).													
43	Hamburg building trades:												
	1907.....(505 cases)..	.20		11.16	33.06	15.42	36.51	3.45	.20	1.98	5.94	6.14	.79
	1897.....(302 cases)..			15.12	34.02	14.09	30.93	5.84		1.66	7.95	4.97	.33
44	Northeast building trades:												
	1907.....(1,927 cases)..	.16	.36	11.89	33.52	15.85	32.90	4.74	.58	2.59	5.97	4.62	.62
	1897.....(1,680 cases)..	.06	.73	12.42	34.21	11.99	33.47	6.63	.49	2.08	5.89	5.42	.83

TABLE 6.—TIME OF ACCIDENT, HOUR OF THE DAY: PER CENT OF PERSONS INJURED BY PERIODS IN WHICH ACCIDENTS OCCURRED—Continued.

Association number.	Industry and cases compensated.	Per cent of persons reported injured in the specified periods.											
		Antemeridian.				Postmeridian.				Monday, a. m.		Saturday, p. m.	
		12 to 3.	3 to 6.	6 to 9.	9 to 12.	12 to 3.	3 to 6.	6 to 9.	9 to 12.	6 to 9.	9 to 12.	3 to 6.	6 to 9.
B. GROUPS OF ASSOCIATIONS—Continued.													
BUILDING TRADES (NOT INCLUDING INSTITUTES)—concluded.													
45	Silesian-Posen building trades:												
	1907.....(1,084 cases)...	0.19	0.47	12.09	31.44	15.20	32.96	7.37	0.38	1.75	6.92	5.44	0.74
	1897.....(717 cases).....	.29	13.01	28.95	13.89	32.89	10.53	.44	2.37	6.00	5.30	1.26	
46	Hanover buildings trades:												
	1907.....(629 cases).....	.17	13.22	28.75	20.83	32.56	4.30	.17	2.07	5.88	5.25	.32	
	1897.....(457 cases).....	1.15	14.32	33.72	12.01	31.41	6.93	.46	2.41	6.13	5.91	1.97	
47	Magdeburg building trades:												
	1907.....(389 cases).....	.27	.27	14.59	35.27	18.83	28.65	2.12	.....	2.57	7.20	4.11	.....
	1897.....(179 cases).....	.59	15.88	31.18	12.35	34.71	5.29	.....	5.35	5.59	4.47	.....	.....
48	Saxony building trades:												
	1907.....(1,109 cases)...	.27	.....	9.33	35.41	14.55	35.04	5.31	.09	1.06	6.58	5.32	.27
	1897.....(767 cases).....	.....	.....	12.40	35.98	12.40	30.59	8.36	.27	1.96	6.52	5.48	.52
49	Thuringian building trades:												
	1907.....(391 cases).....	.26	12.11	30.41	15.21	36.08	5.67	.26	1.28	3.07	6.65	.77	
	1897.....(239 cases).....	.85	14.96	31.20	13.68	29.48	9.83	.....	3.35	6.09	5.44	1.26	
50	Hessen-Nassau building trades:												
	1907.....(694 cases).....	.15	12.83	31.48	17.35	31.77	5.69	.73	1.59	5.62	5.04	.72	
	1897.....(474 cases).....	.46	.91	13.20	30.30	15.72	30.30	9.11	.....	1.27	3.80	4.85	1.27
51	Rhineland-Westphalian building trades:												
	1907.....(1,855 cases)...	.11	.38	10.89	31.15	15.01	31.95	10.35	.16	1.99	5.88	5.77	1.62
	1897.....(1,063 cases)...	.19	.19	10.56	33.78	12.75	30.54	11.61	.38	2.26	6.40	4.61	1.41
52	Wurtemberg building trades:												
	1907.....(583 cases).....	.17	.....	12.50	33.51	16.32	32.98	4.17	.35	2.23	5.66	6.86	.69
	1897.....(403 cases).....	.....	.....	14.61	29.47	16.62	31.23	7.81	.26	2.73	4.96	6.45	1.49
53	Bavarian building trades:												
	1907.....(1,149 cases)...	.28	.37	15.07	26.98	16.74	36.47	3.72	.37	2.35	2.61	6.61	.35
	1897.....(1,175 cases)...	.27	.09	14.09	31.17	17.07	32.97	4.34	.....	1.96	4.51	5.53	.77
54	Southwest building trades:												
	1907.....(716 cases).....	.21	.....	11.70	30.67	14.84	37.51	4.71	.57	1.82	5.45	6.01	.42
	1897.....(474 cases).....	.21	.43	16.92	28.90	15.63	29.34	8.57	.....	3.16	4.64	4.01	2.11
55	Printing and publishing:												
	1907.....(428 cases).....	1.18	2.36	15.33	24.53	10.61	30.19	13.21	2.59	2.80	3.97	7.71	1.40
	1897.....(252 cases).....	.79	1.19	9.92	35.71	13.49	26.59	11.90	.41	1.59	7.94	5.95	.79
56	Private railways:												
	1907.....(168 cases).....	1.80	4.79	13.77	22.16	12.57	23.95	11.98	8.98	1.19	4.17	7.14	2.98
	1897.....(125 cases).....	.84	4.17	10.83	15.83	18.33	25.00	13.33	11.67	1.60	.....	4.80	.80
57	Street and small railroads:												
	1907.....(485 cases).....	2.49	5.42	15.59	21.00	15.59	20.37	10.60	8.94	2.47	3.30	2.68	1.44
	1897.....(168 cases).....	1.21	3.64	18.18	23.03	12.73	20.00	13.33	7.88	3.57	3.57	1.79	1.79
58	Express and storage:												
	1907.....(3,932 cases).....	.73	.62	11.87	29.03	12.47	29.52	13.61	2.15	2.09	5.82	4.96	2.67
	1897.....(1,426 cases)...	.30	.67	11.83	29.73	11.32	28.47	15.24	2.44	2.73	5.61	5.47	2.38
59	Livery, drayage, cartage, etc.												
	1907.....(2,500 cases)...	1.25	1.77	10.39	23.15	13.28	29.14	16.83	4.19	2.04	5.04	4.44	3.32
	1897.....(1,242 cases)...	1.16	1.33	9.54	22.13	13.27	27.28	19.65	5.64	1.93	3.70	4.27	2.17
INLAND NAVIGATION.													
60	West German inland navigation:												
	1907.....(276 cases).....	3.85	4.23	13.46	25.00	11.54	21.92	11.92	8.08	1.81	4.35	2.54	.72
	1897.....(155 cases).....	1.39	4.17	10.42	22.22	9.03	28.46	16.67	7.64	.....	6.45	5.81	2.58
61	Elbe inland navigation:												
	1907.....(325 cases).....	.93	1.86	16.10	33.13	14.24	19.50	8.05	6.19	3.08	5.85	2.46	1.85
	1897.....(216 cases).....	2.00	6.00	18.50	27.00	13.50	19.50	6.50	7.00	2.31	4.17	3.70	.93
62	East German inland navigation:												
	1907.....(152 cases).....	4.05	3.38	12.84	27.03	9.46	24.32	11.49	7.43	1.97	4.61	4.61	1.32
	1897.....(156 cases).....	1.92	1.28	9.62	35.90	11.54	21.15	8.33	10.26	5.13	.....	3.21	2.56
63	Marine navigation (not including institute):												
	1907.....(459 cases).....	7.69	6.46	16.63	22.58	11.41	17.62	8.68	8.93	1.74	2.61	2.40	.65
	1897.....(397 cases).....	4.70	6.71	19.13	25.84	11.41	17.11	8.39	6.71	2.02	3.27	3.78	1.76

TABLE 6.—TIME OF ACCIDENT, HOUR OF THE DAY: PER CENT OF PERSONS INJURED, BY PERIODS IN WHICH ACCIDENTS OCCURRED—Concluded.

Association number.	Industry and cases compensated.	Per cent of persons reported injured in the specified periods.											
		Antemeridian.				Postmeridian.				Monday, a. m.		Saturday, p. m.	
		12 to 3.	3 to 6.	6 to 9.	9 to 12.	12 to 3.	3 to 6.	6 to 9.	9 to 12.	6 to 9.	9 to 12.	3 to 6.	6 to 9.
B. GROUPS OF ASSOCIATIONS—Concluded.													
04	Engineering, excavating, etc. (not including institute):												
	1907..... (2,143 cases)...	0.75	0.66	15.02	31.11	15.21	29.53	6.74	0.98	2.61	5.04	5.09	1.03
	1897..... (1,226 cases)...	.82	.92	16.41	28.23	13.02	30.70	9.26	.64	2.45	4.57	3.67	.90
65	Meat products:												
	1907..... (1,120 cases)...	.18	1.81	14.17	25.45	18.32	25.36	13.72	.99	2.77	4.02	3.48	2.32
	1897..... (329 cases)...	.31	1.89	14.15	26.42	13.52	23.61	14.47	.63	2.13	4.56	4.56	3.34
66	Blacksmithing, etc.:												
	1907..... (929 cases)...	.11	.44	10.81	33.29	16.48	27.18	11.03	.66	1.72	5.71	5.17	2.48
	1897.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
C. PUBLIC AUTHORITIES.													
Establishments of the naval administration:													
	1907..... (105 cases)...	1.00	.....	20.00	30.00	12.00	34.00	1.00	2.00	4.76	2.86	4.76	.....
	1897..... (86 cases)...	.....	1.31	9.35	46.75	6.59	32.00	4.00	.....	1.16	6.98	4.65	.....
Establishments of the military administration:													
	1907..... (157 cases)...	1.92	.64	25.00	35.26	12.18	19.87	3.21	1.92	5.10	7.01	1.91	.....
	1897..... (190 cases)...	1.12	1.12	14.04	35.96	14.04	26.97	4.51	2.24	3.16	5.26	2.63	.....
Postal and telegraph administration:													
	1907..... (122 cases)...	.....	1.65	7.44	32.23	8.26	28.10	18.18	4.14	.82	4.10	4.10	1.64
	1897..... (54 cases)...	3.94	5.88	7.84	29.41	7.84	33.33	5.88	5.88	1.85	1.85	1.85	1.85
Railway administration:													
	1907..... (3,316 cases)...	5.42	8.31	13.33	26.33	12.09	17.29	10.23	7.00	2.32	4.22	3.65	1.57
	1897..... (2,233 cases)...	3.30	3.54	13.58	25.51	11.60	22.63	11.08	8.76	2.19	3.63	4.79	2.02
Dredging, towing, etc.:													
	1907..... (79 cases)...	.....	.....	19.23	35.90	5.13	29.49	6.41	3.84	5.06	6.33	3.80	.....
	1897..... (52 cases)...	.....	8.00	14.00	26.00	16.00	26.00	6.00	4.00	3.85	1.92	1.92	1.92
Building operations (States and Empire):													
	1907..... (248 cases)...	.43	1.71	14.53	28.63	18.80	26.50	6.81	2.59	2.42	5.24	5.65	1.21
	1897..... (188 cases)...	.....	1.22	15.24	29.27	18.90	31.10	2.44	1.83	1.06	5.32	4.79	.....
Marine navigation:													
	1907..... (1 case)...	.....	.....	.....	100.00	.....	.....	.....	.....	.....	.....	.....	.....
	1897..... (5 cases)...	.....	25.00	.....	.....	25.00	25.00	.....	25.00	.....	.....	.....	.....
Building operations of local governments:													
	1907..... (505 cases)...	2.02	1.61	12.70	29.64	14.82	33.17	4.03	2.01	2.77	5.15	5.74	.20
	1897..... (262 cases)...	.....	.....	9.33	29.78	20.89	35.11	4.00	.89	1.15	4.58	6.49	.38

¹ Included in associations 4 to 11.

NATURE OF THE INJURIES SUSTAINED BY THE WORKMEN.

In Table 7 is given information regarding the nature of the injury sustained by the workmen receiving compensation for the first time in 1907.

In this table each injured person is counted only once, that injury which is the most serious determining the classification.

The group of injuries designated as wounds, contusions, fractures, etc., forms nearly 95 per cent of the total number of injuries for which compensation was paid both in 1907 and 1897. The injuries designated as suffocation formed approximately 3 per cent, but this proportion is largely caused by accidents in the mining industry; the group of injuries designated as burns, scalds, acid burns, etc., ranks third and formed 2.89 per cent of the injuries compensated in 1907. The other three classes of injuries formed insignificant parts of the total. As has been the case heretofore, injuries to the arms and legs formed the most numerous class of accidents, the two comprising 58.43 per cent of all injuries compensated in 1907; wounds, fractures, etc., of the arms comprised 32.41 per cent of the 1907 injuries as compared with 37.92 per cent in 1897, while wounds, fractures, etc., of the legs comprised 26.02 per cent in 1907 as compared with 25.21 per cent in 1897. There is a tendency therefore toward a more even distribution of the various kinds of injuries, and it is probable that safety devices on working machinery have been influential in reducing the large number of injuries to the hands, etc., the type of injury characteristic of modern apparatus. In some of the industries, such as printing and publishing (association 55), wounds, fractures, etc., of the arms formed 81.35 per cent of the injuries in 1897, while in 1907 this had been changed to 67.52 per cent. The same prominence of wounds and fractures to the arm is also shown in the other industries where presses, stamping machines, etc., formed an important part of the equipment of the establishment; thus in the metal-working industries, the musical-instrument industries, the textile industries, woodworking industries, clothing industries, meat-products industries, etc., these injuries make up about 70 per cent of the injuries for which compensation was paid in 1907, and in most of these industries the proportion of wounds, fractures, etc., to the arms is smaller in 1907 than it was in 1897.

The injuries caused by burns, scalds, acid burns, etc., occur most frequently in the chemical industries, the iron and steel industries, the clothing industries, etc. In many of the industries mentioned there is a marked reduction in the proportion of injuries caused by this type of accident, and in some cases, such, for instance, as the glass industry, the proportion of cases due to these accidents has decreased nearly one-half in 1907 as compared with 1897.

As stated above, injuries caused by suffocation occur most frequently in the mining industry, in establishments conducting gas and water works, and in engineering, excavating, etc., industries.

The drowning cases are, of course, most frequent in the navigation and allied industries. Each of the four associations engaged in navigation shows a sharp decrease in 1907 as compared with 1897 in the proportion of cases compensated on account of drowning; thus the marine navigation association had 25.95 per cent of its compensated cases caused by drowning in 1897, while in 1907 this proportion was 14.81 per cent; the inland navigation associations also show a sharp decrease.

The miscellaneous fatalities in 1897 occurred principally in land and water transportation, while in 1907 such accidents occurred but seldom.

TABLE 7.—NATURE OF THE INJURY: PER CENT OF PERSONS KILLED OR INJURED
NATURE OF

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft,

Asso- cia- tion num- ber.	Industry, etc.	Per cent of persons killed or injured by—		
		Wounds, contusions, fractures, etc.		
		Arms.	Legs.	Head and neck.
A. TOTALS.				
	Grand total:			
	1907.....(81,248 cases).....	32.41	26.02	12.11
	1897.....(45,971 cases).....	37.92	25.21	10.46
	Industrial accident associations (not including institutes):			
	1907.....(75,370 cases).....	41.22	25.41	9.83
	1897.....(41,746 cases).....	39.21	25.05	10.27
	Subsidiary institutes of building trades, engineering, and navigation associations:			
	1907.....(1,345 cases).....	23.34	31.00	11.08
	1897.....(1,155 cases).....	22.60	28.49	12.29
	Public authorities:			
	1907.....(4,533 cases).....	27.33	28.06	12.75
	1897.....(3,070 cases).....	26.12	26.09	12.38
B. GROUPS OF ASSOCIATIONS.				
1	Mining:			
	1907.....(11,381 cases).....	32.41	26.02	12.11
	1897.....(5,670 cases).....	27.35	26.14	13.95
2	Quarrying:			
	1907.....(2,677 cases).....	29.36	31.64	15.43
	1897.....(1,554 cases).....	22.39	32.50	14.80
3	Fine mechanical products:			
	1907.....(1,481 cases).....	55.97	13.70	11.00
	1897.....(567 cases).....	57.86	17.81	8.82
IRON AND STEEL.¹				
4	South German iron and steel:			
	1907.....(2,105 cases).....	49.11	20.43	12.97
	1897.....(1,093 cases).....	51.24	17.29	14.00
5	Southwest German iron:			
	1907.....(821 cases).....	33.25	26.92	9.99
	1897.....(301 cases).....	26.91	29.24	10.96
6	Rhineland-Westphalian furnace and rolling works:			
	1907.....(2,748 cases).....	37.91	29.18	9.97
	1897.....(1,127 cases).....	35.85	29.99	10.20
7	Machine building and small iron wares:			
	1907.....(2,308 cases).....	49.61	20.76	12.65
	1897.....(936 cases).....	48.40	18.06	14.42
8	Saxony-Thuringian iron and steel:			
	1907.....(1,104 cases).....	50.90	19.47	14.95
	1897.....(788 cases).....	54.06	16.50	15.35
9	Northeast iron and steel:			
	1907.....(1,510 cases).....	45.76	22.71	12.32
	1897.....(746 cases).....	43.97	23.99	15.28
10	Silesian iron and steel:			
	1907.....(1,813 cases).....	43.79	27.36	8.44
	1897.....(957 cases).....	35.42	24.56	13.48
11	Northwest iron and steel:			
	1907.....(1,674 cases).....	42.23	23.72	15.47
	1897.....(925 cases).....	42.05	22.16	17.30
METAL WORKING.				
12	South German precious and nonprecious metal working:			
	1907.....(424 cases).....	78.07	9.43	5.42
	1897.....(199 cases).....	70.85	9.05	7.54
13	North German metal working:			
	1907.....(1,109 cases).....	67.54	13.61	7.57
	1897.....(335 cases).....	70.74	9.85	8.06
14	Musical instruments:			
	1907.....(225 cases).....	70.22	15.11	5.33
	1897.....(89 cases).....	75.28	10.11	5.62
15	Glass:			
	1907.....(347 cases).....	53.89	18.15	9.80
	1897.....(235 cases).....	50.64	22.98	5.11
16	Pottery:			
	1907.....(310 cases).....	43.55	23.87	9.04
	1897.....(166 cases).....	46.99	15.66	12.65

¹Including blacksmithing, etc., in 1897.

AND COMPENSATED FOR THE FIRST TIME IN 1907 AND IN 1897, CLASSIFIED BY INJURY SUSTAINED.

I Tell. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 18* to 22* and 316 to 325.]

Per cent of persons killed or injured by—									
Wounds, contusions, fractures, etc.				Burns, scalds, acid burns, etc.	Frost, freezing, etc.	Suffoca-tion.	Drown-ing.	Miscella-neous acci-dents.	Asso-cia-tion num-ber.
Trunk.	Several parts of body at same time.	Whole body.	Total.						
11.58	10.02	1.69	93.83	2.89	0.10	3.01	0.06	0.11	
11.93	8.46	.75	94.73	3.56	.....	.44	.80	.47	
9.42	7.99	1.19	95.06	3.50	.25	.63	.42	.14	
11.17	8.13	.63	94.46	3.74	.....	.47	.83	.50	
14.12	12.64	1.04	93.22	2.15	.26	.51	3.71	.15	
17.14	13.16	2.68	96.36	2.60	.....	.35	.26	.43	
14.45	11.85	2.96	97.40	1.32	.51	.05	.68	.04	
20.29	11.17	1.70	97.75	1.46	.....	.07	.59	.13	
11.58	10.02	1.69	93.83	2.89	.10	3.01	.06	.11	1
13.31	11.36	1.06	93.17	4.25	.....	1.94	.25	.39	2
9.00	9.67	1.16	96.26	2.50	.04	.64	.49	.07	
12.48	11.84	1.16	95.17	3.48	.....	.71	.32	.32	3
5.67	5.54	.95	92.83	4.66	.88	.14	.....	1.49	
5.64	6.17	.18	96.48	2.82	.....	.....	.18	.52	4
5.89	4.13	.76	93.29	6.13	.05	.10	.33	.10	
6.22	4.57	.37	93.69	6.04	.....	.....	.09	.18	5
5.60	12.54	.97	89.27	9.49	.12	.37	.....	.75	
10.30	11.96	1.33	90.70	8.64	.....	.33	.....	.33	6
6.37	5.46	.62	89.51	9.68	.15	.33	.04	.29	
6.12	5.94	.09	88.19	11.27	.....	.18	.18	.18	7
5.24	4.90	1.08	94.24	5.50	.05	.04	.13	.04	
7.69	4.91	.11	93.59	6.09	.....	.....	.21	.11	8
4.53	3.44	1.00	94.29	5.07	.45	.19	.....	.....
4.70	3.05	.25	93.91	5.71	.....	.13	.....	.25	9
7.09	6.49	.60	94.97	4.63	.07	.13	.13	.07	
4.82	5.50	.27	93.83	4.16	.....	.40	1.07	.54	10
5.79	5.02	.88	91.23	8.05	.....	.28	.17	.22	
10.97	4.70	.21	89.34	9.50	.....	.11	.11	.94	11
7.53	5.37	.54	94.86	4.00	.36	.06	.54	.18	
8.00	5.41	.32	95.24	3.89	.....	.33	.32	.22	12
2.36	1.65	.24	97.17	2.83	.....	.....	.....	.....
6.53	3.52	.50	97.99	2.01	.....	.....	.....	.....	13
3.07	2.71	1.71	96.21	3.43	.36	.....	.....	.....
3.58	2.39	.30	94.92	4.48	.....	.....	.....	.60	14
6.67	1.78	.....	99.11	.89	.....	.....	.....	.....
3.37	3.37	.....	97.75	2.25	.....	.....	.....	.....	15
9.51	3.16	.58	95.09	3.75	.58	.....	.29	.29	
8.94	3.40	.42	91.49	7.23	.....	.43	.....	.85	16
12.58	5.48	1.93	96.45	2.90	.....	.65	.....	.....
18.07	3.01	1.21	97.59	.60	.....	.....	.60	1.21	

TABLE 7.—NATURE OF THE INJURY: PER CENT OF PERSONS KILLED OR INJURED
NATURE OF INJURY

Asso- cia- tion num- ber.	Industry, etc.	Per cent of persons killed or injured by—		
		Wounds, contusions, fractures, etc.		
		Arms.	Legs.	Head and neck.
B. GROUPS OF ASSOCIATIONS—Continued.				
17	Brick and tile making:			
	1907.....(1,931 cases) ..	36.60	31.85	6.37
	1897.....(1,085 cases) ..	33.46	36.04	4.88
18	Chemicals:			
	1907.....(2,038 cases) ..	40.87	21.54	7.41
	1897.....(1,007 cases) ..	35.65	20.36	8.44
19	Gas and waterworks:			
	1907.....(435 cases) ..	30.11	27.59	10.34
	1897.....(179 cases) ..	30.72	30.17	13.41
TEXTILES.				
20	Linen:			
	1907.....(280 cases) ..	64.64	12.14	8.57
	1897.....(202 cases) ..	67.82	10.89	5.44
21	North German textile:			
	1907.....(546 cases) ..	58.24	15.20	7.14
	1897.....(343 cases) ..	64.72	13.12	5.25
22	South German textile:			
	1907.....(291 cases) ..	66.32	15.12	6.19
	1897.....(228 cases) ..	68.86	9.21	7.89
23	Silesian textile:			
	1907.....(187 cases) ..	60.96	17.11	10.16
	1897.....(181 cases) ..	64.64	6.08	11.60
24	Alsace-Lorraine textile:			
	1907.....(227 cases) ..	64.32	17.18	6.61
	1897.....(203 cases) ..	74.39	11.33	6.40
25	Rhineland-Westphalian textile:			
	1907.....(440 cases) ..	70.46	15.46	4.77
	1897.....(387 cases) ..	71.58	10.08	5.16
26	Saxony textile:			
	1907.....(675 cases) ..	62.52	10.81	8.00
	1897.....(782 cases) ..	61.89	12.27	6.14
27	Silk:			
	1907.....(93 cases) ..	53.76	10.75	8.60
	1897.....(68 cases) ..	72.06	7.35	5.88
28	Paper making:			
	1907.....(793 cases) ..	51.32	20.30	5.42
	1897.....(592 cases) ..	56.42	13.85	6.58
29	Paper products:			
	1907.....(500 cases) ..	77.00	10.40	4.60
	1897.....(271 cases) ..	77.12	10.33	5.90
30	Leather:			
	1907.....(537 cases) ..	55.12	16.02	4.29
	1897.....(292 cases) ..	45.89	18.15	6.51
WOODWORKING.				
31	Saxony woodworking:			
	1907.....(484 cases) ..	72.31	12.91	4.75
	1897.....(252 cases) ..	75.79	9.92	4.37
32	North German woodworking:			
	1907.....(3,344 cases) ..	65.25	18.12	4.87
	1897.....(1,872 cases) ..	63.46	18.64	4.17
33	Bavarian woodworking:			
	1907.....(631 cases) ..	66.40	17.43	7.29
	1897.....(392 cases) ..	63.52	18.11	6.38
34	Southwest German woodworking:			
	1907.....(821 cases) ..	70.77	14.49	5.48
	1897.....(352 cases) ..	70.46	15.63	5.68
35	Flour milling:			
	1907.....(1,027 cases) ..	43.72	25.71	6.62
	1897.....(1,007 cases) ..	46.17	23.83	5.96
36	Food products:			
	1907.....(789 cases) ..	55.39	20.03	6.08
	1897.....(340 cases) ..	61.47	17.65	6.18
37	Sugar:			
	1907.....(508 cases) ..	36.62	28.54	7.88
	1897.....(509 cases) ..	38.90	24.56	8.25

AND COMPENSATED FOR THE FIRST TIME IN 1907 AND IN 1897, CLASSIFIED BY SUSTAINED—Continued.

Per cent of persons killed or injured by—									Asso- cia- tion num- ber.
Wounds, contusions, fractures, etc.				Burns, scalds, acid burns, etc.	Frost, freezing, etc.	Suffoca- tion.	Drown- ing.	Miscella- neous acci- dents.	
Trunk.	Several parts of body at same time.	Whole body.	Total.						
11.19	9.74	1.61	97.36	1.45	0.05	0.57	0.31	0.26	17
12.81	8.39	.83	96.41	1.84		.46	.55	.74	
9.27	6.13	.65	85.87	11.92	1.42	.59	.05	.15	18
9.73	7.45	2.18	83.81	13.70		.70	.40	1.39	
14.71	7.13	.92	90.80	4.37	1.84	.92	.46	1.61	19
8.38	8.94		91.62	3.91		1.68	1.11	1.08	
5.00	6.43	1.43	98.21	1.43	.36				20
8.91	5.45	.99	99.50	.50					
6.23	7.51	.55	94.87	4.76	.18			.19	21
7.29	4.38	.58	95.34	3.50			.29	.87	
4.47	4.12	.34	96.56	3.09			.35		22
7.02	2.63		95.61	3.95		.44			
5.35	3.74	.54	97.86	2.14					23
7.18	5.52	1.11	96.13	3.32				.55	
3.96	4.41	.44	96.92	3.08					24
2.96	2.46	.49	98.03	1.97					
5.45	2.27	.45	98.86	1.14					25
5.68	3.62	.26	96.38	3.36			.26		
6.37	7.26	.45	95.41	4.15	.15	.29			26
9.72	3.84	.13	93.99	4.22		.26	1.15	.38	
11.83	6.45	1.08	92.47	7.53					27
11.77			97.06	2.94					
8.45	6.94	1.26	93.69	5.17	.14	.25	.50	.25	28
7.27	8.11	.17	92.40	6.42		.17	.34	.67	
3.60	3.00		98.60	1.40					29
3.32	1.48		98.15	1.48				.37	
7.82	5.21	1.30	89.76	4.66	5.58				30
15.41	6.17	.34	92.47	3.08		.34	.34	3.77	
3.31	5.37	.42	98.97	.83	.20				31
5.16	3.57		98.81	.79				.40	
6.37	4.07	.30	98.98	.69	.12	.06	.12	.03	32
7.11	5.13	.48	98.99	.75			.21	.05	
5.55	2.06	.48	99.21	.79					33
6.89	1.79	.25	96.94	1.28			.25	1.53	
5.72	2.68	.13	99.27	.73					34
5.68	2.27		99.72	.28					
11.20	9.44	1.85	98.54	.97		.29	.10	.10	35
13.11	7.84	.50	97.41	.60		.50	.89	.60	
8.24	5.31	1.27	96.32	3.68					36
7.94	2.94		96.18	3.53			.29		
11.02	8.66	1.18	93.90	5.11	.20	.20	.39	.20	37
13.55	5.30	.20	90.76	6.68		.59	.20	1.77	

TABLE 7.—NATURE OF THE INJURY: PER CENT OF PERSONS KILLED OR INJURED
NATURE OF INJURY

Asso- cia- tion num- ber.	Industry, etc.	Per cent of persons killed or injured by—		
		Wounds, contusions, fractures, etc.		
		Arms.	Legs.	Head and neck.
B. GROUPS OF ASSOCIATIONS—Continued.				
38	Dairying, distilling, and starch:			
	1907.....(409 cases)...	39.12	27.38	5.63
	1897.....(360 cases)...	41.66	19.72	7.78
39	Brewing and malting:			
	1907.....(1,608 cases)...	39.93	29.17	7.96
	1897.....(1,142 cases)...	38.27	29.16	7.79
40	Tobacco:			
	1907.....(81 cases)...	61.73	16.05	3.70
	1897.....(57 cases)...	54.39	19.30	5.26
41	Clothing:			
	1907.....(676 cases)...	70.56	10.06	2.96
	1897.....(295 cases)...	76.61	6.78	4.75
42	Chimney sweeping:			
	1907.....(34 cases)...	11.76	41.18	8.82
	1897.....(38 cases)...	13.16	39.47	7.89
BUILDING TRADES (NOT INCLUDING INSTITUTES).				
43	Hamburg building trades:			
	1907.....(505 cases)...	25.74	29.50	14.65
	1897.....(302 cases)...	22.85	30.46	10.27
44	Northeast building trades:			
	1907.....(1,927 cases)...	27.45	32.02	11.11
	1897.....(1,680 cases)...	25.18	31.01	10.48
45	Silesian-Posen building trades:			
	1907.....(1,084 cases)...	29.89	29.80	11.44
	1897.....(717 cases)...	29.43	25.52	11.72
46	Hanover building trades:			
	1907.....(629 cases)...	26.87	27.98	12.88
	1897.....(457 cases)...	26.04	27.35	11.52
47	Magdeburg building trades:			
	1907.....(389 cases)...	28.53	28.54	9.77
	1897.....(179 cases)...	24.58	29.05	12.85
48	Saxony building trades:			
	1907.....(1,109 cases)...	29.49	29.58	14.07
	1897.....(767 cases)...	26.73	29.20	16.04
49	Thuringian building trades:			
	1907.....(391 cases)...	31.71	32.74	7.93
	1897.....(239 cases)...	30.54	32.64	11.30
50	Hessen-Nassau building trades:			
	1907.....(694 cases)...	26.80	26.22	11.24
	1897.....(474 cases)...	27.00	27.00	12.66
51	Rhineland-Westphalian building trades:			
	1907.....(1,855 cases)...	30.19	27.81	12.99
	1897.....(1,063 cases)...	25.78	27.00	13.55
52	Wurtemberg building trades:			
	1907.....(583 cases)...	32.07	25.39	10.12
	1897.....(403 cases)...	24.57	33.25	8.19
53	Bavarian building trades:			
	1907.....(1,149 cases)...	27.76	29.77	12.53
	1897.....(1,175 cases)...	26.81	29.53	11.74
54	Southwest building trades:			
	1907.....(716 cases)...	26.54	31.98	12.29
	1897.....(474 cases)...	27.22	30.38	9.70
55	Printing and publishing:			
	1907.....(428 cases)...	67.52	15.89	4.91
	1897.....(252 cases)...	81.35	9.53	2.38
56	Private railways:			
	1907.....(168 cases)...	27.38	23.21	10.12
	1897.....(125 cases)...	23.20	33.60	12.00
57	Street and small railroads:			
	1907.....(485 cases)...	23.71	29.27	10.52
	1897.....(168 cases)...	22.02	41.07	6.55
58	Express and storage:			
	1907.....(3,932 cases)...	30.09	36.57	7.50
	1897.....(1,426 cases)...	30.23	36.75	7.85
59	Livery, drayage, cartage, etc.:			
	1907.....(2,500 cases)...	23.84	37.92	8.64
	1897.....(1,242 cases)...	22.54	40.18	9.02

INDUSTRIAL ACCIDENTS IN GERMANY, 1897 AND 1907.

41

AND COMPENSATED FOR THE FIRST TIME IN 1907 AND IN 1897, CLASSIFIED BY SUSTAINED—Continued.

Per cent of persons killed or injured by—									Asso- cia- tion num- ber.
Wounds, contusions, fractures, etc.				Burns, scalds, acid burns, etc.	Frost, freezing, etc.	Suffoca- tion.	Drown- ing.	Miscella- neous acci- dents.	
Trunk.	Several parts of body at same time.	Whole body.	Total.						
11.74	8.07	0.97	92.91	5.63	0.73	0.49	0.24		38
16.67	7.22	.28	93.33	5.83		.56		0.28	
9.58	9.70	1.18	97.52	2.05	.25	.12	.06		39
11.73	9.28	.35	96.58	2.36		.18		.88	
9.88	4.94	2.47	98.77	1.23					40
15.79	5.26		100.00						
3.70	2.51	.44	90.23	9.32	.30			.15	41
6.44	1.35		95.93	4.07					
8.82	23.54	2.94	97.06	2.94					42
13.16	13.16	2.63	89.47	7.90				2.63	
11.68	12.87	2.39	96.83	2.57	.20	.20	.20		43
13.91	17.22	1.32	96.03	1.32		.33	1.99	.33	
11.26	13.91	1.40	97.15	2.13	.10	.30	.16	.16	44
15.36	14.64	.53	97.20	2.08		.12	.18	.42	
13.93	8.76	1.75	95.57	3.97	.28	.09	.09		45
15.90	9.62	2.79	94.98	3.90		.14	.28	.70	
10.02	16.05	2.86	96.66	2.54	.16	.16	.16	.22	46
17.07	12.25	.87	95.40	3.50		.22	.22	.66	
15.68	14.40	1.54	98.46	1.54					47
13.41	13.41	1.11	94.41	3.35		.56	.56	1.12	
15.42	7.12	1.35	97.03	2.61	.27		.09		48
14.73	10.56	.26	97.52	2.09			.13	.26	
9.97	13.04	1.79	97.18	2.56				.26	49
12.13	10.46		97.07	2.93					
13.55	16.86	2.45	97.12	2.16	.29	.29	.14		50
15.40	11.82	.64	94.52	4.43				1.05	
11.97	11.43	1.73	96.12	3.23	.11	.27	.16	.11	51
16.27	12.79	.28	95.67	3.86		.28	.19		
15.78	12.69	.86	96.91	2.06	.17	.69		.17	52
14.64	12.65	3.72	97.02	2.48		.25		.25	
12.45	12.53	1.74	96.78	3.05	.08			.09	53
16.17	11.49	.43	96.17	3.23		.09	.17	.34	
14.11	12.28	.70	97.90	1.96				.14	54
15.61	12.66	.84	96.41	2.96		.21	.21	.21	
4.44	4.67	1.64	99.07	.93					55
3.57	1.19	.40	98.42	.79				.79	
16.68	16.07	2.97	96.43	3.57					56
16.80	8.00	1.60	95.20	1.60				3.20	
17.32	12.58	2.27	95.67	3.09	.82	.21		.21	57
16.66	11.90		95.20	.60			.60	.60	
13.45	9.38	1.22	98.21	.79	.15	.08	.69	.08	58
14.31	8.20	.21	97.55	1.12		.28	.70	.35	
15.48	11.48	1.72	99.08	.36	.24	.08	.20	.04	59
15.46	11.51	.08	98.79	.24		.32	.41	.24	

TABLE 7.—NATURE OF THE INJURY: PER CENT OF PERSONS KILLED OR INJURED
NATURE OF INJURY

Asso- cia- tion num- ber.	Industry, etc.	Per cent of persons killed or injured by—		
		Wounds, contusions, fractures, etc.		
		Arms.	Legs.	Head and neck.
B. GROUPS OF ASSOCIATIONS—Concluded.				
INLAND NAVIGATION.				
60	West German inland navigation:			
	1907.....(276 cases) ..	27.18	28.26	5.43
	1897.....(155 cases) ..	27.10	27.10	1.93
61	Elbe inland navigation:			
	1907.....(325 cases) ..	28.62	29.54	8.62
	1897.....(216 cases) ..	30.56	25.00	6.02
62	East German inland navigation:			
	1907.....(152 cases) ..	38.82	15.13	9.21
	1897.....(156 cases) ..	34.61	25.00	3.85
63	Marine navigation (not including institute):			
	1907.....(459 cases) ..	36.60	25.27	3.92
	1897.....(397 cases) ..	29.72	21.91	7.81
64	Engineering, excavating, etc. (not including institute):			
	1907.....(2,143 cases) ..	25.66	38.50	9.52
	1897.....(1,226 cases) ..	23.08	41.03	11.01
65	Meat products:			
	1907.....(1,120 cases) ..	69.73	16.69	2.86
	1897.....(329 cases) ..	72.64	15.20	2.74
66	Blacksmithing, etc.:			
	1907.....(929 cases) ..	44.56	20.13	14.75
	1897.....	(¹)	(¹)	(¹)
C. PUBLIC AUTHORITIES.				
Establishment of the naval administration:				
	1907.....(105 cases) ..	43.81	18.10	18.10
	1897.....(96 cases) ..	29.07	12.79	17.44
Establishment of the military administration:				
	1907.....(157 cases) ..	43.95	19.11	14.01
	1897.....(190 cases) ..	49.47	16.84	10.53
Postal and telegraph administration:				
	1907.....(122 cases) ..	22.95	27.86	9.02
	1897.....(54 cases) ..	14.81	38.89	11.11
Railway administration:				
	1907.....(3,316 cases) ..	26.33	28.86	11.58
	1897.....(2,233 cases) ..	24.41	27.05	10.84
Dredging, towing, etc.:				
	1907.....(79 cases) ..	25.32	44.30	8.86
	1897.....(52 cases) ..	34.61	28.85	3.85
Building operations (States and Empire):				
	1907.....(248 cases) ..	27.82	25.81	15.32
	1897.....(188 cases) ..	27.66	22.87	17.02
Marine navigation:				
	1907.....(1 case) ..	100.00	-----	-----
	1897.....(5 cases) ..	20.00	60.00	-----
Building operations of local governments:				
	1907.....(505 cases) ..	26.33	26.34	19.21
	1897.....(262 cases) ..	22.52	27.48	24.05

¹ Included in associations 4 to 11.

INDUSTRIAL ACCIDENTS IN GERMANY, 1897 AND 1907.

AND COMPENSATED FOR THE FIRST TIME IN 1907 AND IN 1897, CLASSIFIED BY SUSTAINED—Concluded.

Per cent of persons killed or injured by—									Asso- cia- tion num- ber.
Wounds, contusions, fractures, etc.				Burns, scalds, acid burns, etc.	Frost, freezing, etc.	Suffoca- tion.	Drown- ing.	Miscella- neous acci- dents.	
Trunk.	Several parts of body at same time.	Whole body.	Total.						
7.61	6.88	1.09	76.45	1.08	1.09		21.38		60
11.61	4.51		72.25	.65			26.45	0.65	
11.69	6.45	2.77	87.69	.93			11.38		61
14.81	4.17		80.56	1.85			17.13	.46	
6.58	5.26	5.26	80.26	1.98			17.76		62
9.62	5.13		78.24				18.59	3.20	
6.54	7.84	2.40	82.57	1.31	.87		14.81	.44	63
6.05	2.52	.25	68.26	3.53		0.50	25.95	1.76	
10.78	11.11	.93	96.50	1.31	.47	.98	.65	.09	64
11.50	7.91	1.39	95.92	1.39		.73	1.47	.49	
5.35	2.95	.54	98.12	1.70	.18				65
5.78	1.52	.30	98.18	1.22		.30	.30		
8.83	3.98	.97	93.22	6.67	.11				66
(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
7.62	4.76	4.76	97.15	1.90			.95		
30.24	4.65	1.16	95.35	4.65					
10.19	7.64	1.91	96.81	2.55	.64				
14.74	3.68	1.05	96.31	3.16		.53			
13.11	6.56	8.20	87.70	1.64	9.84		.82		
20.37	14.82		100.00						
15.29	13.23	3.14	98.43	1.24	.21	.03	.06	.03	
20.91	13.30	2.10	98.61	1.30				.09	
7.59	8.86	3.80	98.73				1.27		
21.15	1.92		90.38				9.62		
14.92	6.45	.81	91.13	.40	.81		7.66		
18.62	5.32	.53	92.02	.53		.53	6.92		
			100.00						
20.00			100.00						
12.87	9.90	1.39	96.04	1.98	.20	.20	1.38	.20	
16.79	6.11	.38	97.33	1.81				.76	

LENGTH OF TIME THE INJURED PERSON WAS EMPLOYED IN THE ESTABLISHMENT AND IN THE OCCUPATION.

For the first time information is available as to the length of time the injured person had been employed in the establishment and in the occupation previous to receiving the injury; in addition, data showing the number of hours the injured person had been at work on the day the accident occurred have been collected.

The assumption underlying this phase of the study of accidents is that each establishment has special working conditions, special apparatus, special features of the plant, etc., with which a new workman must familiarize himself, and until this is done he is probably exposed to a higher risk of accident than a workman who has been employed for some time. The study of the length of time employed in an occupation before the accident occurred is made for the purpose of ascertaining the influence of a new occupation on a workman's risk of accident as contrasted with an occupation in which he has been engaged for some time; in Table 9 the occupation may have been in the same or in different establishments. In order to show the effect of fatigue, lessening of caution, etc., Table 10 shows the number of hours the workman had been employed on the day (or in the shift) that the accident occurred.

To make an accurate presentation of these three facts, it would be necessary to have the total number of workmen employed during the various periods of time in order to compute a rate which the number who were injured during that period bore to such number; but as it was impossible to classify the workmen into such groups, the three tables dealing with this information show only the number of injured workmen and the length of time they had been employed in the establishment, in the occupation, and in the specified number of hours on the day the accident occurred.

The grand total in the first line of figures of Table 8 shows that 3.07 per cent of the injured workmen had been employed in the establishment less than three days when the accident occurred, 1.89 per cent had been employed three days but less than one week, 8.36 per cent had been employed one week but less than one month, 11.94 per cent had been employed one month but less than three months, 9.99 per cent had been employed three months but less than six months, 10.82 per cent had been employed six months but less than one year, and 53.85 per cent had been employed one year and over. The casual workers, presumably meaning those who are employed at odd jobs for not more than one day, formed 0.08 per cent of the injured persons.

The first line of figures in Table 9 shows that 2.99 per cent of the injured workmen had been employed in the occupation less than three

days when the accident occurred, 1.37 per cent from three days up to one week, 5.61 per cent from one week up to one month, 7.80 per cent from one month to three months, 6.66 per cent from three months to six months, 7.46 per cent from six months to one year, and 67.57 per cent one year or more. Those engaged as casual workers in the occupation formed 0.54 per cent of the total number of injured persons.

In each of the two preceding cases it is noteworthy that the workmen employed less than three days in an establishment or in an occupation had formed a much higher proportion of the injured persons than those employed from three days to one week; thus in the establishment figures, 3.07 per cent had been employed less than three days, while 1.89 per cent had been employed from three days to one week; in the occupation figures, 2.99 per cent had been employed less than three days, while 1.37 per cent had been employed from three days to one week.

Considering the various groups of industries, the data for the length of time employed in the establishment show that in the case of the injured employees of the public authorities 73.55 per cent had been employed in the establishments one year and over, while only 52.73 per cent of the injured employees of private establishments (not including the institutes) had been employed one year and over. The difference is most probably due to the greater continuity of employment in the establishments conducted by the Government authorities. Four of the industry groups had approximately 70 per cent and over of their injured employees engaged in the establishment for one year and over. These industries are blacksmithing (association 66) with 79.87 per cent, private railways (association 56) with 73.21 per cent, mining (association 1) with 69.68 per cent, and silk (association 27) with 69.59 per cent. Two of the accident associations engaged in transportation service, viz, express and storage (association 58) with 7.28 per cent, and livery, drayage, cartage (association 59) with 9.10 per cent, had the highest proportion of their injured persons consisting of those employed less than three days. Some of the industry groups, such as mining (association 1) with 0.62 per cent, street and small railroads (association 57) with 0.42 per cent, show an unusually small proportion of the injured persons to have been newcomers in the establishment.

The total line of figures giving the percentages for the public authorities and for the private establishments show that these groups had 66.54 per cent and 67.64 per cent, respectively, of their injured persons employed one year and over in the occupation at which they were engaged at the time of the accident. There is therefore but little difference between the Government and the private estab-

lishments in this respect. Among the different industries there is a marked difference in the proportion of injured persons who had been engaged in the occupation more than one year. The least favorable showing in this respect was that of the paper products group (association 29) with only 37.70 per cent of its injured persons in the one-year class, while the most favorable showing was that of the blacksmithing, etc., group (association 66) with 88.27 per cent in the one-year class. In all, five groups of industries had over 80 per cent of their injured persons in the class employed one year and over. These groups were blacksmithing (association 66) with 88.27 per cent, meat products (association 65) with 86.11 per cent, chimney sweeping (association 42) with 85.29 per cent, marine navigation (association 63) with 84.65 per cent, and express and storage (association 58) with 81.75 per cent. Taking the other extreme, the proportion of injured persons who had been employed in the occupation for less than three days when the accident occurred was 2.80 per cent in the private establishments and 4.14 per cent in the Government establishments. Four of the groups of industries had over 5 per cent of their injured persons disabled during the first three days of their employment at the occupation—clothing (association 41) with 7.26 per cent, sugar (association 37) with 6.72 per cent, metal working (associations 12 and 13) with 5.68 per cent, and chemicals (association 18) with 5.23 per cent.

TABLE 8.—LENGTH OF TIME EMPLOYED IN THE ESTABLISHMENT: PER CENT OF PERSONS KILLED OR INJURED, BY DURATION OF EMPLOYMENT IN THE ESTABLISHMENT PREVIOUS TO THE ACCIDENT.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beheft, I Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 328 to 337.]

Association number.	Industry, etc.	Total reporting.	Per cent of injured persons who had been at work—							
			At temporary employment.	Less than 3 days.	3 days to 1 week.	1 week to 1 month.	1 month to 3 months.	3 months to 6 months.	6 mos. to 1 year.	1 year and over.
A. TOTALS.										
	Grand total.....	80,692	0.08	3.07	1.89	8.36	11.94	9.99	10.82	53.85
	Industrial accident associations (not including institutes).....	75,070	.06	2.98	1.89	8.63	12.32	10.28	11.11	52.73
	Subsidiary institutes of building trades, engineering, and navigation associations.....	1,098	.....	13.48	6.19	12.02	10.02	6.01	3.46	48.82
	Public authorities.....	4,524	.35	2.03	.97	3.01	6.17	6.12	7.80	73.55
B. GROUPS OF ASSOCIATIONS.										
1	Mining.....	11,355	.....	.62	.78	3.86	7.46	7.75	9.85	69.68
2	Quarrying.....	2,664	.04	2.18	1.31	8.93	13.10	10.40	13.48	50.56
3	Fine mechanical products.....	1,479	.20	1.76	2.10	8.32	12.71	12.51	15.00	47.40
4-11	Iron and steel.....	14,041	.....	2.68	1.80	8.37	12.65	10.29	11.53	52.68
12, 13	Metal working.....	1,533	.....	2.61	2.94	9.65	13.18	11.02	12.39	48.21
14	Musical instruments.....	225	.....	3.11	2.23	8.00	8.44	10.67	14.22	53.33
15	Glass.....	347	.....	1.44	.58	4.90	7.78	9.51	11.81	63.98
16	Pottery.....	306	.....	1.31	.65	5.56	9.80	9.48	8.17	65.03
17	Brick and tile making.....	1,931	.47	3.21	1.14	9.53	14.86	13.46	11.29	46.04
18	Chemicals.....	2,036	.15	2.70	2.31	9.04	12.52	8.89	11.59	52.80
19	Gas and water works.....	435	.....	1.38	1.38	7.13	9.65	6.90	8.28	65.23
20	Linon.....	280	.37	1.43	2.50	6.07	10.71	13.57	8.21	57.14
27	Silk.....	93	.....	1.07	.....	7.53	9.68	6.45	9.68	69.59
20-27	Textiles (including linen and silk).....	2,735	.07	.84	1.28	7.24	9.95	9.87	12.29	58.46
28	Paper making.....	792	.....	.51	.76	7.82	8.58	9.47	13.26	59.60
29	Paper products.....	500	.....	2.40	1.80	12.40	17.40	12.00	14.20	39.80
30	Leather.....	535	.....	1.31	1.50	5.98	9.16	10.47	11.21	60.37
31-34	Woodworking.....	5,272	.09	3.41	2.26	9.07	12.03	11.44	12.00	49.70
35	Flour milling.....	1,027	.39	2.82	1.17	9.25	9.74	12.17	9.25	55.21
36	Food products.....	789	.38	1.90	1.52	9.00	16.48	11.91	12.55	46.26
37	Sugar.....	508	.....	2.3	1.57	9.65	17.13	8.27	4.33	56.69
38	Dairying, distilling, and starch.....	409	.....	1.96	2.69	6.60	10.02	9.05	8.80	60.88
39	Brewing and malting.....	1,602	.....	3.06	2.05	5.81	7.24	8.24	10.24	63.36
40	Tobacco.....	81	1.24	1.24	1.23	6.17	8.64	7.41	11.11	62.96
41	Clothing.....	676	.....	2.07	1.78	8.58	13.31	12.13	15.53	46.60
42	Chimney sweeping.....	34	.....	2.94	.....	2.94	17.65	11.76	8.83	55.88
43-54	Building trades (not including institutes).....	10,945	.04	3.69	2.65	11.96	15.49	11.57	10.55	44.05
55	Printing and publishing.....	425	.....	1.42	2.35	6.82	12.94	10.82	9.18	56.47
56	Private railways.....	168	.....	1.19	1.19	5.95	4.76	6.55	7.15	73.21
57	Street and small railroads.....	485	.....	.42	2.06	5.15	9.28	9.07	8.04	65.98
58	Express and storage.....	3,927	.17	7.28	2.52	8.33	12.15	8.79	10.82	49.94
59	Livery, drayage, cartage, etc.....	2,497	.08	9.10	2.16	9.65	14.10	11.49	12.13	41.29
60-62	Inland navigation.....	721	.42	4.72	3.33	10.26	11.51	10.82	8.04	50.90
63	Marine navigation (not including institute).....	405	.....	3.70	2.23	14.32	24.44	17.78	15.06	22.47
64	Engineering, excavating, etc. (not including institute).....	2,136	.....	5.43	3.79	21.91	23.92	13.06	9.65	22.24
65	Meat products.....	1,120	.....	6.07	2.06	9.91	14.91	13.66	13.48	39.91
66	Blacksmithing, etc.....	929	.....	1.08	1.18	2.69	4.95	4.31	5.92	79.87
C. PUBLIC AUTHORITIES.										
	Establishments of the naval administration.....	105	.....	.....	.....	.96	4.76	6.67	1.90	85.71
	Establishments of the military administration.....	156	.....	2.56	1.92	1.28	4.49	5.13	9.62	75.00
	Postal and telegraph administration.....	122	.....	1.64	.82	3.28	8.20	9.01	11.48	65.57
	Railway administration.....	3,315	.09	.45	.57	2.29	5.31	5.85	8.09	77.35
	Dredging, towing, etc.....	79	.....	60.63	1.27	1.27	3.80	2.53	3.80	36.70
	Building operations (States and Empire).....	246	.40	3.25	1.22	8.13	14.23	6.91	4.88	60.98
	Marine navigation.....	1	.....	.....	.....	.....	.....	.....	.....	100.00
	Building operations of local governments.....	500	2.40	4.60	3.40	6.40	8.60	7.60	7.80	59.20

TABLE 9.—LENGTH OF TIME EMPLOYED IN THE OCCUPATION: PER CENT OF PERSONS KILLED OR INJURED, BY DURATION OF EMPLOYMENT IN THE OCCUPATION PREVIOUS TO THE ACCIDENT.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft, I Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 328 to 337.]

Association number.	Industry, etc.	Total reporting.	Per cent of injured persons who had been at work—							
			At temporary employment.	Less than 3 days.	3 days to 1 week.	1 week to 1 month.	1 month to 3 months.	3 months to 6 months.	6 mos. to 1 year.	1 year and over.
A. TOTALS.										
	Grand total.....	74,426	0.54	2.99	1.37	5.61	7.80	6.66	7.46	67.57
	Industrial accident associations (not including institutes).....	70,888	.52	2.80	1.34	5.66	7.86	6.70	7.48	67.64
	Subsidiary institutes of building trades, engineering, and navigation.....	1,024	.20	10.94	2.93	6.74	5.47	3.61	2.73	67.38
	Public authorities.....	4,513	.71	4.14	1.62	4.61	7.42	6.74	8.22	66.54
B. GROUPS OF ASSOCIATIONS.										
1	Mining.....	11,282		.80	.63	2.84	4.67	5.22	6.18	79.66
2	Quarrying.....	2,484	.33	3.70	1.37	7.77	10.95	8.57	10.87	56.44
3	Fine mechanical products.....	1,444	1.04	4.02	2.70	9.00	12.12	11.77	14.20	45.15
4-11	Iron and steel.....	13,316	.30	3.15	1.86	7.04	10.51	8.49	9.64	59.01
12,13	Metal working.....	1,532	.46	5.68	2.48	8.62	10.18	8.09	9.53	54.96
14	Musical instruments.....	1,223	1.35	4.04	1.79	8.07	8.52	9.42	10.76	56.05
15	Glass.....	341		3.52	.88	6.45	8.50	8.60	10.86	61.29
16	Pottery.....	303	.33	3.96	1.32	5.95	9.57	9.57	8.58	60.73
17	Brick and tile making.....	1,907	1.57	3.72	.79	6.03	8.50	7.81	7.81	63.77
18	Chemicals.....	2,007	1.20	5.23	2.74	9.52	12.90	8.57	10.56	49.28
19	Gas and water works.....	435	.23	3.91	3.91	9.43	11.03	7.36	7.13	57.00
20	Linen.....	280		4.29	3.93	8.93	12.50	12.85	9.64	47.86
20-27	Silk.....	93		2.15		6.45	9.68	4.30	6.45	70.97
20-27	Textiles (including linen and silk).....	2,706	.63	1.96	1.48	6.98	10.10	8.94	11.71	58.20
28	Paper making.....	787		3.43	.76	8.26	9.40	8.52	11.82	57.81
29	Paper products.....	496		4.64	1.81	13.10	17.14	11.09	14.52	37.70
30	Leather.....	399	4.51	4.26	1.75	5.76	10.03	9.52	10.03	54.14
31-34	Woodworking.....	4,178	3.18	3.21	1.02	4.38	5.98	5.79	5.98	70.46
35	Flour milling.....	1,027	2.73	3.70	.97	5.45	5.75	7.40	5.94	68.06
36	Food products.....	788	.38	2.03	1.27	8.12	14.47	10.02	10.03	53.68
37	Sugar.....	506		2.96	6.72	7.77	14.82	17.98	6.93	43.87
38	Dalrying, distilling, and starch.....	404		1.98	1.24	3.22	5.69	4.21	4.20	79.46
39	Brewing and malting.....	1,586		4.22	1.58	4.92	4.79	5.49	6.49	72.51
40	Tobacco.....	79	3.80	2.53	1.27	5.06	10.13	7.59	13.92	55.70
41	Clothing.....	675		7.26	1.92	8.15	12.15	11.56	14.96	44.00
42	Chimney sweeping.....	34					5.88	5.88	2.95	85.29
43-54	Building trades (not including institutes).....	9,346	.16	2.16	1.10	4.02	5.06	4.27	3.97	79.26
55	Printing and publishing.....	421		3.32	2.38	7.13	11.16	9.50	10.69	55.82
56	Private railways.....	168		1.79	1.19	5.95	5.36	8.33	7.74	69.64
57	Street and small railroads.....	479		2.30	2.51	5.01	7.51	8.14	8.14	66.39
58	Express and storage.....	3,913	.11	2.81	.54	2.40	4.27	3.60	4.52	81.75
59	Livery, drayage, cartage, etc.....	2,393	.16	3.84	.84	3.26	5.56	4.39	5.06	76.89
60-62	Inland navigation.....	684	.29	2.34	1.02	5.41	6.29	5.41	4.39	74.85
63	Marine navigation (not including institute).....	417		.72		1.44	4.07	3.60	5.52	84.65
64	Engineering, excavating, etc. (not including institute).....	2,083		3.07	2.50	16.13	16.51	10.75	7.30	43.74
65	Meat products.....	1,116	.09	1.88	.27	1.52	2.24	2.87	5.02	86.11
66	Blacksmithing, etc.....	929		.86	.75	1.72	2.48	2.48	3.44	88.27
C. PUBLIC AUTHORITIES.										
	Establishments of the naval administration.....	105				1.90	4.77	6.67	1.90	84.76
	Establishments of the military administration.....	156	.64	10.26	1.28	2.56	5.78	7.05	14.10	58.33
	Postal and telegraph administration.....	122		1.64	.82	3.28	8.20	9.01	11.48	65.57
	Railway administration.....	3,812	.51	1.51	1.03	3.36	7.00	6.81	8.70	70.98
	Dredging, towing, etc.....	77		51.95		1.30	3.90	1.30	2.60	38.95
	Building operations (States and Empire).....	241	.83	10.79	3.73	15.35	11.62	4.57	3.32	49.79
	Marine navigation.....	1								100.00
	Building operations of local governments.....	499	2.40	10.62	5.41	9.82	9.62	6.81	7.02	48.30

LENGTH OF TIME THE INJURED PERSON HAD BEEN AT WORK ON THE DAY OF THE ACCIDENT.

In order to disclose what, if any, relation exists between the number of hours which the injured person had been at work on the day of the accident and the frequency of accidents, Table 10 shows the number of persons killed and injured classified by the number of hours they had been at work on the day of the accident. As was the case in the tables showing the length of time employed in the establishment and in the occupation, it would be necessary to know the total number of persons employed the respective number of hours per day in order to compute an accurate rate; this information is not available. Table 10 presents the proportion of injured persons instead of the rate per 1,000 persons in each period of time.

Taking the total number of injured persons, Table 10 shows that these were distributed throughout the day as follows:

Number of hours the injured person had been at work.	Per cent.
Less than 1 hour.....	4.94
1 hour and up to 2 hours.....	8.63
2 hours and up to 3 hours.....	9.21
3 hours and up to 4 hours.....	11.28
4 hours and up to 5 hours.....	12.20
5 hours and up to 6 hours.....	10.16
6 hours and up to 7 hours.....	8.10
7 hours and up to 8 hours.....	8.66
8 hours and up to 9 hours.....	8.54
9 hours and up to 10 hours.....	7.57
10 hours and over.....	10.71
Total.....	100.00

The most conspicuous fact in these figures is that the expected increase in the proportion of accidents in the last few hours of the day does not appear; in fact, the proportion of accidents occurring from the seventh to the eighth hour of work is practically the same as that occurring from the first to the second hour of work. It is customary to allow about 15 minutes for afternoon lunch (*Vesper-pause*) at 4 o'clock or later; and probably this intermission is responsible for the decrease noted beginning with the eighth hour of work.

While the last 4 hours of work do not show an increase in the proportion of accidents, the first 5 hours do show such an increase to a marked degree. The proportion of all accidents occurring to persons at work less than 1 hour was 4.94 per cent; the increase in the next group, those who had been employed 1 to 2 hours, is quite marked; after the second hour the increase is uninterrupted until the end of the fifth hour, when the maximum for the day is reached with 12.20 per cent of all the injured persons. At this point the noon recess evidently influences the number of accidents, though in

the various industries and in the various localities the custom regarding the time of the noon meal differs greatly.

It is of interest to note that other investigations as to the time of day when the accidents occur show substantially the same results as those above cited. In the Report on Condition of Woman and Child Wage-earners in the United States the accidents in cotton textile mills (Vol. I) and in establishments engaged in the metal trades (Vol. XI) are distributed throughout the day in practically the same proportion as is stated above. In explanation of the increasing proportion of accidents during the first 4 or 5 hours, the report (Vol. I, p. 396) suggests that at the beginning of the day the worker in the factory gradually increases his speed in order to increase his output, but such increased exertion soon becomes accompanied by increase of fatigue, lack of care, etc., and naturally results in a higher accident rate. In the afternoon the sense of fatigue overcomes the desire for increased output and is also accompanied by the feeling that, since a certain amount of work has been accomplished, a lessening of effort is permissible. This suggested explanation is apparently based on the experience of factory employees and especially of piece-rate workers. It is worthy of note that practically the same tendency to an increase of accidents during the first 4 hours of work occurs in industries where piecework can prevail to only a limited extent, such as in the operation of gas and water works (association 19) and in the operation of the State railways.

TABLE 10.—NUMBER OF HOURS OF WORK PRECEDING THE ACCIDENT: PER CENT OF PERSONS KILLED OR INJURED, BY NUMBER OF HOURS OF WORK ON DAY OF ACCIDENT.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft, I Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 329 to 335.]

Association number.	Industry, etc.	Total reporting.	Per cent of injured persons who had been at work—										
			Less than 1 hr.	1 to 2 hrs.	2 to 3 hrs.	3 to 4 hrs.	4 to 5 hrs.	5 to 6 hrs.	6 to 7 hrs.	7 to 8 hrs.	8 to 9 hrs.	9 to 10 hrs.	10 hrs. and over.
A. TOTALS.													
	Grand total.....	79,791	4.94	8.63	9.21	11.28	12.20	10.16	8.10	8.66	8.54	7.57	10.71
	Industrial accident associations (not including institutes).....	74,084	4.89	8.57	9.10	11.24	12.20	10.24	8.13	8.68	8.54	7.59	10.82
	Subsidiary institutes of building trades, engineering, and navigation accident associations.....	1,255	4.38	9.00	11.39	11.47	12.27	6.85	7.17	9.48	10.52	7.82	9.65
	Public authorities..	4,452	5.80	9.57	10.47	11.93	12.38	9.70	7.82	8.11	8.11	7.23	8.83
B. GROUPS OF ASSOCIATIONS.													
1	Mining.....	11,194	5.02	10.53	10.89	13.10	14.36	14.34	9.90	9.31	5.42	3.00	4.13
2	Quarrying.....	2,610	5.36	9.04	10.50	10.38	11.69	8.85	8.39	8.39	9.16	7.78	10.46
3	Fine mechanical products.....	1,455	6.12	9.35	10.37	14.23	13.33	10.24	7.70	9.28	8.73	6.32	4.33
4-11	Iron and steel.....	13,966	4.32	8.87	8.23	11.01	12.09	9.90	7.15	8.45	9.34	9.77	10.87

TABLE 10.—NUMBER OF HOURS OF WORK PRECEDING THE ACCIDENT: PER CENT OF PERSONS KILLED OR INJURED, BY NUMBER OF HOURS OF WORK ON DAY OF ACCIDENT—Concluded.

Association number.	Industry, etc.	Total reporting.	Per cent of injured persons who had been at work—										
			Less than 1 hr.	1 to 2 hrs.	2 to 3 hrs.	3 to 4 hrs.	4 to 5 hrs.	5 to 6 hrs.	6 to 7 hrs.	7 to 8 hrs.	8 to 9 hrs.	9 to 10 hrs.	10 hrs. and over.
B. GROUPS OF ASSOCIATIONS—concd.													
12, 13	Metal working.....	1,519	5.79	8.23	8.76	13.76	13.10	8.89	7.64	10.60	9.28	7.18	6.77
14	Musical instruments	222	7.20	6.76	10.80	10.36	15.32	7.66	7.21	12.17	10.81	5.41	6.30
15	Glass.....	344	8.43	8.72	9.01	8.43	9.60	10.76	8.72	9.60	8.43	6.10	12.20
16	Pottery.....	297	8.75	8.75	12.46	16.84	16.16	12.79	4.71	2.36	6.40	3.03	7.75
17	Brick and tile making.....	1,917	5.22	8.09	8.40	9.29	10.38	10.64	8.40	9.44	10.07	7.67	12.40
18	Chemicals.....	1,999	4.90	7.45	8.45	10.80	11.40	10.00	6.95	8.95	9.69	9.00	11.81
19	Gas and water works.....	425	5.88	10.82	8.24	10.59	13.41	8.71	5.65	8.47	9.41	6.82	12.00
20	Linen.....	271	5.91	11.44	12.92	6.64	16.97	9.96	7.01	8.49	8.49	9.59	2.58
27	Silk.....	93	9.68	9.68	16.13	12.90	10.75	4.30	2.15	11.83	6.45	8.60	7.53
20-27	Textiles (including linen and silk).....	2,689	6.62	9.26	10.52	11.38	12.46	10.70	7.59	8.33	7.70	8.00	7.44
28	Paper making.....	778	6.68	8.35	7.97	10.80	12.49	11.05	6.94	7.84	9.25	6.94	11.09
29	Paper products.....	494	6.28	19.42	20.44	21.26	24.08	6.90	1.22	.....	.....	.....	.20
30	Leather.....	508	5.31	9.25	9.06	10.24	14.57	9.25	9.45	11.42	7.48	7.28	6.69
31-34	Woodworking.....	5,222	4.17	7.22	8.25	11.28	12.11	9.17	10.09	10.76	10.09	8.08	8.78
35	Flour milling.....	1,024	5.37	6.25	7.13	8.20	10.06	8.69	9.57	5.27	9.77	8.40	21.29
36	Food products.....	777	6.44	5.92	8.37	10.17	10.94	10.41	9.78	8.24	6.95	8.49	14.29
37	Sugar.....	503	4.17	8.75	7.55	9.94	12.52	10.54	3.18	5.77	9.15	9.35	19.08
38	Dairying, distilling, and starch.....	405	8.15	7.16	6.17	7.90	9.63	7.42	6.17	6.91	7.90	11.11	21.48
39	Brewing and malting.....	1,577	3.80	6.47	5.39	7.42	9.58	10.21	9.07	9.00	10.27	8.75	20.04
40	Tobacco.....	80	5.00	10.00	7.50	12.50	12.50	8.75	3.75	11.25	6.25	11.25	11.25
41	Clothing.....	676	4.44	9.02	10.36	14.20	9.32	6.21	10.36	12.13	10.95	7.84	5.17
42	Chimney sweeping.....	34	14.71	14.71	5.88	11.76	8.82	2.94	8.82	20.60	5.88	.....	5.88
43-54	Building trades (not including institutes).....	10,816	4.31	8.19	8.76	11.45	12.41	9.26	9.36	10.02	10.11	8.71	7.42
55	Printing and publishing.....	412	8.25	15.05	13.35	7.52	11.17	7.28	6.32	6.55	7.52	13.35	3.64
56	Private railways.....	166	6.63	4.82	9.04	12.65	12.65	7.83	7.83	7.83	10.84	4.22	15.66
57	Street and small railroads.....	473	7.19	10.36	10.99	11.20	10.57	9.09	8.25	8.88	6.77	9.09	7.61
58	Express and storage.....	3,852	4.26	7.50	9.28	11.66	11.94	10.36	5.74	5.79	6.57	7.04	19.86
59	Livery, drayage, cartage, etc.....	2,500	3.52	5.69	6.22	7.24	7.61	8.35	5.69	5.36	6.96	7.86	35.50
60-62	Inland navigation.....	716	5.17	7.68	8.80	11.03	10.06	9.08	7.26	6.42	8.38	7.40	18.72
63	Marine navigation (not including institute).....	327	12.54	12.54	15.60	12.84	8.26	6.12	4.89	5.50	4.28	3.06	14.37
64	Engineering, excavating, etc. (not including institute).....	2,137	5.24	7.58	9.03	9.55	11.04	7.53	5.15	7.67	10.80	10.15	16.26
65	Meat products.....	1,108	4.96	6.32	9.21	7.67	9.39	10.83	9.75	7.04	10.02	7.58	17.23
66	Blacksmithing, etc.....	918	4.90	6.11	9.16	11.98	13.29	10.68	8.50	8.93	8.06	6.64	11.75
C. PUBLIC AUTHORITIES.													
	Establishments of the naval administration.....	100	7.00	20.00	10.00	15.00	21.00	5.00	3.00	8.00	5.00	.....	6.00
	Establishments of the military administration.....	155	10.32	15.48	10.97	7.10	18.06	7.74	6.45	9.03	7.10	4.52	3.23
	Postal and telegraph administration.....	121	3.30	9.90	15.70	16.53	12.40	11.57	7.44	7.44	5.79	5.79	4.14
	Railway administration.....	3,277	5.52	8.91	10.19	11.96	11.96	10.31	8.09	8.06	7.75	7.38	9.87
	Dredging, towing, etc.....	78	7.69	11.54	1.28	11.54	14.10	8.97	1.28	11.54	12.82	10.27	8.97
	Building operations (States and Empire).....	234	5.56	10.68	10.68	11.54	11.54	8.12	6.41	8.55	8.12	8.55	10.25
	Marine navigation.....	1	.....	.....	.....	.....	100.00	.....	.....	.....	.....	.....	.....
	Building operations of local governments.....	486	6.38	9.05	12.35	11.73	11.52	7.61	9.26	7.61	11.32	7.82	5.35

CAUSES OF ACCIDENTS.

In Table 11 the proportion of the accidents due to the various causes are given for the standard industry groups.

In this table the accidents are distributed among 17 groups of causes. If there was more than one cause responsible for the accident, the accident is classified under the cause which had the greatest influence in producing the injury.

The accidents in the first 4 groups in the table may be grouped together as having been caused by machinery of various sorts; these 4 groups included 24.37 per cent of the accidents of the year 1907. The machinery accidents resulted fatally in 1.07 per cent of all the accidents, while of all the fatal accidents machinery caused 13.40 per cent. Out of the total number of 81,248 accidents compensated for the first time in 1907, motors, etc., caused 0.64 per cent, transmission apparatus 1.20 per cent, working machinery of all kinds 17.50 per cent, and elevators, etc., 5.03 per cent. A table printed in the original report but not here given shows that there were 19,803 accidents caused by machinery of all kinds. The highest proportion of these occurred in the iron and steel industries, which had 24.26 per cent of the number just given. The woodworking associations had 15.77 per cent, the textile associations 7.91 per cent, the mining 6.96 per cent, the building trades 6.15 per cent, the metal-working trades 4.81 per cent, the fine mechanical products association 3.28 per cent, and the express and storage association 2.54 per cent.

Of the accidents occurring in each industry group, 71 per cent of those occurring in the paper products group were due to machinery of all kinds; in the clothing group 66.42 per cent of the accidents were caused by machinery, the metal-working group had 62.17 per cent, the musical instruments 61.33 per cent, the woodworking 59.13 per cent, the printing and publishing group 57.71 per cent, and the textile group 57.21 per cent.

Of the accidents caused by motors, engines, etc. (including prime movers of all kinds), the highest proportion occurred in the case of marine navigation (association 63) where they formed 8.28 per cent of the accidents compensated in this industry; the group with the next highest proportion of accidents due to motors, etc., was inland navigation (association 60-62) where the proportion was 2.26 per cent of the accidents compensated in this industry. Dairying, distilling, etc. (association 38), has the next highest proportion, namely, 2.20 per cent of all the accidents compensated in 1907 in this industry. The detailed table not reproduced here shows that 70.79 per cent of the 517 accidents caused by motors were caused by steam engines, 4.26 per cent by water-power engines, 19.15 per cent by gas, compressed air, and wind motors, 5.03 per cent by electric motors and

dynamos, and 0.77 per cent by animal motors. Of the accidents which were due to motors 7.16 per cent resulted fatally, while of all fatal injuries 0.57 per cent were caused by motors.

The term "transmission apparatus" (Class II) includes shafting, pulleys, tooth and friction gears, belts, ropes, chains, etc. Of the accidents caused by transmission apparatus 15.74 per cent resulted in death; of all the fatal accidents 2.37 per cent were due to this cause. A few of the groups of industries show a conspicuously high proportion of their accidents as originating from transmission apparatus; thus flour milling (association 35) had 10.03 per cent of its accidents due to this cause, while paper making (association 28) had 6.31 per cent of its accidents so caused.

The accidents caused by "working machinery" (Class III) form 17.50 per cent of all the accidents compensated and comprise the largest group of accidents due to any one of the causes enumerated in the table. Of all the injuries due to this cause 1.36 per cent resulted fatally. In some of the industry groups this cause is responsible for over half of all the accidents compensated; thus of the group paper products (association 29) 67.80 per cent of the accidents were due to this cause; in the metal working group 57.47 per cent of the accidents are due to this cause. On account of the varied nature of the machinery included under the term "working machinery" the accidents in one industry group can not very well be contrasted with those in another group.

The cause numbered IV, elevators, cranes, hoists, lifts, etc., was responsible for 5.03 per cent of the total number of injuries in 1907. The industry groups in which this cause was especially conspicuous are the water transportation industries; in 1907 the marine navigation group (association 63) had 13.29 per cent and the inland navigation group (association 60-62) had 13.27 per cent of their accidents originating in this cause. Of the accidents in the sugar industry group (association 37) and also in the express and storage group (association 58), 9.45 per cent were caused by elevators, hoists, etc. All the other industry groups had less than 9 per cent of their injuries due to this cause. Of all the accidents caused by elevators, hoists, etc., in 1907, 11.79 per cent were fatal, while of all the fatal accidents compensated 7.47 per cent were due to this cause.

The cause numbered V, steam boilers, etc., in 1907, is conspicuous for two things, first, the number of accidents is small, and second, those accidents which did arise from this cause frequently resulted in death, 26.85 per cent of these accidents causing the death of the injured person. Of the total number of fatal accidents in 1907, however, those due to steam boilers, etc., formed only 0.62 per cent.

The cause numbered VI, electric currents, was also responsible for a small number of accidents, but as in the preceding class, the acci-

dents to a large degree resulted in death; 34.24 per cent of injuries caused by electric currents were fatalities, though only 0.97 per cent of all the fatal accidents were due to this cause.

The cause numbered VII, explosives of various kinds, possesses the same characteristics as the two preceding classes, the number of accidents being small and the proportion of this small number which resulted in death being large.

The cause numbered VIII, inflammable, hot, or corrosive substances, likewise was responsible in 1907 for a small number of accidents, of which 20.36 per cent resulted in death. The industry group chemicals (association 18) in 1907 had the highest proportion of accidents due to this cause, having 14.47 per cent of all its accidents originating in this class.

The cause numbered IX, collapse, fall, etc., of objects, materials, etc., was responsible for 15.08 per cent of all the accidents compensated in 1907. Of the total number of injuries in 1907 due to this cause, 10.75 per cent resulted in death, but these deaths formed 20.38 per cent of all the fatalities. This cause was responsible for 44.12 per cent of the accidents in the chimney sweeping industry (association 42), for 32.78 per cent of the accidents in the mining industry (association 1), and for 27.01 per cent of the accidents in the building trades industries (associations 43-54). All of the other industry groups had less than 20 per cent of their accidents arising from this cause.

The cause numbered X, falls on even surface, falls from stairs, ladders, fall into depressions, etc., was responsible for 11.30 per cent of the accidents compensated in 1907. Of all the accidents due to this cause, 8.48 per cent were fatal. The industry chimney sweeping (association 42) had 38.24 per cent of its accidents due to this cause, while the building trades (associations 43-54) had 23.82 per cent; the proportion of accidents due to this cause in the other groups was less than 20 per cent.

The cause numbered XI, loading, unloading, etc., formed 14.02 per cent of all the accidents compensated in 1907, and of these accidents 3.05 per cent were fatal. As would be expected, the industry with the highest proportion of its accidents due to this cause is the group express and storage (association 58) with 28.69 per cent. Other groups where heavy parcels or heavy material is moved show also a high proportion; brewing and malting (association 39) and engineering, excavating, etc. (association 64), had 24.88 per cent and 21.33 per cent, respectively, of all their accidents arising from this cause.

The cause numbered XII, teaming, drayage, etc., was responsible for 6.63 per cent of all the injuries compensated in 1907, and 10.15 per cent of these injuries were fatal. As in Class XI of

causes, a transportation industry—in this case the livery, drayage, cartage, etc., group (association 59), with 49.76 per cent—had the highest proportion of its accidents arising in this cause.

The cause designated as operation of railways (Class XIII) caused 9.71 per cent of the total number of injuries compensated in 1907, and of these injuries 13.59 per cent resulted fatally. Of all the fatal accidents compensated 16.59 per cent were caused by this class.

As would be expected, the industry groups with the highest proportion of accidents due to this cause are the various forms of railway transportation and those groups in which special branch roads, spurs, etc., are used for the movement of material, etc.; thus private railways (association 56) had 56.54 per cent of its accidents in 1907 due to this cause, street and small railroads (association 57) had 45.36 per cent, engineering, excavating, etc. (association 64), had 23.61 per cent, and the State railways had 46.44 per cent.

The cause indicated as shipping and water transportation (Class XIV) was responsible for 1.06 per cent of all the accidents compensated, but this cause is conspicuous by having 42.34 per cent of these accidents resulting in death, this being the highest proportion shown by any of the causes given in the table; these fatal accidents, however, formed but 5.65 per cent of all fatal accidents. The industry groups with the highest proportion of accidents due to this cause are naturally those including water transportation; thus the group inland navigation (association 60–62) had 46.22 per cent and marine navigation (association 63) had 43.57 per cent.

The accidents caused by bite, kick, push, etc., of animals (Class XV) are not numerous, being 1.64 per cent of the total number compensated in 1907, and of course occurred in those industries in which animals are used in large numbers. Thus the group livery, drayage, cartage, etc. (association 59), had 14.28 per cent of its accidents originating in this cause; blacksmithing, farriers, etc. (association 66), had 13.99 per cent, and meat products (association 65) had 10.27 per cent.

The accidents caused by tools, hand apparatus of various kinds, etc. (Class XVI), formed 4.10 per cent of all the accidents compensated, and with one or two exceptions are not conspicuous in any of the industry groups. The group meat products, etc. (association 65), had 34.54 per cent of its accidents so caused, while blacksmithing (association 66) had 15.51 per cent.

TABLE II.—CAUSES OF ACCIDENTS: PER CENT OF PERSONS KILLED OR INJURED AND BY

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Belhett,

Asso- cia- tion num- ber.	Industry, etc.	Per cent of persons killed or injured by—					
		(I.) Motors, engines, etc. (prime mov- ers).	(II.) Trans- mis- sion appa- ratus.	(III.) Work- ing ma- chin- ery.	(IV.) Eleva- tors, hoists, etc.	(V.) Steam boilers, etc.	(VI.) Electric cur- rents.
A. TOTALS.							
	Grand total:						
	1907.....(81,248 cases) ..	0.64	1.20	17.50	5.03	0.18	0.23
	1897.....(45,971 cases) ..	.95	1.55	17.40	4.86	.32	.04
	Fatal injuries:						
	Per cent of all fatal accidents—						
	1907.....(6,463 cases) ..	.57	2.37	2.99	7.47	.62	.97
	1897 ¹.....	.77	2.36	3.50	7.44	1.02	.20
	Per cent of fatal accidents of total acci- dents due to each cause—						
	1907.....(6,463 cases) ..	7.16	15.74	1.36	11.79	26.85	34.24
	1897 ¹	8.70	16.22	2.15	16.38	34.25	52.63
	Industrial accident associations (not including institutes):						
	1907.....(75,370 cases) ..	.68	1.28	18.64	5.24	.20	.22
	1897.....(41,746 cases) ..	1.04	1.69	18.87	5.18	.33	.04
	Subsidiary institutes of the building trades, en- gineering, and navigation associations:						
	1907.....(1,345 cases) ..	.....	.07	.74	1.42	.....	.....
	1897.....(1,155 cases) ..	.....	.09	.26	1.73	.....	.....
	Public authorities:						
	1907.....(4,533 cases) ..	.18	.13	3.51	2.69	.04	.46
	1897.....(2,070 cases) ..	.10	.16	3.81	1.73	.26	.03
B. GROUPS OF ASSOCIATIONS.							
1	Mining:						
	1907.....(11,381 cases) ..	.47	.62	3.69	7.94	.25	.26
	1897.....(5,670 cases) ..	.81	.42	2.44	11.64	.23	.02
2	Quarrying:						
	1907.....(2,677 cases) ..	.37	1.57	6.01	5.95	.07	.....
	1897.....(1,554 cases) ..	.39	1.22	3.92	2.51	.06	.....
3	Fine mechanical products:						
	1907.....(1,481 cases) ..	1.55	1.42	37.00	3.92	.20	3.85
	1897.....(567 cases) ..	2.47	3.35	39.15	3.00	.....	.88
4-11	Iron and steel:						
	1907.....(14,083 cases) ..	.87	1.24	23.49	8.52	.19	.26
	1897.....(6,873 cases) ..	² 2.34	² 1.85	² 26.00	² 6.63	² 1.35	² 1.07
12,13	Metal working:						
	1907.....(1,533 cases) ..	.72	2.15	57.47	1.83	.13	.07
	1897.....(534 cases) ..	1.50	2.81	56.55	1.31	.56	.....
14	Musical instruments:						
	1907.....(225 cases) ..	.....	2.22	57.78	1.33	.44	.....
	1897.....(89 cases) ..	1.12	2.25	53.93	3.37	.....	.....
15	Glass:						
	1907.....(347 cases) ..	.58	1.73	13.82	.58	.....	.....
	1897.....(235 cases) ..	.43	2.55	14.04	.85	.....	.....
16	Pottery:						
	1907.....(310 cases) ..	.65	3.23	22.26	2.89	.32	.65
	1897.....(166 cases) ..	.60	4.82	25.91	.60	.....	.....
17	Brick and tile making:						
	1907.....(1,931 cases) ..	.78	2.43	13.62	5.65	.31	.05
	1897.....(1,085 cases) ..	1.38	1.38	14.75	4.98	.37	.....
18	Chemicals:						
	1907.....(2,038 cases) ..	.93	1.62	17.22	3.29	.25	.15
	1897.....(1,007 cases) ..	1.19	2.98	15.10	2.28	.30	.....
19	Gas and water works:						
	1907.....(435 cases) ..	1.60	.22	3.00	3.00	.....	.....
	1897.....(179 cases) ..	1.68	.56	1.12	2.79	.56	.56
20	Linen:						
	1907.....(280 cases) ..	1.07	3.57	55.71	1.44	.72	.....
	1897.....(202 cases) ..	1.49	2.48	55.94	1.48	.49	.....
27	Silk:						
	1907.....(93 cases) ..	.....	5.38	41.93	1.08	.....	.....
	1897.....(68 cases) ..	5.89	4.41	54.41	1.47	.....	.....
20-27	Textiles (including linen and silk):						
	1907.....(2,739 cases) ..	1.02	3.72	50.64	1.83	.41	.11
	1897.....(2,394 cases) ..	1.63	3.26	55.97	1.80	.63	.....

¹ Number of cases not reported.

BY ACCIDENTS COMPENSATED FOR THE FIRST TIME, 1907 AND 1897, BY CAUSES INDUSTRIES.

II Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 352-362, 366-383.]

Per cent of persons killed or injured by—											Asso- cia- tion num- ber.
(VII.) Explo- sives.	(VIII.) Inflam- mable, hot, or corrosive sub- stances.	(IX.) Collapse, fall, etc., of ob- jects.	(X.) Falls, falls from stairs, ladders, etc.	(XI.) Loading, unload- ing, etc.	(XII.) Team- ing, dray- age, etc.	(XIII.) Opera- tion of rail- ways.	(XIV.) Ship- ping and water trans- porta- tion.	(XV.) Anim- als (bite, kick, push, etc.).	(XVI.) Tools, hand appa- ratus, etc.	(XVII.) Mis- cella- neous.	
0.64	3.53	15.08	11.30	14.02	6.63	9.71	1.06	1.64	4.10	7.51	
.95	3.35	16.94	11.83	13.76	6.37	7.84	1.37	.91	3.57	7.99	
2.20	9.04	20.38	12.04	5.38	8.46	16.59	5.65	1.52	.67	3.08	
2.26	5.71	22.00	15.92	6.14	7.89	13.62	6.36	1.07	1.14	2.60	
27.52	20.36	10.75	8.48	3.05	10.15	13.59	42.34	7.36	1.29	3.28	
25.28	18.23	13.89	14.40	4.78	13.26	18.60	49.76	12.44	3.41	3.49	
.65	3.69	15.34	11.07	13.80	6.75	8.33	.97	1.73	4.10	7.31	
.98	3.53	17.13	11.73	13.37	6.65	6.04	1.39	.97	3.45	7.71	
.82	2.01	28.92	22.60	12.79	6.17	1.41	6.25	.89	4.61	11.30	
.87	2.51	35.41	22.25	12.47	5.63	1.73	.26	.26	5.71	10.48	
.29	1.39	6.64	11.69	18.11	4.70	34.99	.97	.36	4.10	9.75	
.62	1.20	7.39	9.32	19.45	4.17	34.66	1.50	.29	4.40	10.91	
2.02	4.12	32.78	6.29	6.20	.46	25.93	.....	.83	2.21	6.53	1
3.49	3.35	38.45	5.75	6.42	.28	17.00	.....	.49	2.17	7.04	
3.88	1.27	18.98	9.41	15.24	5.12	14.12	.72	1.12	5.08	11.09	2
5.60	1.35	27.54	10.17	13.26	5.41	11.84	.58	.77	4.31	11.07	
.34	3.51	10.13	8.58	9.66	3.38	1.63	.....	.08	4.62	10.13	3
.53	2.47	11.64	8.64	10.93	2.65	.35	.18	.18	4.94	8.64	
.15	6.77	9.82	8.17	16.10	2.75	6.45	.16	.16	5.65	9.25	4-11
1.17	6.94	9.44	7.57	14.83	3.03	4.26	2.29	1.14	4.16	12.93	
.26	4.04	6.52	5.81	8.74	2.02	1.11	.07	.13	3.39	5.54	12, 13
.19	4.68	3.75	7.30	7.12	1.31	.19	.....	.....	4.68	8.05	
.....	.44	6.67	7.11	13.33	.89	.....	.....	.44	3.12	6.23	14
.....	2.25	5.62	7.86	6.74	.....	.....	.....	.....	2.25	14.61	
.29	5.19	6.92	16.43	17.58	5.48	6.34	.29	1.15	1.15	22.47	15
.....	5.96	6.81	14.47	16.17	3.83	5.11	.42	.....	3.40	25.96	
.....	2.26	8.71	13.87	18.06	6.77	4.84	.....	1.94	2.58	10.97	16
.....	1.80	9.04	18.67	13.86	4.82	1.81	.60	.60	1.20	15.67	
.15	1.35	15.54	7.98	12.07	14.09	15.43	.47	2.58	2.38	5.12	17
.37	1.66	18.16	9.49	10.14	13.55	12.63	.55	2.67	3.22	4.70	
2.11	14.47	7.80	11.63	15.90	5.94	5.35	.20	.93	3.19	9.02	18
4.57	15.59	7.05	11.62	14.50	7.25	5.36	.50	.89	2.68	8.14	
.....	8.05	15.40	18.62	16.55	8.05	6.67	.45	.....	5.98	12.41	19
.....	5.03	20.11	23.46	9.50	7.82	3.35	.....	.56	6.14	16.76	
.....	1.44	4.64	7.86	10.36	2.14	.70	.....	.70	2.86	6.79	20
.....	.49	6.44	7.92	12.38	3.47	.49	.....	.....	3.96	2.97	
.....	4.31	7.53	17.20	11.83	2.15	2.15	.....	1.07	2.15	3.22	27
.....	2.94	2.94	10.30	5.88	2.94	.....	.....	.....	1.47	7.35	
.....	3.10	5.88	11.43	9.64	2.96	.84	.....	.54	1.97	5.91	20-27
.04	2.80	4.60	9.48	9.62	2.67	.54	.....	.54	2.12	4.30	

¹Including blacksmithing, etc.

TABLE 11.—CAUSES OF ACCIDENTS: PER CENT OF PERSONS KILLED OR INJURED AND BY INDUS

Asso- cia- tion num- ber.	Industry, etc.	Per cent of persons killed or injured by—					
		(I.) Motors, engines, etc. (prime mov- ers).	(II.) Trans- mis- sion appa- ra- tus.	(III.) Work- ing ma- chin- ery.	(IV.) Eleva- tors, hoists, etc.	(V.) Steam boilers, etc.	(VI.) Electric cur- rents.
B. GROUPS OF ASSOCIATIONS—continued.							
28	Paper making:						
	1907.....(793 cases).....	0.63	6.31	39.09	4.03	0.63	0.25
	1897.....(592 cases).....	2.20	8.61	43.75	4.39	1.86	.....
29	Paper products:						
	1907.....(500 cases).....	.40	1.20	67.80	1.60	.40	.....
	1897.....(271 cases).....	1.85	1.48	70.11	1.84	.....	.....
30	Leather:						
	1907.....(537 cases).....	.74	2.78	37.24	2.25	.75	.....
	1897.....(292 cases).....	2.05	2.05	26.03	1.03	2.74	.....
31-34	Woodworking:						
	1907.....(5,280 cases).....	.55	1.76	55.61	1.21	.08	.....
	1897.....(2,868 cases).....	.84	2.09	54.08	1.29	.35	.....
35	Flour milling:						
	1907.....(1,027 cases).....	1.56	10.03	23.76	7.98	.19	.....
	1897.....(1,007 cases).....	2.43	11.22	26.52	6.45	.50	.....
36	Food products:						
	1907.....(789 cases).....	1.39	1.14	27.38	2.92	.75	.....
	1897.....(340 cases).....	2.06	1.76	32.94	4.71	.29	.....
37	Sugar:						
	1907.....(508 cases).....	1.38	3.94	13.77	9.45	.39	.....
	1897.....(509 cases).....	2.75	4.13	11.00	8.45	1.37	.40
38	Dairying, distilling, and starch:						
	1907.....(409 cases).....	2.20	4.89	11.73	3.18	1.22	.24
	1897.....(360 cases).....	2.22	2.78	13.33	3.61	2.50	.....
39	Brewing and malting:						
	1907.....(1,608 cases).....	1.24	2.05	4.61	3.92	.44	.06
	1897.....(1,142 cases).....	1.22	2.89	4.73	6.57	.35	.....
40	Tobacco:						
	1907.....(81 cases).....	1.23	1.23	33.35	1.23	.....	.....
	1897.....(57 cases).....	1.75	.....	28.07	3.51	1.75	.....
41	Clothing:						
	1907.....(676 cases).....	.89	1.78	61.83	1.92	.59	.15
	1897.....(295 cases).....	2.37	3.05	58.65	.68	1.35	.....
42	Chimney sweeping:						
	1907.....(34 cases).....	.....	.....	.....	.....	.....	.....
	1897.....(38 cases).....	.....	.....	.....	.....	.....	.....
43-54	Building trades (not including institutes):						
	1907.....(11,031 cases).....	.21	.36	7.41	3.06	.07	.11
	1897.....(7,930 cases).....	.25	.45	5.72	3.03	.05	.01
55	Printing and publishing:						
	1907.....(428 cases).....	.93	.....	56.07	.48	.....	.....
	1897.....(252 cases).....	1.59	1.19	72.22	1.19	.....	.....
56	Private railways:						
	1907.....(168 cases).....	.60	.....	2.98	1.78	.....	.....
	1897.....(125 cases).....	.....	.....	1.60	3.20	.....	.....
57	Street and small railroads:						
	1907.....(485 cases).....	.....	.....	3.92	1.44	.21	2.47
	1897.....(168 cases).....	.59	.....	2.98	1.19	.....	1.19
58	Express and storage:						
	1907.....(3,932 cases).....	.13	.13	3.08	9.45	.05	.....
	1897.....(1,426 cases).....	.35	.21	1.61	12.84	.07	.....
59	Livery, drayage, cartage, etc.:						
	1907.....(2,500 cases).....	.....	.....	1.08	1.00	.....	.04
	1897.....(1,242 cases).....	.16	.....	.41	1.93	.....	.....
60-62	Inland navigation:						
	1907.....(753 cases).....	2.26	.27	.27	13.27	.80	.....
	1897.....(527 cases).....	2.66	.19	.76	9.67	.38	.....
63	Marine navigation (not including institute):						
	1907.....(459 cases).....	8.28	.22	1.96	13.29	.22	.....
	1897.....(397 cases).....	5.54	.....	1.51	7.31	.76	.....
64	Engineering, excavating, etc. (not including institute):						
	1907.....(2,143 cases).....	.37	.20	2.00	3.59	.05	.....
	1897.....(1,226 cases).....	.165	.165	1.55	1.71	.33	.08
65	Meat products:						
	1907.....(1,120 cases).....	.54	.18	19.64	.53	.09	.....
	1897.....(329 cases).....	.31	1.82	26.44	2.13	.....	.....

BY ACCIDENTS COMPENSATED FOR THE FIRST TIME, 1907 AND 1897, BY CAUSES TRIED—Continued.

Per cent of persons killed or injured by—											Asso- cia- tion num- ber.
(VII.) Explosives.	(VIII.) Inflam- mable, hot, or corrosive sub- stances.	(IX.) Collapse, fall, etc., of ob- jects.	(X.) Falls, falls from stairs, ladders, etc.	(XI.) Loading, unload- ing, etc.	(XII.) Team- ing, dray- age, etc.	(XIII.) Opera- tion of rail- ways.	(XIV.) Ship- ping and water trans- porta- tion.	(XV.) Anim- als (bite, kick, push, etc.).	(XVI.) Tools, hand appara- tus, etc.	(XVII.) Mis- cella- neous.	
.....	3.15	7.19	9.33	13.75	4.67	2.40	0.37	0.13	3.28	4.79	28
.....	2.20	5.58	5.74	11.99	4.05	1.86	.....	.34	2.87	4.56	28
.....	.80	5.80	6.80	6.20	3.00	.20	.....	.60	2.80	2.40	29
.....	2.21	1.84	3.32	11.81	.74	.37	.....	.74	1.11	2.58	29
.....	8.95	6.52	16.57	9.68	2.42	.56	.....	.56	5.21	5.77	30
.....	7.88	5.14	13.01	18.15	6.51	.69	.....	.34	8.90	5.48	30
0.02	.76	7.25	6.21	11.52	4.87	1.44	.09	.68	3.58	4.37	31-34
.10	.59	6.59	5.47	13.68	5.16	1.26	.28	.73	3.10	4.39	31-34
.10	.49	6.43	8.18	14.70	13.92	2.43	.....	3.70	2.53	4.00	35
.10	.50	3.97	7.94	16.98	13.01	.69	.20	1.89	2.78	4.77	35
.....	3.80	7.10	15.34	12.55	8.37	.63	.12	3.30	3.30	11.91	36
.....	6.76	5.59	12.65	10.59	6.47	.59	.29	1.47	2.06	11.77	36
.....	4.92	11.81	14.17	12.40	4.13	13.78	.....	.39	3.35	6.12	37
.....	6.88	12.18	12.18	13.55	2.95	14.14	.....	.79	3.93	5.30	37
.49	4.40	8.07	15.16	17.36	15.16	3.67	.49	3.42	2.94	5.38	38
.....	5.28	4.72	16.95	21.94	13.89	1.11	.....	2.50	3.06	6.11	38
.....	2.92	7.96	16.04	24.88	20.02	1.24	.....	5.04	1.37	8.21	39
.....	3.06	9.90	14.89	26.71	18.83	.96	.....	2.54	1.31	6.04	39
.....	1.23	3.69	17.28	14.82	6.17	.....	.....	1.25	6.17	12.35	40
.....	1.75	3.51	19.30	26.32	5.26	.....	.....	1.76	3.51	3.51	40
.....	2.23	3.70	7.40	5.48	3.96	.15	.....	.30	2.96	6.66	41
.....	4.07	3.73	8.14	6.78	1.35	.....	.34	.....	3.73	5.76	41
.....	8.82	44.12	38.24	2.94	5.88	.....	.....	.....	.....	.....	42
.....	7.89	28.95	44.74	2.63	.....	.....	.....	.....	.....	15.79	42
.28	2.65	27.01	23.82	14.72	5.92	2.04	.11	.58	4.07	7.58	43-54
.25	2.76	28.65	26.23	14.44	4.88	1.27	.21	.38	4.06	7.36	43-54
.....	1.87	3.27	18.46	5.61	5.14	.70	.....	1.17	.93	5.14	55
.....	1.19	2.78	9.92	3.18	1.98	.....	.....	.79	1.19	2.78	55
.....	3.57	3.57	11.31	9.52	2.98	56.54	.....	.....	.60	6.55	56
1.60	.....	3.20	7.20	12.00	2.40	59.20	.....	.....	4.00	5.60	56
.....	1.44	5.57	12.78	11.55	4.54	45.36	.....	.82	2.89	7.01	57
.....	1.19	4.17	10.71	7.14	7.74	47.02	.60	9.52	1.79	4.17	57
.08	.99	10.27	11.78	28.69	18.16	3.31	1.98	4.17	1.96	5.77	58
.07	1.54	11.85	9.68	28.05	17.95	3.86	2.32	1.89	1.33	6.38	58
.08	.86	2.52	4.56	20.72	49.76	3.04	.08	14.28	.68	1.80	59
.08	.82	4.91	3.70	16.10	57.25	2.81	.08	8.62	1.13	2.50	59
.....	1.20	4.12	11.16	10.76	1.72	1.32	46.22	.26	2.25	4.12	60-62
.19	.76	6.26	9.49	14.04	1.33	1.71	47.63	.....	1.13	3.80	60-62
.....	1.52	5.23	12.85	3.27	.22	.....	43.57	.....	1.96	7.41	63
.....	3.53	4.53	13.35	4.03	.....	.....	51.89	.25	1.76	5.54	63
1.45	.79	18.76	10.27	21.33	4.95	23.61	1.21	.46	3.35	7.61	64
2.37	.49	21.45	7.75	15.58	4.73	28.55	1.30	.57	4.24	8.97	64
.09	2.23	2.68	9.91	6.79	6.61	.54	.....	10.27	34.54	5.36	65
.....	3.65	2.43	6.99	5.78	4.86	.30	.....	6.08	35.56	3.65	65

TABLE 11.—CAUSES OF ACCIDENTS: PER CENT OF PERSONS KILLED OR INJURED AND BY INDUS

Asso- cia- tion num- ber.	Industry, etc.	Per cent of persons killed or injured by—					
		(I.) Motors, engines, etc. (prime mov- ers).	(II.) Trans- mis- sion appa- ratus.	(III.) Work- ing ma- chinery.	(IV.) Eleva- tors, hoists, etc.	(V.) Steam boilers, etc.	(VI.) Electric cur- rents.
	B. GROUPS OF ASSOCIATIONS—concluded.						
66	Blacksmithing, etc.:						
	1907.....(929 cases).....	0.43	0.32	16.36	0.54		
	1897.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
	C. PUBLIC AUTHORITIES.						
	Establishments of the naval administration:						
	1907.....(105 cases).....	.95	1.90	20.00	11.44		
	1897.....(86 cases).....		3.49	8.14	5.81		
	Establishments of the military administration:						
	1907.....(157 cases).....	1.27		20.38	4.46	0.64	
	1897.....(190 cases).....	1.05	.53	22.63	1.05	.53	
	Postal and telegraph administration:						
	1907.....(122 cases).....			1.64			14.75
	1897.....(54 cases).....				1.85		1.85
	Railway administration:						
	1907.....(3,316 cases).....	.06	.09	2.75	2.38	.03	.06
	1897.....(2,233 cases).....	.045	.045	2.55	1.39	.31	
	Dredging, towing, etc.:						
	1907.....(79 cases).....			3.80	10.13		
	1897.....(52 cases).....				11.54		
	Building operations (States and Empire):						
	1907.....(248 cases).....	.80		1.61	5.65		
	1897.....(188 cases).....			2.66	3.19		
	Marine navigation:						
	1907.....(1 case).....						
	1897.....(5 cases).....				20.00		
	Building operations of local governments:						
	1907.....(505 cases).....	.20	.20	1.18	.40		.20
	1897.....(262 cases).....			1.91	.38		

¹ Included in associations 4-11.**PROPORTION OF ACCIDENTS DUE TO THE FAULT OF THE EMPLOYER, OF THE WORKMAN, ETC.**

Table 12 shows the per cent of accidents compensated for the first time in 1907 and in 1897, distributed in the proportion of those due to the fault of the employer, those due to the fault of the workman, and those due to four other specified causes. It is freely admitted that it was no easy task to decide which party was at fault in an accident, and therefore the per cents in the table are subject to some degree of uncertainty. The table does, however, give in a general way reliable information as to the party at fault, and the data as here compiled are regarded, both in Germany and in other countries, as entirely trustworthy. It is necessary to make a few statements in explanation of the terms used at the head of the table in order to clearly define what is meant by the fault in each case.

The accidents due to the fault of the employer include three classes: First, "defective apparatus, arrangements, etc.," includes accidents caused by faults in the plant generally, in the machinery, in poor or inadequate maintenance of the buildings or machinery; the employ-

BY ACCIDENTS COMPENSATED FOR THE FIRST TIME, 1907 AND 1897, BY CAUSES TRIED—Conclud ed.

Per cent of persons killed or injured by—											Asso- cia- tion num- ber
(VII.) Explo- sives.	(VIII.) Inflam- mable, hot, or corrosive sub- stances.	(IX.) Collapse, fall, etc., of ob- jects.	(X.) Falls, falls from stairs, ladders, etc.	(XI.) Loading, unload- ing, etc.	(XII.) Team- ing, dray- age, etc.	(XIII.) Opera- tion of rail- ways.	(XIV.) Ship- ping and water trans- porta- tion.	(XV.) Anim- als (bite, kick, push, etc.).	(XVI.) Tools, hand appa- ratus, etc.	(XVII.) Mis- cella- neous.	
0.97 (1)	6.46 (1)	6.78 (1)	7.53 (1)	7.75 (1)	6.46 (1) (1) (1)	13.99 (1)	15.51 (1)	16.90 (1)	66
2.86 1.16	1.90 3.49	5.72 9.30	12.38 8.14	10.48 30.23	3.81 2.33	1.90 1.16	2.86 1.16	..... .....	8.56 5.82	15.24 19.77
2.55 2.63	2.55 2.10	8.92 14.21	14.01 9.47	19.75 18.95	4.46 4.21	1.27 1.58	..........	......53	7.00 6.32	12.74 14.21
.....	1.64	12.30 25.93	19.67 40.74	9.02 7.41	16.39 12.96	4.10 3.70	..... .....	1.64 1.85	8.20	10.65 3.71
.03 .09	1.36 1.12	5.28 4.97	9.89 7.79	18.85 20.69	1.92 1.70	46.44 46.80	.06 .05	.06 .09	3.20 3.99	7.64 8.37	
.....	1.92	10.13 13.46	13.92 17.31	31.65 17.31	17.72 9.61	5.06 5.77	..... 13.46	..... .....	1.26 3.85	6.33 5.77
.81 3.72	1.21 1.06	8.06 10.64	14.92 11.70	14.52 18.62	8.47 5.32	5.24 2.66	14.52 17.55	.81	7.25 9.58	16.13 13.30	
.....	.....	.....	.....	.....	.....	.....	100.00 80.00	..... .....	..... .....	..... .....
.59 1.53	1.40 .76	12.48 15.27	18.80 12.98	16.24 9.54	16.44 22.14	3.96 1.91	.40	1.98 1.91	6.13 3.43	19.40 28.24	

ment of poor material; imperfect methods of work, especially the instructions given workmen; the use of loosely fastened parts of the plant, such as poor stairways, ladders, etc.; insufficient lighting of the workrooms, failure to remove snow or ice from the working places, etc.; second, "absence of or defective safety appliances" includes the failure to use proper apparatus, such, for instance, as one prescribed by the regulations of the association or one which is customary in the industry; and, third, "absence of or defective regulations, supervision, etc.," includes cases of imperfect management, insufficient number of supervisors, detailing unsuitable, especially youthful, workers for tasks which are beyond their powers or for tasks which are especially dangerous, etc. The term "fault of the employer" includes also the acts of foremen, supervisors, managers, etc.

The accidents due to the fault of the workmen are classified into five groups: First, "lack of skill, inattention, or carelessness," includes accidents due to lack of ordinary skill or lack of ordinary care or caution which may reasonably be expected of a workman and includes the number of accidents which are generally comprised

under the designation of carelessness due to the zeal in work or to lack of forethought or failing to keep in mind the danger of the operations, etc.; in general these accidents are not of great importance, the more serious cases being included in the other classes under "acts contrary to rules, regulations, etc.;" second, "failure to use safety appliances or removal of same" includes instances where the workman has either not used the prescribed apparatus or has not used it in the prescribed manner or has (contrary to regulations) entirely removed it; third, "acts contrary to rules, regulations, etc.," includes cases where the workman consciously disobeys existing rules for the prevention of the accident, rules established by law or official regulations, or rules established by the employer or his representative; fourth, "horseplay, mischief, intoxication, etc.," includes those acts usually understood by these terms; fifth, "unsuitable clothing" includes accidents due to wearing of loose overalls, fluttering aprons, neckcloths, ribbons, unsuitable footgear, having the hair arranged in high coiffures, etc.

The third group includes accidents due to the fault of the employer and of the workman at the same time and includes cases where accidents would have been included in those due to some of the causes already mentioned.

The fourth group includes accidents caused by fellow workmen or by a third party, but not including the employer.

The fifth group includes accidents in which no one was at fault; it especially includes accidents due to the general hazard of the industry, such as in case where, according to the present development of protective appliances and by the use of all reasonable supervision, the accident still occurs.

The last group includes accidents due to "other causes" and refers especially to cases where the accident has been caused by an act of God, such as lightning, sudden storm, etc., or due to other unforeseen occurrences or to the workman suddenly becoming ill and the like.

The distribution of the total number of accidents among the various causes shows that 12.06 per cent were due to the fault of the employer, 41.26 per cent to the fault of the workman, and 37.65 per cent to the general hazard of the industry. The most interesting fact presented by the table is the showing that the proportion due to the fault of the employer has decreased; that the proportion due to the general hazard of the industry has also decreased; and that the proportion due to the fault of the workman has increased in 1907 as compared with 1897. The report states that this change in the proportion is due to the introduction of preventive measures, safety appliances, etc.; this is shown especially in the columns marked "defective apparatus, arrangements, etc.," and "the absence of or defective safety appliances." In the accidents due to the fault of the employer, where, in connection with motors, transmission apparatus, working machinery,

elevators, and steam boilers, a marked improvement has occurred. In the accidents due to the fault of the workman 28.96 per cent were caused by lack of skill, inattention, or carelessness, this being the highest percentage in any cause save general hazard of the industry; in 1897 this group included 20.85 per cent of the total number of accidents and its increase to 28.96 per cent is responsible for the principal part of the increase in the percentage of accidents due to the fault of the workman. In distributing the accidents among the apparatus, etc., causing the injury, there are a few cases where the fault of the workman is conspicuous; thus of the accidents caused by motors, engines, etc., 69.94 per cent were due to the fault of the workman; of the accidents caused by transmission apparatus, 67.54 per cent were due to the fault of the workman; of the accidents caused by the operation of railways, 57.79 per cent were due to the fault of the workman. The report calls special attention to the fact that in discussing accidents due to the fault of the workman emphasis must be placed on the fact that in very few cases could a serious fault or gross negligence be charged against the workman; by far the greatest number of accidents due to the workman's fault were caused by awkwardness, slight carelessness, and lack of caution, which are due to a greater or less degree to the natural weakness of ordinary human beings and in many cases should rather be considered as unavoidable. Of the accidents due to the fault of the employer the highest proportion is found among those caused by steam boilers, etc., in which 32.89 per cent were credited to the fault of the employer; of the accidents due to collapse, fall, etc., of substances, 21.58 per cent were due to the fault of the employer.

The report also urges that in developing systems of preventive measures attention should be paid to the fact that no human being can be expected to continually keep in mind the fact that certain dangers are present in his occupation. Of the accidents due to the general hazard of the industry, the cause showing the highest proportion was that of animals (bite, kick, push, etc.), where 89.15 per cent originated in this manner; loading, unloading, etc., had 52.10 per cent; inflammable, hot, or corrosive substances had 50.51 per cent; shipping and water transportation had 50.06 per cent, while the lowest proportion was shown by transmission apparatus, which had 7.06 per cent due to this cause. In 9 of the 17 classes of causes of injuries there is a decrease in the proportion due to the hazard of industry, while in 7 of the others there is an increase in the proportion, and 1 was not reported in 1897; in some cases this increase is quite marked, as, for instance, steam boilers had but 16.03 per cent in 1897 and 30.20 per cent in 1907 due to the general hazard of the industry. Many of these instances have also a sharp decrease in the proportion of accidents due to the fault of the employer; thus accidents caused by steam boilers, etc., had 64.89 per cent due to the fault of the employer in 1897 and 32.89 per cent in 1907.

TABLE 12.—FAULT OF THE EMPLOYER, OF THE WORKMEN, ETC.: PER CENT OF ACCIDENTS OF INJURY,

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910,

Apparatus, etc., causing the injury. ¹	Per cent of persons killed or injured to whom compensation was paid for the first time for whom reports were obtained.	Per cent of accidents due to—			
		Fault of employer.			Total.
		Defective apparatus, arrangements, etc.	Absence of or defective safety appliances.	Absence of or defective regulations, supervision, etc.	
Grand total:					
1907.....(81,248 cases) ..	99.13	5.40	4.69	1.97	12.06
1897.....	97.66	7.15	7.82	1.84	16.81
Accidents caused by machinery:					
1907.....(19,803 cases) ..	99.56	5.42	12.00	1.55	18.97
1897.....	98.16	6.96	16.32	2.34	25.62
Accidents due to causes other than machinery:					
1907.....(61,445 cases) ..	98.99	5.39	2.32	2.11	9.82
1897.....	97.50	7.21	5.00	1.68	13.89
CAUSES.					
I. Motors, engines, etc. (prime movers):					
1907.....(517 cases) ..	98.45	4.71	5.11	1.18	11.00
1897.....	97.03	5.43	9.43	2.83	17.69
II. Transmission apparatus:					
1907.....(972 cases) ..	97.63	6.01	9.38	3.16	18.55
1897.....	98.18	7.55	13.96	4.70	26.21
III. Working machinery:					
1907.....(14,217 cases) ..	99.81	3.13	14.68	1.25	19.06
1897.....	98.51	3.18	19.66	2.21	25.05
IV. Elevators, hoists, etc.:					
1907.....(4,097 cases) ..	99.24	13.35	4.13	2.26	19.74
1897.....	97.09	20.79	6.31	1.94	29.04
V. Steam boilers, etc.:					
1907.....(149 cases) ..	100.00	22.15	6.04	4.70	32.89
1897.....	89.73	38.93	19.09	6.87	64.89
VI. Electric currents:					
1907.....(184 cases) ..	94.57	11.49	3.45	4.02	18.96
1897.....	(²)	(²)	(²)	(²)	(²)
VII. Explosives:					
1907.....(516 cases) ..	96.32	4.63	.40	7.85	12.88
1897.....	72.44	7.55	.94	8.49	16.98
VIII. Inflammable, hot, or corrosive substances:					
1907.....(2,868 cases) ..	99.27	5.34	2.60	2.28	10.22
1897.....	94.68	7.81	7.13	6.72	21.66
IX. Collapse, fall, etc., of objects:					
1907.....(12,249 cases) ..	99.83	12.04	4.27	5.27	21.58
1897.....	98.69	17.40	5.36	2.60	25.36
X. Falls, falls from stairs, ladders, etc.:					
1907.....(9,178 cases) ..	98.02	4.84	4.78	.81	10.43
1897.....	96.45	4.58	7.91	.97	13.46
XI. Loading, unloading, etc.:					
1907.....(11,392 cases) ..	99.91	2.22	.33	2.11	4.66
1897.....	99.46	2.72	.81	.84	4.37
XII. Teaming, drayage, etc.:					
1907.....(5,387 cases) ..	97.98	4.79	.51	.95	6.25
1897.....	96.82	4.41	1.63	.63	6.67
XIII. Operation of railways:					
1907.....(7,886 cases) ..	98.38	5.48	.54	1.37	7.39
1897.....	98.20	7.21	.85	1.83	9.89
XIV. Shipping and water transportation:					
1907.....(862 cases) ..	89.44	5.58	.39	.91	6.88
1897.....	81.72	7.78	1.56	2.53	11.87
XV. Animals (bite, kick, push, etc.):					
1907.....(1,332 cases) ..	99.62	.60	.30	.38	1.28
1897.....	98.80	.24	.....	.73	.97
XVI. Tools, hand apparatus, etc.:					
1907.....(3,338 cases) ..	99.97	1.50	.57	.24	2.31
1897.....	99.70	1.83	.12	.31	2.26
XVII. Miscellaneous:					
1907.....(6,104 cases) ..	99.66	1.87	3.86	.48	6.21
1897.....	99.05	1.20	16.17	.63	18.00

¹ Number of cases in 1897 not reported.

DENTS DUE TO FAULT OF EMPLOYER, OF WORKMAN, ETC., CLASSIFIED BY CAUSES 1907 AND 1897.

I Beiheft, II Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 384, 385.]

Per cent of accidents due to—										
Fault of the workman.						Total.	Fault of both employer and workman.	Fault of fellow workman or third party.	General hazard of the industry.	Other causes (chance, act of God, etc.).
Lack of skill, inattention, or carelessness.	Failure to use safety appliances or removal of same.	Acts contrary to rules, regulations, etc.	Horse-play, mischief, intoxication, etc.	Unsuitable clothing.						
28.96	2.22	9.48	0.55	0.05	41.26	0.91	5.94	37.65	2.18	
20.85	1.92	5.44	1.19	.49	29.89	4.66	5.28	42.05	1.81	
28.75	4.61	18.04	.67	.14	52.21	2.01	3.93	22.57	.31	
25.58	3.23	13.29	1.60	.88	44.58	9.52	3.97	16.04	.27	
29.03	1.44	6.70	.51	.03	37.71	.56	6.59	42.53	2.79	
19.29	1.48	2.84	1.05	.36	25.02	3.05	5.72	50.66	1.66	
43.02	1.18	25.15	.39	.20	69.94	1.18	2.16	14.74	.98	
34.90	.24	17.22	2.12	.47	54.95	9.20	1.89	16.04	.23	
18.86	2.42	43.62	2.00	.64	67.54	4.53	2.11	7.06	.21	
18.38	2.85	25.64	2.99	5.55	55.41	11.97	1.71	4.56	.14	
27.76	5.78	17.36	.60	.15	51.65	1.85	2.22	24.99	.23	
26.07	3.93	13.34	1.40	.69	45.43	9.14	2.83	17.30	.25	
32.73	1.48	13.55	.62	-----	48.38	2.09	10.53	18.74	.52	
24.30	1.38	8.35	1.80	.18	36.01	10.19	9.22	15.17	.37	
11.41	1.34	14.09	1.35	-----	28.19	2.01	4.70	30.20	2.01	
7.64	.76	1.53	3.05	-----	12.98	.76	5.34	16.03	-----	
24.14	1.72	21.85	1.72	-----	49.43	.57	6.90	18.39	5.75	
(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
11.67	.80	26.16	3.22	-----	41.85	3.42	7.24	32.80	1.81	
8.80	.63	25.16	9.12	-----	43.71	5.97	8.81	24.53	-----	
17.00	3.16	10.19	1.02	.24	31.61	.49	4.85	50.51	2.32	
10.42	3.91	5.00	2.05	1.99	23.37	5.21	4.39	44.07	1.30	
19.85	.47	5.05	.21	-----	25.58	1.41	7.26	42.20	1.97	
12.04	.34	3.21	.35	.01	15.95	4.90	7.25	45.36	1.18	
45.33	1.10	2.97	1.00	.03	50.43	.49	2.23	30.48	5.94	
18.62	1.22	1.18	1.70	.78	23.50	3.75	1.51	54.14	3.64	
30.92	.05	2.71	.10	.02	33.80	.17	7.49	52.10	1.78	
26.23	.26	.51	.14	.30	27.44	1.29	5.71	60.65	.54	
24.46	.09	8.90	.99	-----	34.44	.28	8.62	47.36	3.05	
21.07	.49	4.59	2.19	.28	28.62	2.12	5.50	56.46	.68	
38.75	.68	18.04	.32	-----	57.79	.50	9.65	23.41	1.26	
34.76	.51	8.48	1.47	.20	45.42	4.86	9.78	29.06	.99	
20.88	.65	1.95	1.03	-----	24.51	-----	4.41	50.06	14.14	
22.37	.19	1.17	1.56	-----	25.29	.97	2.53	43.00	16.34	
3.24	-----	2.18	.53	-----	5.95	-----	1.81	89.15	1.81	
4.84	-----	.97	.73	-----	6.54	.48	.73	91.04	.24	
34.58	1.86	4.26	.18	-----	40.88	.09	12.80	43.54	.38	
35.07	.12	.18	.43	.18	35.98	.55	12.89	47.89	.43	
22.65	8.07	5.75	.54	.03	37.05	.20	3.07	49.73	3.74	
6.21	8.18	.49	.93	.36	16.17	.79	2.84	60.01	2.19	

² Not reported.

RESULT OF THE INJURIES.

Table 13 shows the result of the injury, or rather the condition of the injured person, expressed in terms of loss of earning power. To bring out the condition of the injured person in the years immediately following the granting of the pension the table shows what his loss of earning power is during the first, the second, the third, and the fourth year after the granting of the pension.

In the total for all industrial accident associations (not including institutes), 65,205 injured persons were given pensions for industrial accidents in 1904; during the year 1905, 7.63 per cent had died as the result of the accident, and in the year 1908 this proportion had increased to 8.06 per cent.

Of the 65,205 injured persons given pensions in 1904, 0.93 per cent were rated as sustaining total permanent disability in 1905, and in 1908 this proportion had been reduced to 0.81 per cent.

Of the 65,205 injured persons granted pensions in 1904, 44.27 per cent were rated as having sustained an injury causing partial permanent disability in 1905, and in 1908 this proportion had been reduced to 37.40 per cent. Of the pensioners composing this 37.40 per cent, 24.17 per cent had sustained a loss of earning power of under 25 per cent, 9.27 per cent had sustained a loss of earning power of 25 to 50 per cent, 3.01 per cent a loss of earning power of 50 to 75 per cent, and 0.95 per cent a loss of earning power of 75 to 100 per cent; in each case there is a decrease in the proportion of those sustaining the various degrees of loss of earning power during the four years 1905 to 1908.

Of the 65,205 injured persons who were granted pensions in 1904, 47.17 per cent were rated in 1905 as having sustained temporary disability, and in 1908 this proportion had been increased to 53.73 per cent; in 1905, 22.59 per cent were no longer disabled and in 1908 44.37 per cent were no longer disabled; in 1905, 19.67 per cent had sustained a loss of earning power of less than 25 per cent and in 1908, 8.15 per cent had sustained this loss of earning power; in 1905, 3.93 per cent were rated as having sustained a loss of earning power of 25 to 50 per cent, and in 1908 this proportion had been reduced to 0.98 per cent; in 1905, 0.50 per cent were rated as having sustained a loss of earning power of 50 to 75 per cent, and in 1908 this proportion had been reduced to 0.12 per cent; in 1905, 0.48 per cent were rated as having sustained a loss of earning power of 75 to 100 per cent, and in 1908 this had been reduced to 0.11 per cent. Approximately 44 per cent of the persons granted pensions in 1904 had therefore entirely recovered at the end of the year 1908.

A comparison of the improvement in the character of the disability sustained by the pensioners of 1896 with the pensioners of 1904 shows

a marked decrease in the proportion of deaths, of total permanent disablements, and of partial permanent disablements; the proportion of those entirely recovering their earning power in the second of these two periods is much greater than was the case in the first. Part of this improvement just mentioned is of course due to the inclusion of a larger number of temporary disablements among those granted compensation in the later of the two periods; part of it must also be regarded as due to the elaborate medical and other treatment provided by the accident associations in their effort to restore the earning power of those injured by accident in the course of their employment.

Taking up first the accidents resulting in death, the marine-navigation industry (association 63) had 418 persons granted pensions in 1904; of this number 22.49 per cent died in the course of the year 1905, and there were no additional deaths during the following three years. The fatal-accident rate of this association is similar to that of the inland navigation associations (60-62), which, in 1904, had 756 persons granted pensions; of this number 21.30 per cent died during the course of the year 1905, and this proportion had increased to 22.35 per cent in the year 1908. The industry group private railways (association 56) had 135 persons granted pensions in the year 1904; of this number 18.52 per cent died in the course of the year 1905, and during the period 1905 to 1908 increased to 20 per cent. The chimney-sweeping industry (association 42) had 29 persons granted pensions in the year 1904; of this number 13.79 per cent died in the course of the year 1905, and there were no additional deaths during the period. The industry of livery, drayage, cartage, etc. (association 59), had 1,835 persons granted pensions in the year 1904; of this number 12.15 per cent died in the course of the year 1905 and 12.59 per cent in the course of the four-year period ending with 1908. The five industry groups mentioned had the highest fatal-accident rates of those included in the table.

Taking up the cases of total permanent disability the industry group with the highest rate is that of chimney sweeping (association 42). In 1904 this industry had 29 persons granted pensions on account of industrial accidents, and of this number 3.45 per cent were rated as having sustained total permanent disability in 1905; in 1908 this proportion had been increased to 6.90 per cent. The industry group with the second highest proportion of total permanent disablement is that of street and small railways (association 57); this group had 406 persons granted pensions in the year 1904, and of this number 4.68 per cent had sustained injuries causing total permanent disability, and during the period this proportion had been reduced to 4.44 per cent. The industry group with the third highest proportion

of total permanent disablement is that of private railways (association 56), which had 135 persons granted pensions in the year 1904; of this number 2.22 per cent were rated as having sustained total permanent disability in 1905, and this proportion had increased during the period to 4.44 per cent. The industry group with the fourth highest proportion of total permanent disablement is that of pottery (association 16) which had 272 persons granted pensions in the year 1904; of this number 1.47 per cent were rated as having sustained total permanent disability in the year 1905, and in the year 1908 this proportion had increased to 1.84 per cent. The industry group with the fifth highest proportion of total permanent disablement is that of engineering, excavating, etc. (association 64), which had 2,001 persons granted pensions in the year 1904; of this number 1.30 per cent were rated as having sustained total permanent disablement in the year 1905, and in 1908 this proportion had been increased to 1.55.

The industry group with the highest proportion of partial permanent disablement is that of metal working (associations 12, 13), which in 1904 had 1,116 persons granted pensions; of this number 79.30 per cent were rated in 1905 as having sustained partial permanent disability, and in the year 1908 this proportion had been reduced to 69.44 per cent. This 69.44 per cent was composed of 57.70 per cent who had sustained a loss of earning power of less than 25 per cent, 9.05 per cent with a loss of earning power of 25 to 50 per cent, 2.15 per cent with a loss of earning power of 50 to 75 per cent, and 0.54 per cent with a loss of earning power of 75 to 100 per cent. The industry group with the second highest proportion of partial permanent disablement is that of paper products (association 29), which in 1904 had 398 persons granted pensions; of this number 54.27 per cent were rated as having sustained partial permanent disablement in the year 1905, and this proportion increased in the years 1906 and 1907, but in the year 1908 was also 54.27 per cent; this 54.27 per cent was composed of 40.20 per cent who had sustained a loss of earning power of less than 25 per cent, 9.80 per cent with 25 to 50 per cent loss of earning power, 3.01 per cent with a loss of earning power of 50 to 75 per cent, and 1.26 per cent with a loss of earning power of 75 to 100 per cent. The industry group with the third highest proportion of partial permanent disablement is that of clothing (association 41), which in 1904 had 640 persons granted pensions; of this number 72.97 per cent were rated in the year 1905 as having sustained partial disablement, and in the year 1908 this proportion had been reduced to 54.22 per cent; this 54.22 per cent is composed of 35.47 per cent who had sustained a loss of earning power of less than 25 per cent, 11.09 per cent with a loss of earning power of 25 to 50 per cent, 5.16 per cent with a loss of

earning power of 50 to 75 per cent, and 2.50 per cent with a loss of earning power of 75 to 100 per cent. The industry group with the fourth highest proportion of partial permanent disablement is that of linen (association 20), which in 1904 had 242 persons granted pensions; of this number 49.17 per cent were rated in 1905 as having sustained partial permanent disablement, and in 1908 this proportion had been increased to 54.13 per cent; this 54.13 per cent was composed of 33.88 per cent with a loss of earning power of less than 25 per cent, 13.22 per cent with a loss of earning power of 25 to 50 per cent, 6.20 per cent with a loss of earning power of 50 to 75 per cent, and 0.83 per cent with a loss of earning power of 75 to 100 per cent. The industry group with the fifth highest proportion of partial permanent disablement is that of leather (association 30) which in 1904 had 455 persons granted pensions; of this number 65.28 per cent were rated in 1905 as having sustained partial permanent disablement, and in 1908 this proportion had been reduced to 52.75 per cent; this 52.75 per cent was composed of 32.75 per cent who had sustained a loss of earning power of less than 25 per cent, 13.63 per cent with a loss of earning power of 25 to 50 per cent, 4.83 per cent with a loss of earning power of 50 to 75 per cent, and 1.54 per cent with a loss of earning power of 75 to 100 per cent. This industry group of leather shows a marked decrease in the proportion of those rated as having sustained a loss of earning power of 75 to 100 per cent in the four years included in the table.

The industry group with the highest proportion of those sustaining temporary disablement is that of blacksmithing, etc. (association 66), which in 1904 had 1,283 persons granted pensions; of this number 81.84 per cent were rated as having sustained temporary disability in 1905, and in 1908 this percentage had been changed to 79.27 per cent; this 79.27 per cent, however, is composed of 63.68 per cent who had sustained no loss of earning power (in other words, who had entirely recovered during the following year) together with 14.19 per cent with a loss of earning power of under 25 per cent, 1.09 per cent with a loss of earning power of 25 to 50 per cent, 0.08 per cent with a loss of earning power of 50 to 75 per cent, and 0.23 per cent with a loss of earning power of 75 to 100 per cent. The four other groups with the highest proportions of temporary disablements are those of meat products (association 65), brick and tile making (association 17), livery, drayage, cartage, etc. (association 59), and silk (association 27). In each of these groups practically the same distribution of disabilities is found; there is a high proportion of persons sustaining no loss of earning power (that is, who have entirely recovered) at the end of the fifth year, and of those who have sustained the various degrees of loss of earning power the greatest number are contained in the group of slight disabilities.

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS.

Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft. III Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 5 to 153.]

INDUSTRIAL ACCIDENT ASSOCIATIONS.¹

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.					
			With loss of earning power of—				Total.	With loss of earning power of—					Total.
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.		No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	
1896.													
38,538 cases:													
1897.....	10.48	1.54	31.08	14.34	5.18	1.95	52.55	20.32	11.18	2.59	0.43	0.41	35.43
1898.....	10.74	1.37	30.80	13.07	4.70	1.29	49.86	23.37	7.82	1.43	.21	.20	38.03
1899.....	10.89	1.46	30.77	12.46	4.42	.98	48.63	32.68	5.32	.78	.08	.16	39.02
1900.....	11.02	1.48	30.34	12.12	4.33	.90	47.69	35.09	3.98	.56	.06	.12	39.81
1904.													
65,205 cases:													
1905.....	7.63	.93	25.90	12.74	3.80	1.83	44.27	22.59	19.67	3.93	.50	.48	47.17
1906.....	7.81	.80	25.38	10.97	3.48	1.29	41.12	33.59	14.14	2.14	.23	.17	50.27
1907.....	7.96	.78	24.60	10.07	3.18	1.15	39.00	39.97	10.59	1.39	.16	.15	52.26
1908.....	8.06	.81	24.17	9.27	3.01	.95	37.40	44.37	8.15	.98	.12	.11	53.73

AGRICULTURAL ACCIDENT ASSOCIATIONS (data for 22 associations).

1896.													
17,537 cases:													
1897.....	6.24	2.18	30.59	18.65	6.09	1.93	57.26	14.58	14.47	4.25	0.67	0.35	34.32
1898.....	6.65	1.44	29.13	17.21	5.17	1.49	53.00	29.33	7.32	1.81	.27	.18	38.91
1899.....	6.82	1.34	28.89	14.03	3.85	1.16	47.93	37.82	4.84	1.04	.17	.04	43.91
1900.....	6.89	1.31	28.15	14.19	3.53	1.08	46.95	41.97	2.35	.37	.13	.08	44.85
1904.													
26,920 cases:													
1905.....	4.87	1.06	25.62	16.02	4.34	2.08	48.06	17.02	21.86	6.12	.68	.33	46.01
1906.....	5.01	.83	25.89	12.28	3.18	1.42	42.77	34.87	13.74	2.28	.40	.10	51.39
1907.....	5.18	.93	25.50	10.78	2.76	1.08	40.12	45.13	6.98	1.33	.23	.10	53.77
1908.....	5.28	.81	25.10	9.88	2.64	1.05	38.67	50.00	4.47	.67	.09	.01	55.24

MINING (association 1).

1896.													
5,385 cases:													
1897.....	118.11	1.36	20.78	12.68	5.03	2.23	40.72	23.34	11.22	4.59	0.48	0.18	39.81
1898.....	18.31	1.54	23.10	12.03	4.72	1.17	41.02	30.19	6.15	2.19	.43	.17	39.13
1899.....	18.49	1.69	25.50	11.74	4.42	.83	42.49	32.74	3.12	1.15	.23	.09	37.33
1900.....	18.63	1.78	25.92	11.85	4.34	.71	42.82	34.11	1.78	.67	.13	.08	36.77
1904.													
9,931 cases:													
1905.....	11.90	.73	19.90	11.35	3.90	1.67	36.82	22.84	21.29	5.66	.32	.44	50.55
1906.....	12.12	.78	21.17	9.98	3.52	1.32	35.99	32.10	15.66	3.13	.15	.07	51.11
1907.....	12.24	.80	22.02	9.16	3.19	1.28	35.65	37.44	11.56	2.11	.11	.09	51.31
1908.....	12.30	.85	22.48	8.51	3.14	1.06	35.19	42.18	7.91	1.45	.08	.04	51.66

¹ Not including institutes.

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

QUARRYING (association 2).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.					
			With loss of earning power of—				Total.	With loss of earning power of—					Total.
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.		No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	
1896.													
1,332 cases:													
1897.....	12.69	1.05	23.35	19.89	5.71	2.40	51.35	23.05	9.61	2.03	0.22	34.91	
1898.....	12.76	1.13	20.79	15.24	6.16	1.35	43.54	30.71	10.51	1.28	.07	42.57	
1899.....	12.99	1.35	20.57	14.79	5.26	.90	41.52	33.86	9.31	.90	.07	44.14	
1900.....	13.14	1.13	19.97	13.59	5.18	1.05	39.79	36.04	8.93	.90	.07	45.94	
1904.													
2,347 cases:													
1905.....	9.72	.85	16.70	13.34	4.43	2.81	37.28	22.37	25.18	3.75	.51	0.34	52.15
1906.....	9.93	.68	15.64	11.80	3.88	2.13	33.45	34.55	18.49	2.39	.30	.21	55.94
1907.....	10.05	.60	15.72	9.97	3.54	1.92	31.15	40.65	15.04	2.09	.21	.21	58.20
1908.....	10.06	.55	14.74	9.54	3.41	1.62	29.31	45.34	12.87	1.53	.17	.17	60.08

FINE MECHANICAL PRODUCTS (association 3).

1896.												
444 cases:												
1897.....	5.40	1.13	63.97	14.64	3.60	0.90	83.11	10.36				10.36
1898.....	5.40	.90	61.04	12.61	2.93	.90	77.43	16.22				16.22
1899.....	5.40	.90	53.34	11.71	2.70	.90	73.65	20.05				20.05
1900.....	5.41	1.35	55.18	11.26	2.48	.45	69.37	23.87				23.87
1904.												
1,081 cases:												
1905.....	3.51	1.39	56.34	14.25	2.59	.92	74.10	21.00				21.00
1906.....	3.79	.93	47.64	11.29	2.41	.92	62.26	33.02				33.02
1907.....	3.79	.74	43.43	9.16	2.50	1.01	56.15	39.32				39.32
1908.....	3.89	.55	40.89	7.86	2.50	1.02	52.27	43.29				43.29

IRON AND STEEL (associations 4-11 and 66).

1896.													
6,065 cases:													
1897.....	6.18	1.07	39.56	15.61	4.24	0.91	60.32	18.55	11.30	1.86	0.36	0.36	32.43
1898.....	6.32	1.09	37.23	14.56	3.91	.67	56.42	26.26	8.52	.91	.15	.33	36.17
1899.....	6.38	1.12	37.35	14.23	4.01	.53	56.12	30.19	5.51	.40	.03	.25	36.38
1900.....	6.49	1.14	34.83	13.27	3.50	.53	52.13	34.90	4.45	.68	.08	.13	40.24
1904.													
12,673 cases:													
1905.....	5.21	1.44	34.39	13.92	3.26	1.17	52.74	22.39	15.32	2.28	.30	.32	40.61
1906.....	5.34	1.01	31.44	11.72	3.11	.89	47.16	32.27	12.59	1.29	.16	.18	46.49
1907.....	5.52	.91	28.85	10.85	2.89	.83	43.42	39.39	9.70	.87	.06	.13	50.15
1908.....	5.60	.88	26.74	10.09	2.75	.72	40.30	44.01	8.52	.53	.07	.09	53.22

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

METAL WORKING (associations 12 and 13).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.					Total.
			With loss of earning power of—					With loss of earning power of—					
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.	No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	
1896.													
488 cases:													
1897.....	2.87	1.43	57.79	13.73	3.89	1.23	76.64	7.17	7.38	0.41	.....	4.10	19.06
1898.....	2.87	.82	52.05	12.91	3.89	1.03	69.88	6.56	15.16	.82	.....	3.89	26.43
1899.....	3.07	.62	53.07	11.89	3.89	.82	69.67	6.56	14.96	.82	.....	4.30	26.64
1900.....	3.28	.62	51.84	10.86	4.10	.41	67.21	8.81	14.75	.82	.....	4.51	28.89
1904.													
1,116 cases:													
1905.....	2.06	1.97	62.99	13.17	2.60	.54	79.30	1.88	12.55	.18	0.09	1.97	16.67
1906.....	2.15	1.34	53.85	11.74	2.51	.63	68.73	10.66	15.15	.09	.....	1.88	27.78
1907.....	2.60	.80	55.11	10.66	2.24	.72	68.73	10.31	15.68	.09	.....	1.79	27.87
1908.....	2.60	.81	57.70	9.05	2.15	.54	69.44	10.66	14.70	.09	.....	1.70	27.15

MUSICAL INSTRUMENTS (association 14).

1896.													
69 cases:													
1897.....	2.90	2.90	44.92	23.19	2.90	.....	71.01	5.80	13.04	2.90	1.45	.....	23.19
1898.....	2.90	.....	36.23	24.64	2.90	.....	63.77	24.64	5.79	1.45	1.45	.....	33.33
1899.....	2.90	1.45	34.78	23.19	2.90	.....	60.87	24.64	7.24	1.45	1.45	.....	34.78
1900.....	2.90	.....	34.78	26.09	2.90	.....	63.77	26.09	5.79	1.45	.....	.....	33.33
1904.													
145 cases:													
1905.....	2.07	.69	34.48	14.48	4.14	4.14	57.24	15.86	22.07	2.07	.....	.....	40.00
1906.....	2.07	1.38	37.93	13.10	2.07	.69	53.79	24.83	17.93	.....	.....	.....	42.76
1907.....	2.07	1.38	36.55	11.03	2.07	.....	49.65	35.17	11.73	.....	.....	.....	46.90
1908.....	2.07	1.38	35.86	9.66	2.07	.....	47.59	42.07	6.89	.....	.....	.....	48.96

GLASS (association 15).

1896.													
206 cases:													
1897.....	6.80	0.97	32.04	13.11	5.82	6.31	57.28	3.40	19.90	9.71	0.48	1.46	34.95
1898.....	6.80	1.46	41.26	18.44	4.37	1.46	65.53	18.93	4.37	1.94	.97	.....	26.21
1899.....	6.79	1.46	27.67	12.13	3.40	1.46	44.66	34.47	9.22	3.40	.....	.....	47.09
1900.....	6.81	2.43	38.35	14.56	3.40	.49	56.80	33.49	.97	.....	.....	.....	34.46
1904.													
343 cases:													
1905.....	5.83	1.17	20.70	16.62	2.92	.87	41.11	15.16	26.82	7.58	.58	1.75	51.89
1906.....	5.54	.29	23.62	11.08	2.33	.58	37.61	37.61	16.33	2.33	.29	.....	56.56
1907.....	5.54	.29	22.45	9.91	1.46	.58	34.40	45.19	11.95	2.63	.....	.....	59.77
1908.....	5.54	.58	21.28	8.75	1.17	.58	31.78	48.40	11.66	2.04	.....	.....	62.10

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

POTTERY (association 16).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.					
			With loss of earning power of—					With loss of earning power of—					
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.	No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.
1896.													
114 cases:													
1897.....	8.77	35.09	14.03	4.39	5.26	58.77	16.67	7.90	4.39	1.75	1.75	32.46	
1898.....	10.53	48.24	10.53	2.63	3.51	61.40	28.07	.....	.....	.....	.....	28.07
1899.....	10.52	0.88	33.33	11.41	2.63	50.88	34.21	2.63	.88	.....	.....	37.72
1900.....	10.53	2.63	35.96	9.65	2.63	51.75	26.32	7.89	.88	.....	.....	35.09
1904.													
272 cases:													
1905.....	4.78	1.47	25.37	19.85	6.25	2.21	53.68	18.01	16.18	4.78	1.10	40.07
1906.....	4.78	1.84	36.51	15.44	4.78	1.84	52.57	23.53	13.97	3.31	40.81
1907.....	4.78	2.20	30.52	12.87	4.41	1.10	48.90	30.88	11.40	1.84	44.12
1908.....	4.78	1.84	30.51	13.24	2.94	1.47	48.16	30.51	12.87	1.84	45.22

BRICK AND TILE MAKING (association 17).

1896.													
938 cases:													
1897.....	10.13	1.28	21.00	15.03	8.21	2.56	46.80	22.28	15.25	3.62	0.21	0.43	41.79
1898.....	10.23	1.17	21.11	13.01	7.25	1.17	42.54	32.62	11.20	2.13	.11	.....	46.06
1899.....	10.23	1.39	20.79	13.64	6.72	.85	42.00	37.53	7.57	1.17	.11	.....	46.38
1900.....	10.24	1.28	23.35	13.22	6.93	.74	44.24	39.34	3.73	1.17	.....	.....	44.24
1904.													
1,673 cases:													
1905.....	9.32	.....	8.43	7.11	4.43	2.21	22.18	27.26	30.07	9.14	1.13	.90	68.50
1906.....	9.44	.....	10.16	6.64	3.89	1.67	22.36	33.89	25.46	7.29	1.08	.48	68.20
1907.....	9.51	.12	11.24	6.75	3.47	1.37	22.53	45.61	16.79	3.94	.90	.30	67.54
1908.....	9.62	.24	12.01	6.81	3.59	1.02	23.43	48.83	13.81	3.29	.54	.24	66.71

CHEMICALS (association 18).

1896.													
898 cases:													
1897.....	10.25	4.12	38.75	16.04	6.01	1.56	62.36	20.15	3.12	.....	.....	.....	23.27
1898.....	10.24	3.12	35.19	15.70	5.01	1.90	57.80	25.05	3.79	.....	.....	.....	28.84
1899.....	10.36	2.34	34.74	14.25	5.12	2.12	56.23	30.40	.67	.....	.....	.....	31.07
1900.....	10.47	2.12	34.19	13.59	5.34	2.00	55.12	32.18	.11	.....	.....	.....	32.29
1904.													
1,535 cases:													
1905.....	7.10	.91	44.76	15.24	5.73	2.02	67.75	22.80	1.44	.....	.....	.....	24.24
1906.....	7.56	.85	37.85	13.29	5.08	1.69	57.91	33.68	.....	.....	.....	.....	33.68
1907.....	7.62	.85	33.75	12.57	4.89	1.43	52.64	38.89	.....	.....	.....	.....	38.89
1908.....	7.88	.78	32.31	11.53	4.37	1.04	49.25	42.09	.....	.....	.....	.....	42.09

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

GAS AND WATER WORKS (association 19).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.					
			With loss of earning power of—					With loss of earning power of—					
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.	No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.
1896.													
178 cases:													
1897.....	12.36	1.68	34.27	20.79	8.99	0.56	64.61	19.66	1.69	.....	.....	21.35
1898.....	12.92	2.25	34.27	17.98	6.18	1.68	60.11	23.60	1.12	.....	.....	24.72
1899.....	14.05	2.81	32.02	15.73	5.06	1.12	53.93	28.65	.56	.....	.....	29.21
1900.....	14.61	2.25	30.90	16.29	5.06	1.68	53.93	29.21	.....	.....	.....	29.21
1904.													
384 cases:													
1905.....	9.38	1.30	17.19	13.80	4.17	3.12	38.28	22.40	25.00	3.38	0.26	51.04
1906.....	9.90	1.04	20.05	13.28	3.39	3.12	39.84	28.13	19.79	1.04	.26	49.22
1907.....	10.16	1.04	26.56	12.50	3.13	2.86	45.05	33.59	9.90	.26	43.75
1908.....	10.42	.78	35.42	11.20	3.38	2.60	52.60	36.20	36.20

LINEN (association 20).

1896.													
168 cases:													
1897.....	2.98	1.19	45.24	17.26	10.12	0.59	73.21	14.29	7.14	0.59	.....	0.60	22.62
1898.....	3.57	1.19	49.40	15.48	8.93	.60	74.41	19.64	.595	.....	.....	.....	20.83
1899.....	3.57	1.19	47.62	15.48	8.33	.59	72.02	21.43	1.79	.....	.....	.....	23.22
1900.....	4.17	.59	48.81	14.88	8.33	.60	72.62	22.62	.....	.....	.....	.....	22.62
1904.													
242 cases:													
1905.....	2.48	.41	24.79	15.29	7.44	1.65	49.17	15.29	29.34	3.31	.....	.....	47.94
1906.....	2.89	.41	26.45	14.46	5.78	2.07	48.76	26.86	20.25	.803	.....	.....	47.94
1907.....	2.89	1.24	31.82	14.46	6.20	.83	53.31	33.06	9.50	.....	.....	.....	42.56
1908.....	2.89	1.24	33.88	13.22	6.20	.83	54.13	36.37	5.37	.....	.....	.....	41.74

SILK (association 27).

1896.													
63 cases:													
1897.....	4.76	.....	55.55	11.11	7.94	.....	74.60	12.70	7.94	.....	.....	.....	20.64
1898.....	4.76	.....	52.38	12.70	6.35	.....	71.43	19.05	4.76	.....	.....	.....	23.81
1899.....	4.76	.....	44.44	12.70	6.35	.....	63.49	25.40	6.35	.....	.....	.....	31.75
1900.....	4.76	.....	47.62	12.70	6.35	.....	66.67	28.57	.....	.....	.....	.....	28.57
1904.													
96 cases:													
1905.....	1.04	.....	31.25	13.54	1.04	.....	45.83	33.34	19.79	.....	.....	.....	53.13
1906.....	1.04	.....	23.96	13.54	1.04	.....	38.54	35.42	19.79	1.04	1.04	3.13	60.42
1907.....	1.04	.....	22.92	14.58	2.08	.....	39.58	41.67	14.59	1.04	.....	2.08	59.38
1908.....	1.04	.....	22.92	10.42	2.08	.....	35.42	47.92	11.46	3.12	.....	1.04	63.54

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

TEXTILES, INCLUDING LINEN AND SILK (associations 20-27).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.					
			With loss of earning power of—				Total.	With loss of earning power of—					
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.		No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.
1896.													
2,166 cases:													
1897.....	4.15	1.62	48.57	14.36	6.93	1.38	71.24	14.54	7.16	0.69	0.09	0.51	22.99
1898.....	4.39	1.43	47.76	13.39	6.79	.97	68.91	21.02	3.79	.46	.....	.....	25.27
1899.....	4.36	1.45	47.12	12.31	6.64	.86	66.93	23.13	3.86	.27	.....	.....	27.26
1900.....	4.41	1.45	46.71	11.58	6.54	.82	65.65	25.03	3.18	.23	.....	.05	28.49
1904.													
2,443 cases:													
1905.....	4.21	.74	33.36	14.69	6.43	1.15	55.63	19.81	18.34	.94	.04	.29	39.42
1906.....	4.50	.74	33.85	13.27	5.73	.94	53.79	27.59	12.61	.49	.08	.20	40.97
1907.....	4.50	.74	33.61	12.44	5.65	.78	52.48	33.16	8.76	.16	.....	.20	42.28
1908.....	4.54	.86	33.81	11.46	5.49	.65	51.41	36.72	6.18	.25	.....	.04	43.19

PAPER MAKING (association 28).

1896.													
496 cases:													
1897.....	10.89	1.81	43.75	15.52	8.47	1.21	68.95	10.08	5.85	1.41	0.61	0.40	18.35
1898.....	10.89	1.21	41.73	13.10	8.47	1.21	64.51	18.15	4.84	.40	.....	.....	23.39
1899.....	10.89	1.21	43.55	12.30	8.06	1.01	64.92	17.74	4.44	.60	.....	.20	22.98
1900.....	10.89	1.41	44.56	12.70	7.66	.81	65.73	20.96	1.01	.....	.....	.....	21.97
1904.													
739 cases:													
1905.....	5.82	1.35	24.76	12.59	5.41	1.90	44.66	21.24	22.87	3.25	.68	.13	48.17
1906.....	5.82	1.49	21.92	10.15	5.14	.95	38.16	33.02	17.18	3.52	.68	.13	54.53
1907.....	5.95	1.35	22.33	10.02	5.68	.54	38.57	43.71	8.39	1.76	.27	.....	54.13
1908.....	6.09	1.35	24.36	10.01	4.76	.54	39.65	47.50	4.06	1.08	.27	.....	52.91

PAPER PRODUCTS (association 29).

1896.													
283 cases:													
1897.....	4.50	1.06	39.22	12.02	5.30	1.41	57.95	22.26	13.43	0.71	.....	.....	36.40
1898.....	4.59	1.06	40.28	12.37	4.95	.71	58.31	27.56	7.77	.71	.....	.....	36.04
1899.....	4.59	1.06	41.70	12.01	5.30	.71	59.72	30.74	3.54	.35	.....	.....	34.63
1900.....	4.59	1.06	40.99	12.37	4.59	1.06	59.01	33.57	1.77	.....	.....	.....	35.34
1904.													
398 cases:													
1905.....	1.51	.25	35.68	11.30	3.77	3.52	54.27	19.85	21.36	2.26	0.25	0.25	43.97
1906.....	1.76	.....	39.95	9.55	3.52	2.26	55.28	28.64	12.31	2.01	.....	.....	42.96
1907.....	1.76	.25	42.71	9.55	3.27	1.76	57.29	35.43	4.02	1.25	.....	.....	40.70
1908.....	2.01	.50	40.20	9.80	3.01	1.26	54.27	41.21	2.01	.....	.....	.....	43.22

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

LEATHER (association 30).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.					
			With loss of earning power of—					With loss of earning power of—					
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.	No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.
1896.													
260 cases:													
1897.....	7.31	1.54	48.08	12.69	10.77	1.15	72.69	8.46	8.08	0.77	.....	1.15	18.46
1898.....	7.31	1.54	44.28	11.54	8.08	1.15	65.00	21.92	2.69	.....	0.39	1.15	26.15
1899.....	7.31	1.54	41.92	10.39	8.08	1.15	61.54	11.92	13.46	1.54	.38	2.31	29.61
1900.....	8.08	1.15	41.54	9.23	8.08	1.15	60.00	26.92	3.08	.77	.....	.....	30.77
1904.													
455 cases:													
1905.....	6.15	2.42	35.17	16.92	5.28	7.91	65.28	4.61	14.07	4.17	.....	3.30	26.15
1906.....	6.37	.44	36.70	15.16	4.84	3.74	60.44	24.84	7.03	.44	.22	.22	32.75
1907.....	6.81	1.32	33.55	14.73	5.05	2.20	55.83	29.89	5.27	.44	.22	.22	36.04
1908.....	7.03	1.10	32.75	13.63	4.83	1.54	52.75	34.07	4.17	.44	.22	.22	39.12

WOODWORKING (associations 31-34).

1896.													
2,727 cases:													
1897.....	4.66	0.66	40.41	15.40	4.88	1.21	61.90	20.57	11.04	0.95	0.11	0.11	32.78
1898.....	4.69	.59	39.57	12.95	4.25	.62	57.39	27.72	8.33	1.06	.22	.....	37.33
1899.....	4.88	.55	41.77	13.24	4.14	.55	59.70	31.32	3.48	.07	.....	.....	34.87
1900.....	4.95	.59	37.95	11.85	3.92	.48	54.20	34.29	5.46	.51	.....	.....	40.26
1904.													
4,479 cases:													
1905.....	3.89	.09	27.48	12.90	3.62	1.14	45.14	24.02	23.33	3.21	.16	.16	50.88
1906.....	3.91	.07	27.01	10.94	2.95	.78	41.68	35.72	16.41	1.99	.15	.07	54.34
1907.....	4.09	.11	26.46	9.56	2.63	.71	39.36	41.86	12.73	1.58	.20	.07	56.44
1908.....	4.11	.11	26.21	8.66	2.53	.69	38.09	45.68	10.36	1.45	.13	.07	57.69

FLOUR MILLING (association 35).

1896.													
949 cases:													
1897.....	10.64	1.27	22.65	14.75	6.01	3.06	46.47	25.92	14.44	1.26	.....	.....	41.62
1898.....	10.85	.74	24.66	14.12	4.74	1.79	45.31	29.40	12.75	.95	.....	.....	43.10
1899.....	11.17	1.37	23.92	13.59	4.85	.53	42.89	34.56	9.90	.11	.....	.....	44.57
1900.....	11.17	1.27	19.28	13.49	8.22	1.79	42.78	37.62	6.95	.21	.....	.....	44.78
1904.													
1,069 cases:													
1905.....	8.08	.37	13.04	15.24	4.50	1.75	34.53	24.06	31.31	1.65	.....	.....	57.02
1906.....	8.26	.28	13.96	13.59	3.77	1.19	32.51	36.91	21.03	1.01	.....	.....	58.95
1907.....	8.45	.27	14.78	11.57	3.31	1.29	30.95	42.88	16.35	1.10	.....	.....	60.33
1908.....	8.63	.28	15.89	9.92	3.30	.55	29.66	49.77	11.39	.27	.....	.....	61.43

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

FOOD PRODUCTS (association 36).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.				Temporary disability.					Total.	
			With loss of earning power of—				Total.	With loss of earning power of—					
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.		No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.		75 to 100 per cent.
1896.													
450 cases:													
1897.....	4.00	2.22	33.78	12.67	3.55	1.78	51.78	32.00	9.78	0.22		42.00	
1898.....	4.00	1.11	34.89	10.44	4.00	1.11	50.44	36.67	7.78			44.45	
1899.....	4.00	.89	31.78	8.89	4.66	1.11	46.44	44.89	3.78			48.67	
1900.....	4.00	.89	32.89	8.89	4.00	1.11	46.89	46.00	2.22			48.22	
1904.													
513 cases:													
1905.....	3.70	.58	33.72	14.43	3.70	2.15	54.00	22.22	18.91	.59		41.72	
1906.....	4.48	.39	30.60	12.48	3.12	1.75	47.95	36.45	10.53	.20		47.18	
1907.....	4.48	.59	28.46	11.30	3.12	1.56	44.44	43.23	7.21			50.49	
1908.....	4.68	.78	29.82	9.94	2.92	.98	43.66	43.93	1.99			50.88	

SUGAR (association 37).

1896.													
509 cases:													
1897.....	10.41	1.37	46.37	15.52	4.91	1.18	67.98	19.06	1.18			20.24	
1898.....	10.41	1.77	41.85	13.36	4.91	1.18	61.30	25.74	.78			26.52	
1899.....	10.41	.39	39.63	13.56	4.52	2.36	60.12	28.88		0.20		29.08	
1900.....	10.41	1.57	34.97	14.15	4.52	.98	54.62	32.81	.59			33.40	
1904.													
481 cases:													
1905.....	8.73	.21	47.82	16.42	3.95	2.91	71.10	8.11	10.60	.83		0.42	19.96
1906.....	8.94		40.33	12.27	4.16	2.08	58.84	25.78	6.44				32.22
1907.....	8.94		36.17	10.81	4.37	1.25	52.60	32.22	5.40	.42		.42	38.46
1908.....	8.94		35.26	97.7	3.54	1.04	47.61	37.63	5.82				43.45

DAIRYING, DISTILLING, AND STARCH (association 38).

1896.													
359 cases:													
1897.....	8.91	1.12	39.28	12.26	5.29	0.83	57.66	23.40	8.35	0.56			32.31
1898.....	8.91	.84	35.93	10.51	5.85	1.11	53.20	30.64	5.85	.56			37.05
1899.....	8.91	.84	35.65	8.91	5.57	.84	50.97	33.71	5.29	.28			39.28
1900.....	9.19	.28	35.38	8.91	5.85		50.98	34.26	4.73	.56			39.55
1904.													
360 cases:													
1905.....	6.67	.83	38.05	15.28	4.17	4.44	61.94	15.00	15.00	.56			30.56
1906.....	7.22	.83	33.33	12.22	3.89	1.67	56.11	24.17	11.39	.28			35.84
1907.....	7.22	.28	31.95	11.94	3.61	1.67	49.17	34.72	8.33	.28			43.33
1908.....	7.22	.28	28.61	11.39	3.61	1.39	45.00	40.00	7.22	.28			47.50

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

BREWING AND MALTING (association 39).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death.	Total permanent disability.	Partial permanent disability.					Temporary disability.					
			With loss of earning power of—				Total.	With loss of earning power of—					Total.
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.		No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	
1896.													
1,028 cases:													
1897.....	8.66	5.83	31.03	17.32	5.25	2.14	55.74	16.25	11.67	1.36	.....	0.49	29.77
1898.....	9.82	1.75	31.23	14.11	5.35	1.26	51.95	31.23	4.96	.29	.....	.....	36.48
1899.....	9.92	2.24	29.38	12.74	4.87	.68	47.67	36.28	3.50	.39	.....	.....	40.17
1900.....	10.12	2.14	27.34	12.35	4.77	.58	45.04	38.23	4.28	.19	.....	.....	42.70
1904.													
1,629 cases:													
1905.....	7.98	1.66	28.42	14.43	3.50	1.29	47.64	25.84	15.41	1.47	.....	.....	42.72
1906.....	8.35	1.35	27.93	10.87	2.88	.68	42.36	38.30	9.15	.49	.....	.....	47.94
1907.....	8.47	.92	22.28	9.09	2.39	.80	34.56	46.35	8.96	.74	.....	.....	56.05
1908.....	8.90	.80	19.46	7.61	2.33	.68	30.08	51.26	8.41	.55	.....	.....	60.22

TOBACCO (association 40).

1896.													
52 cases:													
1897.....	7.69	3.85	48.08	30.77	.....	.....	78.85	5.77	1.92	.....	.....	1.92	9.61
1898.....	7.69	3.85	50.00	21.16	1.92	.....	73.08	15.38	.....	.....	.....	.....	15.38
1899.....	7.69	3.85	46.15	19.23	3.85	.....	69.23	19.23	.....	.....	.....	.....	19.23
1900.....	7.69	1.92	48.08	19.23	1.92	.....	69.23	21.16	.....	.....	.....	.....	21.16
1904.													
79 cases:													
1905.....	5.06	1.27	25.32	13.92	8.86	3.80	51.90	18.99	18.99	1.265	1.265	1.26	41.77
1906.....	6.33	1.27	22.78	15.19	6.33	2.53	46.83	24.05	18.99	2.53	.....	.....	45.57
1907.....	6.33	1.26	31.65	13.92	7.60	2.53	55.70	34.18	4.53	.....	.....	.....	36.71
1908.....	6.33	1.26	29.11	12.66	8.86	1.27	51.90	39.24	1.27	.....	.....	.....	40.51

CLOTHING (association 41).

1896.													
300 cases:													
1897.....	2.00	.....	55.00	15.00	6.67	3.00	79.67	15.33	1.67	0.67	0.33	0.33	18.33
1898.....	2.33	.....	51.67	11.00	6.00	2.67	71.34	24.67	1.00	.33	.33	.....	26.33
1899.....	2.33	.....	48.67	10.33	5.67	2.67	67.34	30.00	.33	.....	.....	.....	30.33
1900.....	2.33	.....	47.00	9.33	5.67	2.67	64.67	32.67	.33	.....	.....	.....	33.00
1904.													
640 cases:													
1905.....	2.97	.....	48.13	15.31	6.09	3.44	72.97	23.12	.47	.31	.16	.....	24.06
1906.....	2.97	.....	42.50	11.87	5.16	2.97	62.50	33.905	.47	.155	.....	.....	34.53
1907.....	3.12	.....	36.09	10.78	5.16	2.97	55.00	41.41	.31	.16	.....	.....	41.88
1908.....	3.28	.....	35.47	11.09	5.16	2.50	54.22	42.19	.155	.155	.....	.....	42.50

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

CHIMNEY SWEEPING (association 42).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.				Temporary disability.					Total.	
			With loss of earning power of—				Total.	With loss of earning power of—					
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.		No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.		75 to 100 per cent.
1896.													
30 cases:													
1897.....	23.33		26.67	23.33	10.00	3.33	63.33	13.34				13.34	
1898.....	23.33		26.67	23.33	10.00	3.33	63.33	13.34				13.34	
1899.....	23.33		16.67	3.33	10.00		30.00	46.67				46.67	
1900.....	23.33		13.34	3.33	10.00		26.67	50.00				50.00	
1904.													
20 cases:													
1905.....	13.79	3.45	27.59	20.69	3.445	3.445	55.17		24.14			3.45	27.59
1906.....	13.79	3.45	17.24	6.90	10.34		34.48	48.28					48.28
1907.....	13.79	3.45	17.24	3.45	10.35		31.04	51.72					51.72
1908.....	13.79	6.40	27.58	6.90	3.45		37.93	41.38					41.38

BUILDING TRADES¹ (associations 43-54).

1896.													
7,556 cases:													
1897.....	11.50	2.12	23.76	14.00	5.05	2.46	45.27	22.58	12.84	3.94	0.90	0.85	41.11
1898.....	12.00	1.87	24.26	12.82	4.38	1.64	43.10	30.93	9.07	2.43	.32	.28	43.08
1899.....	12.24	1.94	24.11	12.39	3.81	1.29	41.60	36.05	6.45	1.40	.17	.15	44.22
1900.....	12.47	1.96	24.49	12.19	3.51	1.06	41.25	39.11	4.30	.69	.09	.13	44.32
1904.													
10,385 cases:													
1905.....	8.60	.94	19.59	11.83	3.72	2.05	37.19	23.38	20.74	6.90	1.33	1.02	53.27
1906.....	8.80	.88	20.94	10.48	3.61	1.48	36.51	35.89	13.86	3.40	.40	.26	53.81
1907.....	8.98	.95	21.28	10.23	3.05	1.30	35.86	41.77	10.11	1.84	.30	.19	54.21
1908.....	9.09	.99	21.04	9.37	2.84	1.06	34.31	46.53	7.47	1.22	.21	.18	55.61

PRINTING AND PUBLISHING (association 55).

1896.													
206 cases:													
1897.....	2.43	0.48	38.35	15.05	5.34	1.94	60.68	17.47	17.48	1.46			36.41
1898.....	2.91	.49	38.83	12.14	4.85	1.46	57.28	22.33	15.05	1.94			39.32
1899.....	2.91	.49	35.92	13.59	4.85	1.46	55.82	25.25	13.59	1.94			40.78
1900.....	2.91	.49	36.41	12.62	4.85	1.46	55.34	26.21	13.11	1.94			41.26
1904.													
310 cases:													
1905.....	1.29		25.81	15.805	3.87	3.87	49.355	11.935	30.00	5.48	0.97	0.97	49.355
1906.....	1.61		23.87	14.84	4.52	1.61	44.84	26.77	20.65	4.85	.64	.64	53.55
1907.....	1.61		21.94	14.84	4.19	1.29	42.26	34.52	17.74	3.23	.64		56.13
1908.....	1.61		22.26	14.20	2.58	1.61	40.65	38.71	15.81	2.58	.64		57.74

¹ Not including institutes.

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

PRIVATE RAILWAYS (association 56).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.					Total.
			With loss of earning power of—					With loss of earning power of—					
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.	No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	
1896.													
119 cases:													
1897.....	26.89	1.68	13.45	12.60	12.61	4.20	42.86	22.69	5.04		0.84	28.57	
1898.....	27.73	2.52	13.45	13.45	11.76	2.52	41.18	22.69	5.88			28.57	
1899.....	27.73	2.52	12.61	14.29	10.92	1.68	39.50	24.37	5.88			30.25	
1900.....	27.73	3.36	15.13	13.45	10.92	1.68	41.18	26.05	1.68			27.73	
1904.													
135 cases:													
1905.....	18.52	2.22	21.48	12.59	3.71	11.85	49.63	11.85	17.78			29.63	
1906.....	19.26	3.70	21.48	14.07	5.19	6.67	47.41	18.52	11.11			29.63	
1907.....	20.00	2.96	22.96	12.59	5.19	5.93	46.67	24.44	5.93			30.37	
1908.....	20.00	4.44	23.71	12.59	5.19	3.70	45.19	28.89	1.48			30.37	

STREET AND SMALL RAILROADS (association 57).

1896.												
152 cases:												
1897.....	9.87	5.26	33.55	15.13	3.95		52.63	30.26	1.98			32.24
1898.....	10.53	3.29	32.24	14.47	5.26	0.66	52.63	32.24	1.31			33.55
1899.....	10.53	3.29	29.60	12.50	3.95	.66	46.71	37.50	1.97			39.47
1900.....	10.53	1.97	30.92	10.53	4.60	.66	46.71	39.47	1.32			40.79
1904.												
406 cases:												
1905.....	8.62	4.68	38.18	15.52	3.69	.98	58.37	23.89	4.44			28.33
1906.....	8.62	4.68	32.76	12.07	2.95	.74	48.52	35.22	2.96			38.18
1907.....	9.11	4.93	32.51	11.33	2.47	.49	46.80	39.16				39.16
1908.....	9.11	4.44	30.54	11.08	2.71	.25	44.58	41.87				41.87

EXPRESS AND STORAGE (association 58).

1896.												
1,310 cases:												
1897.....	10.99	0.69	15.50	9.77	5.19	4.35	34.81	28.02	19.31	5.34	0.84	53.51
1898.....	11.37	1.76	17.40	12.06	4.12	2.60	26.18	35.50	13.66	1.53		50.69
1899.....	11.75	2.37	20.08	10.92	3.43	1.37	35.80	40.15	9.09	.84		50.08
1900.....	11.91	2.60	22.44	10.76	3.44	.84	37.48	43.20	4.58	.15	.08	48.01
1904.												
2,925 cases:												
1905.....	7.32	.75	15.45	14.36	3.56	2.87	36.24	28.48	25.98	1.20	.03	55.69
1906.....	7.59	1.09	20.20	12.62	3.18	1.23	37.23	40.51	13.54	.04		54.09
1907.....	7.76	1.10	21.13	10.77	2.77	.85	35.52	47.01	8.58	.03		55.62
1908.....	7.86	1.06	20.17	9.61	2.57	.92	33.27	51.52	6.29			57.81

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904, BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Continued.

LIVERY, DRAYAGE, CARTAGE, ETC. (association 59).

Year and number of cases.	Percent of injured persons whose injuries resulted in—												
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.					
			With loss of earning power of—					With loss of earning power of—					
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.	No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.
1896.													
1,216 cases:													
1897.....	13.73	0.82	17.52	10.85	3.95	2.14	34.46	22.04	21.96	5.84	1.07	0.08	50.99
1898.....	13.90	.90	19.00	10.77	3.12	2.06	34.95	32.16	14.56	2.96	.49	.08	50.25
1899.....	14.14	1.23	20.07	11.18	3.29	1.32	35.86	36.93	10.20	1.48	.08	.08	48.77
1900.....	14.47	1.32	21.54	11.35	2.88	1.15	36.92	39.39	6.66	.99	.17	.08	47.29
1904.													
1,835 cases:													
1905.....	12.15	.44	9.10	9.21	3.27	2.62	24.20	22.51	29.59	9.43	1.14	.54	63.21
1906.....	12.26	.54	10.90	8.50	3.38	1.91	24.69	34.99	21.63	5.12	.44	.33	62.51
1907.....	12.43	.49	10.46	7.90	2.89	1.91	23.16	42.34	17.49	3.60	.27	.22	63.92
1908.....	12.59	.38	11.23	6.87	2.61	1.63	22.34	47.19	14.17	2.73	.27	.33	64.69

INLAND NAVIGATION (associations 60-62).

1896.													
571 cases:													
1897.....	31.52	0.88	16.29	8.06	3.33	1.22	28.90	21.02	13.13	2.80	1.05	0.70	38.70
1898.....	32.05	.70	14.71	6.30	2.63	1.40	25.04	24.87	11.21	4.55	.88	.70	42.21
1899.....	32.40	.53	14.18	7.53	2.63	1.40	25.74	32.40	6.13	2.45	.175	.175	41.33
1900.....	32.40	.70	17.16	8.06	3.15	.88	29.25	28.90	6.48	1.75	.35	.17	37.65
1904.													
756 cases:													
1905.....	21.30	.53	10.58	7.94	2.91	1.85	23.28	24.47	20.10	7.41	1.85	1.06	54.89
1906.....	21.69	.66	16.27	7.94	2.64	1.06	27.91	32.80	13.36	3.31	.27	.....	49.74
1907.....	22.36	.79	18.88	7.14	2.12	.40	28.04	37.43	8.47	2.78	.13	.....	48.81
1908.....	22.35	.93	16.27	6.08	1.46	.26	24.07	43.78	7.01	1.59	.27	.....	52.65

MARINE NAVIGATION¹ (association 63).

1896.													
321 cases:													
1897.....	28.97	0.62	23.36	11.22	4.99	2.49	42.06	18.38	9.03	0.94	.....	.....	28.35
1898.....	28.97	.935	28.35	9.03	3.43	1.56	42.37	23.05	3.74	.935	.....	.....	27.725
1899.....	28.97	.31	25.86	9.04	2.80	2.49	40.19	25.24	4.67	.62	.....	.....	30.53
1900.....	28.97	.31	27.73	6.54	2.81	2.49	39.57	27.73	2.80	.62	.....	.....	31.15
1904.													
418 cases:													
1905.....	22.49	.....	15.55	9.57	2.15	5.74	33.01	21.77	18.42	3.11	0.96	0.24	44.50
1906.....	22.49	.....	18.18	7.66	2.15	3.59	31.58	32.30	11.00	1.91	.72	.....	45.93
1907.....	22.49	.....	18.66	7.42	1.91	3.35	31.34	36.84	7.18	1.67	.48	.....	46.17
1908.....	22.49	.96	18.90	7.42	1.67	2.15	30.14	39.71	5.02	1.68	.....	.....	46.41

¹Not including institute.

TABLE 13.—RESULT OF THE INJURIES: PER CENT OF PERSONS KILLED OR INJURED WHO WERE COMPENSATED FOR THE FIRST TIME IN 1896 AND 1904. BY RESULT OF INJURY AND BY INDUSTRY GROUPS—Concluded.

ENGINEERING, EXCAVATING, ETC.¹ (association 64).

Year and number of cases.	Per cent of injured persons whose injuries resulted in—											
	Death	Total permanent disability.	Partial permanent disability.					Temporary disability.				
			With loss of earning power of—				Total.	With loss of earning power of—				
			Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.		No loss.	Under 25 per cent.	25 to 50 per cent.	50 to 75 per cent.	75 to 100 per cent.	Total.
1896.												
1,361 cases:												
1897.....	9.55	1.03	32.77	15.36	4.55	2.28	54.96	26.97	7.13	0.29	0.07	34.46
1898.....	9.85	1.10	30.86	13.23	4.41	1.98	50.48	35.41	3.16			38.57
1899.....	9.99	1.62	24.32	8.67	3.53	.73	37.25	49.96	1.18			51.14
1900.....	10.14	1.47	27.70	10.87	4.12	1.32	44.01	44.01	.37			44.38
1904.												
2,001 cases:												
1905.....	7.10	1.30	28.28	15.59	4.15	1.75	49.77	24.14	16.09	1.45	.15	41.83
1906.....	7.20	1.05	20.99	12.54	3.60	1.45	38.58	37.63	15.39	.15		53.17
1907.....	7.20	1.05	15.84	10.79	3.80	1.35	31.78	45.23	14.64	.10		59.97
1908.....	7.35	1.55	18.09	9.79	3.60	.80	32.28	50.27	8.55			58.82

MEAT PRODUCTS (association 65).

1896.													
329 cases:													
1897.....	3.34		28.57	6.38	1.82	0.31	37.08	28.27	30.40	0.91		59.58	
1898.....	3.34		37.69	5.78	2.13	.30	45.90	38.60	11.86	.30		50.76	
1899.....	3.34		40.73	6.38	2.13		49.24	42.25	4.86	.31		47.42	
1900.....	3.34		40.73	5.77	2.13		48.63	43.47	4.26	.30		48.03	
1904.													
1,200 cases:													
1905.....	2.67		10.50	2.33	.58	.17	13.58	32.00	39.83	9.00	1.92	1.00	83.75
1906.....	2.67	0.06	18.17	2.67	.92	.16	19.92	46.42	24.33	5.08	1.17	.33	77.33
1907.....	2.67	.17	18.42	3.16	1.00		22.58	52.75	17.83	2.92	.83	.25	74.58
1908.....	2.75	.17	19.92	3.50	.75	.08	24.25	57.25	12.50	2.33	.67	.08	72.83

BLACKSMITHING, ETC. (association 66).

1902.¹													
467 cases:													
1903.....	1.28	0.43	10.06	8.57	1.070		19.70	22.70	47.32	6.85	0.22	1.50	78.59
1904.....	1.28	.86	14.77	8.14	.86	0.43	24.20	40.90	29.12	3.43	.21		73.06
1905.....	1.28	.86	16.27	8.78	.640	.22	25.91	50.75	19.27	1.71	.22		71.95
1906.....	1.28	.86	17.13	10.28	.640	.22	28.27	54.00	14.99				69.59
1904.													
1,283 cases:													
1905.....	2.10	.16	9.12	4.83	1.17	.78	15.90	33.67	40.53	6.47	.70	.47	81.84
1906.....	2.34	.08	16.13	1.48	.545	.545	18.70	44.82	31.25	2.73	.08		78.85
1907.....	2.50	.23	10.36	6.47	.86	.08	17.77	56.74	20.34	1.87	.08	.47	79.50
1908.....	2.57	.23	11.46	5.38	1.01	.08	17.93	63.68	14.19	1.09	.08	.23	79.27

¹ Not including institute.

² Year association began operations.

DURATION OF DISABILITY AND LOSS OF EARNING POWER.

Under the German system compensation for accidents is paid in the form of annuities or pensions which continue during disability; the injured person must, however, undergo reexamination at intervals during the receipt of his pension and the amount of his annuity or pension is revised according to the decision of a board as to the earning power of the pensioner at the time of these examinations. If the condition of the workman becomes worse—that is, if his earning power decreases with the lapse of time as the result of his injury—he becomes entitled to a higher pension; if, on the other hand, his condition improves—if his earning power increases with the lapse of time—the employer's association is entitled to ask for a reduction of the pension. The experience under this plan of revising pensions throws much light both on the duration of the disability and on the effect of industrial accidents in reducing the earning power of the workmen and incidentally brings out the advantages of the annuity or pension system of compensation payments. Table 14 shows, first, the proportion of pensioners who drop out after the first, the second, the third, and the fourth year of receipt of pension; second, the proportion of pensioners who are still on the roll in about the fifth year from the time the pension was granted, classified by their degree of earning power; third, the proportion of pensioners who died during 5 years as a result of the injury.

Taking the first section of the table, giving the total for the industrial accident associations (not including institutes), it is seen that of the persons receiving compensation for the first time in 1904, there were 22.59 per cent who ceased to draw pensions after one year because of regaining their entire earning capacity; after the second year, 33.59 per cent of those then on the roll entirely recovered; after the third year 39.97 per cent of those then on the roll entirely recovered; after the fourth year 44.37 per cent of those then on the roll entirely recovered, and about 5 years afterwards 47.57 per cent of the persons granted compensation in 1904 were still receiving pensions; in other words, after 5 years, about one-half of the injured persons had entirely recovered their earning capacity, while during this period 8.06 per cent had died as the result of the accident. The experience of the agricultural accident associations shows that a somewhat greater proportion had entirely recovered their earning capacity and a smaller proportion died as the result of the accidents.

The first subdivision of the table, giving the total for the industrial accident associations (not including institutes), is also of interest in showing that there has been an increase in the proportion of those who entirely recover their earning capacity after the first year of the receipt of pension; thus of the 1896 pensioners there were 20.82 per

cent who entirely recovered their earning capacity after one year, while of the 1907 pensioners there were 25.83 per cent who entirely recovered their earning capacity in one year. This also holds true for each of the other columns; thus those who had entirely recovered their earning capacity after 4 years of receipt of pensions granted in 1896 was 35.09 per cent, while of the pensions granted in 1904 there were 44.37 per cent who had entirely recovered after about 4 years of receipt of pension. This fact is brought out most clearly by the column giving the total number of persons still in receipt of pensions in about the fifth year after the date of granting compensation; of the 1896 pensioners 53.89 per cent were still on the pension roll in the fifth year. This proportion tended to rise for the pensioners of 1897, 1898, 1899, and 1900, but after that there was a steady and sharp decrease in this ratio, and of the 1904 pensioners the proportion who were still on the pension roll in the fifth year was 47.57 per cent. Another interesting feature is the reduction in the proportion of those who had suffered the higher degrees of loss of earning power; thus in the fifth year after 1896 those injured persons who had received pensions for about 5 years and had suffered a loss of earning power from 75 to 100 per cent, formed 2.50 per cent of the persons granted pensions in 1896. In the years following this the percentage in the same column shows, with the exception of one year, a steady tendency to decrease, and of the persons in receipt of pensions granted in 1904 only 1.87 per cent belong to the group which had sustained a loss of earning power from 75 to 100 per cent. The rate in the column showing the proportion of those who had died as a result of the injury within approximately 5 years after the receipt of pension also shows a marked tendency to decrease; thus of the persons granted pensions in 1896 there were 11.02 per cent who died, while of the persons granted pensions in 1904 there were 8.06 per cent who died after having received pensions for about 5 years. It may be said, therefore, that a marked improvement has taken place in the restoration of the earning power of the injured workers and that there has been a similar decrease in the proportion of those who died as the result of the injury.

In the subdivisions of the table showing the same data for the various industries, this seems to be the usual experience, though in some of the industries, especially those in which the number of injured persons is less than 1,000, variations from this rule are found. In some instances the decrease in the industry group is quite marked; in the case of the inland navigation group 32.40 per cent of the pensioners put on the roll in 1896 died within the following 5 years, while of those pensioned in 1904 this proportion had been reduced to 22.35 per cent; marine navigation shows a similar decrease from 28.97 per cent

of the 1896 to 22.49 per cent of the 1904 pensioners. In some of the smaller groups, such for instance as that of the silk industry, the proportionate decrease has been even more marked; in this industry group 4.76 per cent of those granted pensions in 1896 died in about 5 years as the result of the injuries, while of those granted pensions in 1904 only 1.04 per cent died from the same cause.

In view of the decreases in the proportion of those sustaining the higher degrees of loss of earning power it is but natural to find that the proportion of those sustaining a loss of earning power of 25 per cent or less has undergone much change during the period included in the table.

The industry group which shows the highest proportion of injured persons still on the pension rolls after about 5 years is that of metal working (associations 12 and 13); of the pensions granted in 1904 there were 86.74 per cent of the pensioners still in receipt of their pensions on an average of 5 years afterwards, and there is little change in this proportion during the period given in the table. Although the total has not changed it is seen that there is a distinct improvement in the character of the disabilities included in this total; thus while the proportion of persons suffering a disability of under 25 per cent has increased considerably, there is a corresponding decrease in the more serious degrees of disability. The death rate also shows an improvement and is below the average for all industrial accident associations.

The industry group with the next highest proportion of injured persons still on the pension rolls at the end of 5 years is that of pottery (association 16), with 64.71 per cent of the pensions granted in 1904 still in force at about 5 years afterwards; while there has been some fluctuation in this proportion during the period included in the table, the proportion of the 1904 pensioners is not very different from that of the 1896 pensioners. The proportion who have sustained a loss of earning power of 25 per cent or less is practically the same for the pensioners of 1896 and of 1904; the proportion of pensioners who sustained a loss of earning power of from 25 to 50 per cent has varied during the period in question, but is practically the same for the 1904 as for the 1897 pensioners; the proportion of pensioners sustaining a loss of earning power of 50 to 75 per cent also fluctuated during the period and was not very different for the 1904 pensioners as compared with the 1896 pensioners; the proportion of pensioners suffering a loss of earning power of from 75 to 100 per cent seems to show a tendency to decrease during the period in the table, and the same is true for the proportion of those who died in the 5-year period. The industry groups of metal working and of pottery are conspicuous in the high proportion of permanent disabilities which the injured

persons sustained. Following these two groups the groups having 50 per cent or more of the pensioners still on the pension rolls at the end of 5 years are as follows: Linen (association 20) with 60.74 per cent, printing and publishing (association 55) with 59.68 per cent, leather (association 30) with 58.90 per cent, textiles (associations 20-27) with 58.74 per cent, paper products (association 29) with 56.78 per cent, musical instruments (association 14) with 55.86 per cent, clothing (association 41) with 54.53 per cent, tobacco (association 40) with 54.43 per cent, sugar (association 37) with 53.43 per cent, gas and water works (association 19) with 53.38 per cent, fine mechanical products (association 3) with 52.82 per cent, dairying, distilling, starch, etc., (association 38) with 52.78 per cent, private railways (association 56) with 51.11 per cent, silk (association 27) with 51.04 per cent, iron and steel (associations 4-11,66) with 50.39 per cent, woodworking (associations 31-34) with 50.21 per cent, chemicals (association 18) with 50.03 per cent. With one exception all of these groups show a lower percentage of persons on the pension roll at the end of 5 years in the case of the 1904 pensioners as contrasted with the 1896 pensioners; the exception is the group private railways (association 56), which had 46.22 per cent of the 1896 pensioners on the roll after about 5 years, and this proportion steadily increased during the succeeding 5 years, since which time, however, there has been a decrease, and the 1904 pensioners show approximately the same proportion as the 1897 pensioners; the proportion of pensioners who died during the 5-year period is much above the average for all industrial accident associations, and during the period given in the table has varied between 14.02 per cent and 28 per cent; similarly the proportion of those who still had a loss of earning power from 75 to 100 per cent at the end of 5 years was much above the average, being 8.14 per cent of the pensions granted in 1904.

All of the other industry groups had less than 50 per cent of the pensioners on the pension rolls after about 5 years, the lowest two groups being inland navigation (associations 60-62) and marine navigation (association 63), the former having 33.87 per cent and the latter 37.80 per cent of the pensions granted in 1904 still in force after about 5 years. Each of these groups, however, has had a high death rate of its pensioners, while the proportion of those sustaining the various degrees of loss of earning power does not differ greatly from the average for all industries.

TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907.

[Source: Amtliche Nachrichten des Reichs-Versicherungsamts, 1910. I Beiheft, III Teil. Gewerbe-Unfallstatistik für das Jahr 1907, pp. 228-253.]

INDUSTRIAL ACCIDENT ASSOCIATIONS.¹

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—									Died during five years.
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.				Total.	
						For loss of earning power of—					
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.		
1896.....	38,538	20.82	28.37	32.68	35.09	34.32	12.68	4.39	2.50	53.89	11.02
1897.....	41,746	21.29	29.20	33.42	35.39	34.76	12.52	4.18	2.44	53.90	10.71
1898.....	44,881	21.38	29.39	32.92	35.05	34.86	12.78	4.18	2.36	54.18	10.77
1899.....	49,175	21.98	28.70	32.53	35.41	35.53	12.26	4.20	2.36	54.35	10.24
1900.....	51,097	19.67	27.32	31.78	34.53	36.13	12.49	4.16	2.29	55.07	10.40
1901.....	55,525	19.83	28.73	33.24	36.88	35.39	12.10	3.81	2.41	53.71	9.41
1902.....	57,244	21.11	29.94	35.58	39.49	34.51	11.52	3.73	2.26	52.02	8.49
1903.....	60,550	21.35	31.72	37.87	41.55	33.65	11.03	3.50	2.09	50.27	8.18
1904.....	65,205	22.59	33.59	39.97	44.37	32.32	10.25	3.13	1.87	47.57	8.06
1905.....	68,360	23.49	35.42	42.18	.....	.....	.....	.....	.....	.....	.....
1906.....	71,227	25.07	37.50	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	75,370	25.83	.....	.....	.....	.....	.....	.....	.....	.....	.....

AGRICULTURAL ACCIDENT ASSOCIATIONS (data for 22 associations).

1896.....	17,537	14.58	29.33	37.82	41.97	30.50	14.56	3.66	2.42	51.14	6.89
1897.....	18,343	13.83	30.60	38.98	41.81	31.51	14.64	3.39	1.99	51.53	6.66
1898.....	18,641	14.22	33.29	38.27	43.16	32.02	12.87	3.46	1.90	50.25	6.59
1899.....	20,789	14.85	31.71	38.65	42.90	32.78	12.74	3.91	1.75	51.18	5.92
1900.....	20,830	14.31	31.00	36.75	43.55	31.98	12.74	3.80	1.75	50.27	6.18
1901.....	23,104	13.81	32.13	40.13	43.79	32.42	12.84	3.50	1.80	50.56	5.65
1902.....	24,273	15.22	33.74	40.50	44.67	32.81	12.46	3.09	1.83	50.19	5.14
1903.....	25,054	14.40	34.93	41.37	48.27	30.18	11.47	2.90	1.80	46.35	5.38
1904.....	26,920	17.02	34.87	45.13	50.00	29.57	10.55	2.73	1.87	44.72	5.28
1905.....	25,709	18.49	38.09	45.24	.....	.....	.....	.....	.....	.....	.....
1906.....	24,607	17.95	38.75	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	24,989	17.53	.....	.....	.....	.....	.....	.....	.....	.....	.....

MINING (association 1).

1896.....	5,385	23.34	30.19	32.74	34.11	27.70	12.52	4.47	2.57	47.26	18.63
1897.....	5,670	24.60	31.66	34.64	35.78	29.42	11.02	3.79	2.42	46.65	17.57
1898.....	6,323	24.17	30.40	32.39	34.08	28.04	11.22	4.20	2.17	45.63	20.29
1899.....	6,306	23.49	28.77	31.81	34.00	30.69	11.51	3.81	2.61	48.62	17.38
1900.....	6,890	18.94	25.62	29.65	31.86	33.23	11.67	3.78	2.19	50.87	17.27
1901.....	7,931	19.14	26.57	31.32	33.46	32.54	11.00	3.62	2.56	49.72	16.82
1902.....	8,132	20.03	29.33	33.45	36.01	32.71	11.27	3.72	2.39	50.09	13.90
1903.....	9,043	21.63	30.41	35.39	38.23	32.44	10.25	3.63	2.21	48.53	13.24
1904.....	9,931	22.84	32.10	37.44	42.18	30.39	9.96	3.22	1.95	45.52	12.30
1905.....	10,054	23.72	33.47	40.67	.....	.....	.....	.....	.....	.....	.....
1906.....	10,821	24.53	38.10	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	11,381	26.09	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Not including institutes.

TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907—Continued.

QUARRYING (association 2).

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—								Died during five years.	
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.					
						For loss of earning power of—					
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.		Total.
1896.....	1,332	23.05	30.71	33.86	36.04	28.90	14.49	5.25	2.18	50.82	13.14
1897.....	1,554	20.40	27.86	31.85	33.46	29.02	13.26	5.54	3.34	51.16	15.38
1898.....	1,616	22.15	28.03	31.43	33.11	30.76	13.55	4.26	2.60	51.17	15.72
1899.....	1,902	20.50	27.29	30.81	32.91	31.13	14.72	3.89	3.00	52.74	14.35
1900.....	1,973	18.91	26.46	29.85	31.68	32.85	13.58	5.27	2.38	54.08	14.24
1901.....	2,197	22.67	30.13	34.09	36.32	32.87	12.83	3.455	3.375	52.53	11.15
1902.....	2,289	21.76	29.32	34.03	37.00	35.07	10.97	4.15	2.28	52.47	10.53
1903.....	2,273	21.95	32.65	38.72	42.19	29.08	11.52	3.79	1.89	46.28	11.53
1904.....	2,347	22.37	34.55	40.65	45.34	27.61	11.07	3.58	2.34	44.60	10.06
1905.....	2,436	24.30	35.59	42.32	.....	.....	.....	.....	.....	.....	.....
1906.....	2,549	25.15	36.25	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	2,677	27.34	.....	.....	.....	.....	.....	.....	.....	.....	.....

FINE MECHANICAL PRODUCTS (association 3).

1896.....	444	10.36	16.22	20.05	23.87	55.18	11.26	2.48	1.80	70.72	5.41
1897.....	567	13.40	22.40	28.40	29.98	52.21	11.29	1.76	1.23	66.49	3.53
1898.....	659	11.08	20.79	24.89	28.98	49.47	11.99	3.18	2.28	66.92	4.10
1899.....	681	14.68	24.08	30.40	33.33	47.29	9.69	2.64	1.03	60.65	6.02
1900.....	757	17.70	23.91	27.88	30.91	46.24	12.55	3.96	1.19	63.94	5.15
1901.....	956	17.89	26.57	32.43	35.98	42.89	11.61	2.30	2.82	59.62	4.40
1902.....	809	16.94	26.45	33.00	36.09	43.39	11.37	2.60	1.61	58.97	4.94
1903.....	874	16.02	29.63	35.47	41.42	40.04	11.21	2.52	2.18	55.95	2.63
1904.....	1,081	21.00	33.02	39.32	43.29	40.89	7.86	2.50	1.57	52.82	3.89
1905.....	1,311	28.53	42.11	48.89	.....	.....	.....	.....	.....	.....	.....
1906.....	1,379	31.40	41.91	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	1,481	28.09	.....	.....	.....	.....	.....	.....	.....	.....	.....

IRON AND STEEL (associations 4-11, 66).

1896.....	6,065	18.55	26.26	30.19	34.90	39.28	13.95	3.58	1.80	58.61	6.49
1897.....	6,873	20.12	27.65	33.15	34.90	39.41	13.53	3.58	1.92	58.44	6.66
1898.....	7,903	19.65	28.78	32.77	33.86	39.66	14.00	3.86	2.13	59.65	6.49
1899.....	9,102	21.73	27.78	30.21	34.89	39.87	12.94	3.84	1.75	58.40	6.71
1900.....	9,646	20.41	25.37	31.58	33.88	40.21	12.96	4.04	1.90	59.11	7.01
1901.....	10,352	19.83	29.76	34.27	37.59	38.38	12.62	3.43	2.09	56.52	5.89
1902.....	10,744	21.45	29.58	35.15	38.79	38.41	12.24	3.28	1.71	55.64	5.57
1903.....	11,329	21.37	30.96	37.38	41.09	37.29	11.79	3.11	1.69	53.88	5.03
1904.....	12,673	22.39	32.27	39.39	44.01	35.26	10.62	2.82	1.69	50.39	5.60
1905.....	13,130	22.33	34.78	41.83	.....	.....	.....	.....	.....	.....	.....
1906.....	14,283	25.68	38.10	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	15,012	25.72	.....	.....	.....	.....	.....	.....	.....	.....	.....

METAL WORKING (associations 12 and 13).

1896.....	488	7.17	6.56	6.56	8.81	66.59	11.68	4.10	5.54	87.92	3.28
1897.....	534	5.62	7.86	9.55	10.11	69.29	9.36	3.37	4.69	86.71	3.18
1898.....	589	8.49	9.85	11.71	12.05	65.20	9.00	2.88	6.62	83.70	4.25
1899.....	621	10.47	13.69	13.69	14.49	61.51	13.53	3.86	4.03	82.93	2.58
1900.....	705	8.37	9.08	10.92	13.47	63.55	12.06	2.27	4.82	82.70	3.83
1901.....	760	6.32	8.82	11.71	11.71	61.97	13.55	4.21	4.22	83.95	4.34
1902.....	862	8.70	11.48	11.02	15.78	62.06	10.68	3.95	4.52	81.21	3.01
1903.....	940	1.83	7.87	10.96	10.64	69.78	10.00	2.13	3.83	85.74	3.62
1904.....	1,116	1.88	10.66	10.31	10.66	72.40	9.14	2.15	3.05	86.74	2.60
1905.....	1,242	1.21	9.50	10.95	.....	.....	.....	.....	.....	.....	.....
1906.....	1,334	.68	10.27	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	1,533	.91	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907—Continued.

MUSICAL INSTRUMENTS (association 14).

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—								Died during five years.	
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.					
						For loss of earning power of—					
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.		Total.
1896	69	5.80	24.64	24.64	26.09	40.57	27.54	2.90	71.01	2.90	
1897	89	16.855	17.98	20.22	21.35	55.05	13.48	5.62	2.25	76.40	2.25
1898	99	11.11	18.18	24.24	28.28	56.57	8.08	2.02	1.01	67.68	4.04
1899	121	6.61	18.18	27.27	30.58	52.89	10.74	.83	2.48	66.94	2.48
1900	120	12.50	26.67	29.17	32.50	53.34	5.00	3.33	2.50	64.17	3.33
1901	130	16.15	25.38	27.69	30.00	50.77	10.77	3.84	1.84	66.92	3.08
1902	133	9.78	23.31	27.07	33.83	48.87	10.53	3.76	1.50	64.66	1.51
1903	133	10.53	26.32	35.34	39.10	47.37	4.51	3.76	1.80	57.14	3.76
1904	145	15.86	24.83	35.17	42.07	42.75	9.66	2.07	1.38	55.86	2.07
1905	154	11.04	27.92	39.61	.....	.....	.....	.....	.....	.....	.....
1906	153	13.72	32.68	.....	.....	.....	.....	.....	.....	.....	.....
1907	225	15.55	.....	.....	.....	.....	.....	.....	.....	.....	.....

GLASS (association 15).

1896	206	3.40	18.93	34.47	33.49	39.32	14.56	3.40	2.92	60.20	6.31
1897	235	15.74	32.34	37.45	39.57	33.19	14.89	5.11	.43	53.62	6.81
1898	255	17.65	31.76	38.43	38.04	37.26	14.12	2.74	2.35	56.47	5.49
1899	302	21.19	28.15	31.46	33.77	40.73	15.56	4.31	.66	61.26	4.97
1900	268	4.85	18.29	30.60	42.54	33.58	13.43	4.48	2.24	53.73	3.73
1901	305	13.77	30.82	36.07	42.95	35.41	12.79	2.29	.99	51.48	5.57
1902	297	11.11	23.23	41.08	46.46	30.97	11.79	3.03	2.36	48.15	5.39
1903	333	14.41	33.93	42.34	46.84	33.04	8.41	3.60	1.50	46.55	6.61
1904	343	15.16	37.61	45.19	48.40	32.94	10.79	1.17	1.16	46.06	5.54
1905	363	14.05	34.71	42.42	.....	.....	.....	.....	.....	.....	.....
1906	355	26.76	36.34	.....	.....	.....	.....	.....	.....	.....	.....
1907	347	25.36	.....	.....	.....	.....	.....	.....	.....	.....	.....

POTTERY (association 16).

1896	114	16.67	28.07	34.21	26.32	43.85	10.53	2.63	6.14	63.15	10.53
1897	166	14.46	21.69	21.69	24.76	42.17	15.66	2.41	4.82	65.06	10.24
1898	171	15.21	22.22	26.90	30.41	31.00	14.03	7.60	8.19	60.82	8.77
1899	151	7.95	20.53	23.18	29.14	33.78	9.93	9.93	6.62	60.26	10.60
1900	207	10.63	14.49	24.15	20.77	35.75	18.36	10.14	4.83	69.08	10.15
1901	229	10.48	20.09	19.65	25.33	41.92	17.03	4.81	3.05	66.81	7.86
1902	231	14.72	16.45	23.81	23.81	45.89	16.45	8.90	1.73	67.97	8.22
1903	214	7.01	18.69	25.70	31.31	38.78	14.02	3.74	4.67	61.21	7.48
1904	272	18.01	23.53	30.83	30.51	43.38	15.08	2.94	3.31	64.71	4.78
1905	293	13.31	23.21	29.35	.....	.....	.....	.....	.....	.....	.....
1906	273	2.57	21.24	.....	.....	.....	.....	.....	.....	.....	.....
1907	310	14.19	.....	.....	.....	.....	.....	.....	.....	.....	.....

BRICK AND TILE MAKING (association 17).

1896	938	22.28	32.62	37.53	39.34	27.08	14.39	6.93	2.02	50.42	10.24
1897	1,085	25.99	36.04	40.37	42.58	26.46	12.44	7.09	1.66	47.65	9.77
1898	1,181	25.91	38.53	38.70	41.66	26.58	11.52	6.18	1.95	46.23	12.11
1899	1,421	28.64	34.49	39.90	42.15	28.29	11.33	4.86	1.97	46.45	11.40
1900	1,644	24.03	33.15	36.33	37.89	29.33	12.28	6.93	2.26	50.86	11.25
1901	1,449	23.67	32.99	37.06	40.10	29.47	11.79	7.24	1.38	49.62	10.28
1902	1,514	25.03	34.28	39.89	42.07	28.34	12.09	6.14	1.98	48.55	9.38
1903	1,446	25.10	36.03	39.35	45.51	27.93	11.76	4.56	1.46	45.71	8.78
1904	1,673	27.26	33.89	45.61	48.83	25.82	10.10	4.13	1.50	41.55	9.62
1905	1,829	14.66	42.04	45.38	.....	.....	.....	.....	.....	.....	.....
1906	1,787	28.48	36.60	.....	.....	.....	.....	.....	.....	.....	.....
1907	1,931	18.38	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907—Continued.

CHEMICALS (association 18).

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—									
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.				Total.	Died during five years.
		For loss of earning power of—				Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.		
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.						
1896	898	20.15	25.05	30.40	32.18	34.30	13.59	5.34	4.12	57.35		10.47
1897	1,007	19.56	26.31	29.09	31.28	35.65	12.71	3.97	3.08	55.41	13.31
1898	960	21.98	29.27	35.00	36.46	33.02	15.73	3.54	2.81	55.10	8.44
1899	1,115	21.08	28.88	33.81	27.13	35.78	12.02	3.95	2.42	54.17	8.70
1900	1,284	19.86	27.72	32.63	33.96	35.43	12.54	4.52	2.96	55.45	10.59
1901	1,415	19.08	29.82	30.32	33.43	37.60	13.21	4.81	2.19	57.81	8.76
1902	1,262	23.53	28.84	35.02	37.64	35.58	12.20	3.80	2.38	53.96	8.40
1903	1,348	23.52	37.91	40.95	45.33	30.19	12.46	2.60	1.11	46.36	8.31
1904	1,535	22.80	33.63	38.89	42.09	32.31	11.53	4.37	1.82	50.03	7.88
1905	1,619	24.77	36.57	41.38	.....	.....	.....	.....	.....	.....	.....
1906	1,805	25.60	36.73	.....	.....	.....	.....	.....	.....	.....	.....
1907	2,038	28.22	.....	.....	.....	.....	.....	.....	.....	.....	.....

GAS AND WATER WORKS (association 19).

1896	178	19.66	23.60	28.65	29.21	30.90	16.29	5.06	3.93	56.18	14.61
1897	179	25.14	29.05	32.40	32.40	26.81	19.55	4.47	6.71	57.54	10.06
1898	200	27.00	34.00	38.50	39.00	31.00	13.00	4.00	3.00	51.00	10.00
1899	222	18.02	22.52	24.32	26.58	36.04	13.51	6.31	6.30	62.16	11.26
1900	254	24.01	25.59	34.25	35.83	25.98	9.84	7.09	4.33	47.24	16.93
1901	308	7.47	24.025	28.57	32.14	35.72	15.59	4.22	3.89	59.42	8.44
1902	309	17.80	22.98	27.18	30.74	36.24	16.83	3.24	4.21	60.52	8.74
1903	378	18.25	27.78	31.75	38.09	29.90	14.02	3.97	5.55	53.44	8.47
1904	384	22.40	28.13	33.59	36.20	35.42	11.20	3.38	3.38	53.38	10.42
1905	387	21.70	31.52	35.40	.....	.....	.....	.....	.....	.....	.....
1906	396	26.26	37.38	.....	.....	.....	.....	.....	.....	.....	.....
1907	435	22.76	.....	.....	.....	.....	.....	.....	.....	.....	.....

LINEN (association 20).

1896	168	14.29	19.64	21.43	22.62	48.81	14.88	8.33	1.19	73.21	4.17
1897	202	9.41	20.79	23.27	24.26	48.02	13.37	4.95	1.98	68.32	7.42
1898	195	12.82	23.59	25.64	26.67	48.71	11.28	6.67	2.57	69.23	4.10
1899	250	13.60	22.00	23.20	24.80	48.80	12.40	10.40	.80	72.40	2.80
1900	216	14.82	23.15	32.41	32.41	43.51	12.04	4.17	2.78	62.50	5.09
1901	220	15.46	30.00	34.09	37.27	38.64	11.82	5.45	2.27	58.18	4.55
1902	234	27.78	33.33	39.74	43.16	35.90	11.54	5.55	4.43	53.42	3.42
1903	198	24.24	36.36	39.90	42.93	32.82	11.62	5.55	2.53	52.52	4.55
1904	242	15.29	26.86	33.06	36.37	39.25	13.22	6.20	2.07	60.74	2.89
1905	224	24.55	34.38	42.86	.....	.....	.....	.....	.....	.....	.....
1906	279	20.43	33.69	.....	.....	.....	.....	.....	.....	.....	.....
1907	280	16.07	.....	.....	.....	.....	.....	.....	.....	.....	.....

SILK (association 27).

1896	63	12.70	19.05	25.40	28.57	47.62	12.70	6.35	.....	66.67	4.76
1897	68	23.53	30.88	41.18	54.41	30.88	7.36	4.41	1.47	44.12	1.47
1898	88	23.86	43.18	53.41	37.50	42.04	9.09	2.27	2.28	55.68	6.82
1899	85	27.06	41.17	40.00	43.53	32.94	15.29	4.71	1.18	54.12	2.35
1900	99	20.20	33.34	39.40	47.48	29.29	10.10	5.05	1.01	45.45	7.07
1901	106	18.15	19.81	33.96	38.68	41.51	8.49	3.775	2.825	56.60	4.72
1902	87	14.39	42.53	48.28	51.72	33.34	10.34	3.45	1.15	48.28	.....
1903	92	26.09	41.30	48.91	50.00	35.86	8.70	4.35	1.09	50.00	.....
1904	96	33.34	35.42	41.67	47.92	34.38	13.54	2.08	1.04	51.04	1.04
1905	99	38.39	47.48	51.52	.....	.....	.....	.....	.....	.....	.....
1906	92	26.09	38.04
1907	93	33.33

INDUSTRIAL ACCIDENTS IN GERMANY, 1897 AND 1907.

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TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907—Continued.

TEXTILES, INCLUDING LINEN AND SILK (associations 20-27).

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—									Died during five years.
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.					
						For loss of earning power of—					
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.	Total.	
1896	2,166	14.54	21.02	23.13	25.03	49.89	11.81	6.54	2.32	70.56	4.41
1897	2,394	18.40	24.96	28.82	30.29	45.57	11.65	5.85	2.00	65.07	4.64
1898	2,338	17.75	25.15	28.57	29.68	45.98	12.40	6.29	1.67	66.84	3.98
1899	2,565	18.05	24.65	28.39	30.61	45.45	11.61	5.68	2.34	65.38	4.01
1900	2,668	18.70	25.49	29.76	31.82	44.68	11.92	5.36	1.91	63.87	4.31
1901	2,465	18.70	25.49	29.76	31.82	44.68	11.92	5.36	1.91	63.87	4.31
1902	2,582	18.44	27.83	32.87	35.98	41.52	11.21	5.63	1.97	60.33	3.69
1903	2,504	18.85	26.64	31.79	36.10	42.26	10.98	4.83	1.64	59.71	4.19
1904	2,443	19.61	27.69	33.16	38.72	39.99	11.71	5.49	1.55	58.74	4.54
1905	2,576	19.13	28.61	35.33	.....	.....	.....	.....	.....	.....	.....
1906	2,836	18.10	29.09	.....	.....	.....	.....	.....	.....	.....	.....
1907	2,739	19.42	.....	.....	.....	.....	.....	.....	.....	.....	.....

PAPER MAKING (association 28).

1896	496	10.08	18.15	17.74	20.96	45.57	12.70	7.66	2.22	68.15	10.89
1897	592	11.66	15.88	21.45	23.14	41.33	15.04	9.97	3.04	69.43	7.43
1898	597	13.07	19.26	20.60	22.62	42.37	16.08	7.87	2.85	69.17	8.21
1899	613	13.54	20.39	22.35	24.14	38.34	15.83	8.48	3.42	66.07	9.79
1900	644	10.09	21.58	26.09	29.66	39.91	12.11	4.81	2.64	59.47	10.87
1901	771	11.80	22.57	27.62	32.04	36.70	13.88	4.795	2.985	58.36	9.60
1902	706	13.32	24.08	32.72	35.98	39.10	10.05	4.53	2.55	56.23	7.79
1903	718	18.52	32.31	36.91	43.04	30.22	10.44	4.74	2.09	47.49	9.47
1904	739	21.24	33.02	43.71	47.50	28.42	11.09	5.01	1.89	46.41	6.09
1905	773	18.63	37.65	44.50	.....	.....	.....	.....	.....	.....	.....
1906	743	18.30	36.47	.....	.....	.....	.....	.....	.....	.....	.....
1907	793	18.54	.....	.....	.....	.....	.....	.....	.....	.....	.....

PAPER PRODUCTS (association 29).

1896	283	22.26	27.56	30.74	33.57	42.76	12.37	4.59	2.12	61.84	4.59
1897	271	20.66	26.94	29.52	33.95	42.43	11.44	6.64	2.59	63.10	2.95
1898	278	19.06	27.34	33.09	35.61	43.53	10.79	5.03	2.16	61.51	2.88
1899	300	21.33	32.67	36.67	39.34	42.00	11.33	4.33	1.67	59.33	1.33
1900	347	20.17	25.65	29.97	34.58	41.78	12.97	4.90	2.60	62.25	3.17
1901	344	18.02	26.46	32.56	36.34	44.47	7.56	5.23	2.04	59.30	4.36
1902	320	22.19	33.13	35.00	37.81	42.19	9.06	5.63	2.18	59.06	3.13
1903	364	21.98	30.22	34.62	37.91	42.04	10.99	4.39	2.20	59.62	2.47
1904	398	19.85	28.64	35.43	41.21	42.21	9.80	3.01	1.76	56.78	2.01
1905	477	20.96	30.40	38.36	.....	.....	.....	.....	.....	.....	.....
1906	466	21.67	36.27	.....	.....	.....	.....	.....	.....	.....	.....
1907	500	24.80	.....	.....	.....	.....	.....	.....	.....	.....	.....

LEATHER (association 30).

1896	260	8.46	21.92	11.92	26.92	44.62	10.00	8.08	2.30	65.00	8.08
1897	292	6.85	11.99	22.60	22.95	45.20	11.99	4.45	5.48	67.12	9.93
1898	328	7.93	17.68	22.26	23.78	45.42	13.42	4.27	3.96	67.07	9.15
1899	308	15.91	22.08	24.67	25.00	43.19	15.25	6.17	4.22	68.83	6.17
1900	381	8.40	15.75	18.63	13.65	56.17	15.48	4.205	2.885	78.74	7.61
1901	414	3.62	18.12	18.60	29.95	40.10	15.94	4.11	3.38	63.53	6.52
1902	388	9.28	15.98	27.32	32.73	37.88	14.69	5.93	2.33	60.33	6.44
1903	452	5.75	24.78	31.42	33.63	40.49	10.84	5.75	1.99	59.07	7.30
1904	455	4.61	24.84	29.89	34.07	36.92	14.07	5.05	2.86	58.90	7.03
1905	472	3.18	31.78	36.65	.....	.....	.....	.....	.....	.....	.....
1906	478	15.69	34.73	.....	.....	.....	.....	.....	.....	.....	.....
1907	537	15.27	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907—Continued.

WOODWORKING (associations 31-34).

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—									Died during five years.
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.				Total.	
						For loss of earning power of—					
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.		
1896	2,727	20.57	27.72	31.32	34.29	43.41	12.36	3.92	1.07	60.76	4.95
1897	2,968	22.94	29.15	34.41	35.98	42.26	12.49	3.52	1.04	59.31	4.71
1898	3,121	21.18	28.48	31.88	35.79	42.20	12.98	3.58	1.35	60.11	4.10
1899	3,547	21.94	26.70	33.69	35.69	43.19	11.19	4.06	1.10	59.54	4.77
1900	3,738	18.03	29.64	32.98	35.96	43.18	11.85	3.45	.99	59.47	4.57
1901	3,957	19.81	28.30	32.47	39.02	40.69	11.88	2.75	1.39	56.71	4.27
1902	3,834	21.91	30.60	37.90	43.35	37.64	10.64	3.34	.96	52.58	4.07
1903	4,081	19.87	33.77	40.26	43.37	37.20	11.03	3.50	.93	52.66	3.97
1904	4,479	24.02	35.72	41.86	45.68	36.57	10.11	2.66	.87	50.21	4.11
1905	4,828	25.93	37.51	44.01	.....	.....	.....	.....	.....	.....	.....
1906	5,104	27.33	39.56	.....	.....	.....	.....	.....	.....	.....	.....
1907	5,280	29.77	.....	.....	.....	.....	.....	.....	.....	.....	.....

FLOUR MILLING (association 35).

1896	949	25.92	29.40	34.56	37.62	26.23	13.70	8.22	3.06	51.21	11.17
1897	1,007	21.65	30.88	34.95	37.24	31.48	15.79	4.47	2.08	53.82	8.94
1898	992	21.67	28.53	31.15	34.78	34.27	14.62	4.43	2.02	55.34	9.88
1899	1,048	21.37	31.59	37.59	41.51	30.25	11.83	4.96	2.10	49.14	9.35
1900	985	19.19	29.54	35.33	39.29	31.47	12.99	5.48	1.43	51.37	9.34
1901	991	18.87	28.96	34.51	38.14	34.41	12.11	4.84	1.82	53.18	8.68
1902	1,003	23.73	31.01	37.98	43.57	30.11	10.67	4.68	1.50	46.96	9.47
1903	1,073	23.58	31.69	39.14	41.85	31.22	13.70	4.38	2.33	51.63	6.52
1904	1,089	24.06	36.91	42.88	49.77	27.28	10.19	3.30	.83	41.60	8.63
1905	1,068	27.435	38.11	46.53	.....	.....	.....	.....	.....	.....	.....
1906	1,008	27.53	39.58	.....	.....	.....	.....	.....	.....	.....	.....
1907	1,027	23.66	.....	.....	.....	.....	.....	.....	.....	.....	.....

FOOD PRODUCTS (association 36).

1896	450	32.00	36.67	44.89	46.00	35.11	8.89	4.00	2.00	50.00	4.00
1897	340	25.59	37.65	44.12	47.94	35.59	7.06	1.77	1.76	46.18	5.88
1898	286	30.42	42.65	47.90	50.70	30.42	10.84	2.10	1.40	44.76	4.54
1899	336	29.46	36.01	40.77	45.24	30.95	11.91	4.76	2.68	50.30	4.46
1900	382	26.70	37.96	45.29	46.60	33.77	10.99	3.67	.52	48.95	4.45
1901	428	24.07	35.52	42.52	46.26	32.71	13.55	3.97	.47	50.70	3.04
1902	453	29.80	37.53	43.05	46.14	32.45	12.58	3.53	.88	49.44	4.42
1903	448	22.77	34.60	31.07	45.76	33.26	11.16	4.24	1.34	50.00	4.24
1904	513	22.22	36.45	43.28	48.93	31.77	9.94	2.92	1.76	46.39	4.68
1905	553	25.68	35.08	41.96	.....	.....	.....	.....	.....	.....	.....
1906	623	24.08	38.20	.....	.....	.....	.....	.....	.....	.....	.....
1907	789	29.41	.....	.....	.....	.....	.....	.....	.....	.....	.....

SUGAR (association 37).

1896	509	19.06	25.74	28.88	32.81	35.56	14.15	4.52	2.55	56.78	10.41
1897	509	14.535	23.58	27.51	29.08	36.73	14.34	3.54	1.77	56.38	14.54
1898	462	15.15	22.73	25.54	28.79	37.225	15.585	6.06	1.52	60.39	10.82
1899	528	14.96	23.295	27.46	34.28	36.37	12.12	3.60	2.46	54.55	11.17
1900	517	14.51	26.11	35.78	36.94	33.84	12.58	3.68	1.35	51.45	11.61
1901	509	13.75	27.51	29.86	33.99	34.77	14.735	3.34	1.765	54.61	11.40
1902	544	16.91	22.24	31.80	39.52	32.91	11.77	5.70	1.83	52.21	8.27
1903	468	10.26	23.29	31.84	34.40	35.89	11.97	4.06	1.60	53.42	12.18
1904	481	8.11	25.78	32.22	37.63	39.08	9.77	3.54	1.04	53.43	8.94
1905	484	12.40	21.07	31.19	.....	.....	.....	.....	.....	.....	.....
1906	521	10.75	23.99	.....	.....	.....	.....	.....	.....	.....	.....
1907	508	11.02	.....	.....	.....	.....	.....	.....	.....	.....	.....

INDUSTRIAL ACCIDENTS IN GERMANY, 1897 AND 1907.

TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907—Continued.

DAIRYING, DISTILLING, AND STARCH (association 38).

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—									Died during five years.
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.					
						For loss of earning power of—				Total.	
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.		
1896	359	23.40	30.64	33.71	34.26	40.11	9.47	5.85	1.12	56.55	9.19
1897	360	22.22	29.17	33.33	35.56	35.27	12.23	4.44	2.50	54.44	10.00
1898	398	21.61	31.15	32.92	34.67	34.93	14.82	3.27	2.01	55.03	10.30
1899	453	22.08	26.49	28.92	30.25	35.32	13.24	5.30	3.75	57.61	12.14
1900	399	19.55	25.07	27.82	29.83	34.59	17.04	5.51	2.75	59.89	10.28
1901	431	18.10	24.36	28.31	30.16	39.67	14.85	4.18	2.32	61.02	8.82
1902	337	14.24	18.40	18.99	26.41	39.76	17.21	2.97	2.67	62.61	10.98
1903	309	18.45	27.19	36.25	42.07	35.27	9.71	2.59	2.27	49.84	8.09
1904	360	15.00	24.17	34.72	40.00	35.83	11.67	3.61	1.67	52.78	7.22
1905	389	19.80	36.50	42.16	.....	.....	.....	.....	.....	.....	.....
1906	386	21.24	31.09	.....	.....	.....	.....	.....	.....	.....	.....
1907	409	23.96	.....	.....	.....	.....	.....	.....	.....	.....	.....

BREWING AND MALTING (association 39).

1896	1,028	16.25	31.23	36.28	38.23	31.62	12.54	4.77	2.72	51.65	10.12
1897	1,142	20.67	27.14	33.97	38.18	33.18	12.70	3.24	2.19	51.31	10.51
1898	1,126	22.47	29.75	33.93	38.63	33.04	10.75	3.64	2.57	50.00	11.37
1899	1,193	19.20	28.33	36.46	40.99	33.61	9.89	4.28	1.93	49.71	9.30
1900	1,335	17.98	31.39	37.38	41.12	30.94	11.91	3.22	1.17	48.24	10.64
1901	1,358	24.74	34.61	39.77	45.14	29.16	10.97	3.17	2.77	45.07	9.79
1902	1,418	23.62	33.92	41.12	47.60	28.56	9.31	2.82	1.55	42.24	10.16
1903	1,532	22.65	32.64	42.43	46.48	30.74	10.11	2.55	1.83	45.23	8.26
1904	1,629	25.84	38.30	46.35	51.26	27.87	8.16	2.33	1.48	39.84	8.90
1905	1,586	25.66	37.20	45.65	.....	.....	.....	.....	.....	.....	.....
1906	1,499	26.22	38.96	.....	.....	.....	.....	.....	.....	.....	.....
1907	1,608	31.47	.....	.....	.....	.....	.....	.....	.....	.....	.....

TOBACCO (association 40).

1896	52	5.77	15.38	19.23	21.16	48.08	19.23	1.92	1.92	71.15	7.69
1897	57	17.54	21.05	29.83	31.58	28.07	17.54	10.53	7.02	63.16	5.26
1898	61	4.92	19.67	24.59	26.23	39.34	18.03	3.28	6.56	67.21	6.56
1899	65	26.15	26.15	29.23	32.31	33.85	20.00	6.15	4.61	64.61	3.08
1900	86	9.30	16.28	17.44	23.25	44.19	17.44	4.65	3.49	69.77	6.98
1901	77	1.30	27.27	33.77	41.56	32.47	10.39	2.595	5.195	50.65	7.79
1902	86	17.44	29.07	36.05	38.37	33.72	12.79	3.49	6.98	56.98	4.65
1903	96	13.54	21.88	26.04	34.37	39.59	13.54	6.25	3.12	62.50	3.13
1904	79	18.98	24.05	34.18	39.24	30.38	12.66	8.86	2.53	54.43	6.33
1905	74	9.46	25.67	33.78	.....	.....	.....	.....	.....	.....	.....
1906	88	6.82	28.41	.....	.....	.....	.....	.....	.....	.....	.....
1907	81	9.88	.....	.....	.....	.....	.....	.....	.....	.....	.....

CLOTHING (association 41).

1896	300	15.33	24.67	30.00	32.67	47.33	9.33	5.67	2.67	65.00	2.33
1897	295	14.58	25.76	33.90	36.27	39.66	11.86	4.41	3.73	59.66	4.07
1898	391	13.56	22.76	27.11	30.69	47.83	10.23	6.14	2.55	66.75	2.56
1899	417	17.74	22.54	26.14	29.26	47.00	12.47	4.31	3.84	67.62	3.12
1900	446	18.83	24.22	29.82	33.86	46.19	10.76	5.83	1.57	64.35	1.79
1901	593	19.39	27.49	32.04	35.58	43.68	11.30	4.55	3.04	62.57	1.85
1902	497	24.35	35.82	39.24	43.26	36.82	8.65	6.04	2.41	53.92	2.82
1903	551	20.33	32.13	40.47	42.83	36.84	8.89	5.81	2.18	53.72	3.45
1904	640	23.12	33.905	41.41	42.19	35.63	11.24	5.16	2.50	54.53	3.28
1905	586	20.31	29.35	33.28	.....	.....	.....	.....	.....	.....	.....
1906	662	23.87	29.46	.....	.....	.....	.....	.....	.....	.....	.....
1907	676	20.71	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907—Continued.

CHIMNEY SWEEPING (association 42).

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—								Died during five years.		
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.						
						For loss of earning power of—						
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.		Total.	
1896.....	30	13.34	13.33	46.67	50.00	13.34	3.33	10.00	.....	26.67	23.33	
1897.....	38	7.90	42.11	52.63	57.89	21.05	7.90	5.26	.....	34.21	7.90	
1898.....	34	8.825	29.41	47.06	5.88	41.18	26.48	11.76	.....	79.42	14.70	
1899.....	32	9.38	25.00	.....	.....	34.38	18.75	12.50	9.38	3.12	43.75	21.87
1900.....	28	.....	.....	17.86	7.145	32.145	17.86	.....	.....	10.71	60.715	32.14
1901.....	28	.....	.....	.....	14.29	32.14	17.86	7.14	.....	10.71	67.85	17.86
1902.....	29	.....	13.79	3.45	13.79	41.38	6.89	3.45	3.45	55.17	31.04	.....
1903.....	30	10.00	6.67	36.67	43.33	16.665	10.00	16.665	3.34	46.67	10.00	.....
1904.....	29	.....	48.28	51.72	41.38	27.58	6.90	3.45	6.90	44.83	13.79	.....
1905.....	29	10.345	17.24	34.48	.....	.....	.....	.....	.....	.....	.....	.....
1906.....	26	.....	7.69	.....	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	34	20.59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

BUILDING TRADES¹ (associations 43-54).

1896.....	7,556	22.58	30.93	36.05	39.11	28.79	12.88	3.60	3.15	48.42	12.47
1897.....	7,930	21.90	30.66	35.50	37.65	29.40	13.57	4.35	3.09	50.41	11.94
1898.....	8,550	21.60	30.87	34.71	37.09	31.56	13.17	3.75	2.66	51.14	11.77
1899.....	9,058	22.43	30.08	34.54	36.23	32.30	12.97	3.80	2.82	51.89	11.88
1900.....	9,012	20.67	29.12	32.77	36.94	31.91	13.52	3.69	2.63	51.75	11.31
1901.....	9,118	21.37	29.23	34.95	39.01	32.00	12.70	3.82	2.39	50.91	10.08
1902.....	9,877	20.07	30.39	36.90	41.66	30.78	12.40	3.19	2.76	49.13	9.21
1903.....	9,983	22.18	33.26	40.15	43.42	29.95	11.93	3.41	2.42	47.71	8.87
1904.....	10,985	23.38	35.99	41.77	46.53	28.51	10.59	3.05	2.23	44.38	9.09
1905.....	10,582	25.62	36.19	43.01	.....	.....	.....	.....	.....	.....	.....
1906.....	10,696	24.56	37.12	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	11,031	25.74	.....	.....	.....	.....	.....	.....	.....	.....	.....

PRINTING AND PUBLISHING (association 55).

1896.....	206	17.47	22.33	25.25	26.21	49.52	14.56	4.85	1.95	70.88	2.91
1897.....	252	14.68	17.46	22.22	26.59	50.40	13.89	3.965	1.585	69.84	3.57
1898.....	202	15.35	19.31	26.24	30.20	43.56	11.88	8.41	1.99	65.84	3.96
1899.....	238	14.71	21.01	27.31	27.73	43.28	16.39	10.08	.84	70.59	1.68
1900.....	290	13.45	26.21	26.21	30.69	44.48	12.76	6.89	2.42	66.55	2.76
1901.....	284	17.61	20.42	21.83	33.45	40.50	13.73	6.69	2.11	63.03	3.52
1902.....	325	11.38	16.62	20.92	24.615	49.54	15.075	6.77	1.85	73.235	2.15
1903.....	297	12.46	18.86	24.92	30.98	44.78	15.15	4.04	2.35	66.32	2.70
1904.....	310	11.935	26.77	34.52	38.71	38.07	16.78	3.22	1.61	59.68	1.61
1905.....	414	17.63	26.09	31.88	.....	.....	.....	.....	.....	.....	.....
1906.....	434	19.82	29.26	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	428	20.80	.....	.....	.....	.....	.....	.....	.....	.....	.....

PRIVATE RAILWAYS (association 56).

1896.....	119	22.69	22.69	24.37	26.05	16.81	13.45	10.92	5.04	46.22	27.73
1897.....	125	13.60	17.60	20.80	20.80	24.80	12.00	5.60	8.80	51.20	28.00
1898.....	108	11.11	13.89	15.74	20.37	24.075	15.74	15.74	2.78	58.335	21.295
1899.....	147	15.65	15.65	17.69	19.05	23.13	19.73	7.48	8.84	59.18	21.77
1900.....	125	15.20	16.80	19.20	20.80	29.60	10.40	8.80	9.60	58.40	20.80
1901.....	152	12.50	14.475	16.45	16.45	30.92	16.45	4.60	11.18	63.15	20.40
1902.....	180	16.11	18.89	21.11	22.225	35.555	12.78	3.33	7.78	59.445	18.33
1903.....	164	13.42	20.12	23.78	27.44	27.44	14.63	4.88	11.59	58.54	14.02
1904.....	135	11.85	18.52	24.44	28.89	28.19	12.59	5.19	8.14	51.11	20.00
1905.....	144	13.89	20.14	25.69	.....	.....	.....	.....	.....	.....	.....
1906.....	170	13.53	21.18	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	168	19.05	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Not including institutes.

TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907—Continued.

STREET AND SMALL RAILROADS (association 57).

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—								Died during five years.	
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.					
						For loss of earning power of—					
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.		Total.
1896	152	30.26	32.24	37.50	39.47	32.24	10.53	4.60	2.63	50.00	10.53
1897	168	32.14	36.90	41.67	45.24	23.80	16.07	4.17	1.79	45.83	8.93
1898	205	34.63	40.49	45.86	49.76	20.97	11.71	3.90	3.90	40.48	9.76
1899	300	27.00	37.67	40.67	41.33	26.34	12.00	4.00	2.33	44.67	14.00
1900	315	24.44	29.52	32.70	34.60	28.25	11.75	5.40	6.98	52.38	13.02
1901	416	25.24	34.37	38.94	40.39	29.33	11.06	4.08	3.60	48.07	11.54
1902	417	28.30	36.45	40.77	42.92	25.42	11.03	5.52	5.28	47.25	9.83
1903	430	29.07	36.98	42.09	44.89	31.39	7.44	3.40	5.12	47.44	7.67
1904	406	23.89	35.22	39.16	41.87	30.54	11.08	2.71	4.69	49.02	9.11
1905	463	25.70	39.74	44.92	.....	.....	.....	.....	.....	.....	.....
1906	481	24.12	35.55	.....	.....	.....	.....	.....	.....	.....	.....
1907	485	28.66	.....	.....	.....	.....	.....	.....	.....	.....	.....

EXPRESS AND STORAGE (association 58).

1896	1,310	28.02	35.50	40.15	43.20	27.02	10.91	3.52	3.44	44.89	11.91
1897	1,426	28.33	34.36	38.92	40.53	29.25	11.43	3.93	3.22	47.83	11.64
1898	1,464	27.87	36.34	40.095	42.42	27.53	13.11	3.42	3.55	47.61	9.97
1899	1,761	29.19	36.97	40.49	43.10	29.59	10.68	3.80	2.15	46.22	10.68
1900	1,861	27.08	35.25	39.82	42.82	26.98	12.09	3.87	3.87	46.81	10.37
1901	2,086	25.65	35.23	39.98	43.43	29.00	11.08	3.69	4.03	47.80	8.77
1902	2,272	26.72	36.88	41.72	44.72	29.09	10.74	4.27	3.13	47.23	8.05
1903	2,678	27.48	37.41	44.33	48.88	27.22	9.60	3.10	2.54	42.46	8.66
1904	2,925	28.48	40.51	47.01	51.52	26.46	9.61	2.57	1.98	40.62	7.86
1905	3,406	32.35	44.68	52.08	.....	.....	.....	.....	.....	.....	.....
1906	3,562	33.55	46.49	.....	.....	.....	.....	.....	.....	.....	.....
1907	3,932	33.11	.....	.....	.....	.....	.....	.....	.....	.....	.....

LIVERY, DRAYAGE, CARTAGE, ETC. (association 59).

1896	1,216	22.04	32.16	36.93	39.39	28.20	12.34	3.05	2.55	46.14	14.47
1897	1,242	25.68	32.29	35.59	38.65	29.86	10.55	4.43	2.18	47.02	14.33
1898	1,363	23.41	31.77	35.36	37.93	28.54	12.40	4.11	2.49	47.54	14.53
1899	1,401	25.91	35.19	37.97	40.62	28.34	10.92	4.42	2.28	45.96	13.42
1900	1,345	24.61	32.41	35.17	38.07	27.58	13.08	3.87	2.53	47.06	14.87
1901	1,712	20.97	29.67	33.70	36.86	28.44	13.37	3.86	3.45	49.12	14.02
1902	1,613	22.07	31.87	37.82	42.53	27.84	10.54	3.35	2.91	44.64	12.83
1903	1,874	21.72	30.52	36.98	42.16	28.81	10.83	3.63	2.78	46.05	11.79
1904	1,935	22.51	34.99	42.34	47.19	25.40	9.60	2.88	2.34	40.22	12.59
1905	2,134	27.23	38.33	46.91	.....	.....	.....	.....	.....	.....	.....
1906	2,193	29.05	43.50	.....	.....	.....	.....	.....	.....	.....	.....
1907	2,500	31.96	.....	.....	.....	.....	.....	.....	.....	.....	.....

INLAND NAVIGATION (associations 60-62).

1896	571	21.02	24.87	32.40	28.90	23.64	9.81	3.50	1.75	38.70	32.40
1897	527	14.42	31.88	25.24	35.86	22.58	7.21	3.42	3.23	36.44	27.70
1898	516	18.02	24.61	30.04	31.78	22.87	10.47	3.68	2.52	39.54	28.68
1899	577	19.58	29.46	33.62	36.22	19.41	9.19	3.81	2.95	35.36	28.42
1900	593	19.73	27.65	28.50	35.07	21.76	8.77	4.38	2.36	37.27	27.66
1901	683	25.77	29.58	37.04	40.41	21.52	8.78	3.96	3.07	37.33	22.26
1902	630	18.73	30.00	33.81	37.62	22.69	8.73	4.13	2.70	38.25	24.13
1903	700	19.71	29.43	35.00	38.29	22.14	8.29	4.99	3.43	38.85	22.86
1904	756	24.47	32.80	37.43	43.78	23.28	7.67	1.73	1.19	33.87	22.35
1905	765	23.66	33.33	41.04	.....	.....	.....	.....	.....	.....	.....
1906	796	20.23	36.43	.....	.....	.....	.....	.....	.....	.....	.....
1907	753	28.55	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 14.—DURATION OF DISABILITY AND LOSS OF EARNING POWER: PER CENT OF INJURED PERSONS RECOVERING FROM INJURIES WITHIN FIVE YEARS AND LOSS OF EARNING POWER OF THOSE STILL DISABLED, BY INDUSTRY GROUPS, 1896 TO 1907—Concluded.

MARINE NAVIGATION ¹ (association 63).

Year pension was granted.	Number of injured persons.	Per cent of injured persons who—								Died during five years.	
		Ceased to receive pensions because of recovery of earning power—				After an average of five years receive pensions.					
						For loss of earning power of—					
		After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 to 100 per cent, inclusive.		Total.
1896.....	321	18.38	23.05	25.24	27.73	30.53	7.16	2.81	2.80	43.30	28.97
1897.....	397	10.83	20.40	23.68	24.69	25.45	11.08	3.02	2.77	43.32	31.99
1898.....	366	15.03	22.13	25.68	26.78	26.23	10.92	4.05	2.19	43.99	29.23
1899.....	419	16.23	20.52	23.39	26.25	26.25	8.11	5.49	2.87	42.72	31.03
1900.....	416	15.38	20.19	23.56	25.24	25.24	5.77	2.59	1.68	35.58	39.18
1901.....	400	19.50	27.60	30.25	33.50	26.25	7.50	3.25	2.25	39.25	27.25
1902.....	440	17.05	24.77	28.18	31.14	25.905	8.64	3.18	2.27	39.995	28.865
1903.....	391	20.46	25.83	30.43	32.99	23.02	8.70	1.53	3.33	36.53	30.43
1904.....	418	21.77	32.30	36.84	39.71	23.92	9.10	1.67	3.11	37.80	22.49
1905.....	423	17.97	27.66	33.33	.....	.....	.....	.....	.....	.....	.....
1906.....	461	20.83	31.02	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	459	26.58	.....	.....	.....	.....	.....	.....	.....	.....	.....

ENGINEERING, EXCAVATING, ETC.¹ (association 64).

1896.....	1,361	26.97	35.41	49.06	44.01	28.07	10.87	4.12	2.79	45.85	10.14
1897.....	1,226	25.45	42.01	41.03	42.66	30.13	11.91	2.85	2.04	46.98	10.36
1898.....	1,397	30.28	36.44	42.23	45.31	27.49	11.24	3.87	2.14	44.74	9.95
1899.....	1,527	26.20	33.86	35.17	40.93	29.73	13.49	4.12	1.95	50.29	8.78
1900.....	1,628	20.64	30.41	34.46	35.93	35.69	11.79	3.62	2.77	53.87	10.20
1901.....	1,691	19.46	32.64	34.95	39.98	31.88	11.88	3.96	2.66	50.38	9.64
1902.....	1,955	25.17	33.61	40.87	45.83	28.44	12.27	3.44	3.12	47.27	6.90
1903.....	1,985	24.69	35.42	42.37	47.50	28.57	10.63	3.42	4.42	45.04	7.46
1904.....	2,001	24.14	37.63	45.23	50.27	26.64	9.79	3.00	2.35	42.38	7.35
1905.....	2,080	26.30	41.54	47.69	.....	.....	.....	.....	.....	.....	.....
1906.....	1,948	33.47	.....	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	2,143	31.78	44.76	.....	.....	.....	.....	.....	.....	.....	.....

MEAT PRODUCTS (association 65).

1897.....	329	28.27	38.60	42.25	43.47	44.99	6.07	2.13	.....	53.19	3.34
1898.....	342	35.09	40.94	44.44	47.37	39.47	9.65	1.88	1.17	51.17	1.46
1899.....	338	27.89	38.19	42.97	45.73	41.70	7.54	2.77	.75	52.76	1.51
1900.....	408	24.76	32.35	37.74	43.14	41.42	10.54	1.47	.49	53.92	2.94
1901.....	585	24.45	37.95	43.25	45.13	42.87	7.52	2.73	.68	53.50	1.37
1902.....	956	33.89	44.46	48.54	52.72	36.82	5.86	2.09	.63	45.40	1.88
1903.....	1,111	32.58	46.00	52.75	55.81	34.26	5.67	1.62	.45	41.94	2.25
1904.....	1,200	32.00	46.42	52.75	57.25	32.42	5.83	1.42	.33	40.00	2.75
1905.....	1,236	30.34	43.20	50.49	.....	.....	.....	.....	.....	.....	.....
1906.....	1,117	31.87	45.66	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	1,120	28.13	.....	.....	.....	.....	.....	.....	.....	.....	.....

BLACKSMITHING, ETC. (association 66).

1902.....	467	22.70	40.90	50.75	54.60	44.12	32.12	10.28	0.64	1.08	1.28
1903.....	851	28.79	42.54	49.12	55.47	42.53	31.14	9.99	.82	.58	2.00
1904.....	1,283	33.67	44.82	56.74	63.68	33.75	25.65	6.47	1.09	.54	2.57
1905.....	1,167	30.42	50.47	59.73	.....	.....	.....	.....	.....	.....	.....
1906.....	1,179	39.61	54.20	.....	.....	.....	.....	.....	.....	.....	.....
1907.....	929	34.44	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Not including institute.

WORKMEN'S COMPENSATION AND INSURANCE: LAWS AND BILLS, 1911.

LINDLEY D. CLARK, A. M., LL. M.

In the Bulletin of the Bureau of Labor for September, 1910, there was published a review of the conditions then existing in the movement in various States for modifications in the laws governing the recovery of damages or of compensation for injuries to employees. Since that date most of the commissions named in the article have made reports, some laws have been enacted, and the New York compulsory compensation law has been held by the court of last resort of that State to be unconstitutional. It is the purpose of the present article to notice briefly the subjects presented in the reports of the commissions, to reproduce the enacted laws and certain bills, and to discuss briefly these laws and bills and the decisions on the New York law.

REPORTS OF COMMISSIONS.

The commission of Montana is the only one of those mentioned in the September Bulletin from which no report has been received. The reports at hand will be considered in order.

ILLINOIS.

The report of the Illinois commission¹ is a compact small octavo volume of 249 pages, presenting a brief record of the work of the commission; a draft of a bill; a discussion of the constitutionality of a compensation law; records of cases heard before certain courts of the State; the record of the coroner of Cook County, in which the city of Chicago is situated; special studies of the coal mining industry, railroads, manufactories, etc., from the standpoint of hazard, and showing accident records and compensation for injuries; and other valuable statistical and economic data. The discussion as to constitutionality was made by the commission's attorney, who expressed the conviction that compulsory compensation will be generally accepted within a decade as being within the police power of the State to provide for. He recommended, however, as a concession to the present state of information and public opinion,

¹ Report of the employers' liability commission of the State of Illinois, 1910.

that an alternative proposition be enacted, embodying compensation as optional but not required, though so limiting rights and defenses as to lead both parties to an acceptance of the compensation provisions. "That the law should read into every contract of hiring a limited guaranty by the master to his servant against injury to life or limb while the servant is going about his master's business, when it appears that the larger proportion of such injuries in almost all employments are entirely incidental to the business, does not seem any more unreasonable than that the law should conclusively presume that the servant, upon entering the employment, voluntarily assumes in advance all the necessary and inherent hazards of the trade."

The study of the coal-mining industry—one of the largest of the State—leads the commission to the conclusion that the adoption of the scheme of compensation proposed, giving \$2,250 for fatal accidents as against the present average award of \$168, would effect a charge of but 1.6 cents per ton of coal mined to meet the necessary expenditures. As to the direction of this expenditure it is said: "Should this prompt the exercise of extra care, as the commission confidently anticipates, only a portion of this increase would be utilized for the purpose of compensation, the remainder going into the plant in additional safeguards and conveniences."

In the other industries investigated and in the report from the Illinois Manufacturers' Association details of accidents showing the nature of the injury and the form and amount of damages or compensation on account of it are shown; also a comparison of the present actual cost and the estimated cost under the commission's plan.

MASSACHUSETTS.

This commission was appointed in June of last year and submits only a partial report, recommending that another year be given to investigation before any bill is submitted, an earlier tentative draft not being included in the report. A pamphlet of 23 pages¹ sketches briefly the forms of compensation in use in Great Britain, Germany, and Norway as typical of the three systems in use in countries having compensation systems. Tables are given showing the period of disability in 2,849 accidents reported to the commission from September 12 to November 20, 1910; also the cost of industrial accidents in 734 establishments during 1909.

MINNESOTA.

The report of the Minnesota commission² is devoted more to the discussion of legal and constitutional questions than to a study of industrial conditions. Mention should be made in this connec-

¹ Report of the commission on compensation for industrial accidents, 1911.

² Report to legislature of Minnesota employees' compensation commission, 1911.

tion, however, of a statistical and economic study of "Industrial accidents and employers' liability in Minnesota," made by the State bureau of labor, and published as a part of its Twelfth Biennial Report (1909-10). Prefaced by a brief historical sketch of the question under consideration, there is given a summary of the laws of foreign countries, taken from the Bulletin of the Bureau of Labor; the action of the Federal Government is next reviewed; also that of various States in the appointment of commissions, and particularly the movements that led to the appointment of the Minnesota commission. Practically 100 of the 289 pages of the report are taken up with a presentation of the draft of a bill proposed by the commission and its discussion, point by point, in which the rights and liabilities provided are defined and court decisions cited in support of the various provisions.

The conclusions of the commission are adverse to the constitutionality of a State insurance law, in view of the provisions of the State constitution which forbid the State to engage in private business or to use the public funds in competitive undertakings as a means of regulating the conduct of business, citing *Rippe v. Becker* (56 Minn. 100), a case in which it was held that the State had not the power to build and operate a grain elevator. The discussion as to the constitutionality of the proposed bill is detailed and, together with the summary, presents the argument in favor of a compensation bill of compulsory application.

NEW JERSEY.

The report of the New Jersey commission¹ is embodied in a message of the governor to the legislature, transmitting the report. The pamphlet of 91 pages contains the evidence taken at the hearings of the commission, discussions of the defenses commonly in use in meeting actions for injuries to employees, some account of the Chicago conference of November, 1910, and the bill proposed for enactment. The representatives of labor on the commission, while supporting the principle of the bill, objected to the amount of compensation proposed, desiring to make the maximum period 400 weeks instead of 300 weeks, which the bill provided.

OHIO.

The report of this commission² consists of two octavo volumes, each of more than 400 pages. The first volume contains the report to the State legislature, with numerous appendices containing summaries and discussions of the compensation acts of foreign countries,

¹ Message of the governor of New Jersey transmitting to the legislature the report of commission on employers' liability, 1911.

² Report to the Legislature of the State of Ohio by the commission appointed under senate bill No. 250 of the Laws of 1910 (employers' liability commission, 1911).

statistical data, Federal and State laws, drafts submitted by other commissions, etc. The second volume is made up of minutes of evidence and a record of the public hearings held by the commission.

Considerable space is given in the report proper to a consideration of the legal aspects of the question, while the social and economic reasons for a change in the law are also discussed. The conclusions of the commission were in favor of a law providing "a uniform plan of insurance, practically compulsory in its nature," and the argument as to constitutionality is, of course, directed to the support of such a law. Besides the draft of a compensation bill, the commission recommended an investigation of occupational diseases, an increase in the number of factory inspectors, and an increase of the penalty for violations of the laws requiring the installation of guards and safety devices in factories and workshops.

WASHINGTON.

The report of the Washington commission¹ is the briefest made so far, occupying but 5 pages of a pamphlet of 48 pages, the remainder of the volume being taken up with the proposed bill and a discussion of its provisions from a legal viewpoint. Like the Ohio bill, the bill offered is one that provides for State insurance, and so far from feeling itself bound by the case cited by the Minnesota commission it regards this case as controverted by decisions in the Slaughterhouse Cases (16 Wall. (U. S.) 36), and the State Dispensary Cases (*State v. Porterfield*, 47 S. C. 75; *Farmville v. Walker*, 101 Va. 323; *Carsed v. Greensboro*, 126 N. C. 159, etc.). It is said that "it ought to be a sufficient answer that in the proposed act the State is not engaging in a business, but only creating and through State officers disbursing funds, to which the State contributes nothing, in the administration of the police power by the means deemed by the legislature most effective. There is no possibility of a revenue or profit to the State and the State is not insuring anybody or anything."

WISCONSIN.

The report of the Wisconsin commission² is a pamphlet of 98 pages, presenting a draft of a bill which is discussed section by section, to set forth the working and purpose of the various provisions rather than to support their constitutionality. There are about 40 pages of tables showing the nature and results of accidents, the outcome of damage suits, insurance costs, etc.

¹ Report of commission appointed by Gov. M. E. Hay to investigate the problems of industrial accidents, 1910.

² Report of the special committee on industrial insurance, 1911.

The counsel for the commission concluded that no compulsory system of compensation could constitutionally be exacted, except for the State and its subdivisions, while an elective system would be possible, and, by the withdrawal of the defenses commonly offered by employers, acceptable as well.

The commission reports that from the beginning they have agreed that accidents or deaths suffered in industrial pursuits should be reasonably compensated, not as a matter of charity, but as a matter of justice; and that as a rule the manufacturers of the State have approved a change in the conditions, and have expressed at all times their desire to cooperate in framing a suitable bill and in gathering helpful data. As to the matter of uniformity of legislation, the commission regarded it as important that Wisconsin and other States, particularly those that are adjacent, should adopt a uniform or nearly uniform scale of compensation, though it did not think it important that the bills should be similar as regards compulsory or optional features.

LAWS ENACTED AND BILLS DRAFTED.

Each of the commissions that made a final report submitted therewith a draft of a bill. In New Jersey, Washington, and Wisconsin laws were enacted practically in accordance with the recommendations of the reports, while the legislatures of California, Kansas, and New Hampshire enacted compensation laws without preceding commissions. With many amendments, the Ohio commission's bill passed the legislature. In California an amendment to the constitution of the State has also been submitted to the vote of the people next autumn, authorizing the legislature to enact a compulsory compensation measure, the present law being elective. Besides the commissions' bills, it is of interest to consider the proposed drafts of bills prepared by the American Federation of Labor and the National Civic Federation, and the conclusions of the Chicago conference as to the essential features of a compensation law. All these laws, bills, and drafts not previously printed by the Bureau are reproduced on subsequent pages, while a tabular analysis presents a view of certain important features of these measures, actual and proposed. Included in the table are the previously printed laws of Maryland, Montana, and New York on compensation and insurance. First in the table are presented the laws of the nine States having laws of this class, the States having compensation laws being first presented, those providing for insurance systems following. The same order is observed in presenting the bills and drafts of bills. In the tabulation, the items noted were taken up in the order indicated in the following discussion of the headings.

PRINCIPAL FEATURES OF LAWS AND BILLS.

SYSTEMS PROVIDED FOR.—As already indicated, two principal systems are contemplated by the various laws and bills under consideration, *compensation* and *State insurance*. In the first, the employer is not required to make any preparation in advance of possible demands on account of injuries to his workmen; while under the insurance system all employers coming under the law pay fixed amounts as premiums into a State fund (county funds in Maryland) to cover such cases as may arise, whether in their own establishments or elsewhere. Obviously the former system is without expense to the employer who has no accidents, while in the latter every employer is at some charge, whether he has an accident in his plant or not; but it is equally clear that the undistributed cost of a serious accident might prove disastrous to an uninsured employer. Some, but not all, of the laws and bills providing for compensation make at least permissive provision for insurance by employers to meet their liabilities under the new legislation. Where such provision is made, a common condition is that the insuring company shall be subjected to the liabilities of the employer so far as is appropriate, retaining also his defenses, if any. Provision is made by statutes of Illinois (R. S., ch. 73, sec. 309 et seq.) and South Carolina (Acts of 1903, act No. 40) for the formation of mutual companies by employers for the insurance of risks resulting from their liability for injuries to employees. A similar measure is reported to have passed the senate of the State of New Jersey at its session just concluded.

Either of these systems may be *elective*, i. e., subject to acceptance or rejection at the option or choice of the parties affected; or *compulsory*, i. e., of necessary acceptance as a basis of determining the rights of workmen to receive payment for injuries resulting from labor accidents. Another variation may provide that the law shall apply compulsorily to the State and its subdivisions, and be elective as to private employers. Where the elective system prevails, the parties rejecting compensation or insurance remain under a liability system, requiring a suit at law for the determination of rights and damages in cases of accidental injury to workmen. Under a compulsory system the liability law is abrogated within the scope of the new law, unless in specified classes of cases the right is retained. (See "Suits for damages.")

Insurance may be *cooperative*, the fund being maintained by premium payments from both employers and employees, or it may be at the cost of the employer alone.

INDUSTRIES COVERED.—The laws vary widely in their scope and in the method of determination. Some include all industries, others

designated industries or groups of industries, and others those that fall within a specified description. In a few cases the number of employees is a determining factor; and in a few cases employees classed as casual are not considered.

ELECTION.—Under this head are considered the methods prescribed for the expression by employers and workmen of their choice as to the adoption or rejection of the system proposed. The New Hampshire law is unique in requiring an employer making election to show financial ability or give bond to pay the compensation provided.

DEFENSES ABROGATED IF EMPLOYER DOES NOT ELECT.—In case the employer does not elect, it is usually provided that he shall not be permitted to offer the customary defenses to actions for injuries to workmen. This abrogation may be effected by a separate general law, or it may form an inseparable part of the same law that offers the new system. Of course this feature does not appear in compulsory laws. Some laws that use the number of employees as a basis for classification of industries covered permit employers having a smaller number to elect to adopt the system, but provide no limitation of defenses in case they do not so elect.

SUITS FOR DAMAGES.—In only a few of the laws and bills is the suit for damages under the liability law absolutely done away with, the usual provision being that where the employer is personally negligent, or is guilty of serious or willful misconduct, or violates a law enacted for the protection of his workmen, a damage suit may be instituted against him. This remedy is usually in lieu of the compensation system, and the choice of one bars the alternative remedy. In Washington, however, provision is made for the suit as a cumulative remedy, but only in case the injury results from the "deliberate intention" of the employer. The law of this State also provides that if an employer is in default in the payment of premiums an employee may waive his insurance benefit and sue for damages; in such cases the defenses of assumed risks and fellow service are abrogated and contributory negligence is to be measured.

SPECIAL CONTRACTS.—Under this head are considered chiefly those provisions of the laws or bills that relate to contracts between employers and their workmen modifying in any way the provisions of the statute. Under the British compensation law the question of "contracting out" or superseding the provisions of the statute by a substitute agreement has been prominent from the first. That law permits the adoption of such schemes as provide terms not less favorable to the workmen than those of the law. Such contracts are forbidden in some of the laws and bills under consideration, while others resemble the British statute in permitting them under prescribed conditions.

BURDEN OF COST.—In all the compensation schemes the employer alone is charged with the duty of meeting the costs of the payments provided for injury or death. In the cooperative insurance laws it is provided, as the name implies, that the premium costs shall be shared by the employers and workmen. In the Ohio bill the employer is authorized to charge one-tenth of the premium against the employees' wages.

PERIOD OF DISABILITY REQUIRED TO SECURE COMPENSATION.—In practically every case a "waiting time" or uncompensated period is provided for. This period is usually one or two weeks, provision being sometimes made for payments from the beginning where the disability continues beyond a certain period. The Montana statute seems not to provide for temporary disability, at least of less than 12 weeks, while the Washington statute contains no provision as to "waiting time."

COMPENSATION PROVISIONS.—These provisions vary so widely and abound in so many qualifications that only the principal facts in this connection could be presented in a table. In some cases separate provision is made for funeral expenses of employees dying as the result of accident, while in others this expense must be met from the amount paid as compensation. The amount to be paid is generally scaled according to the degree of dependence or the number of beneficiaries while in other cases it is a fixed sum. It is a common provision that medical and funeral expenses up to a certain maximum, varying from \$100 to \$200, shall be paid where there are no dependents. Injury benefits paid prior to death are usually deducted from the sum payable at death. In but few of the laws or proposed laws is the fact recognized that in cases of total disability the family is more heavily burdened than where death ensues as an early consequence of the injury. Questions of partial disability receive quite varied treatment, detailed schedules of rates for specified injuries being provided in some cases, while in others the matter is left to estimate and award according to the decision of a board or body intrusted with the administration of the law. In a majority of cases separate provision is made for medical and surgical aid; this form of benefit has been found most important in European experience, as securing prompt attention to injuries which might otherwise be neglected and thus lead to prolonged or even permanent disability, when early care might prevent these serious and burdensome consequences. Where a continuing pension was provided, it was found necessary to require injured workmen to avail themselves of the opportunity to secure a restoration of the capacity for self-support, since they would otherwise remain a burden on the fund, endangering the possibility of its adequate maintenance. It may be noted in this connection that in five States and one Territory the need of provision for hos-

pital service for miners has been recognized by statutes providing for the maintenance of hospitals or homes for injured or disabled miners by taxation or mutual contributions of employers and employees.

Nearly all the laws and bills contemplate periodical payments, subject to commutation by the payment of a lump sum or sums after a specified period of time or in the discretion of an administrative authority. Provision is also made for the revision of payments where there is a change in the degree of disability after the preliminary determination and award.

In practically every instance the claim of an injured workman is made nonassignable and exempt from attachment or levy. An exception in the law of Kansas permits attachments to secure payment for medicines, physician's attendance, and nursing. An almost equally common provision is one that requires a claimant to submit to medical examination at reasonable intervals—sometimes fixed—usually at the option and cost of the employer, to determine the fact as to the extent of the injury and of recovery therefrom. It is provided in some laws and bills that the injured person may have his own physician present, while in others he may submit his physician's statements. In a few instances provision is made for a medical referee.

TIME FOR NOTICE AND CLAIM.—Prospective claimants of compensation or benefits are usually required to notify the employer of their intention within a specified number of days after the accident. This requirement may be waived where the employer had actual knowledge without such notice or where any compensation or assistance on account of the injury is given before the expiration of the period named in the law. If the notice was not given within the time named it is frequently provided that the failure shall not bar the claim where the injured person or his beneficiary can adequately explain the delay and the employer was not prejudiced in his rights by the delay. It may further be provided that if he appears to have been to some extent prejudiced thereby, the amount of compensation shall only be reduced to that extent, and that the right shall not entirely fail. A longer period is of course permitted for the perfecting of the claim.

SETTLEMENT OF DISPUTES.—While the object of these laws and bills is to attain as nearly as practicable to an automatic adjustment of claims and the determination of rights without litigation, it is of course necessary to provide for the intervention of third parties where the employer and the employee or beneficiary fail to agree, and also to supervise the agreements and settlements made by the parties. This is variously provided for, sometimes by local arbitrators or boards, either temporary or permanent, and sometimes by a State board created for the purpose, while in other cases the matter is intrusted to existing officials. Courts may usually be called upon,

either by way of appeal in the settlement of disputes or to enforce the awards made.

NONRESIDENT ALIEN BENEFICIARIES.—There is wide disagreement on the question of compensating dependents of aliens dying from injury, where such dependents reside outside the boundaries of the United States. The law of Wisconsin specifically includes them, while the New Jersey law and the Chicago conference recommendations exclude them entirely; in New Hampshire only residents of the State may be beneficiaries; other laws consider only designated classes of beneficiaries or reduce the amount of benefits payable, while in other cases no mention is made. In these last cases it is fair to assume that the views of the courts on the law giving survivors a right of action in case of death (Lord Campbell's Act) would govern. On this view, Illinois (*Kellyville Coal Co. v. Petraytis*, 195 Ill. 215; 63 N. E. 94), Minnesota (*Renlund v. Mining Co.*, 89 Minn. 41; 93 N. W. 1057), New York (*Alfson v. Bush Co.*, 182 N. Y. 393; 75 N. E. 230), and Ohio (*Pittsburg, etc., R. Co. v. Naylor*, 73 Ohio St. 115; 76 N. E. 505) would place nonresident alien claimants on the same footing as residents or citizens. No citation is at hand showing the attitude of the Maryland courts, though Pennsylvania (*Maiorano v. R. Co.*, 216 Pa. 402; 65 Atl. 1077) and Wisconsin (*McMillan v. Spider Lake Sawmill & Lumber Co.*, 115 Wis. 332; 91 N. W. 979) are the only States, so far as a careful examination of the subject discloses, which exclude aliens; while a number of States besides those named grant equal rights to residents and nonresidents. The difficulty of determining the rights and conditions of claimants residing abroad, and the differences in the standards of living and in the purchasing power of money are offered as reasons for putting such claimants on a different footing from those who are residents of the United States, at least to the extent of reducing the amount of the payments. It may here be noticed that at the Sixth General Meeting of the International Association for Labor Legislation, held at Lugano, Switzerland, in September, 1910, resolutions were adopted requesting the American section of this body to urge on the legislatures of the various States an equal provision for aliens with that accorded citizens.

QUESTIONS OF CONSTITUTIONALITY.

The question of the desirability of laws to supersede the employers' liability laws is treated differently in the various reports, the conclusion, however, being the same in all cases. The statistical studies presented are in part to afford a basis for estimates of costs, though it is admitted that no adequate basis for an exact determination now exists; while other statistics are given to demonstrate "the present wasteful, impractical, and obviously unjust methods of dealing with work accidents." (Wisconsin report.) Gov. Fort, of New

PRINCIPAL FEATURES OF LAWS, BILLS, AND DRAFTS OF BILLS RELATIVE TO WORKMEN'S COMPENSATION AND INSURANCE.

States, etc.	System provided for—	Industries covered.	How election is made.		Defenses abrogated if employer does not elect.	Suits for damages are—	Special contracts.	Burden of cost is on—	To be compensated disability must continue—	Compensation for—				Time for notice and claim.	Disputes settled by—	Nonresident alien beneficiaries of deceased workmen.
			By employer.	By employee.						Death.	Total disability.	Partial disability.	Medical and surgical aid.			
LAWS.																
California.....	Compensation, elective (compulsory as to State and municipalities).	All (casual employees excepted).	Writing filed with industrial accident board.	If employer elects, presumed in absence of written notice.	None (assumed risks and fellow-service abrogated, and comparative negligence enacted by general liability law).	Permitted in lieu of compensation if employer was personally negligent or violated a safety law.	Employer may insure or maintain a benefit fund, but may not reduce liability fixed by law.	Employer.....	More than 1 week.	3 years' earnings; \$1,000 minimum, \$5,000 maximum; no dependents, \$100.	65 per cent of weekly wages; if nurse is required, 100 per cent; minimum wages per annum, \$333.33; maximum, \$1,666.66; limits, same as for death.	65 per cent of wage decrease; wages considered and total payments same as for total disability.	During first 90 days; not to exceed \$100.	Notice in 30 days; claim in 1 year.	Industrial accident board; limited appeals to courts.	
Kansas.....	Compensation, elective.	"Especially dangerous" (enumerated list) where 15 or more workmen are employed. ¹	Writing filed with secretary of state.	.....do.....	Assumed risks, fellow-service; contributory negligence to be measured. ²	Permitted in lieu of compensation if employer was personally negligent.	Approved schemes may be substituted.	.....do.....	More than 2 weeks.	3 years' earnings; \$1,200 minimum, \$3,600 maximum; no dependents, \$100.	50 per cent of weekly earnings; \$6 minimum, \$15 maximum, for not more than 10 years.	25 to 50 per cent of weekly earnings; \$3 minimum, \$12 maximum, for not more than 10 years.	Only if employee dies leaving no dependents.	Notice in 10 days; claims in 6 months.	Local committees or arbitrators; court review allowed.	\$750 maximum except to residents of Canada.
New Hampshire.....	.....do.....	"Dangerous" (enumerated list).	Writing filed with commissioner of labor, with proof of financial ability or bond.	.....do.....	None (assumed risks, fellow-service and contributory negligence restricted by liability provisions of statute).	Permitted in lieu of compensation if employer willfully failed to comply with safety law.	.....do.....	.....do.....	.....do.....	150 times weekly earnings, not more than \$3,000; no dependents, \$100.	50 per cent of average weekly earnings; maximum, \$10 for not more than 300 weeks.	50 per cent of wage loss; maximum, \$10 per week, not more than 300 weeks.	.....do.....	Notice as soon as practicable, and before leaving service; claims in 6 months.	Proceedings in equity.	Beneficiaries must be residents of State.
New Jersey.....	.....do.....	All.....	Presumed in absence of written notice.	If employer elects, presumed in absence of written notice.	Assumed risks, fellow-service, contributory negligence unless willful.	Not permitted after electing to receive compensation.	.....do.....	.....do.....	.....do.....	25 to 60 per cent of wages for 300 weeks; \$5 minimum, \$10 maximum; no dependents, \$200.	50 per cent of wages for 400 weeks; \$5 minimum, \$10 maximum.	Proportionate, fixed scale (sec. 11, c).	During first 2 weeks; not over \$100.	Notice in 30 days; in 90 days if employee can justify delay and employer was not prejudiced thereby.	Judge of court of common pleas.	Excluded.
New York.....	.....do.....	All but railroads.....	Writing filed with county clerk.	Writing filed with county clerk.	None; restricts defenses of assumed risks and fellow-service; requires proof of contributory negligence.	Permitted in lieu of compensation if employer was guilty of serious or willful misconduct, or violated safety law.	.....do.....	.....do.....	.....do.....	1,200 times daily earnings; \$3,000 maximum; no dependents, \$100.	50 per cent of wages (not more than \$10 weekly) for not more than 8 years.	50 per cent of wage decrease; same limits as total disability.	Only if employee dies leaving no dependents.	Notice as soon as practicable, and before leaving service; claim in 6 months.	Courts.....	
Wisconsin.....	Compensation, elective (compulsory as to the State and its municipalities).	All (casual employees excepted).	Writing filed with State Industrial Accident Board.	If employer elects, presumed in absence of written notice.	Assumed risks, fellow-service (if 4 or more employees).	Not permitted after electing to receive compensation.	No reduction of liability allowed.	.....do.....	More than 1 week (payment for first week if disability lasts more than 4 weeks).	4 years' earnings; \$1,500 minimum, \$3,000 maximum; no dependents, \$100.	65 per cent of wages, if nurse is required, 100 per cent after 90 days; no total to exceed 4 years' earnings.	65 per cent of wage decrease; no total to exceed 4 years' earnings.	For not more than 90 days.	Notice in 30 days, claim in 2 years.	State Industrial Accident Board; appeal to courts.	Included.
Maryland.....	State insurance, cooperative, compulsory.	Coal and clay mining in Allegany and Garrett counties only.	.....do.....	.....do.....	.....do.....	Permitted in lieu of compensation.	.....do.....	Employer and employee jointly.	More than 1 week.	\$1,500.....	With maiming, \$750 without maiming, \$1 per working day for 26 weeks after first.	With maiming, \$375.	In maiming cases, \$1 per working day for 26 weeks after first.	Appeal, 12 months after injury; 6 months after death.	County commissioners; appeals lie to courts.	
Montana.....	.....do.....	Coal mining.....	.....do.....	.....do.....	.....do.....	.....do.....	Forbidden.	.....do.....	More than 12 weeks; then compensated from first day if pronounced permanent.	\$3,000.....	\$1 per working day during disability.	Loss of limb or eye, \$1,000.	At discretion of State auditor.	.....do.....	State auditor.....	Only widow and children considered.
Washington.....	State insurance, compulsory.	"Extra hazardous" (enumerated list); elective as to all others.	.....do.....	.....do.....	.....do.....	Permitted in addition to insurance benefits if injury resulted from deliberate intention of employer.	.....do.....	Employer.....	Any time. (Law fixes no minimum period.)	\$75 funeral expenses; spouse receives \$20 monthly until death or remarriage; each child up to 3, \$5 per month. ³	\$20 per month if single, \$25 if married; for each child up to 2, \$5 per month.	Proportionate; not over \$1,500.	50 per cent of benefits added for first 6 months of total temporary disability; not more than 60 per cent of wages in all.	Claim in 1 year.....	Industrial Insurance Department; appeal to courts.	Only father and mother considered.
BILLS OF STATE COMMISSIONS.																
Illinois.....	Compensation, elective.	All (casual employees excepted).	Presumed in absence of written notice; must file notice to bind employees.	If employer elects, presumed in absence of written notice.	Assumed risks, fellow-service.	Permitted in lieu of compensation where employer willfully fails to comply with a statute.	.....do.....	.....do.....	More than 1 week, then compensation from first day.	3 years' earnings; \$1,500 minimum, \$3,000 maximum; no dependents, \$150.	50 per cent of weekly earnings for 8 years, \$5 minimum, \$10 maximum. ⁴	50 per cent of wage decrease. Loss of hand or foot, 1 1/2 years' earnings; eye, 1 year's earnings (year's earnings, \$500 minimum, \$1,000 maximum).	During first 90 days.....	Notice as soon as practicable; claim in 6 months.	Arbitrators for each case.	
Minnesota.....	Compensation, compulsory.	"Dangerous" (all in which personal injuries hereafter occur by accident).	.....do.....	.....do.....	.....do.....	Not permitted as to industries covered.	.....do.....	.....do.....	More than 2 weeks.	\$100 funeral expenses; 50 per cent of wages for 5 years; \$3,000 maximum.	50 per cent of wages for 5 years; \$5,000 maximum.	50 per cent of wage decrease (not over \$2,000 per year considered) for 5 years; schedule for maiming.	During first 2 weeks; not over \$100.	Notice in 30 days; in 90 days if employee can justify delay and employer was not prejudiced.	County boards of arbitration; suits only to recover awards.	
Ohio (as passed by the legislature).	State insurance, cooperative, elective.	All.....	By payment of premium.	Presumed after employer has posted notice of payment.	Assumed risks, fellow-service, contributory negligence.	Permitted in lieu of compensation if injury was caused by willful act of employer, or failure to comply with safety law.	.....do.....	Employer, 90 per cent; employee, 10 per cent.	More than 1 week.	\$150 funeral expenses; 66 2/3 per cent of wages for 6 years; \$1,500 minimum, \$3,400 maximum.	66 2/3 per cent of wages until death, if permanently disabled.	66 2/3 per cent of wage decrease for 6 years; \$5 per week minimum, \$12 maximum; not over \$3,400 in all.	Not to exceed \$200.....	To be fixed by board.....	State Liability Board of Awards; limited appeal to courts.	
DRAFTS BY ASSOCIATIONS, ETC.																
American Federation of Labor.	Compensation, compulsory.	"Dangerous" (enumerated list).	.....do.....	.....do.....	.....do.....	Permitted for short term injuries; also in lieu of compensation if employer was personally negligent.	Approved schemes may be substituted.	Employer.....	More than 2 weeks.	3 years' earnings; \$1,000 minimum, \$5,000 maximum; no dependents, \$200.	50 per cent of earnings; not over \$15 weekly, nor for more than 10 years unless permanently totally disabled.	Proportionate; not more than for total disability.	First aid only.....	Notice in 30 days; claim in 6 months.	Local arbitrators; appeal to courts.	No mention; workmen leaving United States forfeit compensation.
National Civic Federation.	.....do.....	"Hazardous" (enumerated list; casual employees excepted).	.....do.....	.....do.....	.....do.....	Permitted in lieu of compensation if employer was personally negligent.	.....do.....	.....do.....	.....do.....	3 years' earnings; \$3,000 maximum; no dependents, \$100.	50 per cent of weekly earnings; \$10 maximum for not more than 10 years.	50 per cent of wage decrease; same limits as for total disability.	Only if employee dies leaving no dependents.	Notice in 7 days; claim in 6 months.	Local commission or court.	\$1,000 maximum, except to residents of Canada.
Chicago Conference.	Compulsory State insurance if practicable; otherwise, compulsory compensation.	All.....	.....do.....	.....do.....	.....do.....	Not permitted.....	.....do.....	.....do.....	.....do.....	60 per cent of earnings for 300 weeks; not over \$10 weekly; no dependents, \$200.	50 per cent of earnings for 300 weeks, not over \$10 weekly.	.....do.....	During first 2 weeks; not over \$100.	.....do.....	Board of arbitration.	Excluded.

¹ Employers having fewer employees may elect, but lose no defenses if they do not.
² These defenses are not abrogated where an employee sues an employer who has elected to use the compensation system.

³ If a widow remarries she receives a lump sum of \$240. If there are children and no widow they receive \$10 per month each, but not more than \$35 in all, until 16 years of age.
⁴ If complete disability still continues, "then a compensation during life, equal to 8 per cent of the death benefit."

Jersey, in transmitting the commission's report to the State legislature urges such a measure as the commission recommends as one that "will work right and justice in the place of the present inequalities and unjust results," and thus secure "a great advance in the economic problem of solving the questions between labor and capital." Assuming these points, and acknowledging the economic need of a different mode of providing for the results of industrial accidents, the question of constitutionality remains. As already indicated, the systems of insurance and compensation each have their supporters on the ground of constitutionality. In this connection attention may be called to the attitude of a number of students of the question at a recent meeting of the American Academy of Political and Social Science, where, in a discussion of the decision of the court of appeals of New York holding the compulsory compensation law of that State unconstitutional, there was a very considerable expression in favor of compulsory State insurance. The opinion of the court in the case referred to is reproduced at pages 253 to 275. It can not be regarded as determinative universally of the principles set forth as controlling in that State, since, as stated by the court itself, they might receive a different construction elsewhere, but, in the view held of the provisions of the State constitution, that could not affect conditions in New York. The question of elective systems of either compensation or insurance would remain open, even if compulsory systems are regarded as in conflict with controlling constitutional principles. Recommendations have been made of bills formally elective but in practical effect compulsory, rendered so by the withdrawal of the employers' customary defenses, which is constitutional. While this action is in a sense coercive, it is pointed out that the employer will prefer to accept a limited liability in a wider range of cases if he is at the same time relieved of the danger of harassing lawsuits for excessive damages, that he will be readily able to insure his liability, and that he can in large measure add the expense to cost of manufacture and distribute the burden among consumers. As to this last point, objection is made on behalf of street railway companies or others who like them are restricted by their charters or otherwise to a fixed rate of charges. It is assumed that the employee will accept the substitute for damage suits because of its certainty of results as against the uncertainty of the action for damages, because of the promptness with which relief will be afforded, and because the full amount will reach him instead of being in large part consumed in attorneys' fees and court expenses. It is also suggested that a system which would necessarily be elective as to the employer might be constitutionally compulsory to the employee, since by it he was granted new benefits to which the enacting power might lawfully attach the condition of exclusiveness as a remedy. It would appear, however, that a law

making compensation an exclusive remedy and depriving the employee of the power to sue, would take away as valid a right as that which an employer has to have the questions involved determined by due process of law. By election, of course, the parties adopt the provisions of the statutes as a part of the contract of employment, in the exercise of their right to contract freely. It may here be noted that in continental Europe the right to sue is entirely superseded by the provisions of the compensation or insurance systems adopted; and that in Great Britain, while the right to sue is retained, it is of small practical importance, the great majority of injury cases being taken up under the compensation law. It may also be remarked that no country having once adopted a compensation or insurance system has ever returned to the liability system.

The arguments for constitutionality are supported in the reports by citations to cases a considerable number of which are mentioned in the article in Bulletin No. 90, previously referred to. A case not there mentioned but referred to with considerable emphasis in some of the reports is that of *Bertholf v. O'Reilly* (74 N. Y. 509), in which a law of the State of New York giving redress against owners of saloon property for damages resulting from the sale of liquor by a tenant was upheld as constitutional. This was cited to show that personal fault is not necessary to charge liability, and that new liabilities might be created by statute. The recent opinion of the Supreme Court in the case of *Noble State Bank v. Haskell* (219 U. S. 104; 31 Sup. Ct. 186), is also cited as setting forth the rights of the State in the exercise of its police power. The law under consideration in this case was that of Oklahoma creating a depositors' guaranty fund to which State banks were to contribute as a means of guaranteeing deposits in banks that may become insolvent. The bank contended that the statute deprived it of property without due process of law in requiring payments for the ultimate or possible benefit of depositors in other banks, thus violating the provisions of the fourteenth amendment to the Federal Constitution. Justice Holmes, speaking for a united court, said:

In answering that question, we must be cautious about pressing the broad words of the fourteenth amendment to a drily logical extreme. Many laws which it would be vain to ask the court to overthrow could be shown, easily enough, to transgress a scholastic interpretation of one or another of the great guaranties in the Bill of Rights. They more or less limit the liberty of the individual, or they diminish property to a certain extent. We have few scientifically certain criteria of legislation, and as it often is difficult to mark the line where what is called the police power of the States is limited by the Constitution of the United States, judges should be slow to read into the latter a *nolumus mutare* as against the lawmaking power.

The substance of the plaintiff's argument is that the assessment takes private property for private use without compensation. And

while we should assume that the plaintiff would retain a reversionary interest in its contribution to the fund, so as to be entitled to a return of what remained of it if the purpose were given up (see *Danby Bank v. State Treasurer*, 39 Vt., 92, 98), still there is no denying that by this law a portion of its property might be taken without return to pay debts of a failing rival in business. Nevertheless, notwithstanding the logical form of the objection, there are more powerful considerations on the other side. In the first place, it is established by a series of cases that an ulterior public advantage may justify a comparatively insignificant taking of private property for what, in its immediate purpose, is a private use. [Cases cited.] And in the next it would seem that there may be other cases beside the everyday one of taxation, in which the share of each party in the benefit of a scheme of mutual protection is sufficient compensation for the correlative burden that it is compelled to assume. At least, if we have a case within the reasonable exercise of the police power as above explained, no more need be said.

It may be said in a general way that the police power extends to all the great public needs. (*Camfield v. United States*, 167 U. S., 518; 17 Sup. Ct., 864.) It may be put forth in aid of what is sanctioned by usage, or held by the prevailing morality or strong and preponderant opinion to be greatly and immediately necessary to the public welfare. If, then, the legislature of the State thinks that the public welfare requires the measure under consideration, analogy and principle are in favor of the power to enact it.

We can not say that the public interests to which we have adverted, and others, are not sufficient to warrant the State in taking the whole business of banking under its control. On the contrary, we are of opinion that it may go on from regulation to prohibition except upon such conditions as it may prescribe. In short, when the Oklahoma Legislature declares by implication that free banking is a public danger, and that incorporation, inspection, and the above-described cooperation are necessary safeguards, this court certainly can not say that it is wrong.

It has been stated that the court of appeals of New York declared the compulsory compensation law of that State covering designated dangerous employments (Acts of 1910, ch. 674; see Bulletin No. 90, pp. 713, 714) unconstitutional. The case was first heard in the supreme court (Erie County), in which the statute was held to be a valid exercise of the police power of the State, quoting from an opinion of the United States Supreme Court to the effect that the Federal Constitution, "which is necessarily and to a large extent inflexible and exceedingly difficult of amendment, should not be so construed as to deprive the States of the power to so amend their laws as to make them conform to the wishes of the citizens as they may deem best for the public welfare without bringing them into conflict with the supreme law of the land." (*Holden v. Hardy*, 169 U. S. 366; 18 Sup. Ct. 383.) The right to classify and legislate for dangerous employments was supported by reference to the decision in the case

Missouri P. R. Co. v. Mackey (127 U. S. 205, 8 Sup. Ct. 1161). Judgment was therefore rendered in favor of the plaintiff (*Ives v. South Buffalo Railway Co.*, 124 N. Y. Supp. 920), whereupon the company appealed, securing a reversal of this judgment. The court of appeals in its opinion (pp. 253 to 275) admits "the cogent economic and sociological arguments which are urged in the support of the statute," but finds itself powerless, under its conception of the limitations set by the State constitution, to do other than hold the law invalid as taking the property of the employer without due process of law. The cases cited by the supporters of the law are considered and the conclusion reached that they do not in fact sustain it as valid.

The conclusion that in considering the question of constitutionality the weight of economic reasoning can not control is of interest in comparing this discussion with the efforts of the courts to justify their departure from the doctrine of respondeat superior in accepting the defense of fellow service. The reasons offered by the courts for this rule have been various, one being found in the view that the master's responsibility is at an end when he has used ordinary care to employ competent servants. It is held that the employee assumes the risk of the possible negligence of a coemployee as one of the incidents of employment. (*Hough v. Texas & P. R. Co.*, 100 U. S. 213; 25 L. Ed. 612.) In another opinion of our Supreme Court it was said that the obvious reason for exempting the employer from liability is that the employee has or is supposed to have such risks in contemplation when he engaged in the service, and his compensation is arranged accordingly, so that he can not in reason complain if he suffers from a risk which he has voluntarily assumed, and for the assumption of which he is paid. (*Chicago, M. & St. P. R. Co. v. Ross*, 112 U. S. 377; 5 Sup. Ct. 184.) Another reason is found in alleged grounds of public policy as tending to make the employees more watchful over their own conduct and that of their fellows, thus benefiting employers, employees, and the public alike by the greater care with which they perform their duties. (*Chicago, M. & St. P. R. Co. v. Ross*, supra.) In close connection herewith is the claim that any marked enlargement of liability to capital would lead to the withdrawal of capital from industrial enterprise, thus reducing the opportunities of employment and inflicting damage upon the whole community. (*New Pittsburg Coal & C. Co. v. Peterson*, 136 Ind. 398; 35 N. E. 7.) The last two reasons have perhaps been most frequently relied on as supporting the customary rule, though no such results as are therein indicated have followed the adoption of statutes greatly enlarging the rights of employees to recover for injuries following upon industrial accidents.

The finding of unconstitutionality as to the compulsory statute has of course no effect on the elective statute previously enacted; nor

does it affect the amendments to the liability law of the State incorporated in the same chapter. A proposition looking toward an amendment to the State constitution, authorizing a compulsory compensation law, was under consideration by the legislature as this article was concluded.

Following are the laws, bills, and drafts discussed above and not previously reproduced:

TEXT OF LAWS.

CALIFORNIA.

ACT APPROVED APRIL 8, 1911.

SECTION 1. In any action to recover damages for a personal injury sustained within this State by an employee while engaged in the line of his duty or the course of his employment as such, or for death resulting from personal injury so sustained, in which recovery is sought upon the ground of want of ordinary or reasonable care of the employer, or of any officer, agent or servant of the employer, the fact that such employee may have been guilty of contributory negligence shall not bar a recovery therein where his contributory negligence was slight and that of the employer was gross, in comparison, but the damages may be diminished by the jury in proportion to the amount of negligence attributable to such employee, and it shall be conclusively presumed that such employee was not guilty of contributory negligence in any case where the violation of any statute enacted for the safety of employees contributed to such employee's injury; and it shall not be a defense:

(1) That the employee either expressly or impliedly assumed the risk of the hazard complained of.

(2) That the injury or death was caused in whole or in part by the want of ordinary or reasonable care of a fellow servant.

Sec. 2. No contract, rule or regulation, shall exempt the employer from any of the provisions of the preceding section of this act.

Sec. 3. Liability for the compensation hereinafter provided for, in lieu of any other liability whatsoever, shall, without regard to negligence, exist against an employer for any personal injury accidentally sustained by his employees, and for his death if the injury shall approximately cause death, in those cases where the following conditions of compensation concur:

(1) Where, at the time of the accident, both the employer and employee are subject to the provisions of this act according to the succeeding sections hereof.

(2) Where, at the time of the accident, the employee is performing service growing out of and incidental to his employment and is acting within the line of his duty or course of his employment as such.

(3) Where the injury is approximately caused by accident, either with or without negligence, and is not so caused by the willful misconduct of the employee.

And where such conditions of compensation exist for any personal injury or death, the right to the recovery of such compensation pursuant to the provisions of this act, and acts amendatory thereof, shall be the exclusive remedy against the employer for such injury or death, except that when the injury was caused by the personal gross negligence or willful personal misconduct of the employer, or by reason of his violation of any statute designed for the protection of employees from bodily injury, the employee may, at his option, either claim compensation under this act, or maintain an action for damages therefor; in all other cases the liability of the employer shall be the same as if this and the succeeding sections of this act had not been passed, but shall be subject to the provisions, of the preceding sections of this act.

Sec. 4. The following shall constitute employers subject to the provisions of this act within the meaning of the preceding section:

(1) The State, and each county, city and county, city, town, village and school districts and all public corporations, every person, firm, and private corporation, (including any public service corporation) who has any person in service under any contract of hire, express or implied, oral or written, and who, at or prior to the time of the accident to the employee for which compensation under this act may be claimed, shall, in the manner provided in the next section, have elected to become subject to the provisions of this act, and who shall not, at the time of such accident, have withdrawn such election, in the manner provided in the next section.

SEC. 5. Such election on the part of the employer shall be made by filing with the industrial accident board, hereinafter provided for a written statement to the effect that he accepts the provisions of this act, the filing of which statement shall operate, within the meaning of section three of this act, to subject such employer to the provisions of this act and all acts amendatory thereof for the term of one year from the date of the filing of such statement, and thereafter, without further act on his part, for successive terms of one year each, unless such employer shall, at least sixty days prior to the expiration of such first or any succeeding year, file in the office of said board a notice in writing to the effect that he withdraws his election to be subject to the provisions of the act.

SEC. 6. The term "employee" as used in section three of this act shall be construed to mean:

(1) Every person in the service of the State, or any county, city and county, city, town, village or school district therein, and all public corporations, under any appointment or contract of hire, express or implied, oral or written, except any official of the State, or of any county, city and county, city, town, village or school district therein or any public corporation, who shall have been elected or appointed for a regular term of one or more years, or to complete the unexpired portion of any such regular term.

(2) Every person in the service of another under any contract of hire, express or implied, oral or written, including aliens, and also including minors who are legally permitted to work under the laws of the State, (who, for the purposes of the next section of this act, shall be considered the same and shall have the same power of contracting as adult employees), but not including any person whose employment is but casual and not in the usual course of the trade, business, profession or occupation of his employer.

SEC. 7. Any employee as defined in subsection (1) of the preceding section shall be subject to the provisions of this act and of any act amendatory thereof. Any employee as defined in subsection (2) of the preceding section shall be deemed to have accepted and shall, within the meaning of section 3 of this act be subject to the provisions of this act and of any act amendatory thereof, if, at the time of the accident upon which liability is claimed:

(1) The employer charged with such liability is subject to the provisions of this act, whether the employee has actual notice thereof or not; and

(2) At the time of entering into his contract of hire, express or implied, with such employer, such employee shall not have given to his employer notice in writing that he elects not to be subject to the provisions of this act, or, in the event that such contract of hire was made in advance of such employer becoming subject to the provisions of the act, such employee shall, without giving such notice, remain in the service of such employer for thirty days after the employer has filed with said board an election to be subject to the terms of this act.

SEC. 8. Where liability for compensation under this act exists the same shall be as provided in the following schedule:

(1) Such medical and surgical treatment, medicines, medical and surgical supplies, crutches and apparatus, as may be reasonably required at the time of the injury and thereafter during the disability, but not exceeding ninety days, to cure and relieve from the effect of the injury, the same to be provided by the employer, and in case of his neglect or refusal seasonably to do so, the employer to be liable for the reasonable expense incurred by or on behalf of the employee in providing the same: *Provided, however,* That the total liability under this subdivision shall not exceed the sum of \$100.

(2) If the accident causes disability, an indemnity which shall be payable as wages on the eighth day after the injured employee leaves work as the result of the injury, and weekly thereafter, which weekly indemnity shall be as follows:

(a) If the accident causes total disability, sixty-five per cent of the average weekly earnings during the period of such total disability: *Provided,* That if the disability is such as not only to render the injured employee entirely incapable of work, but also so helpless as to require the assistance of a nurse, the weekly indemnity during the period of such assistance shall be increased to one hundred per cent of the average weekly earnings.

(b) If the accident causes partial disability, sixty-five per cent of the weekly loss in wages during the period of such partial disability.

(c) If the disability caused by the accident is at times total and at times partial, the weekly indemnity during the periods of each such total or partial disability shall be in accordance with said subsections (a) and (b) respectively.

(d) Said subsections (a), (b) and (c) shall be subject to the following limitations: Aggregate disability indemnity for a single injury shall not exceed three times the average annual earnings of the employee.

If the period of disability does not last more than one week from the day the employee leaves work as the result of the accident no indemnity whatever shall be recoverable.

If the period of disability lasts more than one week from the day the employee leaves work as the result of the accident, no indemnity shall be recoverable for the first week of the period of such disability.

The aggregate disability period shall not, in any event extend beyond fifteen years from the date of the accident.

(3) The death of the injured employee shall not affect the obligation of the employer under subsections (1) and (2) of this section, so far as his liability shall have accrued and become payable at the time of the death, but the death shall be deemed the termination of disability, and the employer shall thereupon be liable for the following death benefits in lieu of any further disability benefits: *Provided*, That such death was approximately caused by the accident causing such disability:

(a) In case the deceased employee leaves a person or persons wholly dependent upon him for support, the death benefit shall be a sum sufficient when added to the benefits which shall, at the time of death, have accrued and become payable under the provisions of subsection (2) of this section to make the total compensation for the injury and death, (exclusive of the benefit provided for in subsection (1), equal to three times his annual average earnings, not less than \$1,000 nor more than \$5,000, the same to be payable, unless and until the industrial accident board shall otherwise direct, in weekly installments corresponding in amount to the weekly earnings of the employee.

(b) In case the deceased employee leaves no one wholly dependent on him for support, but one or more persons partially dependent therefor, the death benefit shall be such percentage of three times such average annual earnings of the employee as the annual amount devoted by the deceased to the support of the person or persons so partially dependent upon him for support bears to such average earnings, the same to be payable, unless and until the industrial accident board shall otherwise direct, in weekly installments corresponding to the weekly earnings of the employee: *Provided*, That the total compensation for the injury and death, (exclusive of the benefit provided for in said subsection (1) shall not exceed three times such average annual earnings.

(c) In the event that the accident shall have approximately caused permanent disability, either total or partial, and the employee shall die within fifteen years after the date of the accident, liability for the death benefits provided for in said subsections (a) and (b) respectively shall exist only where the accident was the approximate cause of death within said period of fifteen years.

(d) If the deceased employee leaves no person dependent upon him for support, and the accident approximately causes death, the death benefit shall consist of the reasonable expenses of his burial not exceeding \$100.

Sec. 9. (1) The weekly earning [s] referred to in section (8) shall be one fifty-second of the average annual earnings of the employee; average annual earnings shall not be taken at less than \$333.33, nor more than \$1,666.66, and between said limits shall be arrived at as follows:

(a) If the injured employee has worked in such employment, whether for the same employer or not, during substantially the whole of the year immediately preceding his injury, his average annual earnings shall consist of three hundred times the average daily wage or salary which he has earned as such employee during the days when so employed.

(b) If the injured employee has not so worked in such employment during substantially the whole of such immediately preceding year, his average annual earnings shall consist of three hundred times the average daily wage or salary which an employee of the same class working substantially the whole of such immediately preceding year in the same or a similar employment in the same or a neighboring place shall have earned during the days when so employed.

(c) In cases where the foregoing methods of arriving at the average annual earnings of the injured employee can not reasonably and fairly be applied, such annual earnings shall be taken at such sum as having regard to the previous earnings of the injured employee, and of other employees of the same or most similar class, working in the same or most similar employment in the same or neighboring locality, shall reasonably represent the average earning capacity of the injured employee at the time of the injury in the employment in which he was working at such time.

(d) The fact that an employee has suffered a previous disability, or received compensation therefor, shall not preclude him from compensation for a later injury, or for death resulting therefrom, but in determining compensation for the later injury, or death resulting therefrom, his average annual earnings shall be such sum as will

reasonably represent his annual earning capacity at the time of the later injury, and shall be arrived at according to the previous provisions of this section.

(2) The weekly loss in wages referred to in section 8, shall consist of the difference between the average weekly earnings of the injured employee, computed according to the provisions of this section, and the weekly amount which the injured employee, in the exercise of reasonable diligence, will probably be able to earn, the same to be fixed as of the time of the accident, but to be determined in view of the nature and extent of the injury.

(3) The following shall be conclusively presumed to be solely and wholly dependent for support upon a deceased employee:

(a) A wife upon a husband.

(b) A husband upon a wife upon whose earnings he is partially or wholly dependent at the time of her death.

(c) A child or children under the age of eighteen years (or over said age, but physically or mentally incapacitated from earning), upon the parent with whom he or they are living at the time of the death of such parent, there being no surviving dependent parent. In case there is more than one child thus dependent, the death benefit shall be divided equally among them. In all other cases questions of entire or partial dependency shall be determined in accordance with the fact, as the fact may be at the time of the death of the employee, and in such other cases if there is more than one person wholly dependent, the death benefit shall be divided equally among them and persons partially dependent, if any, shall receive no part thereof, and if there is more than one person partially dependent, the death benefit shall be divided among them according to the relative extent of their dependency.

(4) Questions as to who constitute dependents and the extent of their dependency shall be determined as of the date of the death of the employee, and their right to any death benefit shall become fixed as of such time, irrespective of any subsequent change in conditions, and the death benefit shall be directly recoverable by and payable to the dependent or dependents entitled thereto or their legal guardians or trustees.

Sec. 10. No claim to recover compensation under this act shall be maintained unless within thirty days after the occurrence of the accident which is claimed to have caused the injury or death, notice in writing, stating the name and the address of the person injured, the time and the place where the accident occurred, and the nature of the injury, and signed by the person injured or someone in his behalf, or in case of his death, by a dependent or someone in his behalf, shall be served upon the employer by delivering to and leaving with him a copy of such notice or by mailing to him by registered mail a copy thereof in a sealed and posted envelope addressed to him at his last known place of business or residence. Such mailing shall constitute complete service: *Provided, however,* That any payment of compensation under this act, in whole or in part, made by the employer before the expiration of said thirty days shall be equivalent to the notice herein required: *And provided further,* That the failure to give any such notice, or any defect or inaccuracy therein, shall not be a bar to recovery under this act if it is found as a fact in the proceedings for collections of the claim that there was no intention to mislead the employer, and that he was not in fact misled thereby: *And provided further,* That if no such notice is given and no payment of compensation made, within one year from the date of the accident, the right to compensation therefor shall be wholly barred.

Sec. 11. Wherever in case of injury the right to compensation under this act would exist in favor of any employee, he shall, upon the written request of his employer, submit from time to time to examination by a regular practicing physician, who shall be provided and paid for by the employer, and shall likewise submit to examination from time to time by any regular physician selected by said industrial accident board, or any member or examiner thereof. The employee shall be entitled to have a physician provided and paid for by himself present at any such examination. So long as the employee, after such written request of the employer, shall refuse to submit to such examination, or shall in any way obstruct the same, his right to begin or maintain any proceeding for the collection of compensation shall be suspended, and if he shall refuse to submit to such examination after direction by the board, or any member or examiner thereof, or shall in any way obstruct the same, his right to the weekly indemnity which shall accrue and become payable during the period of such refusal or obstruction, shall be barred. Any physician who shall make or be present at any such examination may be required to testify as to the results thereof.

Sec. 12. Any dispute or controversy concerning compensation under this act, including any in which the State may be a party, shall be submitted to a board consisting of three members, which shall be known as the industrial accident board. Within thirty days before this act shall take effect, the governor, by and with the

advice and consent of the senate, shall appoint a member who shall serve two years, and another who shall serve three years, and another who shall serve four years. Thereafter such three members shall be appointed and confirmed for terms of four years each. Vacancies shall be filled in the same manner for the unexpired term. Each member of the board, before entering upon the duties of his office, shall take the oath prescribed by the constitution. A majority of the board shall constitute a quorum for the exercise of any of the powers or authority conferred by this act, and an award by the majority shall be valid. In case of a vacancy, the remaining two members of the board shall exercise all the powers and authority of the board until such vacancy is filled. Each member of the board shall receive an annual salary of three thousand six hundred dollars.

Sec. 13. The board shall organize by choosing one of its members as chairman. Subject to the provisions of this act, it may adopt its own rules of procedure and may change the same from time to time in its discretion. The board, when it shall deem it necessary to expedite its business, may from time to time employ one or more expert examiners for such length of time as may be required. It may also appoint a secretary and such clerical help as it may deem necessary. It shall fix the compensation of all assistants so appointed.

Sec. 14. The board shall keep its office at the city of San Francisco, and shall be provided by the secretary of state with a suitable room or rooms, necessary office furniture, stationery, and other supplies. The members of the board and its assistants, shall be entitled to receive from the State their actual and necessary expenses while traveling on the business of the board, but such expenses shall be sworn to by the person who incurred the same, and be approved by the chairman of the board, before payment is made. All salaries and expenses authorized by this act shall be audited and paid out of the general funds of the State the same as other general State expenses are audited and paid.

Sec. 15. Upon the filing with the board by any party in interest of an application in writing stating the general nature of any dispute or controversy concerning compensation under this act, it shall fix a time for the hearing thereof, which shall not be more than forty days after the filing of such application. The board shall cause notice of such hearing to be given to each party interested by service of such notice on him personally or by mailing a copy thereof to him at his last known post-office address at least ten days before such hearing. Such hearing may be adjourned from time to time in the discretion of the board, and hearings shall be held at such places as the board shall designate. Either party shall have the right to be present at any hearing, in person or by attorney or any other agent, and to present such testimony as shall be pertinent to the controversy before the board, but the board may, with or without notice to either party, cause testimony to be taken, or inspection of the premises where the injury occurred to be had, or the time books and pay roll of the employer to be examined by any member of the board or any examiner appointed by it, and may from time to time, direct any employee claiming compensation to be examined by a regular physician; the testimony so taken and the results of any such inspection or examination, to be reported to the board for its consideration upon final hearing. The board, or any member thereof, or any examiner appointed thereby shall have power and authority to issue subpoenas to compel the attendance of witnesses or parties, and the production of books, papers, or records, and to administer oaths. Obedience to such subpoenas shall be enforced by the superior court of any county, or city and county.

Sec. 16. After final hearing by said board, it shall make and file (1) its findings upon all facts involved in the controversy, and (2) its award, which shall state its determination as to the rights of the party.

Sec. 17. Either party may present a certified copy of the award to the superior court for any county or city and county, whereupon said court shall, without notice, render a judgment in accordance therewith, which judgment, until and unless set aside as hereinafter provided, shall have the same effect as though duly rendered in an action duly tried and determined by said court, and shall, with the like effect, be entered and docketed.

Sec. 18. The findings of fact made by the board acting within its powers, shall, in the absence of fraud, be conclusive, and the award, whether judgment has been rendered thereon or not, shall be subject to review only in the manner and upon the grounds following: Within thirty days from the date of the award, any party aggrieved thereby may file with the board an application in writing for a review of such award, stating generally the grounds upon which such review is sought; within thirty days thereafter the board shall cause all documents and papers on file in the matter, and a transcript of all testimony which may have been taken therein, to be transmitted with their findings and award to the clerk of the superior court of that county or city

and county wherein the accident occurred; such application for a review may thereupon be brought on for hearing before said court upon such record by either party on ten days' notice to the other, subject, however, to the provisions of law for a change of the place of trial or the calling of another judge. Upon such hearing the court may confirm or set aside such award, and any judgment which may theretofore have been rendered thereon, but the same shall be set aside only upon the following grounds:

- (1) That the board acted without or in excess of its powers.
- (2) That the award was procured by fraud.
- (3) That the findings of fact by the board do not support the award.

SEC. 19. Upon the setting aside of any award the court may recommit the controversy and remand the record in the case to the board, for further hearing or proceedings, or it may enter the proper judgment upon the findings, as the nature of the case shall demand. An abstract of the judgment entered by the trial court upon the review of any award shall be made by the clerk thereof upon the docket entry of any judgment which may theretofore have been rendered upon such award, and transcripts of such abstract may thereupon be obtained for like entry upon the dockets of the courts of other counties, or city and county.

SEC. 20. Any party aggrieved by a judgment entered upon the review of any award, may appeal therefrom within the time and in the manner provided for an appeal from the orders of the superior court; but all such appeals shall be placed on the calendar of the supreme court and brought to a hearing in the same manner as criminal causes on such calendar.

SEC. 21. No fees shall be charged by the clerk of any court for the performance of any official service required by this act, except for the docketing of judgments and for certified copies or transcripts thereof. In proceedings to review an award, costs as between the parties shall be allowed or not in the discretion of the court.

SEC. 22. No claim for compensation under this act shall be assignable before payment, but this provision shall not affect the survival thereof; nor shall any claim for compensation, or compensation awarded, adjudged or paid, be subject to be taken for the debts of the party entitled thereto.

SEC. 23. A claim for compensation for the injury or death of any employee, or any award or judgment entered thereon, shall be entitled to a preference over the other debts of the employer if and to the same extent as the wages of such employee shall be so preferred; but this section shall not impair the lien of any judgment entered upon any award.

SEC. 24. Nothing in this act shall affect the organization of any mutual or other insurance company, or any existing contract for insurance or employers' liability, nor the right of the employer to insure in mutual or other companies, in whole or in part, against such liability, or against the liability for the compensation provided for by this act, or to provide by mutual or other insurance, or by arrangement with his employees, or otherwise, for the payment to such employees, their families, dependents, or representatives, of sick, accident or death benefits, in addition to the compensation provided for by this act. But liability for compensation under this act shall not be reduced or affected by any insurance, contributions, or other benefit whatsoever due to or received by the person entitled to such compensation, and the person so entitled shall, irrespective of any insurance or other contract, have the right to recover the same directly from the employer, and in addition thereto, the right to enforce in his own name, in the manner provided in this act, the liability of any insurance company, which may, in whole or in part have insured the liability for such compensation: *Provided, however,* That payment in whole or in part of such compensation by either the employer or the insurance company, shall, to the extent thereof, be a bar to recovery against the other of the amount so paid: *And provided further,* That as between the employer and the insurance company, payment by either directly to the employee, or to the person entitled to compensation, shall be subject to the conditions of the insurance contract between them.

SEC. 25. Every contract for the insurance of the compensation herein provided for, or against liability therefor, shall be deemed to be made subject to the provisions of this act, and provisions thereof inconsistent with this act shall be void. No company shall enter into any such contract of insurance unless such company shall have been approved by the commissioner of insurance, as provided by law.

SEC. 26. The making of a lawful claim against an employer for compensation under this act for the injury or death of his employee shall operate as an assignment of any assignable cause of action in tort which the employee or his personal representative may have against any other party for such injury or death, and such employer may enforce in his own name the liability of such other party.

SEC. 27. The board shall cause to be printed and furnished free of charge to any employer or employee such blank forms as it shall deem requisite to facilitate or

promote the efficient administration of this act; it shall provide a proper record book in which shall be entered and indexed the name of every employer who shall file a statement of election under this act, and the date of the filing thereof, and a separate book in which shall be entered and indexed the name of every employer who shall file his withdrawal of such election, and the date of the filing thereof; and a book in which shall be recorded all awards made by the board; and such other books or records as it shall deem required by the proper and efficient administration of this act; all such records to be kept in the office of the board. Upon the filing of a statement of election by an employer to become subject to the provisions of this act, the board shall forthwith cause notice of the fact to be given to his employees, by posting and keeping continuously posted in a public and conspicuous place such notice thereof in the office, shop, or place of business of the employer, or by publishing, or in such other manner as the board shall deem most effective, and the board shall cause notice to be given in like manner of the filing of any withdrawal of such election; but notwithstanding the failure to give, or the insufficiency of, any such notice, knowledge of all filed statements of election and withdrawals of election, and of the time of the filing of the same, shall conclusively be imputed to all employees.

SEC. 28. Nothing in this act contained shall be construed as impairing the right of parties interested, after the injury or death of an employee, to compromise and settle upon such terms as they may agree upon, any liability which may be claimed to exist under this act on account of such injury or death, nor as conferring upon the dependents of any injured employee any interest which he may not divert by such settlement or for which he or his estate shall, in the event of such settlement by him, be accountable to such dependents or any of them.

SEC. 29. The sum of fifty thousand dollars is hereby appropriated out of any moneys in the State treasury, not otherwise appropriated, to be used by the industrial accident board in carrying out the purposes of this act, and the controller is hereby directed to draw his warrant on the general fund from time to time in favor of said industrial accident board for the amounts expended under its direction, and the treasurer is hereby authorized and directed to pay the same.

SEC. 30. All acts or parts of acts inconsistent with this act are hereby repealed.

SEC. 31. This act shall take effect and be in force on and after the first day of September. A. D. 1911.

KANSAS.

ACT OF MARCH 13, 1911.

SECTION 1. If in any employment to which this act applies, personal injury by accident arising out of and in the course of employment is caused to a workman, his employer shall, subject as hereinafter mentioned, be liable to pay compensation to the workman in accordance with this act. Save as herein provided, no such employer shall be liable for any injury for which compensation is recoverable under this act: *Provided*, That (a) the employer shall not be liable under this act in respect of any injury which does not disable the workman for a period of at least two weeks from earning full wages at the work at which he is employed; (b) if it is proved that the injury to the workman results from his deliberate intention to cause such injury, or from his willful failure to use a guard or protection against accident required pursuant to any statute and provided for him, or a reasonable and proper guard and protection voluntarily furnished him by said employer, or solely from his deliberate breach of statutory regulations affecting safety of life or limb, or from his intoxication, any compensation in respect to that injury shall be disallowed.

SEC. 2. Where the injury was proximately caused by the individual negligence, either of commission or omission, of the employer, including such negligence of the directors or of any managing officer or managing agent of such employer if a corporation, or of any of the partners if such employer is a partnership, or of any member if such employer is an association, but excluding the negligence of competent employees in the performance of their duties or of the employer's duty delegated to them, the existing liability of the employer shall not be affected by this act, but in such case the injured workman, or if death results from such injury, his dependents as herein defined, if they unanimously agree, otherwise his legal representative, may elect between any right of action against the employer upon such liability and the right to compensation under this act.

SEC. 3. Nothing in this act shall affect the liability of the employer or employee to a fine or penalty under any other statute.

SEC. 4. (a) Where any person (in this section referred to as principal) undertakes to execute any work which is a part of his trade or business or which he has contracted to perform and contracts with any other person (in this section referred to as the

contractor) for the execution by or under the contractor of the whole or any part of the work undertaken by the principal, the principal shall be liable to pay to any workman employed in the execution of the work any compensation under this act which he would have been liable to pay if that workman had been immediately employed by him; and where compensation is claimed from or proceedings are taken against the principal, then, in the application of this act, references to the principal shall be substituted for references to the employer, except that the amount of compensation shall be calculated with reference to the earnings of the workman under the employer by whom he is immediately employed. (b) Where the principal is liable to pay compensation under this section, he shall be entitled to indemnity from any person who would have been liable to pay compensation to the workman independently of this section, and shall have a cause of action therefor. (c) Nothing in this section shall be construed as preventing a workman from recovering compensation under this act from the contractor instead of the principal. (d) This section shall not apply to any case where the accident occurred elsewhere than on or in, or about the premises on which the principal has undertaken to execute work or which are otherwise under his control or management, or on, in, or about the execution of such work under his control or management. (e) A principal contractor, when sued by a workman of a subcontractor, shall have the right to implead the subcontractor. (f) The principal contractor who pays compensation voluntarily to a workman of a subcontractor shall have the right to recover over against the subcontractor.

SEC. 5. Where the injury for which compensation is payable under this act was caused under circumstances creating a legal liability against some person other than the employer to pay damages in respect thereof. (a) The workman may take proceedings against that person to recover damages and against any person liable to pay compensation under this act for such compensation, but shall not be entitled to recover both damages and compensation; and (b) If the workman has recovered compensation under this act, the person by whom the compensation was paid, or any person who has been called on to indemnify him under the section of this act relating to subcontracting, shall be entitled to indemnity from the person so liable to pay damages as aforesaid, and shall be subrogated to the rights of the workman to recover damages therefor.

SEC. 6. This act shall apply only to employment in the course of the employer's trade or business on, in, or about a railway, factory, mine or quarry, electric, building or engineering work, laundry, natural-gas plant and all employments wherein a process requiring the use of any dangerous explosive or inflammable materials is carried on, which is conducted for the purpose of business, trade or gain; each of which employments is hereby determined to be especially dangerous, in which from the nature, conditions or means of prosecution of the work therein, extraordinary risk to the life and limb of the workman engaged therein are inherent, necessary, or substantially unavoidable, and as to each of which employments it is deemed necessary to establish a new system of compensation for injuries to workmen. This act shall not apply in any case where the accident occurred before this act takes effect, and all rights which have accrued, by reason of any such accident, at the time of the publication of this act, shall be saved the remedies now existing therefor, and the court shall have the same power as to them as if this act had not been enacted.

SEC. 7. This act shall not be construed to apply to business or employments which, according to law, are so engaged in interstate commerce as to be not subject to the legislative power of the State, nor to persons injured while they are so engaged.

SEC. 8. It is hereby determined that the necessity for this law and the reason for its enactment, exist only with regard to employers who employ a considerable number of persons. This act, therefore, shall only apply to employers by whom fifteen or more workmen have been [employed] continuously for more than one month at the time of the accident and who have elected or shall elect before the accident to come within the provision hereof: *Provided, however*, That employers having less than fifteen workmen may elect to come within the provisions of this act, in which case his employees shall be included herein, as hereinafter provided.

SEC. 9. In this act, unless the context otherwise requires. (a) "Railway" includes street railways and interurbans; and "employment on railways" includes work in depots, power houses, round-houses, machine shops, yards, and upon the right of way, and in the operation of its engines, cars and trains, and to employees of express companies while running on railroad trains. (b) "Factory" means any premises wherein power is used in manufacturing, making, altering, adapting, ornamenting, finishing, repairing or renovating any article or articles for the purpose of trade or gain or of the business carried on therein, including expressly any brickyard, meat-packing house, foundry, smelter, oil refinery, lime-burning plant, steam-heating plant, electric-lighting plant, electric-power plant and water-power plant, powder plant, blast furnace, paper mill, printing plant, flour mill, glass factory, cement plant, artificial-gas plant,

machine or repair shop, salt plant, and chemical-manufacturing plant. (c) "Mine" means any opening in the earth for the purpose of extracting any minerals, and all underground workings, slopes, shafts, galleries and tunnels, and other ways, cuts and openings connected therewith, including those in the course of being opened, sunk or driven; and includes all the appurtenant structures at or about the openings of the mine, and any adjoining adjacent work place where the material from a mine is prepared for use or shipment. (d) "Quarry" means any place, not a mine, where stone, slate, clay, sand, gravel or other solid material is dug or otherwise extracted from the earth for the purpose of trade or bargain or of the employer's trade or business. (e) "Electrical work" means any kind of work in or directly connected with the construction, installation, operation, alteration, removal or repair of wires, cables, switchboards or apparatus, used for the transmission of electrical current. (f) "Building work" means any work in the erection, construction, extension, decoration, alteration, repair or demolition of any building or structural appurtenance. (g) "Engineering work" means any work in the construction, alteration, extension, repair or demolition of a railway (as hereinbefore defined) bridge, jetty, dike, dam, reservoir, underground conduit, sewer, oil or gas well, oil tank, gas tank, water tower, or water works (including standpipes or mains) any caisson work or work in artificially compressed air, any work in dredging, pile driving, moving buildings, moving safes, or in laying, repairing or removing, underground pipes and connections, the erection, installing, repairing, or removing of boilers, furnaces, engines and power machinery, (including belting and other connections) and any work in grading or excavating where shoring is necessary or power machinery or blasting powder, dynamite or other high explosives is in use (excluding mining and quarrying). (h) "Employer" includes any person or body of persons corporate or unincorporate, and the legal representatives of a deceased employer or the receiver or trustee of a person, corporation, association or partnership. (i) "Workman" means any person who has entered into the employment of or works under contract of service or apprenticeship with an employer, but does not include a person who is employed otherwise than for the purpose of the employer's trade or business. Any reference to a workman who has been injured shall, where the workman is dead, include a reference to his dependents, as hereinafter defined, or to his legal representative, or where he is a minor or incompetent, to his guardian. (j) "Dependents" means such members of the workman's family as were wholly or in part dependent upon the workman at the time of the accident. And "members of a family" for the purposes of this act means only widow or husband, as the case may be, and children; or if no widow, husband or children, then parents and grandparents, or if no parents or grandparents, then grandchildren; or if no grandchildren, then brothers and sisters. In the meaning of this section parents include step-parents, children include stepchildren, and grandchildren include stepgrandchildren, and brothers and sisters include stepbrothers and stepsisters, and children and parents include that relation by legal adoption.

Sec. 10. In case an injured workman is mentally incompetent or a minor, or where death results from the injury, in case any of his dependents as herein defined is mentally incompetent or a minor, at the time when any right, privilege or election accrues to him under this act, his guardian may, in his behalf, claim and exercise such right, privilege, or election, and no limitation of time, in this act provided for, shall run, so long as such incompetent or minor has no guardian.

Sec. 11. The amount of compensation under this act shall be, (a) Where death results from injury: (1) If the workman leaves any dependents wholly dependent upon his earnings, an amount equal to three times his earnings for the preceding year but not exceeding thirty-six hundred dollars and not less than twelve hundred dollars, provided, such earnings shall be computed upon the basis of the scale which he received or would have been entitled to receive had he been at work, during the thirty days next preceding the accident; and, if the period of the workman's employment by the said employer had been less than one year, then the amount of his earnings during the said year shall be deemed to be fifty-two times his average weekly earnings during the period of his actual employment under said employer: *Provided*, That the amount of any payments made under this act and any lump sum paid hereunder for such injury from which death may thereafter result shall be deducted from such sum: *And provided, however*, That if the workman does not leave any dependents, citizens of and residing at the time of the accident in the United States or the Dominion of Canada, the amount of compensation shall not exceed in any case seven hundred and fifty dollars. (2) If the workman does not leave any such dependents, but leaves any dependents in part dependent upon his earnings, such proportion of the amount payable under the foregoing provisions of this section, as may be agreed upon or determined to be proportionate to the injury to the said dependents; and (3) If he leaves no dependents, the reasonable expense of his medical attendance and burial, not exceeding one hundred dollars.

(b) Where total incapacity for work results from injury, periodical payments during such incapacity, commencing at the end of the second week, equal to fifty per cent of his average weekly earnings computed as provided in section 12 but in no case less than six dollars per week or more than fifteen dollars per week. (c) When partial incapacity for work results from injury, periodical payments during such incapacity, commencing at the end of the second week, shall not be less than twenty-five per cent, nor exceed fifty per cent, based upon the average weekly earnings computed as provided in section 12, but in no case less than three dollars per week or more than twelve dollars per week: *Provided, however,* That if the workman is under twenty-one years of age at the date of the accident and the average weekly earnings are less than \$10.00 his compensation shall not be less than seventy-five per cent of his average earnings. No such payment for total or partial disability shall extend over a period exceeding ten years.

SEC. 12. For the purposes of the provisions of this act relating to "earnings" and "average earnings" of a workman, the following rules shall be observed: (a) "Average earnings" shall be computed in such manner as is best calculated to give the average rate per week at which the workman was being remunerated for the 52 weeks prior to the accident: *Provided,* That where by reason of the shortness of time during which the workman has been in the employment of his employer, or the casual nature or the terms of the employment, it is impracticable to compute the rate of remuneration, regard shall be had to the average weekly amount which, during the twelve months previous to the accident, was being earned by a person in the same grade employed at the same work by the same employer, or, if there is no person employed, by a person in the same grade employed in the same class of employment and in the same district. (b) Where the workman had entered into concurrent contracts of service with two or more employers under which he worked at one time for one such employer and at another time for another such employer, his "earnings" and his "average earnings" shall be computed as if his earnings under all such contracts were earnings in the employment of the employer for whom he was working at the time of the accident. (c) Employment by the same employer shall be taken to mean employment by the same employer in the grade in which the workman was employed at the time of the accident, uninterrupted by his absence of work due to illness or any other unavoidable cause. (d) Where the employer has been accustomed to pay to the workman a sum to cover any special expenses entailed upon him by the nature of his employment, the sum so paid shall not be reckoned as part of the earnings. (e) In fixing the amount of the payment, allowance shall be made for any payment or benefit which the workman may receive from the employer during his period of incapacity. (f) In the case of partial incapacity the payments shall be computed to equal, as closely as possible, fifty per cent of the difference between the amount of the "average earnings" of the workman before the accident, to be computed as herein provided, and the average amount which he is most probably able to earn in some suitable employment or business after the accident, subject however, to the limitations hereinbefore provided.

SEC. 13. The payments shall be made at the same time, place and in the same manner as the wages of the workman were payable at the time of the accident, but a judge of any district court having jurisdiction upon the application of either party may modify such regulation in a particular case as to him may seem just.

SEC. 14. Where death results from the injury and the dependents of the deceased workman as herein defined, have agreed to accept compensation, and the amount of such compensation and the apportionment thereof between them has been agreed to or otherwise determined, the employer may pay such compensation to them accordingly (or to an administrator if one be appointed) and thereupon be discharged from all further liability for the injury. Where only the apportionment of the agreed compensation between the dependents is not agreed to, the employer may pay the amount into any district court having jurisdiction, or to the administrator of the deceased workman, with the same effect. Where the compensation has been so paid into court or to an administrator, the proper court, upon the petition of such administrator or any of such dependents, and upon such notice and proof as it may order shall determine the distribution thereof among such dependents. Where there are no dependents, medical and funeral expenses may be paid and distributed in like manner.

SEC. 15. The payments due under this act, as well as any judgment obtained thereunder, shall not be assignable or subject to levy, execution or attachment, except for medicine, medical attention and nursing and no claim of any attorney at law for services rendered in securing such indemnity or compensation or judgment shall be an enforceable lien thereon, unless the same has been approved in writing by the judge of the court where said case was tried; but if no trial was had, then by any judge of the district court of this State to whom such matter has been regularly submitted, on due notice to the party or parties in interest of such submission.

Sec. 16. Employers affected by this act shall report annually to the State commissioner and factory inspector such reasonable particulars in regard thereto as he may require, including particulars as to all releases of liability under this act and any other law. The penalty for failure to report or for false report shall invalidate any such release of liability.

Sec. 17. (a) After an injury to the employees, if so requested by his employer, the employee must submit himself for examination at some reasonable time to a reputable physician selected by the employer, and from time to time thereafter during the pendency of his claim for compensation, or during the receipt by him for payment under this act, but he shall not be required to so submit himself, more than once in two weeks unless in accordance with such orders as may be made by the proper court or judge thereof. Either party may upon demand require a report of any examination made by the physician of the other party upon payment of a fee of one dollar therefor. (b) If the employees request he shall be entitled to have a physician of his own selection present at the time to participate in such examinations. (c) Unless there has been a reasonable opportunity thereafter for such physician selected by the employee to participate in the examination in the presence of the physician selected by the employer, the physician selected by the employer shall not be permitted afterwards to give evidence of the condition of the employee in a dispute as to the injury. (d) Except as provided herein in this act there shall be no other disqualification or privilege preventing the testimony of a physician who actually makes an examination.

Sec. 18. In case of a dispute as to the injury, the committee, or arbitrator as hereinafter provided, or the judge of the district court shall have the power to employ a neutral physician of good standing and ability, whose duty it shall be, at the expense of the parties to make an examination of the injured person, as the court may direct, on the petition of either or both the employer and employee or dependents.

Sec. 19. If the employer or the employee has a physician make such an examination and no reasonable opportunity is given to the other party to have his physician make examination, then, in case of a dispute as to the injury, the physician of the party making such examination shall not give evidence before the court unless a neutral physician either has examined or then does examine the injured employee and give testimony regarding the injuries.

Sec. 20. If the employee shall refuse examination by physician selected by the employer, with the presence of a physician of his own selection, and shall refuse an examination by the physician appointed by the court, he shall have no right to compensation during the period from refusal until he, or someone in his behalf, notifies the employer or the court that he is willing to have such examination.

Sec. 21. A physician making an examination shall give to the employer and to the workman a certificate as to the condition of the workman, but such certificate shall not be competent evidence of that condition unless supported by his testimony if his testimony would have been admissible.

Sec. 22. Proceedings for the recovery of compensation under this act shall not be maintainable unless written notice of the accident, stating the time, place, and particulars thereof, and the name and address of the person injured, has been given within ten days after the accident, and unless a claim for compensation has been made within six months after the accident, or in case of death, within six months from the date thereof. Such notice shall be delivered by registered mail, or by delivery to the employer. The want of, or any defect in such notice or in its service, shall not be a bar unless the employer proves that he has, in fact, been thereby prejudiced, or if such want or defect was occasioned by mistake, physical or mental incapacity or other reasonable cause, and the failure to make a claim within the period above specified shall not be a bar, if such failure was occasioned by a mistake, physical or mental incapacity, or other reasonable cause.

Sec. 23. Compensation due under this act may be settled by agreement. Every such agreement, other than a release, shall be in the form hereinafter provided.

Sec. 24. If compensation be not so settled by agreement: (a) If any committee representative of the employer and the workman exists, organized for the purpose of settling disputes under this act, the matter shall, unless either party objects by notice in writing delivered or sent by registered mail to the other party before the committee meets to consider the matter, be settled in accordance with its rules by such committee or by an arbitrator selected by it. (b) If either party so objects, or there is no such committee, or the committee or the arbitrator to whom it refers the matter fails to settle it within sixty days from the date of the claim, the matter may be settled by a single arbitrator agreed on by the parties, or appointed by any judge of a court where an action might be maintained. The consent to arbitration shall be in writing and signed by the parties and may limit the fees of the arbitrator and the time within which the award must be made. And unless such consent and the order of appoint-

ment expressly refers other questions, only the question of the amount of compensation shall be deemed to be in issue.

SEC. 25. The arbitrator shall not be bound by technical rules of procedure or evidence, but shall give the parties reasonable opportunity to be heard and act reasonably and without partiality. He shall make and file his award, with the consent to arbitration attached in the office of the clerk of the proper district court within the time limited in the consent, or if no time limit is fixed therein, within sixty days after his selection, and shall give notice of such filing to the parties by mail.

SEC. 26. The arbitrator's fees shall be fixed by the consent to arbitration or be agreed to by the parties before the arbitration, and if not so fixed or agreed to, they shall not exceed \$10.00 per day, for not to exceed ten days, and disbursements for expense. The arbitrator shall tax or apportion the costs of such fees in his discretion and shall add the amount taxed or apportioned against the employer to the first payment made under the award, and he shall note the amount of his fees on the award and shall have a lien thereon for the first payments due under the award.

SEC. 27. Every agreement for compensation and every award shall be in writing, signed and acknowledged by the parties or by the arbitrator or secretary of the committee hereinbefore referred to, and shall specify the amount due and unpaid by the employer to the workman up to the date of the agreement or award, and if any, the amount of the payments thereafter to be paid by the employer to the workman and the length of time such payments shall continue.

SEC. 28. It shall be the duty of the employer to file or cause to be filed every release of liability hereunder, every agreement for or award of compensation, or modifying an agreement for or award of compensation, under this act, if not filed by the committee or arbitrator, to which he is a party, or a sworn copy thereof, in the office of the district court in the county in which the accident occurred within sixty days after it is made, otherwise it shall be void as against the workman. The said clerk shall accept, receipt for, and file any such release, agreement or award, without fee, and record and index it in the book kept for that purpose. Nothing herein shall be construed to prevent the workman from filing such agreement or award.

SEC. 29. At any time within one year after an agreement or award has been so filed, a judge of a district court having jurisdiction may, upon the application of either party, cancel such agreement or award, upon such terms as may be just, if it be shown to his satisfaction that the workman has returned to work and is earning approximately the same or higher wages as or than he did before the accident, or that the agreement or award has been obtained by fraud or undue influence, or that the committee or arbitrator making the award acted without authority or was guilty of serious misconduct, or that the award is grossly inadequate or grossly excessive, or if the employee absents himself so that a reasonable examination of his condition can not be made, or has departed beyond the boundaries of the United States or Canada.

SEC. 30. At any time after the filing of an agreement or award and before judgment has been granted thereon, the employer may stay proceedings thereon by filing in the office of the clerk of the district court wherein such agreements or award is filed: (a) A proper certificate of a qualified insurance company that the amount of the compensation to the workman is insured by it; (b) A proper bond undertaking to secure the payment of the compensation. Such certificate or bond shall first be approved by a judge of the said district court.

SEC. 31. At any time after an agreement or award has been filed, the workman may apply to the said district court for judgment against the employer for a lump sum equal to eighty per cent of the amount of payments due and unpaid and prospectively due under the agreement or award; and, unless the agreement or award be stayed, modified or canceled, or the liability thereunder be redeemed or otherwise discharged, the court shall examine the workman under oath, and if satisfied that the application is made because of doubt as to the security of his compensation, shall compute the sum and direct judgment accordingly, as if in an action: *Provided*, That if the employer shall give a good and sufficient bond, approved by the court, no execution shall issue on such judgment so long as the employer continues to make payments in accordance with the original agreement or award undiminished by the discount.

SEC. 32. An agreement or award may be modified at any time by a subsequent agreement; or, at any time after one year from the date of filing; it may be reviewed, upon the application of either party on the ground that the incapacity of the workman has subsequently increased or diminished. Such application shall be made to the said district court; and, unless the parties consent to arbitration, the court may appoint a medical practitioner to examine the workman and report to it; and upon his report and after hearing the evidence of the parties, the court may modify such agreement or award, as may be just, by ending, increasing or diminishing the compensation, subject to the limitations hereinbefore provided.

SEC. 33. Where any payment has been continued for not less than six months the liability therefor may be redeemed by the employer by the payment to the workman of a lump sum of an amount equal to eighty per cent of the payments which may become due according to the award, such amount to be determined by agreement, or, in default thereof, upon application, to a judge of a district court having jurisdiction. Upon paying such amount the employer shall be discharged from all further liability on account of the injury, and be entitled to a duly executed release, upon filing which or other due proof of payment, the liability upon any agreement or award shall be discharged of record.

SEC. 34. Where the payment of compensation to the workman is insured, by a policy or policies, at the expense of the employer, the insurer shall be subrogated to the rights and duties under this act of the employer, so far as appropriate.

SEC. 35. All references hereinbefore to a district court of the State of Kansas having jurisdiction of a civil action between the parties shall be construed as relating to the then existing Code of Civil Procedure. Such court shall make all rules necessary and appropriate to carry out the provisions of this act.

SEC. 36. A workman's right to compensation under this act, may, in default of agreement or arbitration, be determined and enforced by action in any court of competent jurisdiction. In every such action the right to trial by jury shall be deemed waived and the case tried by the court without a jury, unless either party, with his notice of trial, or when the case is placed upon the calendar—demand a jury trial. The judgment in the action, if in favor of the plaintiff, shall be for a lump sum equal to the amount of the payments then due and prospectively due under this act, with interest on the payments overdue, or, in the discretion of the trial judge, for periodical payments as in an award. Where death results from injury, the action shall be brought by the dependent or dependents entitled to the compensation or by the legal representative of the deceased for the benefit of the dependents as herein defined; and in such action the judgment may provide for the proportion of the award to be distributed to or between the several dependents; otherwise such proportions shall be determined by the proper probate court. An action to set aside a release or other discharge of liability on the ground of fraud or mental incompetency may be joined with an action for compensation under this act. No action or proceeding provided for in this act shall be brought or maintained outside of the State of Kansas, and notice thereof may be given by publication against nonresidents of the State in the manner now provided by article 7 of chapter 95, General Statutes of Kansas of 1909 so far as the same may be applicable, and by personal service of a true copy of the first publication within twenty-one days after the date of the said first publication unless excused by the court upon proper showing that such service can not be made.

SEC. 37. The cause of action shall be deemed in every case, including a case where death results from the injury to have accrued to the injured workman at the time of the accident; and the time limited in which to commence an action for compensation therefor shall run as against him, his legal representatives and dependents from that date.

SEC. 38. Contingent fees of attorneys for services and proceedings under this act shall in every case be subject to approval by the court.

SEC. 39. If the superintendent of insurance by and with the advice and written approval of the attorney general certifies that any scheme of compensation, benefit or insurance for the workman of an employer in any employment to which this act applies, whether or not such scheme includes other employers and their workmen, provides scales of compensation not less favorable to the workmen and their dependents than the corresponding scales contained in this act, and that, where the scheme provides for contributions by the workman, the scheme confers benefits at least equivalent to those contributions, in addition to the benefits to which the workmen would have been entitled under this act or their equivalents, the employer, may, while the certificate is in force, contract with any of his workmen that the provisions of the scheme shall be substituted for the provisions of this act; and thereupon the employer shall be liable only in accordance with that scheme; but, save as aforesaid, this act shall not apply notwithstanding any contract to the contrary made after this act becomes a law.

SEC. 40. No scheme shall be so certified which does not contain suitable provisions for the equitable distribution of any moneys or securities held for the purpose of the scheme, after due provision has been made to discharge the liabilities already accrued, if and when such certificate is revoked or the scheme otherwise terminated.

SEC. 41. If at any time the scheme no longer fulfills the requirements of this article, or is not fairly administered, or other valid and substantial reasons therefor exist, the superintendent of insurance by and with the attorney general shall revoke the certificate and the scheme shall thereby be terminated.

SEC. 42. Where a certified scheme is in effect the employer shall answer all such inquiries and furnish all such accounts in regard thereto as may be required by the superintendent.

SEC. 43. The superintendent of insurance may make all rules and regulations necessary to carry out the purposes of the four preceding sections.

SEC. 44. All employers as defined by this act who shall elect to come within the provisions of this act and of all acts amendatory hereof shall do so by filing a statement to such effect with the secretary of state of this State at any time after taking effect of this act, which election shall be binding upon such employer for the term of one year from the date of the filing of such statement, and thereafter, without further act on his part, for successive terms of one year each, unless such employer shall, at least sixty days prior to the expiration of such first or of any succeeding year, file in the office of the secretary of state a notice in writing to the effect that he withdraws his election to be subject to the provisions of this act. Notice of such election or withdrawal shall be forthwith posted by such employer in conspicuous places in and about his place of business.

SEC. 45. Every employee entitled to come within the provisions of this act, shall be presumed to have done so unless he serve written notice, before injury, upon his employer that he elects not to accept thereunder and thereafter any such employee desiring to change his election shall only do so by serving written notice thereof upon his employer. Any contract wherein an employer requires of an employee as a condition of employment that he shall elect not to come within the provisions of this act shall be void.

SEC. 46. In any action to recover damages for a personal injury sustained within this State by an employee (entitled to come within the provisions of this act) while engaged in the line of his duty as such or for death resulting from personal injury so sustained, in which recovery is sought upon the ground of want of due care of the employer or of any officer, agent or servant of the employer, where such employer is within the provisions hereof, it shall not be a defense to any employer (as herein in this act defined) who shall not have elected, as hereinbefore provided, to come within the provisions of this act: (a) That the employee either expressly or impliedly assumed the risk of the hazard complained of; (b) that the injury or death was caused in whole or in part by the want of due care of a fellow servant; (c) that such employee was guilty of contributory negligence but such contributory negligence of said employee shall be considered by the jury in assessing the amount of recovery.

SEC. 47. In an action to recover damages for a personal injury sustained within this State by an employee (entitled to come within the provisions of this act) while engaged in the line of his duty as such or for death resulting from personal injury so sustained in which recovery is sought upon the ground of want of due care of the employer or of any officer, agent or servant of the employer, and where such employer has elected to come and is within the provisions of this act as hereinbefore provided, it shall be a defense for such employer in all cases where said employee has elected not to come within the provisions of this act; (a) That the employee either expressly or impliedly assumed the risk of the hazard complained of; (b) that the injury or death was caused in whole or in part by the want of due care of a fellow servant; (c) that said employee was guilty of contributory negligence: *Provided, however,* That none of these defenses shall be available where the injury was caused by the willful or gross negligence of such employer, or of any managing officer, or managing agent of said employer, or where under the law existing at the time of the death or injury such defenses are not available.

SEC. 48. Nothing in this act shall be construed to amend or repeal section 6999 of the General Statutes of Kansas of 1909, or House bill No. 240 of the Session of 1911, the same being "An act relating to the liability of common carriers by railroads to their employees in certain cases, and repealing all acts and parts of acts so far as the same are in conflict herewith."

SEC. 49. This act shall take effect and be in force from and after its publication in the statute book, and the first day of January, 1912.

MARYLAND.

[The cooperative insurance law of Maryland, applicable to coal and clay miners in Allegany and Garrett counties, was printed in Bulletin No. 91, pp. 1066-1070.]

MONTANA.

[The cooperative insurance law of Montana, applicable to coal mine employees, was printed in Bulletin No. 85, pp. 658-661.]

NEW HAMPSHIRE.

ACT APPROVED APRIL 15, 1911.

SECTION 1. This act shall apply only to workmen engaged in manual or mechanical labor in the employments described in this section, which, from the nature, conditions or means of prosecution of such work, are dangerous to the life and limb of workmen engaged therein, because in them the risks of employment and the danger of injury caused by fellow servants are great and difficult to avoid. (a) The operation on steam or electric railroads of locomotives, engines, trains or cars, or the construction, alteration, maintenance or repair of steam railroad tracks or roadbeds over which such locomotives, engines, trains or cars are or are to be operated. (b) Work in any shop, mill, factory or other place on, in connection with or in proximity to any hoisting apparatus, or any machinery propelled or operated by steam or other mechanical power in which shop, mill, factory or other place five or more persons are engaged in manual or mechanical labor. (c) The construction, operation, alteration or repair of wires or lines of wires, cables, switchboards or apparatus, charged with electric currents. (d) All work necessitating dangerous proximity to gunpowder, blasting powder, dynamite or any other explosives, where the same are used as instrumentalities of the industry, or to any steam boiler owned or operated by the employer, provided injury is occasioned by the explosion of any such boiler or explosive. (e) Work in or about any quarry, mine or foundry. As to each of said employments it is deemed necessary to establish a new system of compensation for accidents to workmen.

SEC. 2. If, in the course of any of the employments above described, personal injury by accident arising out of and in the course of the employment is caused to any workman employed therein, in whole or in part, by failure of the employer to comply with any statute, or with any order made under authority of law, or by the negligence of the employer or any of his or its officers, agents or employees, or by reason of any defect or insufficiency due to his, its or their negligence in the condition of his or its plant, ways, works, machinery, cars, engines, equipment, or appliances, then such employer shall be liable to such workman for all damages occasioned to him, or, in case of his death, to his personal representatives for all damages now recoverable under the provisions of chapter 191 of the Public Statutes. The workman shall not be held to have assumed the risk of any injury, due to any cause specified in this section; but there shall be no liability under this section for any injury to which it shall be made to appear by a preponderance of evidence that the negligence of the plaintiff contributed. The damages provided for by this section shall be recovered in an action on the case for negligence.

SEC. 3. The provisions of section 2 of this act shall not apply to any employer who shall have filed with the commissioner of labor his declaration in writing that he accepts the provisions of this act as contained in the succeeding sections, and shall have satisfied the commissioner of labor of his financial ability to comply with its provisions, or shall have filed with the commissioner of labor a bond, in such form and amount as the commissioner may prescribe, conditioned on the discharge by such employer of all liability incurred under this act. Such bond shall be enforced by the commissioner of labor for the benefit of all persons to whom such employer may become liable under this act in the same manner as probate bonds are enforced. The commissioner may, from time to time, order the filing of new bonds, when in his judgment such bonds are necessary; and after thirty days from the communication of such order to any employer, such employer shall be subject to the provisions of section 2 of this act until such order has been complied with. The employer may at any time revoke his acceptance of the provisions of the succeeding sections of this act by filing with the commissioner of labor a declaration to that effect, and by posting copies of such declaration in conspicuous places about the place where his workmen are employed. Any person aggrieved by any decision of the commissioner under this section may apply by petition to any justice of the superior court for a review of such decision and said justice on notice and hearing shall make such order affirming, reversing or modifying such decision as justice may require; and such order shall be final. Such employer shall be liable to all workmen engaged in any of the employments specified in section 1, for any injury arising out of and in the course of their employment, in the manner provided in the following sections of this act: *Provided*, That the employer shall not be liable in respect of any injury which does not disable the workman for a period of at least two weeks from earning full wages at the work at which he was employed: *And, provided*, That the employer shall not be liable in respect of any injury to the workman which is caused in whole or in part

by the intoxication, violation of law, or serious or willful misconduct of the workman: *Provided, further*, That the employer shall at the election of the workman, or his personal representative, be liable under the provisions of section 2 of this act for all injury caused in whole or in part by willful failure of the employer to comply with any statute, or with any order made under authority of law.

Sec. 4. The right of action for damages caused by any such injury, at common law, or under any statute in force on January one, nineteen hundred and eleven, shall not be affected by this act, but in case the injured workman, or in event of his death his executor or administrator, shall avail himself of this act, either by accepting any compensation hereunder, by giving the notice hereinafter prescribed, or by beginning proceedings therefor in any manner on account of any such injury, he shall be barred from recovery in every action at common law or under any other statute on account of the same injury. In case after such injury the workman, or in the event of his death his executor or administrator, shall commence any action at common law or under any statute other than this act against the employer therefor, he shall be barred from all benefit of this act in regard thereto.

Sec. 5. No proceeding for compensation under this act shall be maintained unless notice of the accident as hereinafter provided has been given to the employer as soon as practicable after the happening thereof and before the workman has voluntarily left the employment in which he was injured and during such disability, and unless claim for compensation has been made within six months from the occurrence of the accident, or in case of the death of the workman, or in the event of his physical or mental incapacity, within six months after such death or the removal of such physical or mental incapacity, or in the event that weekly payments have been made under this article, within six months after such payments have ceased, but no want or defect or inaccuracy of a notice shall be a bar to the maintenance of proceedings unless the employer proves that he is prejudiced by such want, defect or inaccuracy. Notice of the accident shall apprise the employer of the claim for compensation under this article, and shall state the name and address of the workman injured, and the date and place of the accident. The notice may be served personally or by sending it by mail in a registered letter addressed to the employer at his last known residence or place of business.

Sec. 6. (1) The amount of compensation shall be, in case death results from injury: (a) If the workman leaves any widow, children or parents, resident of this State, at the time of his death, then wholly dependent on his earnings, a sum to compensate them for loss, equal to one hundred and fifty times the average weekly earnings of such workman when at work on full time during the preceding year during which he shall have been in the employ of the same employer, or if he shall have been in the employment of the same employer for less than a year then one hundred and fifty times his average weekly earnings on full time for such less period. But in no event shall such sum exceed three thousand dollars. Any weekly payments made under this act shall be deducted from the sum so fixed. (b) If such widow, children or parents at the time of his death are in part only dependent upon his earnings, such proportion of the benefits provided for those wholly dependent as the amount of the wage contributed by the deceased to such partial dependents at the time of injury bore to the total wage of the deceased. (c) If he leaves no such dependents, the reasonable expenses of his medical attendance and burial, not exceeding one hundred dollars. Whatever sum may be determined to be payable under this act in case of death of the injured workman shall be paid to his legal representative for the benefit of such dependents, or if he leaves no such dependents, for the benefit of the persons to whom the expenses of medical attendance and burial are due.

(2) Where total or partial incapacity for work at any gainful employment results to the workman from the injury, a weekly payment commencing at the end of the second week after the injury and continuing during such incapacity, subject as herein provided, not exceeding fifty per centum of his average weekly earnings when at work on full time during the preceding year during which he shall have been in the employment of the same employer, or if he shall have been in the employment of the same employer for less than a year, then a weekly payment of not exceeding one half the average weekly earnings on full time for such less period. In fixing the amount of the weekly payment, regard shall be had to the difference between the amount of the average earnings of the workman before the accident and the average amount he is able to earn thereafter as wages in the same employment or otherwise. In fixing the amount of the weekly payment, regard shall be had to any payment, allowance or benefit which the workman may have received from the employer during the period of his incapacity, and in the case of partial incapacity the weekly payment shall in no case exceed the difference between the amount of the average weekly earnings of the workman before the accident and the average weekly amount which

he is earning or is able to earn in the same employment or otherwise after the accident, but shall amount to one-half of such difference. In no event shall any compensation paid under this act exceed the damage suffered, nor shall any weekly payment payable under this act in any event exceed ten dollars a week or extend over more than three hundred weeks from the date of the accident. Such payment shall continue for such period of three hundred weeks provided total or partial disability continue during such period. No such payment payable under this act in any event prior to the giving of the notice required by section five of this act.

SEC. 7. Any workman entitled to receive weekly payments under this act is required, if requested by the employer, to submit himself for examination by a duly qualified medical practitioner or surgeon provided and paid for by the employer, at a time and place reasonably convenient for the workman, within two weeks after the injury, and thereafter at intervals not oftener than once in a week. If the workman refuses to submit to such examination, or obstructs the same, his right to weekly payments shall be suspended until such examination has taken place, and no compensation shall be payable during or for account of such period.

SEC. 8. In case an injured workman shall be mentally incompetent at the time when any right or privilege accrues to him under this act, the guardian of the incompetent appointed pursuant to law may, on behalf of such incompetent, claim and exercise any such right or privilege with the same force and effect as if the workman himself had been competent and had claimed or exercised any such right or privilege, and no limitation of time in this act provided for shall run so long as said incompetent workman has no guardian.

SEC. 9. Any question as to compensation which may arise under this act shall be determined by agreement or by an action at equity as hereinafter provided. In case the employer fail to make compensation as herein provided, the injured workman, or his guardian, if such be appointed, or his executor or administrator, may then bring an action to recover compensation under this act in any court having jurisdiction of an action for recovery of damages for negligence for the same injury between the same parties. Such action shall be by petition in equity, which may be made returnable at the appropriate term of the superior court or may be filed in the office of the clerk of the superior court and presented in term time or vacation to any justice of said court, who on reasonable notice shall hear the parties and render judgment thereon. The judgment in such action if in favor of the plaintiff shall be for a lump sum equal to the amount of payments then due and prospectively due under this act. In such action by an executor or administrator the judgment may provide the proportions of the award or the costs to be distributed to or between the several dependents. If such determination is not made it shall be determined by the probate court in which such executor or administrator is appointed, in accordance with this act, on petition of any party interested, on such notice as such court may direct. Any employer who has declared his intention to act under the compensation features of this act shall also have the right to apply by similar proceedings to the superior court or to any justice thereof for a determination of the amount of the weekly payments to be paid the injured workman, or of a lump sum to be paid the injured workman in lieu of such weekly payments; and either such employer or workman may apply to said superior court or to any justice thereof in similar proceeding for the determination of any other question that may arise under the compensation feature of this act; and said court or justice, after reasonable notice and hearing, may make such order as to the matter in dispute and taxable costs as justice may require.

SEC. 10. Any person entitled to weekly payments under this act against any employer shall have the same preferential claim therefor against the assets of the employer as is allowed by law for a claim by such person against such employer for unpaid wages or personal services. Weekly payments due under this act shall not be assignable or subject to levy, execution, attachment or satisfaction of debts. Any right to receive compensation under this act shall be extinguished by the death of the person entitled thereto.

SEC. 11. No claim of any attorney at law for any contingent interest in any recovery under this act for services in securing such recovery or for disbursements shall be an enforceable lien on such recovery, unless the account of the same be approved in writing by a justice of the superior court, or, in case the same be tried in any court, by the justice presiding at such trial.

SEC. 12. Every employer subject to the provisions of this act shall from time to time make to the commissioner of labor such returns as to its operation as said commissioner may require upon blanks to be furnished by said commissioner. Any employer failing to make such returns when required by said commissioner shall, until such returns are made, be subject to the provisions of section 2 of this act.

SEC. 13. This act shall take effect January first, nineteen hundred and twelve.

NEW JERSEY.

ACT OF APRIL 4, 1911.

SECTION I.—*Compensation by action at law.*

1. When personal injury is caused to an employee by accident arising out of and in the course of his employment, of which the actual or lawfully imputed negligence of the employer is the natural and proximate cause, he shall receive compensation therefor from his employer, provided the employee was himself not willfully negligent at the time of receiving such injury, and the question of whether the employee was willfully negligent shall be one of fact to be submitted to the jury, subject to the usual superintending powers of a court to set aside a verdict rendered contrary to the evidence.

2. The right to compensation as provided by Section I of this act shall not be defeated upon the ground that the injury was caused in any degree by the negligence of a fellow employee; or that the injured employee assumed the risks inherent in or incidental to or arising out of his employment or arising from the failure of the employer to provide and maintain safe premises and suitable appliances; which said grounds of defense are hereby abolished.

3. If an employer enters into a contract, written or verbal, with an independent contractor to do part of such employer's work, or if such contractor enters into a contract, written or verbal, with a subcontractor to do all or any part of such work comprised in such contractor's contract with the employer, such contract or subcontract shall not bar the liability of the employer under this act for injury caused to an employee of such contractor or subcontractor by any defect in the condition of the ways, works, machinery or plant if the defect arose or had not been discovered and remedied through the negligence of the employer or some one entrusted by him with the duty of seeing that they were in proper condition. This paragraph shall apply only to actions arising under section one.

4. The provisions of paragraphs one, two and three shall apply to any claim for the death of an employee arising under an act entitled "An act to provide for the recovery of damages in cases where the death of a person is caused by wrongful act, neglect or default," approved March third, eighteen hundred and forty-eight, and the amendments thereof and supplements thereto.

5. In all actions at law brought pursuant to Section I of this act, the burden of proof to establish willful negligence in the injured employee shall be upon the defendant.

6. No claim for legal services or disbursements pertaining to any demand made or suit brought under the provisions of this act shall be an enforceable lien against the amount paid as compensation, unless the same be approved in writing by the judge or justice presiding at the trial, or in case of settlement without trial, by the judge of the circuit court of the district in which such issue arose: *Provided*, That if notice in writing be given the defendant of such claim for legal services or disbursements, the same shall be a lien against the amount paid as compensation, subject to determination of the amount and approval hereinbefore provided.

SECTION II.—*Elective compensation.*

7. When employer and employee shall by agreement, either express or implied, as hereinafter provided, accept the provisions of Section II of this act, compensation for personal injuries to or for the death of such employee by accident arising out of and in the course of his employment shall be made by the employer without regard to the negligence of the employer, according to the schedule contained in paragraph eleven, in all cases except when the injury or death is intentionally self-inflicted, or when intoxication is the natural and proximate cause of injury, and the burden of proof of such fact shall be upon the employer.

8. Such agreement shall be a surrender by the parties thereto of their rights to any other method, form or amount of compensation or determination thereof than as provided in Section II of this act, and an acceptance of all the provisions of Section II of this act, and shall bind the employee himself and for compensation for his death shall bind his personal representatives, his widow and next of kin, as well as the employer, and those conducting his business during bankruptcy or insolvency.

9. Every contract of hiring made subsequent to the time provided for this act to take effect shall be presumed to have been made with reference to the provisions of Section II of this act, and unless there be as a part of such contract an express statement in writing, prior to any accident, either in the contract itself or by written notice from either party to the other, that the provisions of Section II of this act are not intended

to apply, then it shall be presumed that the parties have accepted the provisions of Section II of this act and have agreed to be bound thereby. In the employment of minors, Section II shall be presumed to apply unless the notice be given by or to the parent or guardian of the minor.

10. The contract for the operation of the provisions of Section II of this act may be terminated by either party upon sixty days' notice in writing prior to any accident.

11. Following is the schedule of compensation:

(a) For injury producing temporary disability, fifty per centum of the wages received at the time of injury, subject to a maximum compensation of ten dollars per week and a minimum of five dollars per week: *Provided*, That if at the time of injury the employee receives wages of less than five dollars per week, then he shall receive the full amount of such wages per week. This compensation shall be paid during the period of such disability, not, however, beyond three hundred weeks.

(b) For disability total in character and permanent in quality, fifty per centum of the wages received at the time of injury, subject to a maximum compensation of ten dollars per week and a minimum of five dollars per week: *Provided*, That if at the time of injury the employee receives wages of less than five dollars per week, then he shall receive the full amount of wages per week. This compensation shall be paid during the period of such disability, not, however, beyond four hundred weeks.

(c) For disability partial in character but permanent in quality, the compensation shall be based upon the extent of such disability. In cases included by the following schedule the compensation shall be that named in the schedule, to wit:

For the loss of a thumb, fifty per centum of daily wages during sixty weeks.

For the loss of a first finger, commonly called index finger, fifty per centum of daily wages during thirty-five weeks.

For the loss of a second finger, fifty per centum of daily wages during thirty weeks.

For the loss of a third finger, fifty per centum of daily wages during twenty weeks.

For the loss of a fourth finger, commonly called little finger, fifty per centum of daily wages during fifteen weeks.

The loss of the first phalange of the thumb, or of any finger, shall be considered to be equal to the loss of one-half of such thumb, or finger, and compensation shall be one-half the amounts above specified.

The loss of more than one phalange shall be considered as the loss of the entire finger or thumb: *Providing, however*, That in no case shall the amount received for more than one finger exceed the amount provided in this schedule for the loss of a hand.

For the loss of a great toe, fifty per centum of daily wages during thirty weeks.

For the loss of one of the toes other than a great toe, fifty per centum of daily wages during ten weeks.

For the loss of the first phalange of any toe shall be considered to be equal to the loss of one-half of such toe, and compensation shall be one-half of the amount above specified.

The loss of more than one phalange shall be considered as the loss of the entire toe.

For the loss of a hand, fifty per centum of daily wages during one hundred and fifty weeks.

For the loss of an arm, fifty per centum of daily wages during two hundred weeks.

For the loss of a foot, fifty per centum of daily wages during one hundred and twenty-five weeks.

For the loss of a leg, fifty per centum of daily wages during one hundred and seventy-five weeks.

For the loss of an eye, fifty per centum of daily wages during one hundred weeks.

The loss of both hands, or both arms, or both feet, or both legs, or both eyes, or of any two thereof, shall constitute total and permanent disability, to be compensated according to the provisions of clause (b).

In all other cases in this class the compensation shall bear such relation to the amounts stated in the above schedule as the disabilities bear to those produced by the injuries named in the schedule. Should the employer and employee be unable to agree upon the amount of compensation to be paid in cases not covered by the schedule, the amount of compensation shall be settled according to the provisions of paragraph twenty hereof.

The amounts specified in this clause are all subject to the same limitations as to maximum and minimum as are stated in clause (a).

12. In case of death compensation shall be computed but not distributed on the following basis:

(1) Actual dependents.

If orphan or orphans, a minimum of twenty-five per centum of wages of deceased, with ten per centum additional for each orphan in excess of two, with a maximum of sixty per centum.

If widow alone, twenty-five per centum of wages.

If widow and one child, forty per centum of wages.

If widow and two children, forty-five per centum of wages.

If widow and three children, fifty per centum of wages.

If widow and four children, fifty-five per centum of wages.

If widow and five children or more, sixty per centum of wages.

If widow and father or mother, fifty per centum of wages.

If grandparents, grandchildren, or minor, or incapacitated brothers or sisters, twenty-five per centum of wages.

Compensation in case of death shall be computed on the basis of the foregoing schedule, but shall be distributed according to the laws of this State providing for the distribution of the personal property of an intestate decedent, unless decedent has in fact left a will.

(2) No dependents.

Expense of last sickness and burial not exceeding two hundred dollars.

In computing compensation to orphans or other children, only those under sixteen years of age shall be included, and only during the period in which they are under that age, at which time payment on account of such child shall cease.

The compensation in case of death shall be subject to a maximum compensation of ten dollars per week and a minimum of five dollars per week: *Provided*, That if at the time of injury the employee receives wages of less than five dollars per week, then the compensation shall be the full amount of such wages per week. This compensation shall be paid during three hundred weeks.

Compensation under this schedule shall not apply to alien dependents not residents of the United States.

13. No compensation shall be allowed for the first two weeks after injury received, except as provided by paragraph fourteen, nor in any case unless the employer has actual knowledge of the injury or is notified thereof within the period specified in paragraph fifteen.

14. During the first two weeks after the injury the employer shall furnish reasonable medical and hospital services and medicines, as and when needed, not to exceed one hundred dollars in value, unless the employee refuses to allow them to be furnished by the employer.

15. Unless the employer shall have actual knowledge of the occurrence of the injury, or unless the employee, or some one on his behalf, or some of the dependents, or some one on their behalf, shall give notice thereof to the employer within fourteen days of the occurrence of the injury, then no compensation shall be due until such notice is given or knowledge obtained. If the notice is given, or the knowledge obtained within thirty days from the occurrence of the injury, no want, failure, or inaccuracy of a notice shall be a bar to obtaining compensation, unless the employer shall show that he was prejudiced by such want, defect or inaccuracy, and then only to the extent of such prejudice. If the notice is given, or the knowledge obtained within ninety days, and if the employee, or other beneficiary, shall show that his failure to give prior notice was due to his mistake, inadvertence, ignorance of fact or law, or inability, or to the fraud, misrepresentation or deceit of another person, or to any other reasonable cause or excuse, then compensation may be allowed, unless, and then to the extent only that the employer shall show that he was prejudiced by failure to receive such notice. Unless knowledge be obtained, or notice given, within ninety days after the occurrence of the injury, no compensation shall be allowed.

16. The notice referred to may be served personally upon the employer, or upon any agent of the employer upon whom a summons may be served in a civil action, or by sending it through the mail to the employer at the last known residence or business place thereof within the State, and shall be substantially in the following form:

To (name of employer):

You are hereby notified that a personal injury was received by (name of employee injured), who was in your employ at (place) while engaged as (nature of employment), on or about the (—) day of (—), nineteen hundred and (—), and that compensation will be claimed therefor.

Signed, (— — —).

but no variation from this form shall be material if the notice is sufficient to advise the employer that a certain employee, by name, received an injury in the course of his employment on or about a specified time, at or near a certain place. Notice served at the office of, or on the person who was the employer's immediate superior, shall be a compliance with this act.

17. After an injury, the employee, if so requested by his employer, must submit himself for examination at some reasonable time and place within the State, and as

often as may be reasonably requested, to a physician or physicians authorized to practice under the laws of this State. If the employee requests, he shall be entitled to have a physician or physicians of his own selection present to participate in such examination. The refusal of the employee to submit to such examination shall deprive him of the right to compensation during the continuance of such refusal. When a right to compensation is thus suspended no compensation shall be payable in respect of the period of suspension.

18. In case of a dispute over, or failure to agree upon, a claim for compensation between employer and employee, or the dependents of the employee, either party may submit the claim, both as to questions of fact, the nature and effect of the injuries, and the amount of compensation therefor according to the schedule herein provided, to the judge of the court of common pleas of such county as would have jurisdiction in a civil case, or where there is more than one judge of said court, then to either or any of said judges of such court, which judge is hereby authorized to hear and determine such disputes in a summary manner, and his decision as to all questions of fact shall be conclusive and binding.

19. In case of death, where no executor or administrator is qualified, the said judge shall, by order, direct payment to be made to such person as would be appointed administrator of the estate of such decedent upon like terms as to bond for the proper application of compensation payments as are required of administrators.

20. Procedure in case of dispute shall be as follows:

Either party may present a petition to said judge setting forth the names and residences of the parties and the facts relating to employment at the time of injury, the injury in its extent and character, the amount of wages received at the time of injury, the knowledge of the employer or notice of the occurrence of said injury, and such other facts as may be necessary and proper for the information of the said judge, and shall state the matter or matters in dispute and the contention of the petitioner with reference thereto. This petition shall be verified by the oath or affirmation of the petitioner.

Upon the presentation of such petition the same shall be filed with the clerk of the court of common pleas, and the judge shall fix a time and place for the hearing thereof, not less than three weeks after the date of the filing of said petition. A copy of said petition shall be served as summons in a civil action and may be served within four days thereafter upon the adverse party. Within seven days after the service of such notice the adverse party shall file an answer to said petition, which shall admit or deny the substantial averments of the petition, and shall state the contention of the defendant with reference to the matters in dispute as disclosed by the petition. The answer shall be verified in like manner as required for a petition.

At the time fixed for hearing or any adjournment thereof the said judge shall hear such witnesses as may be presented by each party, and in a summary manner decide the merits of the controversy. This determination shall be filed in writing with the clerk of the common pleas court, and judgment shall be entered thereon in the same manner as in causes tried in the court of common pleas, and shall contain a statement of facts as determined by said judge. Subsequent proceedings thereon shall only be for the recovery of moneys thereby determined to be due: *Provided*, That nothing herein contained shall be construed as limiting the jurisdiction of the supreme court to review questions of law by certiorari. Costs may be awarded by said judge in his discretion, and when so awarded the same costs shall be allowed, taxed and collected as are allowed, taxed and collected for like services in the common pleas court.

21. The amounts payable periodically as compensation may be commuted to one or more lump sum payments by the judge of the court of common pleas having jurisdiction as set forth in the preceding paragraph, upon the application of either party, in his discretion, provided the same be in the interest of justice. Unless so approved, no compensation payments shall be commuted.

An agreement of award of compensation may be modified at any time by a subsequent agreement, or at any time after one year from the time when the same became operative it may be reviewed upon the application of either party on the ground that the incapacity of the injured employee has subsequently increased or diminished. In such case the provisions of paragraph seventeen with reference to medical examination shall apply.

22. The right of compensation granted by this act shall have the same preference against the assets of the employer as is now or may hereafter be allowed by law for a claim for unpaid wages for labor. Claims or payments due under this act shall not be assignable, and shall be exempt from all claims of creditors and from levy, execution or attachment.

SECTION III.—*General provisions.*

23. For the purposes of this act, willful negligence shall consist of (1) deliberate act or deliberate failure to act, or (2) such conduct as evidences reckless indifference to safety, or (3) intoxication, operating as the proximate cause of injury.

Wherever in this act the singular is used the plural shall be included; where the masculine gender is used, the feminine and neuter shall be included.

Employer is declared to be synonymous with master and includes natural persons, partnerships and corporations; employee is synonymous with servant and includes all natural persons who perform service for another for financial consideration, exclusive of casual employments.

Amputation between the elbow and the wrist shall be considered as the equivalent of the loss of a hand, and amputation between the knee and the ankle shall be considered as the equivalent of the loss of a foot.

24. In case for any reason any paragraph or any provision of this act shall be questioned in any court and shall be held to be unconstitutional or invalid, the same shall not be held to affect any other paragraph or provision of this act, except that Sections I and II are hereby declared to be inseparable, and if either section be declared void or inoperative in an essential part, so that the whole of such section must fall, the other section shall fall with it and not stand alone. Section I of this act shall not apply in cases where Section II becomes operative in accordance with the provisions thereof, but shall apply in all other cases, and in such cases shall be in extension of the common law.

25. Every right of action for negligence, or to recover damages for injuries resulting in death, existing before this act shall take effect, is continued, and nothing in this act contained shall be construed as affecting any such right of action, nor shall the failure to give the notice provided for in Section II, paragraph fifteen of this act, be a bar to the maintenance of a suit upon any right or action existing before this act shall take effect.

26. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

27. This act shall take effect on the fourth day of July next succeeding its passage and approval.

NEW YORK.

[The compensation law of New York (elective) was printed in Bulletin No. 90, pp. 709-712, and in Bulletin No. 91, pp. 1091-1095.]

WASHINGTON.

ACT OF MARCH 14, 1911.

SECTION 1. The common-law system governing the remedy of workmen against employers for injuries received in hazardous work is inconsistent with modern industrial conditions. In practice it proves to be economically unwise and unfair. Its administration has produced the result that little of the cost of the employer has reached the workman and that little only at large expense to the public. The remedy of the workman has been uncertain, slow and inadequate. Injuries in such works, formerly occasional, have become frequent and inevitable. The welfare of the State depends upon its industries, and even more upon the welfare of its wageworker. The State of Washington, therefore, exercising herein its police and sovereign power, declares that all phases of the premises are withdrawn from private controversy, and sure and certain relief for workmen, injured in extra hazardous work, and their families and dependents is hereby provided regardless of questions of fault and to the exclusion of every other remedy, proceeding or compensation, except as otherwise provided in this act; and to that end all civil actions and civil causes of action for such personal injuries and all jurisdiction of the courts of the State over such causes are hereby abolished, except as in this act provided.

SEC. 2. There is a hazard in all employment, but certain employments have come to be, and to be recognized as being inherently constantly dangerous. This act is intended to apply to all such inherently hazardous works and occupations, and it is the purpose to embrace all of them, which are within the legislative jurisdiction of the State, in the following enumeration, and they are intended to be embraced within the term "extra hazardous" wherever used in this act, to-wit:

Factories, mills and workshops where machinery is used; printing, electrotyping, photo-engraving and stereotyping plants where machinery is used; foundries, blast furnaces, mines, wells, gas works, waterworks, reduction works, breweries, elevators,

wharves, docks, dredges, smelters, powder works; laundries operated by power; quarries; engineering works; logging, lumbering and shipbuilding operations; logging, street and interurban railroads; buildings being constructed, repaired, moved or demolished; telegraph, telephone, electric light or power plants or lines, steam heating or power plants, steamboats, tugs, ferries and railroads. If there be or arise any extra hazardous occupation or work other than those hereinabove enumerated, it shall come under this act, and its rate of contribution to the accident fund hereinafter established, shall be, until fixed by legislation, determined by the department hereinafter created, upon the basis of the relation which the risk involved bears to the risks classified in section 4.

SEC. 3. In the sense of this act words employed mean as here stated, to wit:

Factories mean undertakings in which the business of working at commodities is carried on with power-driven machinery, either in manufacture, repair or change, and shall include the premises, yard and plant of the concern.

Workshop means any plant, yard, premises, room or place wherein power-driven machinery is employed and manual labor is exercised by way of trade for gain or otherwise in or incidental to the process of making, altering, repairing, printing or ornamenting, finishing or adapting for sale or otherwise any article or part of article, machine or thing, over which premises, room or place the employer of the person working therein has the right of access or control.

Mill means any plant, premises, room or place where machinery is used, any process of machinery, changing, altering or repairing any article or commodity for sale or otherwise, together with the yards and premises which are a part of the plant, including elevators, warehouses and bunkers.

Mine means any mine where coal, clay, ore, mineral, gypsum or rock is dug or mined underground.

Quarry means an open cut from which coal is mined, or clay, ore, mineral, gypsum, sand, gravel or rock is cut or taken for manufacturing, building or construction.

Engineering work means any work of construction, improvement or alteration or repair of buildings, structures, streets, sewers, highways, street railways, railroads, logging roads, interurban railroads, harbors, docks, canals; electric, steam or water power plants; telegraph and telephone plants and lines; electric light or power lines, and includes any other works for the construction, alteration or repair of which machinery driven by mechanical power is used.

Except when otherwise expressly stated, employer means any person, body of persons, corporate or otherwise, and the legal personal representatives of a deceased employer, all while engaged in this State in any extra hazardous work.

Workman means every person in this State, who, after September 30, 1911, is engaged in the employment of an employer carrying on or conducting any of the industries scheduled or classified in section 4, whether by way of manual labor or otherwise, and whether upon the premises or at the plant or, he being in the course of his employment, away from the plant of his employer: *Provided, however,* That if the injury to a workman occurring away from the plant of his employer is due to the negligence or wrong of another not in the same employ, the injured workman, or if death result from the injury, his widow, children, or dependents, as the case may be, shall elect whether to take under this act or seek a remedy against such other, such election to be in advance of any suit under this section; and if he take under this act, the cause of action against such other shall be assigned to the State for the benefit of the accident fund; if the other choice is made, the accident fund shall contribute only the deficiency, if any, between the amount of recovery against such third person actually collected, and the compensation provided or estimated by this act for such case. Any such cause of action assigned to the State may be prosecuted, or compromised by the department, in its discretion. Any compromise by the workman of any such suit, which would leave a deficiency to be made good out of the accident fund, may be made only with the written approval of the department.

Any individual employer or any member or officer of any corporate employer who shall be carried upon the pay roll at a salary or wage not less than the average salary or wage named in such pay roll and who shall be injured, shall be entitled to the benefit of this act as and under the same circumstances as and subject to the same obligations as a workman.

Dependent means any of the following-named relatives of a workman whose death results from any injury and who leaves surviving no widow, widower, or child under the age of sixteen years, viz.: invalid child over the age of sixteen years, daughter, between sixteen and eighteen years of age, father, mother, grandfather, grandmother, step-father, step-mother, grandson, granddaughter, step-son, step-daughter, brother, sister, half-sister, half-brother, niece, nephew, who, at the time of the accident, are dependent, in whole or in part, for their support upon the earnings of the workman.

Except where otherwise provided by treaty, aliens, other than father or mother, not residing within the United States at the time of the accident, are not included.

Beneficiary means a husband, wife, child or dependent of a workman, in whom shall vest a right to receive payment under this act.

Invalid means one who is physically or mentally incapacitated from earning.

The word "child," as used in this act, includes a posthumous child, a child legally adopted prior to the injury, and an illegitimate child legitimated prior to the injury.

The words injury or injured, as used in this act, refer only to an injury resulting from some fortuitous event as distinguished from the contraction of disease.

SEC. 4. Inasmuch as industry should bear the greater portion of the burden of the cost of its accidents, each employer shall, prior to January 15th of each year, pay into the State treasury, in accordance with the following schedule, a sum equal to a percentage of his total pay roll for that year, to wit: (the same being deemed the most accurate method of equitable distribution of burden in proportion to relative hazard):

CONSTRUCTION WORK.

Tunnels; bridges; trestles; subaqueous works; ditches and canals (other than irrigation without blasting); dock excavation; fire escapes; sewers; house moving; house wrecking.....	. 065
Iron, or steel frame structures or parts of structures.....	. 080
Electric light or power plants or systems; telegraph or telephone systems; pile driving; steam railroads.....	. 050
Steeple, towers or grain elevators, not metal framed; dry-docks without excavation; jetties; breakwaters; chimneys; marine railways; waterworks or systems; electric railways with rock work or blasting; blasting; erecting fireproof doors or shutters.....	. 050
Steam heating plants; tanks, water towers or windmills, not metal frames....	. 040
Shaft sinking.....	. 060
Concrete buildings; freight or passenger elevators; fireproofing of buildings; galvanized iron or tin works; gas works, or systems; marble, stone or brick work; road making with blasting; roof work; safe moving; slate work; outside plumbing work; metal smokestacks or chimneys.....	. 050
Excavations not otherwise specified; blast furnaces.....	. 040
Street or other grading; cable or electric street railways without blasting; advertising signs; ornamental metal work in buildings.....	. 035
Ship or boat building or wrecking with scaffolds; floating docks.....	. 045
Carpenter work not otherwise specified.....	. 035
Installation of steam boilers or engines; placing wire in conduits; installing dynamos; putting up belts for machinery; marble, stone or tile setting, inside work; mantle setting; metal ceiling work; mill or ship wrighting; painting of buildings or structures; installation of automatic sprinklers; ship or boat rigging; concrete laying in floors, foundations or street paving; asphalt laying; covering steam pipes or boilers; installation of machinery not otherwise specified.....	. 030
Drilling wells; installing electrical apparatus or fire alarm systems in buildings; house heating or ventilating systems; glass setting; building hot houses; lathing; paper hanging; plastering; inside plumbing; wooden stair building; road making.....	. 020

OPERATION (INCLUDING REPAIR WORK) OF

(All combinations of material take the higher rate when not otherwise provided).

Logging railroads; railroads; dredges; interurban electric railroads using third rail system; dry or floating docks.....	. 050
Electric light or power plants; interurban electric railroads not using third-rail system; quarries.....	. 040
Street railways, all employees; telegraph or telephone systems; stone crushing; blasting furnaces; smelters; coal mines; gas works; steamboats; tugs; ferries..	. 030
Mines, other than coal; steam heating or power plants.....	. 025
Grain elevators; laundries; waterworks; paper or pulp mills; garbage works..	. 020

FACTORIES USING POWER-DRIVEN MACHINERY.

Stamping tin or metal.....	. 045
Bridge work; railroad car or locomotive making or repairing; cooperage; logging with or without machinery; sawmills; shingle mills; staves; veneer; box; lath; packing cases; sash, door or blinds; barrel; keg; pail; basket; tub; woodenware or wooden-fibre ware; rolling mills; making steam shovels or dredges; tanks; water towers; asphalt; building material not otherwise specified; fertilizer; cement; stone with or without machinery; kindling wood; masts and spars with or without machinery; canneries, metal stamping extra; creosoting works; pile treating works.....	. 025
Excelsior; iron, steel, copper, zinc, brass or lead articles or wares not otherwise specified; working in wood not otherwise specified; hardware; tile; brick; terra cotta; fire clay; pottery; earthenware; porcelain ware; peat fuel; brickettes.....	. 020
Breweries; bottling works; boiler works; foundries; machine shops not otherwise specified.....	. 020
Cordage; working in foodstuffs, including oils, fruits and vegetables; working in wool, cloth, leather, paper, broom, brush, rubber or textiles not otherwise specified.....	. 015
Making jewelry, soap, tallow, lard, grease, condensed milk.....	. 015
Creameries; printing; electrotyping; photo-engraving; engraving; lithographing.....	. 015
MISCELLANEOUS WORK.	
Stevedoring; longshoring.....	. 030
Operating stock yards, with or without railroad entry; packing houses.....	. 025
Wharf operation; artificial ice, refrigerating or cold storage plants; tanneries; electric systems not otherwise specified.....	. 020
Theater stage employes.....	. 015
Fire works manufacturing.....	. 050
Powder works.....	. 100

The application of this act as between employers and workmen shall date from and include the first day of October, 1911. The payment for 1911 shall be made prior to the day last named, and shall be preliminarily collected upon the pay roll of the last preceding three months of operation. At the end of each year an adjustment of accounts shall be made upon the basis of the actual pay roll. Any shortage shall be made good on or before February 1st, following. Every employer who shall enter into business at any intermediate day shall make his payment for the initial year or portion thereof before commencing operation; its amount shall be calculated upon his estimated pay roll, an adjustment shall be made on or before February 1st of the following year in the manner above provided.

For the purpose of such payments accounts shall be kept with each industry in accordance with the classification herein provided and no class shall be liable for the depletion of the accident fund from accidents happening in any other class. Each class shall meet and be liable for the accidents occurring in such class. There shall be collected from each class as an initial payment into the accident fund as above specified on or before the 1st day of October, 1911, one-fourth of the premium of the next succeeding year, and one-twelfth thereof at the close of each month after December, 1911: *Provided*, Any class having sufficient funds credited to its account at the end of the first three months or any month thereafter, to meet the requirements of the accident fund, that class shall not be called upon for such month. In case of accidents occurring in such class after lapsed payment or payments said class shall pay the said lapsed or deferred payments commencing at the first lapsed payment, as may be necessary to meet such requirements of the accident fund.

The fund thereby created shall be termed the "accident fund" which shall be devoted exclusively to the purpose specified for it in this act.

In that the intent is that the fund created under this section shall ultimately become neither more [n]or less than self-supporting, exclusive of the expense of administration, the rates in this section named are subject to future adjustment by the legislature, and the classifications to rearrangement following any relative increase or decrease of hazard shown by experience.

It shall be unlawful for the employer to deduct or obtain any part of the premium required by this section to be by him paid from the wages or earnings of his workmen or any of them, and the making or attempt to make any such deduction shall be a gross misdemeanor. If, after this act shall have come into operation, it is shown by

experience under the act, because of poor or careless management, any establishment or work is unduly dangerous in comparison with other like establishments or works, the department may advance its classification of risks and premium rates in proportion to the undue hazard. In accordance with the same principle, any such increase in classification or premium rate, shall be subject to restoration to the schedule rate. Any such change in classification of risks or premium rates, or any change caused by change in the class of work, occurring during the year shall, at the time of the annual adjustment, be adjusted by the department in proportion to its duration in accordance with the schedule of this section. If, at the end of any year, it shall be seen that the contribution to the accident fund by any class of industry shall be less than the drain upon the fund on account of that class, the deficiency shall be made good to the fund on the 1st day of February of the following year by the employers of that class in proportion to their respective payments for the past year.

For the purposes of such payment and making good of deficit the particular classes of industry shall be as follows:

CONSTRUCTION WORK.

Class 1. Tunnels; sewer; shaft sinking; drilling wells.

Class 2. Bridges; millwrighting; trestles; steeples, towers or grain elevators not metal framed; tanks, water towers, wind-mills not metal framed.

Class 3. Subaqueous works; canal other than irrigation or docks with or without blasting; pile driving; jetties; breakwaters; marine railways.

Class 4. House moving; house wrecking; safe moving.

Class 5. Iron or steel frame structures or parts of structures; fire escapes; erecting fireproof doors or shutters; blast furnaces; concrete chimneys; freight or passengers elevators; fire proofing of buildings; galvanized iron or tin work; marble, stone or brick work; roof work; slate work; plumbing work; metal smoke stack or chimneys; advertising signs; ornamental metal work in buildings; carpenter work not otherwise specified; marble, stone or tile setting; mantle setting; metal ceiling work; painting of buildings or structures; concrete laying in floors or foundations; glass setting; building hot houses; lathing; paper hanging; plastering; wooden stair building.

Class 6. Electric light and power plants or system; telegraph or telephone systems; cable or electric railways with or without rock work or blasting; waterworks or systems; steam heating plants; gas works or systems; installation of steam boilers or engines; placing wires in conduits; installing dynamos; putting up belts for machinery; installation of automatic sprinklers; covering steam pipes or boilers; installation of machinery not otherwise specified; installing electrical apparatus or fire alarm systems in buildings; house heating or ventilating systems.

Class 7. Steam railroads; logging railroads.

Class 8. Road making; street or other grading; concrete laying in street paving; asphalt laying.

Class 9. Ship or boat building with scaffolds; shipwrighting; ship or boat rigging; floating docks.

OPERATION (INCLUDING REPAIR WORK) OF

Class 10. Logging; sawmills; shingle mills; lath mills; masts and spars with or without machinery.

Class 12. Dredges; dry or floating docks.

Class 13. Electric light or power plants or systems; steam heat or power plants or systems; electric systems not otherwise specified.

Class 14. Street railways.

Class 15. Telegraph systems; telephone systems.

Class 16. Coal mines.

Class 17. Quarries; stone crushing; mines other than coal.

Class 18. Blast furnaces; smelters; rolling mills.

Class 19. Gas works.

Class 20. Steamboats; tugs; ferries.

Class 21. Grain elevators.

Class 22. Laundries.

Class 23. Waterworks.

Class 24. Paper or pulp mills.

Class 25. Garbage works; fertilizer.

FACTORIES (USING POWER-DRIVEN MACHINERY).

- Class 26. Stamping tin or metal.
- Class 27. Bridge work; making steam shovels or dredges; tanks; water towers.
- Class 28. Railroad car or locomotive making or repairing.
- Class 29. Cooperage; staves; veneer; box; packing cases; sash[,] door or blinds; barrel; keg; pail; basket; tub; wood ware or wood fiber ware; kindling wood; excelsior; working in wood not otherwise specified.
- Class 30. Asphalt.
- Class 31. Cement; stone with or without machinery; building material not otherwise specified.
- Class 32. Canneries of fruits or vegetables.
- Class 33. Canneries of fish or meat products.
- Class 34. Iron, steel, copper, zinc, brass or lead articles or wares; hardware; boiler works; foundries; machine shops not otherwise specified.
- Class 35. Tile; brick; terra cotta; fire clay; pottery; earthenware; porcelain ware.
- Class 36. Peat fuel; brickettes.
- Class 37. Breweries; bottling works.
- Class 38. Cordage; working in wool, cloth, leather, paper, brush, rubber or textile not otherwise specified.
- Class 39. Working in foodstuffs, including oils, fruits, vegetables.
- Class 40. Condensed milk; creameries.
- Class 41. Printing; electrotyping; photo-engraving; engraving; lithographing; making jewelry.
- Class 42. Stevedoring; longshoring; wharf operation.
- Class 43. Stockyards; packing houses; making soap, tallow, lard, grease; tanneries.
- Class 44. Artificial ice, refrigerating or cold-storage plants.
- Class 45. Theater stage employees.
- Class 46. Fireworks manufacturing; powder works.
- Class 47. Creosoting works; pile treating works.

If a single establishment for work comprises several occupations listed in this section in different risk classes, the premium shall be computed according to the pay roll of each occupation if clearly separable; otherwise an average rate of premium shall be charged for the entire establishment, taking into consideration the number of employees and the relative hazards. If an employer besides employing workmen in extra hazardous employment shall also employ workmen in employments not extra hazardous the provisions of this act shall apply only to the extra hazardous departments and employments and the workmen employed therein. In computing the pay roll the entire compensation received by every workman employed in extra hazardous employment shall be included, whether it be in the form of salary, wage, piecework, overtime, or any allowance in the way of profit sharing, premium or otherwise, and whether payable in money, board, or otherwise.

Sec. 5. Each workman who shall be injured whether upon the premises or at the plant or, he being in the course of his employment, away from the plant of his employer, or his family or dependents in case of death of the workman, shall receive out of the accident fund compensation in accordance with the following schedule, and, except as in this act otherwise provided, such payment shall be in lieu of any and all rights of action whatsoever against any person whomsoever.

COMPENSATION SCHEDULE.

(a) Where death results from the injury the expenses of burial shall be paid in all cases, not to exceed \$75 in any case, and

(1) If the workman leaves a widow or invalid widower, a monthly payment of \$20 shall be made throughout the life of the surviving spouse, to cease at the end of the month in which remarriage shall occur; and the surviving spouse shall also receive \$5 per month for each child of the deceased under the age of sixteen years at time of the occurrence of the injury until such minor child shall reach the age of sixteen years, but the total monthly payment under this paragraph (1) of subdivision (a) shall not exceed \$35. Upon remarriage of a widow she shall receive, once and for all, a lump sum equal to twelve times her monthly allowance, viz.: the sum of \$240, but the monthly payment for the child or children shall continue as before.

(2) If the workman leaves no wife or husband, but a child or children under the age of sixteen years, a monthly payment of \$10 shall be made to each such child until such child shall reach the age of sixteen years, but the total monthly payment shall not exceed \$35, and any deficit shall be deducted proportionately among the beneficiaries.

(3) If the workman leaves no widow, widower, or child under the age of sixteen years, but leaves a dependent or dependents, a monthly payment shall be made to each dependent equal to fifty per cent of the average monthly support actually received by such dependent from the workman during the twelve months next preceding the occurrence of the injury, but the total payment to all dependents in any case shall not exceed \$20 per month. If any dependent is under the age of sixteen years at the time of the occurrence of the injury, the payment to such dependent shall cease when such dependent shall reach the age of sixteen years. The payment to any dependent shall cease if and when, under the same circumstances, the necessity creating the dependency would have ceased if the injury had not happened.

If the workman is under the age of twenty-one years and unmarried at the time of his death, the parents or parent of the workman shall receive \$20 per month for each month after his death until the time at which he would have arrived at the age of twenty-one years.

(4) In the event a surviving spouse receiving monthly payments shall die, leaving a child or children under the age of sixteen years, the sum he or she shall be receiving on account of such child or children shall be thereafter, until such child shall arrive at the age of sixteen years, paid to the child increased 100 per cent, but the total to all children shall not exceed the sum of thirty-five dollars per month.

(b) Permanent total disability means the loss of both legs and both arms, or one leg and one arm, total loss of eyesight, paralysis or other condition permanently incapacitating the workman from performing any work at any gainful occupation.

When permanent total disability results from the injury the workman shall receive monthly during the period of such disability:

(1) If unmarried at the time of the injury, the sum of \$20.

(2) If the workman have a wife or invalid husband, but no child under the age of sixteen years, the sum of \$25. If the husband is not an invalid, the monthly payment of \$25 shall be reduced to \$15.

(3) If the workman have a wife or husband and a child or children under the age of sixteen years, or, being a widow or widower, have any such child or children, the monthly payment provided in the preceding paragraph shall be increased by five dollars for each such child until such child shall arrive at the age of sixteen years, but the total monthly payment shall not exceed thirty-five dollars.

(c) If the injured workman die during the period of total disability, whatever the cause of death, leaving a widow, invalid widower or child under the age of sixteen years, the surviving widow or invalid widower shall receive twenty dollars per month until death or remarriage, to be increased five dollars per month for each child under the age of sixteen years until such child shall arrive at the age of sixteen years; but if such child is or shall be without father or mother, such child shall receive ten dollars per month until arriving at the age of sixteen years. The total combined monthly payment under this paragraph shall in no case exceed thirty-five dollars. Upon remarriage the payments on account of a child or children shall continue as before to the child or children.

(d) When the total disability is only temporary, the schedule of payment contained in paragraphs (1), (2) and (3) of the foregoing subdivision (d) shall apply so long as the total disability shall continue, increased 50 per cent for the first six months of such continuance, but in no case shall the increase operate to make the monthly payment exceed sixty per cent of the monthly wage (the daily wage multiplied by twenty-six) the workman was receiving at the time of his injury. As soon as recovery is so complete that the present earning power of the workman, at any kind of work, is restored to that existing at the time of the occurrence of the injury the payments shall cease. If and so long as the present earning power is only partially restored the payments shall continue in the proportion which the new earning power shall bear to the old. No compensation shall be payable out of the accident fund unless the loss of earning power shall exceed five per cent.

(e) For every case of injury resulting in death or permanent total disability it shall be the duty of the department to forthwith notify the State treasurer, and he shall set apart out of the accident fund a sum of money for the case, to be known as the estimated lump value of the monthly payments provided for it, to be calculated upon the theory that a monthly payment of twenty dollars, to a person thirty years of age, is equal to a lump sum payment, according to the expectancy of life as fixed by the American Mortality Table, of four thousand dollars, but the total in no case to exceed the sum of four thousand dollars. The State treasurer shall invest said sum at interest in the class of securities provided by law for the investment of the permanent school fund, and out of the same and its earnings shall be paid the monthly installments and any lump sum payment then or thereafter arranged for the case. Any deficiency shall be made good out of, and any balance or overplus shall revert

to the accident fund. The State treasurer shall keep accurate account of all such segregations of the accident fund, and may borrow from the main fund to meet monthly payments pending conversion into cash of any security, and in such case shall repay such temporary loan out of the cash realized from the security.

(f) Permanent partial disability means the loss of either one foot, one leg, one hand, one arm, one eye, one or more fingers, one or more toes, any dislocation where ligaments are severed, or any other injury known in surgery to be permanent partial disability. For any permanent partial disability resulting from an injury, the workman shall receive compensation in a lump sum in an amount equal to the extent of the injury, to be decided in the first instance by the department, but not in any case to exceed the sum of \$1,500. The loss of one major arm at or above the elbow shall be deemed the maximum permanent partial disability. Compensation for any other permanent partial disability shall be in the proportion which the extent of such disability shall bear to the said maximum. If the injured workman be under the age of twenty-one years and unmarried, the parents or parent shall also receive a lump sum payment equal to ten per cent of the amount awarded the minor workman.

(g) Should a further accident occur to a workman already receiving a monthly payment under this section for a temporary disability, or who has been previously the recipient of a lump-sum payment under this act, his future compensation shall be adjusted according to the other provisions of this section and with regard to the combined effect of his injuries, and his past receipt of money under this act.

(h) If aggravation, diminution, or termination of disability takes place or be discovered after the rate of compensation shall have been established or compensation terminated in any case the department may, upon the application of the beneficiary or upon its own motion, readjust for future application the rate of compensation in accordance with the rules in this section provided for the same, or in a proper case terminate the payments.

(i) A husband or wife of an injured workman, living in a state of abandonment for more than one year at the time of the injury or subsequently, shall not be a beneficiary under this act.

(j) If a beneficiary shall reside or remove out of the State the department may, in its discretion, convert any monthly payments provided for such case into a lump-sum payment (not in any case to exceed \$4,000) upon the theory, according to the expectancy of life as fixed by the American Mortality Table, that a monthly payment of \$20 to a person thirty years of age is worth \$4,000, or, with the consent of the beneficiary, for a smaller sum.

(k) Any court review under this section shall be initiated in the county where the workman resides or resided at the time of the injury, or in which the injury occurred.

Sec. 6. If injury or death results to a workman from the deliberate intention of the workman himself to produce such injury or death, neither the workman nor the widow, widower, child or dependent of the workman shall receive any payment whatsoever out of the accident fund. If injury or death results to a workman from the deliberate intention of his employer to produce such injury or death, the workman, the widow, widower, child or dependent of the workman shall have the privilege to take under this act and also have cause of action against the employer, as if this act had not been enacted, for any excess of damage over the amount received or receivable under this act.

A minor working at an age legally permitted under the laws of this State shall be deemed *sui juris* for the purpose of this act, and no other person shall have any cause of action or right to compensation for an injury to such minor workman except as expressly provided in this act, but in the event of a lump sum payment becoming due under this act to such minor workman, the management of the sum shall be within the probate jurisdiction of the courts the same as other property of minors.

Sec. 7. In case of death or permanent total disability the monthly payment provided may be converted, in whole or in part, into a lump sum payment (not in any case to exceed \$4,000), on the theory, according to the expectancy of life as fixed by the American Mortality Table, that a monthly payment of \$20 to a person thirty years of age is worth the sum of \$4,000, in which event the monthly payment shall cease in whole or in part accordingly or proportionately. Such conversion may only be made after the happening of the injury and upon the written application of the beneficiary (in case of minor children, the application may be by either parent) to the department, and shall rest in the discretion of the department. Within the rule aforesaid the amount and value of the lump-sum payment may be agreed upon between the department and the beneficiary.

Sec. 8. If any employer shall default in any payment to the accident fund hereinafter in this act required, the sum due shall be collected by action at law in the

name of the State as plaintiff, and such right of action shall be in addition to any other right of action or remedy. In respect to any injury happening to any of his workmen during the period of any default in the payment of any premium under section 4, the defaulting employer shall not, if such default be after demand for payment, be entitled to the benefits of this act, but shall be liable to suit by the injured workman (or the husband, wife, child or dependent of such workman in case death result from the accident), as he would have been prior to the passage of this act.

In case the recovery actually collected in such suit shall equal or exceed the compensation to which the plaintiff therein would be entitled under this act, the plaintiff shall not be paid anything out of the accident fund; if the said amount shall be less than such compensation under this act, the accident fund shall contribute the amount of the deficiency. The person so entitled under the provisions of this section to sue shall have the choice (to be exercised before suit) of proceeding by suit or taking under this act. If such person shall take under this act, the cause of action against the employer shall be assigned to the State for the benefit of the accident fund. In any suit brought upon such cause of action the defense of fellow servant and assumption of risk shall be inadmissible, and the doctrine of comparative negligence shall obtain. Any such cause of action assigned to the State may be prosecuted or compromised by the department in its discretion. Any compromise by the workman of any such suit, which would leave a deficiency to be made good out of the accident fund, may be made only with the written approval of the department.

Sec. 9. If any workman shall be injured because of the absence of any safeguard or protection required to be provided or maintained by, or pursuant to, any statute or ordinance, or any departmental regulation under any statute, or be, at the time of the injury, of less than the maximum age prescribed by law for the employment of a minor in the occupation in which he shall be engaged when injured, the employer shall, within ten days after demand therefor by the department, pay into the accident fund, in addition to the same required by section 4 to be paid:

(a) In case the consequent payment to the workman out of the accident fund be a lump sum, a sum equal to 50 per cent of that amount.

(b) In case the consequent payment to the workman be payable in monthly payments, a sum equal to 50 per cent of the lump value of such monthly payment, estimated in accordance with the rule stated in section 7.

The foregoing provisions of this act shall not apply to the employer if the absence of such guard or protection be due to the removal thereof by the injured workman himself or with his knowledge by any of his fellow workmen, unless such removal be by order or direction of the employer or superintendent or foreman of the employer, or any one placed by the employer in control or direction of such workman. If the removal of such guard or protection be by the workman himself or with his consent by any of his fellow workmen, unless done by order or direction of the employer or the superintendent or foreman of the employer, or any one placed by the employer in control, or direction of such workman, the schedule of compensation provided in section 5 shall be reduced 10 per cent for the individual case of such workman.

Sec. 10. No money paid or payable under this act out of the accident fund shall, prior to issuance and delivery of the warrant therefor, be capable of being assigned, charged, nor ever be taken in execution or attached or garnished, nor shall the same pass to any other person by operation of law. Any such assignment or charge shall be void.

Sec. 11. No employer or workman shall exempt himself from the burden or waive the benefits of this act by any contract, agreement, rule or regulation, and any such contract, agreement, rule or regulation shall be *pro tanto* void.

Sec. 12. (a) Where a workman is entitled to compensation under this act he shall file with the department, his application for such, together with the certificate of the physician who attended him, and it shall be the duty of the physician to inform the injured workman of his rights under this act and to lend all necessary assistance in making this application for compensation and such proof of other matters as required by the rules of the department without charge to the workman.

(b) Where death results from injury the parties entitled to compensation under this act, or some one in their behalf, shall make application for the same to the department, which application must be accompanied with proof of death and proof of relationship showing the parties to be entitled to compensation under this act, certificates of attending physician, if any, and such other proof as required by the rules of the department.

(c) If change of circumstance warrant an increase or rearrangement of compensation, like application shall be made therefor. No increase or rearrangement shall be operative for any period prior to application therefor.

(d) No application shall be valid or claim thereunder enforceable unless filed within one year after the day upon which the injury occurred or the right thereto accrued.

Sec. 13. Any workman entitled to receive compensation under this act is required, if requested by the department, to submit himself for medical examination at a time and from time to time at a place reasonably convenient for the workman and as may be provided by the rules of the department. If the workman refuses to submit to any such examination, or obstructs the same, his rights to monthly payments shall be suspended until such examination has taken place, and no compensation shall be payable during or for account of such period.

Sec. 14. Whenever any accident occurs to any workman it shall be the duty of the employer to at once report such accident and the injury resulting therefrom to the department, and also to any local representative of the department. Such report shall state:

1. The time, cause and nature of the accident and injuries, and the probable duration of the injury resulting therefrom.

2. Whether the accident arose out of or in the course of the injured person's employment.

3. Any other matters the rules and regulations of the department may prescribe.

Sec. 15. The books, records and pay rolls of the employer pertinent to the administration of this act shall always be open to inspection by the department or its traveling auditor, agent or assistant, for the purpose of ascertaining the correctness of the pay roll, the men employed, and such other information as may be necessary for the department and its management under this act. Refusal on the part of the employer to submit said books, records and pay rolls for such inspection to any member of the commission, or any assistant presenting written authority from the commission, shall subject the offending employer to a penalty of one hundred dollars for each offense, to be collected by civil action in the name of the State and paid into the accident fund, and the individual who shall personally give such refusal shall be guilty of a misdemeanor.

Sec. 16. Any employer who shall misrepresent to the department the amount of pay roll upon which the premium under this act is based shall be liable to the State in ten times the amount of the difference in premium paid and the amount the employer should have paid. The liability to the State under this section shall be enforced in a civil action in the name of the State. All sums collected under this section shall be paid into the accident fund.

Sec. 17. Whenever the State, county or any municipal corporation shall engage in any extra hazardous work in which workmen are employed for wages, this act shall be applicable thereto. The employer's payments into the accident fund shall be made from the treasury of the State, county or municipality. If said work is being done by contract, the pay roll of the contractor and the subcontractor shall be the basis of computation, and in the case of contract work consuming less than one year in performance the required payment into the accident fund shall be based upon the total pay roll. The contractor and any subcontractor shall be subject to the provisions of the act, and the State for its general fund, the county or municipal corporation shall be entitled to collect from the contractor the full amount payable to the accident fund, and the contractor, in turn shall be entitled to collect from the subcontractor his proportionate amount of the payment. The provisions of this section shall apply to all extra hazardous work done by contract, except that in private work the contractor shall be responsible, primarily and directly, to the accident fund for the proper percentage of the total pay roll of the work and the owner of the property affected by the contract shall be surety for such payments. Whenever and so long as, by State law, city charter or municipal ordinance, provision is made for municipal employes injured in the course of employment, such employes shall not be entitled to the benefits of this act and shall not be included in the pay roll of the municipality under this act.

Sec. 18. The provisions of this act shall apply to employers and workmen engaged in intrastate and also in interstate or foreign commerce, for whom a rule of liability or method of compensation has been or may be established by the Congress of the United States, only to the extent that their mutual connection with intrastate work may and shall be clearly separable and distinguishable from interstate or foreign commerce, except that any such employer and any of his workmen working only in this State may, with the approval of the department, and so far as not forbidden by any act of Congress, voluntarily accept the provisions of this act by filing written acceptances with the department. Such acceptances, when filed with and approved by the department, shall subject the acceptors irrevocably to the provisions of this act to all intents and purposes as if they had been originally included in its terms. Payment of premium shall be on the basis of the pay roll of the workmen who accept as aforesaid.

SEC. 19. Any employer and his employes engaged in works not extra hazardous may, by their joint election, filed with the department, accept the provisions of this act, and such acceptances, when approved by the department, shall subject them irrevocably to the provisions of this act to all intents and purposes as if they had been originally included in its terms. Ninety per cent of the minimum rate specified in section 4 shall be applicable to such case until otherwise provided by law.

SEC. 20. Any employer, workman, beneficiary, or person feeling aggrieved at any decision of the department affecting his interests under this act may have the same reviewed by a proceeding for that purpose, in the nature of an appeal, initiated in the superior court of the county of his residence (except as otherwise provided in subdivision (1) of section numbered 5) in so far as such decision rests upon questions of fact, or of the proper application of the provisions of this act, it being the intent that matters resting in the discretion of the department shall not be subject to review. The proceedings in every such appeal shall be informal and summary, but full opportunity to be heard shall be had before judgment is pronounced. No such appeal shall be entertained unless notice of appeal shall have been served by mail or personally upon some member of the commission within twenty days following the rendition of the decision appealed from and communication thereof to the person affected thereby. No bond shall be required, except that an appeal by the employer from a decision of the department under section 9 shall be ineffectual unless, within five days following the service of notice thereof, a bond, with surety satisfactory to the court, shall be filed, conditioned to perform the judgment of the court. Except in the case last named an appeal shall not be a stay. The calling of a jury shall rest in the discretion of the court except that in cases arising under sections 9, 15 and 16 either party shall be entitled to a jury trial upon demand. It shall be unlawful for any attorney engaged in any such appeal to charge or receive any fee therein in excess of a reasonable fee, to be fixed by the court in the case, and, if the decision of the department shall be reversed or modified, such fee and the fees of medical and other witnesses and the costs shall be payable out of the administration fund, if the accident fund is affected by the litigation. In other respects the practice in civil cases shall apply. Appeal shall lie from the judgment of the superior court as in other civil cases. The attorney general shall be the legal adviser of the department and shall represent it in all proceedings, whenever so requested by any of the commissioners. In all court proceedings under or pursuant to this act the decision of the department shall be prima facie correct, and the burden of proof shall be upon the party attacking the same.

SEC. 21. The administration of this act is imposed upon a department, to be known as the industrial insurance department, to consist of three commissioners to be appointed by the governor. One of them shall hold office for the first two years, another for the first four years, and another for the first six years following the passage and approval of this act. Thereafter the term shall be six years. Each commissioner shall hold until his successor shall be appointed and shall have qualified. A decision of any question arising under this act concurred in by two of the commissioners shall be the decision of the department. The governor may at any time remove any commissioner from office in his discretion, but within ten days following any such removal the governor shall file in the office of the secretary of state a statement of his reasons therefor. The commission shall select one of their members as chairman. The main office of the commission shall be at the State capitol, but branch offices may be established at other places in the State. Each member of the commission shall have power to issue subpoenas requiring the attendance of witnesses and the production of books and documents.

SEC. 22. The salary of each of the commissioners shall be thirty-six hundred dollars per annum, and he shall be allowed his actual and necessary traveling and incidental expenses; and any assistant to the commissioners shall be paid for each full day's service rendered by him, his actual and necessary traveling expenses and such compensation as the commission may deem proper, not to exceed six dollars per day to an auditor, or five dollars per day to any other assistant.

SEC. 23. The commissioners may appoint a sufficient number of auditors and assistants to aid them in the administration of this act, at an expense not to exceed \$5,000 per month. They may employ one or more physicians in each county for the purpose of official medical examinations, whose compensation shall be limited to five dollars for each examination and report therein. They may procure such record books as they may deem necessary for the record of the financial transactions and statistical data of the department, and the necessary documents, forms and blanks. They may establish and require all employers to install and maintain a uniform form of pay roll.

SEC. 24. The commission shall, in accordance with the provisions of this act:

1. Establish and promulgate rules governing the administration of this act.

2. Ascertain and establish the amounts to be paid into and out of the accident fund.
3. Regulate the proof of accident and extent thereof, the proof of death and the proof of relationship and the extent of dependency.
4. Supervise the medical, surgical and hospital treatment to the intent that same may be in all cases suitable and wholesome.
5. Issue proper receipts for moneys received, and certificates for benefits accrued and accruing.
6. Investigate the cause of all serious injuries and report to the governor from time to time any violations or laxity in performance of protective statutes or regulations coming under the observation of the department.
7. Compile and preserve statistics showing the number of accidents occurring in the establishment or works of each employer, the liabilities and expenditures of the accident fund on account of, and the premium collected from the same, and hospital charges and expenses.
8. Make annual reports to the governor (one of them not more than sixty nor less than thirty days prior to each regular session of the legislature) of the workings of the department, and showing the financial status and the outstanding obligations of the accident fund, and the statistics aforesaid.

SEC. 25. Upon the appeal of any workman from any decision of the department affecting the extent of his injuries or the progress of the same, the court may appoint not to exceed three physicians to examine the physical condition of the appellant, who shall make to the court their report thereon, and they may be interrogated before the court by or on behalf of the appellant in relation to the same. The fee of each shall be fixed by the court, but shall not exceed ten dollars per day each.

SEC. 26. Disbursement out of the funds shall be made only upon warrants drawn by the State auditor upon vouchers therefor transmitted to him by the department and audited by him. The State treasurer shall pay every warrant out of the fund upon which it is drawn. If, at any time, there shall not be sufficient money in the fund on which any such warrant shall have been drawn wherewith to pay the same, the employer on account of whose workman it was that the warrant was drawn shall pay the same, and he shall be credited upon his next following contribution to such fund the amount so paid with interest thereon at the legal rate from the date of such payment to the date such next following contribution became payable, and if the amount of the credit shall exceed the amount of the contribution, he shall have a warrant upon the same fund for the excess, and if any such warrant shall not be so paid, it shall remain, nevertheless, payable out of the fund. The State treasurer shall to such extent as shall appear to him to be advisable keep the moneys of the unsegregated portion of the accident fund invested at interest in the class of securities provided by law for the investment of the permanent school fund. The State treasurer shall be liable on his official bond for the safe custody of the moneys and securities of the accident fund, but all the provisions of an act approved February 21, 1907, entitled "An act to provide for State depositories and to regulate the deposits of State moneys therein," shall be applied to said moneys and the handling thereof by the State treasurer.

SEC. 27. If any employer shall be adjudicated to be outside the lawful scope of this act, the act shall not apply to him or his workman, or if any workman shall be adjudicated to be outside the lawful scope of this act because of remoteness of his work from the hazard of his employer's work, any such adjudication shall not impair the validity of this act in other respects, and in every such case an accounting in accordance with the justice of the case shall be had of moneys received. If the provisions of section 4 of this act for the creation of the accident fund, or the provisions of this act making the compensation to the workman provided in it exclusive of any other remedy on the part of the workman shall be held invalid the entire act shall be thereby invalidated except the provisions of section 31, and an accounting according to the justice of the case shall be had of moneys received. In other respects an adjudication of invalidity of any part of this act shall not affect the validity of the act as a whole or any other part thereof.

SEC. 28. If the provisions of this act relative to compensation for injuries to or death of workmen become invalid because of any adjudication, or be repealed, the period intervening between the occurrence of an injury or death, not previously compensated for under this act by lump payment or completed monthly payments, and such repeal or the rendition of the final adjudication of the invalidity shall not be computed as a part of the time limited by law for the commencement of any action relating to such injury or death: *Provided*, That such action be commenced within one year after such repeal or adjudication; but in any such action any sum paid out of the accident fund to the workman on account of injury, to whom the action is prosecuted, shall be taken into account or disposed of as follows: If the defendant employer shall have paid without delinquency into the accident fund the payment provided by section

4, such sums shall be credited upon the recovery as payment thereon, otherwise the sum shall not be so credited but shall be deducted from the sum collected and be paid into the said fund from which they had been previously disbursed.

Sec. 29. There is hereby appropriated out of the State treasury the sum of one hundred and fifty thousand dollars, or so much thereof as may be necessary, to be known as the administration fund, out of which the salaries, traveling and office expenses of the department shall be paid, and also all other expenses of the administration of the accident fund; and there is hereby appropriated out of the accident fund for the purpose to which said fund is applicable the sum of \$1,500,000, or so much thereof as shall be necessary for the purposes of this act.

Sec. 30. Nothing in this act contained shall repeal any existing law providing for the installation or maintenance of any device, means or method for the prevention of accidents in extra hazardous work or for a penalty or punishment for failure to install or maintain any such protective device, means or method, but sections 8, 9, and 10 of the act approved March 6, 1905, entitled: "An act providing for the protection and health of employes in factories, mills or workshops, where machinery is used, and providing for suits to recover damages sustained by the violation thereof, and prescribing a punishment for the violation thereof and repealing an act entitled, 'An act providing for the protection of employes in factories, mills, or workshops where machinery is used, and providing for the punishment of the violation thereof, approved March 6, 1903,' and repealing all other acts or parts of acts in conflict herewith," are hereby repealed, except as to any cause of action which shall have accrued thereunder prior to October 1, 1911.

Sec. 31. If this act shall be hereafter repealed, all moneys which are in the accident fund at the time of the repeal shall be subject to such disposition as may be provided by the legislature, and in default of such legislative provision distribution thereof shall be in accordance with the justice of the matter, due regard being had to obligations of compensation incurred and existing.

Sec. 32. This act shall not affect any action pending or cause of action existing on the 30th day of September, 1911.

WISCONSIN.

CHAPTER 50, LAWS OF 1911.

SECTION 1. There are added to the statutes thirty-two new sections to read:

Section 2394—1. In any action to recover damages for a personal injury sustained within this State by an employee while engaged in the line of his duty as such, or for death resulting from personal injury so sustained, in which recovery is sought upon the ground of want of ordinary care of the employer, or of any officer, agent, or servant of the employer, it shall not be a defense:

1. That the employee either expressly or impliedly assumed the risk of the hazard complained of.

2. When such employer has at the time of the accident in a common employment four or more employes, that the injury or death was caused in whole or in part by the want of ordinary care of a fellow servant.

Any employer who has elected to pay compensation as hereinafter provided shall not be subject to the provisions of this section 2394—1.

Sec. 2394—2. No contract, rule, or regulation, shall exempt the employer from any of the provisions of the preceding section of this act.

Sec. 2394—3. Except as regards employees working in shops or offices of a railroad company, who are within the provisions of subsection 9 of section 1816 of the statutes, as amended by chapter 254 of the laws of 1907, the term "employer" as used in the two preceding sections of this act shall not include any railroad company as defined in subsection 7 of said section 1816 as amended, said section 1816 and amendatory acts being continued in force unaffected, except as aforesaid, by the preceding sections of this act.

Sec. 2394—4. Liability for the compensation hereinafter provided for, in lieu of any other liability whatsoever, shall exist against an employer for any personal injury accidentally sustained by his employee, and for his death, if the injury shall proximately cause death, in those cases where the following conditions of compensation concur:

1. Where, at the time of the accident, both the employer and employee are subject to the provisions of this act according to the succeeding sections hereof.

2. Where, at the time of the accident, the employee is performing service growing out of and incidental to his employment.

3. Where the injury is proximately caused by accident, and is not so caused by willful misconduct.

And where such conditions of compensation exist for any personal injury or death, the right to the recovery of such compensation pursuant to the provisions of this act, and acts amendatory thereof, shall be the exclusive remedy against the employer for such injury or death; in all other cases the liability of the employer shall be the same as if this and the succeeding sections of this act had not been passed, but shall be subject to the provisions of the preceding sections of this act.

Sec. 2394—5. The following shall constitute employers subject to the provisions of this act within the meaning of the preceding section:

1. The State, and each county, city, town, village, and school district therein.

2. Every person, firm, and private corporation (including any public service corporation), who has any person in service under any contract of hire, express or implied, oral or written, and who, at or prior to the time of the accident to the employee for which compensation under this act may be claimed, shall, in the manner provided in the next section, have elected to become subject to the provisions of this act, and who shall not, prior to such accident, have effected a withdrawal of such election, in the manner provided in the next section.

Sec. 2394—6. Such election on the part of the employer shall be made by filing with the industrial accident board, hereinafter provided for, a written statement to the effect that he accepts the provisions of this act, the filing of which statement shall operate, within the meaning of section 2394—5 of this act, to subject such employer to the provisions of this act and all acts amendatory thereof for the term of one year from the date of the filing of such statement, and thereafter, without further act on his part, for successive terms of one year each, unless such employer shall, at least sixty days prior to the expiration of such first or any succeeding year, file in the office of said board a notice in writing to the effect that he desires to withdraw his election to be subject to the provisions of the act.

Sec. 2394—7. The term "employee" as used in section 2394—4 of this act shall be construed to mean:

1. Every person in the service of the State, or of any county, city, town, village, or school district therein, under any appointment, or contract of hire, express or implied, oral or written, except any official of the State, or of any county, city, town, village, or school district therein: *Provided*, That one, employed by a contractor, who has contracted with a county, city, town, village, school district, or the State, through its representatives, shall not be considered an employee of the State, county, city, town, village, or school district which made the contract.

2. Every person in the service of another under any contract of hire, express or implied, oral or written, including aliens, and also including minors who are legally permitted to work under the laws of the State (who, for the purposes of the next section of this act, shall be considered the same and shall have the same power of contracting as adult employees), but not including any person whose employment is but casual or is not in the usual course of the trade, business, profession, or occupation of his employer.

Sec. 2394—8. Any employee as defined in subsection 1 of the preceding section shall be subject to the provisions of this act and of any act amendatory thereof. Any employee as defined in subsection 2 of the preceding section shall be deemed to have accepted and shall, within the meaning of section 2394—4 of this act, be subject to the provisions of this act and of any act amendatory thereof, if, at the time of the accident upon which liability is claimed:

1. The employer charged with such liability is subject to the provisions of this act, whether the employee has actual notice thereof or not; and

2. Such employee shall not, at the time of entering into his contract of hire, express or implied, with such employer, have given to his employer notice in writing that he elects not to be subject to the provisions of this act; or, in the event that such contract of hire was made in advance of such employer becoming subject to the provisions of the act, such employee shall have given to his employer notice in writing that he elects to be subject to such provisions, or without giving either of such notices, shall have remained in the service of such employer for thirty days after the employer has filed with said board an election to be subject to the terms of this act.

Sec. 2394—9. Where liability for compensation under this act exists, the same shall be as provided in the following schedule:

1. Such medical and surgical treatment, medicines, medical and surgical supplies, crutches, and apparatus, as may be reasonably required at the time of the injury and thereafter during the disability, but not exceeding ninety days, to cure and relieve from the effects of the injury, the same to be provided by the employer; and in case of his neglect or refusal seasonably to do so, the employer to be liable for the reasonable expense incurred by or on behalf of the employee in providing the same.

2. If the accident causes disability, an indemnity which shall be payable as wages on the eighth day after the injured employee leaves work as the result of the injury, and weekly thereafter, which weekly indemnity shall be as follows:

(a) If the accident causes total disability, sixty-five per cent of the average weekly earnings during the period of such total disability: *Provided*, That, if the disability is such as not only to render the injured employee entirely incapable of work, but also so helpless as to require the assistance of a nurse, the weekly indemnity during the period of such assistance after the first ninety days shall be increased to one hundred per cent of the average weekly earnings.

(b) If the accident causes partial disability, sixty-five per cent of the weekly loss in wages during the period of such partial disability.

(c) If the disability caused by the accident is at times total and at times partial, the weekly indemnity during the periods of each such total or partial disability shall be in accordance with said subdivisions (a) and (b), respectively.

(d) Said subdivisions (a), (b), and (c) shall be subject to the following limitations: Aggregate disability indemnity for injury to a single employee caused by a single accident shall not exceed four times the average annual earnings of such employee.

The aggregate disability period shall not, in any event, extend beyond fifteen years from the date of the accident.

The weekly indemnity due on the eighth day after the employee leaves work as the result of the injury may be withheld until the twenty-ninth day after he so leaves work; if recovery from the disability shall then have occurred, such first weekly indemnity shall not be recoverable; if the disability still continues, it shall be added to the weekly indemnity due on said twenty-ninth day and be paid therewith.

If the period of disability does not last more than one week from the day the employee leaves work as the result of the injury, no indemnity whatever shall be recoverable.

3. The death of the injured employee shall not affect the obligation of the employer under subsections 1 and 2 of this section, so far as his liability shall have become payable at the time of death; but the death shall be deemed the termination of disability, and the employer shall thereupon be liable for the following death benefits in lieu of any further disability indemnity:

(a) In case the deceased employee leaves a person or persons wholly dependent on him for support, the death benefit shall be a sum sufficient, when added to the indemnity which shall at the time of death have been paid or become payable under the provisions of subsection 2 of this section, to make the total compensation for the injury and death (exclusive of the benefit provided for in subsection 1), equal to four times his average annual earnings; the same to be payable, unless and until the board shall direct payment in gross, in weekly installments corresponding in amount to the weekly earnings of the employee.

(b) In case the deceased employee leaves no one wholly dependent on him for support, but one or more persons partially dependent therefor, the death benefit shall be such percentage of four times such average annual earnings of the employee as the average annual amount devoted by the deceased to the support of the person or persons so partially dependent on him for support bears to such average annual earnings, the same to be payable, unless and until the board shall direct payment in gross, in weekly installments corresponding in amount to the weekly earnings of the employee: *Provided*, That the total compensation for the injury and death (exclusive of the benefit provided for in said subsection 1) shall not exceed four times such average annual earnings.

(c) Liability for the death benefits provided for in subdivisions (a) and (b) respectively shall only exist where the accident is the proximate cause of death: *Provided*, That, if the accident proximately causes permanent total disability, and death ensues from some other cause before disability indemnity ceases, the death benefit shall be the same as though the accident had caused death: *And provided further*, That, if the accident proximately causes permanent partial disability and death ensues from some other cause before disability indemnity ceases, liability shall exist for such percentage of the death benefits provided for in said subdivision (a) or (b) (as the case may be), as shall fairly represent the proportionate extent of the impairment of earning capacity caused by such permanent partial disability in the employment in which the employee was working at the time of the accident.

(d) If the deceased employee leaves no person dependent upon him for support, and the accident proximately causes death, the death benefit shall consist of the reasonable expense of his burial, not exceeding \$100.

Sec. 2394—10. 1. The weekly earnings referred to in section 2394—9 shall be one fifty-second of the average annual earnings of the employee; average annual earnings

shall not be taken at less than \$375, nor more than \$750, and between said limits shall be arrived at as follows:

(a) If the injured employee has worked in the employment in which he was working at the time of the accident, whether for the same employer or not, during substantially the whole of the year immediately preceding his injury, his average annual earnings shall consist of three hundred times the average daily wage or salary which he has earned in such employment during the days when so employed.

(b) If the injured employee has not so worked in such employment during substantially the whole of such immediately preceding year, his average annual earnings shall consist of three hundred times the average daily wage or salary which an employee of the same class working substantially the whole of such immediately preceding year in the same or a similar employment in the same or a neighboring place shall have earned in such employment during the days when so employed.

(c) In cases where the foregoing methods of arriving at the average annual earnings of the injured employee can not reasonably and fairly be applied, such annual earnings shall be taken at such sum as, having regard to the previous earnings of the injured employee, and of other employees of the same or most similar class, working in the same or most similar employment, in the same or a neighboring locality, shall reasonably represent the annual earning capacity of the injured employee at the time of the accident in the employment in which he was working at such time.

(d) The fact that an employee has suffered a previous disability, or received compensation therefor, shall not preclude compensation for a later injury, or for death, but in determining compensation for the later injury, or death, his average annual earnings shall be such sum as will reasonably represent his annual earning capacity at the time of the later injury, in the employment in which he was working at such time, and shall be arrived at according to, and subject to the limitations of, the previous provisions of this section.

2. The weekly loss in wages referred to in section 2394—9 shall consist of such percentage of the average weekly earnings of the injured employee, computed according to the provisions of this section, as shall fairly represent the proportionate extent of the impairment of his earning capacity in the employment in which he was working at the time of the accident, the same to be fixed as of the time of the accident, but to be determined in view of the nature and extent of the injury.

3. The following shall be conclusively presumed to be solely and wholly dependent for support upon a deceased employee:

(a) A wife upon a husband with whom she is living at the time of his death.

(b) A husband upon a wife with whom he is living at the time of her death.

(c) A child or children under the age of eighteen years (or over said age, but physically or mentally incapacitated from earning), upon the parent with whom he or they are living at the time of the death of such parent, there being no surviving dependent parent. In case there is more than one child thus dependent, the death benefit shall be divided equally among them.

In all other cases questions of entire or partial dependency shall be determined in accordance with the fact, as the fact may be at the time of the death of the employee; and in such other cases, if there is more than one person wholly dependent, the death benefit shall be divided equally among them, and persons partially dependent, if any, shall receive no part thereof; and if there is more than one person partially dependent, the death benefit shall be divided among them according to the relative extent of their dependency.

4. No person shall be considered a dependent unless a member of the family of the deceased employee, or bears to him the relation of husband or widow, or lineal descendant, or ancestor, or brother, or sister.

5. Questions as to who constitute dependents and the extent of their dependency shall be determined as of the date of the accident to the employee, and their right to any death benefit shall become fixed as of such time, irrespective of any subsequent change in conditions; and the death benefit shall be directly recoverable by and payable to the dependent or dependents entitled thereto or their legal guardians or trustees: *Provided*, That in case of the death of a dependent whose right to a death benefit has thus become fixed, so much of the same as is then unpaid shall be recoverable by and payable to his personal representative in gross. No person shall be excluded as a dependent who is a nonresident alien.

6. No dependent of an injured employee shall be deemed, during the life of such employee, a party in interest to any proceeding by him for the enforcement or collection of any claim for compensation, nor as respects the compromise thereof by such employee.

Sec. 2394—11. No claim to recover compensation under this act shall be maintained unless, within thirty days after the occurrence of the accident which is claimed to

have caused the injury or death, notice in writing, stating the name and address of the person injured, the time and place where the accident occurred, and the nature of the injury, and signed by the person injured or by some one on his behalf, or in case of his death, by a dependent or some one on his behalf, shall be served upon the employer, either by delivering to and leaving with him a copy of such notice, or by mailing to him by registered mail a copy thereof in a sealed and postpaid envelope addressed to him at his last known place of business or residence. Such mailing shall constitute completed service: *Provided, however,* That any payment of compensation under this act, in whole or in part, made by the employer before the expiration of said thirty days, shall be equivalent to the notice herein required: *And provided further,* That the failure to give any such notice, or any defect or inaccuracy therein, shall not be a bar to recovery under this act if it is found as a fact in the proceedings for collection of the claim that there was no intention to mislead the employer, and that he was not in fact misled thereby: *And provided further,* That if no such notice is given and no payment of compensation made, within two years from the date of the accident, the right to compensation therefor shall be wholly barred.

Sec. 2394—12. Wherever in case of injury the right to compensation under this act would exist in favor of any employee, he shall, upon the written request of his employer, submit from time to time to examination by a regular practicing physician, who shall be provided and paid for by the employer, and shall likewise submit to examination from time to time by any regular physician selected by said industrial accident board, or a member or examiner thereof. The employee shall be entitled to have a physician, provided and paid for by himself, present at any such examination. So long as the employee, after such written request of the employer, shall refuse to submit to such examination, or shall in any way obstruct the same, his right to begin or maintain any proceeding for the collection of compensation shall be suspended; and if he shall refuse to submit to such examination after direction by the board, or any member or examiner thereof, or shall in any way obstruct the same, his right to the weekly indemnity which shall accrue and become payable during the period of such refusal or obstruction, shall be barred. Any physician who shall make or be present at any such examination may be required to testify as to the results thereof.

Sec. 2394—13. There is hereby created a board which shall be known as the industrial accident board. The commissioner of labor and industrial statistics shall be ex officio a member of such board. He may, however, authorize the deputy commissioner to act in his place. Within thirty days after the passage of this act, the governor, by and with the advice and consent of the senate, shall appoint a member who shall serve two years, and another who shall serve four years. Thereafter such two members shall be appointed and confirmed for terms of four years each. Vacancies shall be filled in the same manner for the unexpired term. Each member of the board, before entering upon the duties of his office, shall take the oath prescribed by the constitution. A majority of the board shall constitute a quorum for the exercise of any of the powers or authority conferred by this act, and an award by a majority shall be valid. In case of a vacancy, the remaining two members of the board shall exercise all the powers and authority of the board until such vacancy is filled. Each member of the board, including the said commissioner, shall receive an annual salary of \$5,000. This salary shall, as to the commissioner of labor and industrial statistics, be in full for his services as such commissioner of labor and industrial statistics.

Sec. 2394—14. The board shall organize by choosing one of its members as chairman. Subject to the provisions of this act, it may adopt its own rules of procedure and may change the same from time to time in its discretion. The board, when it shall deem it necessary to expedite its business, may from time to time employ one or more expert examiners for such length of time as may be required, such examiners to be exempt from the operation of chapter 363 of the laws of 1905, and amendatory acts. It may also appoint a secretary, who shall be similarly exempt, and such clerical help as it may deem necessary. It shall fix the compensation of all assistants so appointed. It shall provide itself with a seal for the authentication of its orders, awards, and proceedings, upon which shall be inscribed the words "Industrial Accident Board—Wisconsin—Seal." It shall keep its office at the capitol, and shall be provided by the superintendent of public property with a suitable room or rooms, necessary office furniture, stationery, and other supplies. The members of the board and its assistants shall be entitled to receive from the State their actual and necessary expenses while traveling on the business of the board; but such expenses shall be sworn to by the person who incurred the same, and be approved by the chairman of the board, before payment is made. All salaries and expenses authorized by this act shall be audited and paid out of the general funds of the State, the same as other general State expenses are audited and paid.

Sec. 2394—15. Any dispute or controversy concerning compensation under this act, including any in which the State may be a party, shall be submitted to said industrial accident board in the manner and with the effect provided in this act. Every compromise of any claim for compensation under this act shall be subject to be reviewed by, and set aside, modified, or confirmed by the board upon application made within one year from the time of such compromise.

Sec. 2394—16. Upon the filing with the board by any party in interest of an application in writing stating the general nature of any claim as to which any dispute or controversy may have arisen, it shall fix a time for the hearing thereof, which shall not be more than forty days after the filing of such application. The board shall cause notice of such hearing, embracing a general statement of such claim, to be given to each party interested, by service of such notice on him personally or by mailing a copy thereof to him at his last known postoffice address at least ten days before such hearing. Such hearing may be adjourned from time to time in the discretion of the board, and hearings may be held at such places as the board shall designate. Either party shall have the right to be present at any hearing, in person or by attorney, or any other agent, and to present such testimony as may be pertinent to the controversy before the board; but the board may, with or without notice to either party, cause testimony to be taken, or an inspection of the premises where the injury occurred to be had, or the time books and pay roll of the employer to be examined by any member of the board or any examiner appointed by it, and may from time to time direct any employee claiming compensation to be examined by a regular physician; the testimony so taken, and the results of any such inspection or examination, to be reported to the board for its consideration upon final hearing. The board, or any member thereof, or any examiner appointed thereby, shall have power and authority to issue subpoenas, to compel the attendance of witnesses or parties, and the production of books, papers, or records, and to administer oaths. Obedience to such subpoenas shall be enforced by the circuit court of any county.

Sec. 2394—17. After final hearing by said board, it shall make and file (1) its findings upon all the facts involved in the controversy, and (2) its award, which shall state its determination as to the rights of the parties. Pending the hearing and determination of any controversy before it, the board shall have power to order the payment of such, or any part, of the compensation, which is or may fall due, as to which the party from whom the same is claimed does not deny liability in good faith within ten days after the giving of notice of hearing provided for in the preceding section; and if the same shall not be paid as required by such order, the facts with respect to the liability therefor, and the determination of the board as to the rights of the parties, shall be embraced in, and constitute a part of, its finding and award; and the board shall have the power to include in its award, as a penalty for noncompliance with any such order, not exceeding twenty-five per cent of each amount which shall not have been paid as directed thereby.

Sec. 2394—18. Either party may present a certified copy of the award to the circuit court for any county, whereupon said court shall, without notice, render a judgment in accordance therewith; which judgment, until and unless set aside as hereinafter provided, shall have the same effect as though duly rendered in an action duly tried and determined by said court, and shall, with like effect, be entered and docketed.

Sec. 2394—19. The findings of fact made by the board acting within its powers shall, in the absence of fraud, be conclusive; and the award, whether judgment has been rendered thereon or not, shall be subject to review only in the manner and upon the grounds following: Within twenty days from the date of the award, any party aggrieved thereby may commence, in the circuit court of Dane County, an action against the board for the review of such award, in which action the adverse party shall also be made defendant. In such action a complaint, which shall state the grounds upon which a review is sought, shall be served with the summons. Service upon the secretary of the board, or any member of the board, shall be deemed completed service. The board shall serve its answer within twenty days after the service of the complaint, and, within the like time, such adverse party shall, if he so desires, serve his answer to said complaint. With its answer, the board shall make return to said court of all documents and papers on file in the matter, and of all testimony which may have been taken therein, and of its findings and award. Said action may thereupon be brought on for hearing before said court upon such record by either party on ten days' notice to the other; subject, however, to the provisions of law for a change of the place of trial or the calling in of another judge. Upon such hearing, the court may confirm or set aside such award; and any judgment which may theretofore have been rendered thereon; but the same shall be set aside only upon the following grounds:

1. That the board acted without or in excess of its power.
2. That the award was procured by fraud.
3. That the findings of fact by the board do not support the award.

Sec. 2394—20. Upon the setting aside of any award the court may recommit the controversy and remand the record in the case to the board, for further hearing or proceedings; or it may enter the proper judgment upon the findings, as the nature of the case shall demand. An abstract of the judgment entered by the trial court upon the review of any award shall be made by the clerk thereof upon the docket entry of any judgment which may theretofore have been rendered upon such award, and transcripts of such abstract may thereupon be obtained for like entry upon the dockets of the courts of other counties.

Sec. 2394—21. Said board, or any party aggrieved by a judgment entered upon the review of any award, may appeal therefrom within the time and in the manner provided for an appeal from the orders of the circuit court; but all such appeals shall be placed on the calendar of the supreme court and brought to a hearing in the same manner as state causes on such calendar.

Sec. 2394—22. No fees shall be charged by the clerk of any court for the performance of any official service required by this act, except for the docketing of judgments and for certified copies of transcripts thereof. In proceedings to review an award, costs as between the parties shall be allowed or not in the discretion of the court, but no costs shall be taxed against said board. In any action for the review of an award, and upon any appeal therein to the supreme court, it shall be the duty of the attorney general, personally, or by an assistant, to appear on behalf of the board, whether any other party defendant shall have appeared or be represented in the action or not. Unless previously authorized by the board, no lien shall be allowed, nor any contract be enforceable, for any contingent attorney's fee for the enforcement or collection of any claim for compensation where such contingent fee, inclusive of all taxable attorneys' fees paid or agreed to be paid for the enforcement or collection of such claim, exceeds ten per cent of the amount at which such claim shall be compromised, or of the amount awarded, adjudged, or collected.

Sec. 2394—23. No claim for compensation under this act shall be assignable before payment, but this provision shall not affect the survival thereof; nor shall any claim for compensation, or compensation awarded, adjudged, or paid, be subject to be taken for the debts of the party entitled thereto.

Sec. 2394—24. The whole claim for compensation for the injury or death of any employee or any award or judgment thereon, shall be entitled to a preference over the unsecured debts of the employer hereafter contracted, but this section shall not impair the lien of any judgment entered upon any award.

Sec. 2394—25. The making of a lawful claim against an employer for compensation under this act for the injury or death of his employee shall operate as an assignment of any cause of action in tort which the employee or his personal representative may have against any other party for such injury or death; and such employer may enforce in his own name the liability of such other party.

Sec. 2394—26. Nothing in this act shall affect the organization of any mutual or other insurance company, or any existing contract for insurance of employers' liability, nor the right of the employer to insure in mutual or other companies, in whole or in part, against such liability, or against the liability for the compensation provided for by this act, or to provide by mutual or other insurance, or by arrangement with his employees, or otherwise, for the payment to such employees, their families, dependents, or representatives, of sick, accident, or death benefits in addition to the compensation provided for by this act. But liability for compensation under this act shall not be reduced or affected by any insurance, contribution, or other benefit whatsoever, due to or received by the person entitled to such compensation, and the person so entitled shall, irrespective of any insurance or other contract, have the right to recover the same directly from the employer; and in addition thereto, the right to enforce in his own name, in the manner provided in this act, the liability of any insurance company which may, in whole or in part, have insured the liability for such compensation: *Provided, however,* That payment in whole or in part of such compensation by either the employer or the insurance company, shall, to the extent thereof, be a bar to recovery against the other of the amount so paid: *And provided further,* That as between the employer and the insurance company, payment by either directly to the employee, or to the person entitled to compensation, shall be subject to the conditions of the insurance contract between them.

Sec. 2394—27. Every contract for the insurance of the compensation herein provided for, or against liability therefor, shall be deemed to be made subject to the provisions of this act, and provisions thereof inconsistent with this act shall be void. No company shall enter into any such contract of insurance unless such company shall have been approved by the commissioner of insurance, as provided by law. For the purposes of this act, each employee shall constitute a separate risk within the meaning of section 1898d of the statutes.

Sec. 2394—28. Any employer against whom liability may exist for compensation under this act may, with the approval of the industrial accident board, be relieved therefrom by:

1. Depositing the present value of the total unpaid compensation for which such liability exists, assuming interest at three per centum per annum, with such trust company of this State as shall be designated by the employee (or by his dependents, in case of his death, and such liability exists in their favor), or in default of such designation by him (or them) after ten days' notice in writing from the employer, with such trust company of this State as shall be designated by the board; or

2. By the purchase of an annuity, within the limitations provided by law, in any insurance company granting annuities and licensed in this State, which may be designated by the employee, or his dependents, or the board, as provided in subsection 1 of this section.

Sec. 2394—29. The board shall cause to be printed and furnished free of charge to any employer or employee such blank forms as it shall deem requisite to facilitate or promote the efficient administration of this act; it shall provide a proper record book in which shall be entered and indexed the name of every employer who shall file a statement of election under this act, and the date of the filing thereof, and a separate book in which shall be entered and indexed the name of every employer who shall file his notice of withdrawal of such election, and the date of the filing thereof; and books in which shall be recorded all orders and awards made by the board; and such other books or records as it shall deem required by the proper and efficient administration of this act: all such records to be kept in the office of the board. Upon the filing of a statement of election by an employer to become subject to the provisions of this act, the board shall forthwith cause notice of the fact to be given to his employees, by posting such notice thereof in several conspicuous places in the office, shop, or place of business of the employer, or by publishing, or in such other manner as the board shall deem most effective; and the board shall likewise cause notice to be given of the filing of any withdrawal of such election; but notwithstanding the failure to give, or the insufficiency of, any such notice, knowledge of all filed statements of election and notices of withdrawal of election, and of the time of the filing of the same, shall conclusively be imputed to all employees.

Sec. 2394—30. A sum sufficient to carry out the provisions of this act is hereby appropriated out of any money in the treasury not otherwise appropriated.

Sec. 2394—31. All acts or parts of acts inconsistent with this act are to be deemed replaced by this act, and to that end are hereby repealed.

Sec. 2394—32. The legislature intends the contingency in subdivision 2 of section 2394—1 of this act to be a separable part thereof, and the subdivision likewise separable from the rest of the act, and that part of said section 2394—1 that follows subdivision 2, likewise separable from the rest of the act; so that any part of said subdivision, or the whole, or that part which follows said subdivision 2, may fail without affecting any other part of the act.

Sec. 2. Sections 2394—3 to 2394—32, inclusive, shall take effect and be in force from and after the passage and publication of this act, and the entire act shall be in force from and after September 1st, 1911.

Approved May 3, 1911.

TEXT OF BILLS PREPARED BY COMMISSIONS.

ILLINOIS COMMISSION BILL.

SECTION 1. Any employer in this State may elect to provide and pay compensation for injuries sustained by any employee arising out of and in the course of the employment according to the provisions of this act, and thereby relieve himself from liability for the recovery of damages except as herein provided. If, however, any such employer shall elect not to provide and pay the compensation according to the provisions of this act he shall not escape liability for injuries sustained by his employees arising out of and in the course of their employment by alleging or proving in any action brought against such employer:

1. That the employee either expressly or implicitly assumed the risk of the hazard complained of, or,

2. That the injury or death was caused in whole or in part by the negligence of a fellow servant.

Every such employer is presumed to have elected to provide and pay the compensation according to the provisions of this act unless and until notice in writing of an election to the contrary is filed with the State bureau of labor statistics. Such employer, however, shall not be entitled to any of the privileges or advantages specified herein until a notice in writing of an election to provide such compensation has been filed with the State bureau of labor statistics on blanks furnished by it for such purpose.

SEC. 2. The filing of notice of an election to provide such compensation as aforesaid shall constitute an acceptance of all the provisions of this act, and such employer shall be bound thereby as to all his employees for a term of one year and for terms of each year thereafter unless a notice to the contrary shall have been given to the bureau of labor statistics and to all employees in said employment by posting in the plant, shop, office or place of work at least sixty days prior to the expiration of any such annual term: *Provided*, That when an injury to an employee is due to the serious and willful misconduct of that employee, any compensation claimed in respect of that injury shall be disallowed.

SEC. 3. In the event that any employer elects to provide and pay the compensation provided in this act and files notice of such election with the bureau of labor statistics, and thereby becomes bound to provide and pay such compensation according to the provisions of this act, then every employee of such employer, as a part of his contract of hiring, shall be deemed to have accepted all the provisions of this act and shall be bound thereby unless after thirty days and prior to forty-five days after such hiring he shall notify his employer in writing to the contrary: *Provided, however*, That before any such employee shall be so bound by the provisions of this act his employer shall either furnish to such employee, personally, at the time of his hiring or post in a conspicuous place in the room or place where such employee is to be employed, a statement in a language which such employee is able to understand of the compensation provisions of this act, if such employer has accepted the provisions of this act as herein provided, which notice shall also include a notice to the employee that the employer has accepted the provisions hereof. Every employee whose contract of hiring is in force at the time his employer elects to pay the compensation, and who continues to work for such employer, shall be deemed thereby to have accepted the provisions of this act, and shall be bound thereby unless he files a notice in writing to the contrary with his employer after thirty days and prior to forty-five days thereafter: Providing such employer furnishes or posts the statement of the compensation provisions of this act and his notice of acceptance thereof as herein provided.

SEC. 4. No common law or statutory right to recover damages for injuries or death sustained by an employee while engaged in the line of his duty as such employee, other than the compensation herein provided, shall be available to any employee who has accepted, according to section 3, the provisions of this act, or to any one wholly or partially dependent upon him or legally responsible for his estate: *Provided*, That when the injury to the employee was caused by the willful failure of the employer to comply with statutory safety regulations, nothing in this act shall affect the present civil liability of the employer.

SEC. 5. The amount of compensation which the employer shall pay if he elects the provisions of this act, as provided in sections one (1) and two (2) for injury to the employee which results in death shall be:

(a) If the employee leaves any widow, child or children, or parents, or other lineal heirs to whose support he had contributed within five years previous to the time of his death, a sum equal to three times the average annual earnings of the employee, but not less in any event, than one thousand five hundred dollars, and not more in any event than three thousand dollars. Any weekly payments other than necessary medical or surgical fees shall be deducted in ascertaining such amount payable on death.

(b) If the employee leaves collateral heirs dependent upon his earnings, such a percentage of the sum provided in section A [par. (a)] as the contributions which deceased made to the support of these dependents bore to his earnings at the time of his death.

(c) If the employee leaves no widow, child or children, parents or lineal or collateral heirs dependent upon his earnings, a sum not to exceed one hundred fifty dollars (\$150) to be paid to his personal representative.

All compensation provided for in this section to be paid in case the injury results in death shall be paid for the first six months in installments at the same intervals and in the same amounts that the wages or earnings of employee were paid while he was living, and after the expiration of such period of six months the balance of the compensation then due shall be paid either in installments as aforesaid or in a lump sum, at the option of the person entitled to such compensation: *Provided*, That if such compensation is paid in installments as herein provided and it shall not be feasible to pay the same at the same intervals as wages or earnings were paid, then the installments shall be paid weekly.

SEC. 6. The amount of compensation which the employer shall provide and pay for injury to the employee resulting in disability shall be:

(a) Necessary medical and surgical treatment in all cases at the time of the accident and as long thereafter as necessary, but not to exceed ninety (90) days, including medicine and other means of treatment and all reasonable facilities, such as the first

set of apparatus, artificial limbs, crutches and trusses to aid in the success of the treatment and to diminish the effects of the injury.

(b) If the period of disability lasts for more than one week, and such fact is determined by the physician or physicians, as provided in section 8, compensation beginning on the day the injured employee leaves work as a result of the accident, and as long as the disability lasts, or until the amount of compensation paid equals the amount payable as a death benefit.

(c) If the period of disability does not last more than one week from the day the injured employee leaves work as the result of the injury, no compensation shall be paid.

(d) In case after the injury has been received it shall appear upon medical examination as provided for by section 8, that the employee has been partially, though permanently incapacitated from pursuing his usual and customary line of employment, he shall receive compensation equal to one-half the difference between the average weekly wages which he earned before the accident, and the average weekly amount which he is earning, or is able to earn in some suitable employment or business after the accident, if such employment is secured; *Provided*, That where the injury shall be of a character set forth in the following scale, the employee shall receive compensation named:

(1) If the injury causes the immediate severing of, or necessitates the amputation of a hand or foot, at or above the wrist or ankle: one and one-half year's average wages, but in no event less than \$750 nor more than \$1,500.

(2) If the injury results in the total and irrecoverable loss of the sight of one eye: three-fourths of one year's wages, but not less than \$375, nor more than \$750.

(e) In the case of complete disability which renders the employee wholly and permanently incapable of work, compensation for the first eight years after the day the injury was received, equal to 50 per cent of his average weekly earnings, but not less than \$5 nor more than \$10 per week. If complete disability continues after the expiration of the eight years, then a compensation during life, equal to 8 per cent of the death benefit which would have been payable had the accident resulted in death. Such compensation shall not be less than \$10 per month and shall be payable monthly. In case death occurs before the total of the weekly payments equals the amount payable as a death benefit, as provided in section 5, article A [par. (a)], then in case the employee leaves any widow, child or children, or parents, or other lineal heirs, they shall be paid the difference between the compensation for death and the sum of the weekly payments, but in no case shall this sum be less than \$——: *Provided*, That after compensation has been paid at the specified rates for a term of at least six months the employee shall have the option to demand a lump sum payment for the difference between the sum of the weekly payments received and the four years' compensation to which he was entitled when such permanent disability has been definitely determined. For the purpose of this section, the total and irrecoverable loss of the sight of both eyes, the loss of both feet at or above the ankle, the loss of both hands at or above the wrist, the loss of one hand and one foot, an injury to the spine resulting in permanent paralysis of the legs or arms, and the fracture of the skull resulting in incurable imbecility or insanity, shall be considered complete disability. These specific cases of complete disability shall not, however, be construed as excluding other cases.

In fixing the amount of the disability payments, regard shall be had to any payment, allowance or benefit which the workman may have received from the employer during the period of his incapacity, except the expense of necessary medical or surgical treatment. In no event, except in case of complete disability as defined above, shall any weekly payment payable under the compensation plan herein provided exceed ten dollars per week, or extend over a period of more than six years from the date of the accident. In case an injured employee shall be mentally incompetent at the time when any right or privilege accrues to him under such plan, a conservator, or guardian of the incompetent, appointed pursuant to law, may, on behalf of such incompetent, claim and exercise any such right or privilege with the same force and effect as if the employee himself had been competent and had claimed or exercised any such right or privilege; and no limitations of time herein provided for shall run so long as said incompetent employee has no conservator or guardian.

SEC. 7. The basis for computing the compensation provided for in sections 5 and 6 shall be as follows:

(1) The compensation shall be computed on the basis of the annual earnings which the injured persons received as salary, wages or earnings in that employment during the year next preceding the injury.

(2) The annual earnings, if not otherwise determined, shall be regarded as three hundred times the average daily earnings in such computation; as to workmen in employments in which it is the custom to operate for a part of the whole number of

working days, such number shall be used instead of 300 as a basis for computing the annual earnings.

(3) If the injured person has not been engaged in the employment for a full year immediately preceding the accident, the compensation shall be computed according to the annual earnings which persons of the same class in the same or in neighboring employments of the same kind have earned during such period. And if this basis of computation is impossible, or should appear to be unreasonable, three hundred times the amount which the injured person earns on an average on those days when he was working during the year next preceding the accident shall be used as a basis for the computation.

(4) In the case of injured persons who earn either no wage or less than three hundred times the usual daily wage or earnings of the adult day laborers of that locality, the yearly wage shall be reckoned as three hundred times this average daily local wage.

(5) In computing the compensation to be paid to employees who, before the accident were already disabled, and drawing compensation under the terms of this act, the additional compensation shall be apportioned according to the proportion of incapacity and the disability which existed before such accident or injury, and in apportioning such compensation the earnings prior to the first injury shall be considered in relation to the earnings prior and at the time of the injury for which compensation is being computed.

SEC. 8. Any employee entitled to receive weekly payments shall be required, if requested by the employer, to submit himself for examination by a duly qualified medical practitioner or surgeon provided and paid for by the employer, at a time and place reasonably convenient for the employee, as soon as practicable after the injury and also one week after the injury and thereafter at intervals not oftener than once in six weeks, which examination shall be for the purpose of determining the nature, extent and duration of the injury received by the employee, and for the purpose of adjusting the compensation which may be due the employee from time to time for disability according to the provisions of sections 5 and 6 of this act: *Provided, however*, That such examination shall be made in the presence of a duly qualified medical practitioner or surgeon provided and paid for by the employee, if such employee so desires, and in the event of disagreement between said medical practitioners or surgeons as to the nature, extent or duration of said injury or disability, the judge of the probate court in Cook County and the county court in counties outside Cook County, in the county where the employee resided or was employed at the time of the injury, shall within six days after petition filed with such court for that purpose, select a third medical practitioner or surgeon and the majority report of such three physicians as to the nature, extent and probable duration of such injury or disability shall be used for the purpose of estimating the amount of compensation payable to such beneficiary under this act. If the employee refuses so to submit himself to examination or unnecessarily obstructs the same, his right to compensation payments shall be temporarily suspended until such examination shall have taken place, and no compensation shall be payable under this act during such period.

SEC. 9. Any question of law or fact arising in regard to the application of this law in determining the compensation payable hereunder shall be determined either by agreement of the parties or by arbitration as herein provided. In case any such question arises which can not be settled by agreement, the employee and employer shall each select a disinterested party and the judge of the probate court in Cook County and of the county court in counties outside of Cook County shall appoint a third disinterested party, such persons to constitute a board of arbitrators for the purpose of hearing and determining all such disputed questions of law or fact arising in regard to the application of this law in determining the compensation payable hereunder, and it shall be the duty of both employer and employee to submit to such board of arbitrators not later than ten days after the selection and appointment of such arbitrators all facts or evidence which may be in their possession or under their control relating to the questions to be determined by said arbitrators; and said board of arbitrators shall hear all the evidence submitted by both parties and they shall have access to any books, papers or records of either the employer or the employee showing any facts which may be material to the questions before them, and they shall be empowered to visit the place or plant where the accident occurred, to direct the injured employee to be examined by a regular practicing physician or surgeon, and to do all other acts reasonably necessary for a proper investigation of all matters in dispute. A copy of the report of the arbitrators in each case shall be prepared and filed by them with the State bureau of labor statistics, and shall be binding upon both the employer and employee except for fraud and mistake.

SEC. 10. The term "employer," as used in this act, shall be held to include any person, firm or private corporation transacting business in this State that has an

employee in his or its service and that has elected according to sections 1 and 2 of this act to pay the compensation provided for by this act; and any principal contractor shall be held to be an employer and shall be liable to pay compensation for injuries to the employees of any subcontractor, whether first, second, or other subcontractor or [sic] engaged in, on or about the premises on which said principal contractor has engaged to perform any work in the same manner and to the same extent as those said employees had been immediately been [sic] employed by him. Any principal contractor liable to pay compensation under this section, may be indemnified by any subcontractor who would have been liable to pay compensation to such employees independent of the provisions of this section.

Sec. 11. The term "employee," as used in this act, shall be held to include any person who has engaged to work or render any service for an employer under a contract of service or apprenticeship, whether by way of manual labor, clerical work or otherwise, and whether the contract is expressed or implied, oral or in writing, except that minors not legally permitted to work under the laws of this State, shall not be considered within the provisions of this act and minors not so excepted are, for the purposes of this act, to be considered the same and to have the like power of contracting as though they were of full age.

Sec. 12. Persons whose employment is of a casual nature and who are employed otherwise than for the purpose of the employer's trade or business are not included in the foregoing definition.

Sec. 13. Any persons entitled to payments under the compensation provisions of this act against any employer shall have the same preferential claim therefor against the property of the employer as is now allowed by law for a claim by such person against such employer for unpaid wages or personal services, such preference to prevail against wage claims of all other employees not entitled to compensation for injuries, and the payments due under such compensation provisions shall not be subject to attachment, or to levy, or execution and satisfaction of debts except to the same extent and in the same manner as wages or earnings for personal services are now subject to levy and execution under the laws of this State, and shall not be assignable. Any right to receive compensation hereunder shall be extinguished by the death of the person entitled thereto, subject to the provisions of this act relative to compensation for death received in the course of employment. No claim of any attorney at law for any contingent interest in any recovery for services in securing any recovery under this act shall be an enforceable lien thereon unless the amount of the same be approved in writing by a judge of a court of record, or in case the same is tried in any court, before the judge presiding at such trial.

Sec. 14. Any contract or agreement made by any employee or any other beneficiary of any claim under the provisions of this act, within seven days after the injury, with any employer or his agent or with any attorney at law with reference to the prosecution or settlement of such claim shall be presumed to be fraudulent.

Sec. 15. No such employee or beneficiary shall have power to waive any of the provisions of this act in regard to the amount of compensation which may be payable to such employee or beneficiary hereunder.

Sec. 16. No proceedings for compensation under this act shall be maintained unless notice of the accident has been given to the employer as soon as practicable after the happening thereof, and during such disability, and unless claim for compensation has been made within six months from the occurrence of the accident; or in case of the death of the employee or in the event of his physical or mental incapacity within six months after such death or removal of such physical or mental incapacity, or in the event that payments have been made under the provisions of this act within six months after such payments have ceased. No want or defect or inaccuracy of such notice shall be a bar to the maintenance of proceedings by the employee unless the employer proves that he is unduly prejudiced in such proceedings by such want, defect or inaccuracy. Notice of the accident shall, in substance, apprise the employer of the claim for compensation made by the employee and shall state the name and address of the employee injured, the approximate date and place of the accident, and in simple language the cause thereof, if known; which notice may be served personally or by registered letter addressed to the employer at his last known residence or place of business: *Provided*, That the failure on the part of any person entitled to such compensation to give such notice shall not relieve the employer from his liability for such compensation when the facts and circumstances of such accidents are known to such employer or his agent.

Sec. 17. The compensation herein provided shall be the measure of the responsibility which the employer has assumed for injuries or death that may occur to employees in his employment, and it shall not be in any way reduced by contributions from employees.

Sec. 18. The provisions of this act shall not be construed so as to disturb the organization of any existing mutual aid or benefit association or society to which the employer contributes an amount sufficient to insure to the employee or other beneficiary the compensation herein provided, or to prevent the organization of any mutual benefit association or insurance company for the purpose of insuring the compensation herein provided and of paying additional accident or sick benefits for which the employee may contribute, providing such mutual aid or benefit associations or insurance companies comply with the laws of this State.

Sec. 19. Any person who shall become entitled to compensation under the provisions of this act shall, in the event of his inability to recover such compensation from the employer on account of his insolvency or other cause, be subrogated to all the rights of such employer against any insurance company or association which may have insured such employer against loss growing out of the compensation required by the provisions of this act to be paid by such employer, and in such case only a payment of the compensation that has accrued to the person entitled thereto in accordance with the provisions of this act shall relieve such insurance company from such liability.

Sec. 20. It shall be the duty of every employer within the provisions of this act to send to the secretary of the State bureau of labor statistics in writing an immediate report of all accidents or injuries arising out of or in the course of the employment and resulting in death; it shall also be the duty of every such employer to report between the 15th and 25th of each month to the secretary of the State bureau of labor statistics all accidents or injuries for which compensation has been paid in accordance with the scale of compensation provided for in this act, which accidents or injuries entail a loss to the employee of more than one week's time, and in case the injury results in permanent disability, such report shall be made as soon as it is determined that such permanent disability has resulted or will result from such injury; all such reports shall state the date of the injury, including the time of day or night, the nature of the employer's business, the age, sex, and conjugal condition of the injured person, the specific occupation of the injured person, the direct cause of injury, and the nature of the accident, the nature of the injury, the length of disability and, in case of death, the length of disability before death, the wages of the injured person, whether compensation has been paid to the injured person or to his legal representative or his heirs or next of kin, the amount of compensation paid, the amount paid for physician's, surgeon's and hospital bill and by whom paid, and the amount paid for funeral or burial expense, if known.

Sec. 21. The invalidity of any portion of this act shall in no way affect the validity of any other portion thereof which can be given effect without such invalid part.

MINNESOTA COMMISSION BILL.

SECTION 1. The right to compensation and the remedy therefor, herein granted, shall be in lieu of all rights and remedies, now existing either at common law or by statute either upon the theory of negligence or otherwise, for the injuries covered by this code; and no other compensation, right of action, damages or liability shall hereafter be allowed to either the injured or dependents for such injuries, so long as this code shall remain in force, unless, and to the extent only that this code shall be specifically amended.

Sec. 2. Every industrial employment in which there occurs hereafter to any of the workmen personal injuries arising out of and in the course of such employment, is for the purposes of this code hereby declared a dangerous employment, and consequently subject to the provisions of this code and entitled to all the benefits thereof.

Sec. 3. Every employer of a workman engaged in such dangerous employment shall be subject to the provisions of this code, and shall pay compensation, according to the conditions, percentages of wages and other amounts herein named, to every such workman so injured in his employment, or, in case of death caused by such injuries, to the dependents as hereinafter defined and apportioned, for all personal injuries received by such workman arising out of and in the course of such employment and disabling such workman from regular services in such employment, and not purposely self-inflicted unless to further the duties of his employment; but on the condition precedent that in case of dispute between the parties a substantial compliance with this code shall be made by such workman.

Sec. 4. No compensation shall be allowed for the first two weeks after injury received, except that covered by sections 5 and 6, nor in any case unless the employer has actual knowledge of the injury, or is notified within the period specified in section 14, or the workman relieved as provided in section 37.

SEC. 5. During the first two weeks after the injury, the employer shall in all cases furnish reasonable medical and hospital services and medicines, when needed, not to exceed one hundred dollars in value, unless the workman refuses to allow them to be furnished by the employer; provided the employer shall not be required to pay any other physician than his own for any of the medical services or expenses which he can reasonably furnish after the first aid to the injured and an opportunity of properly changing physicians is had, unless the employer knows of the necessity therefor, or is requested so to do and fails or refuses to provide the same promptly.

SEC. 6. In case the injury causes death within the period of five years, the reasonable funeral expenses not to exceed one hundred dollars shall be paid by the employer.

The board of arbitration may determine the amount that is reasonable and fair for medical, hospital and funeral expenses hereunder.

SEC. 7. In case the injury causes death within the period of five years, the compensation shall be in the amounts and to the persons following:

a. If there be no dependents, then the medical, hospital and funeral expenses, as provided in sections 5 and 6 hereof.

b. If there are wholly dependent persons at the time of the injury, then a payment of fifty per cent of the wage, to be made at reasonable intervals not longer than monthly, and to continue during dependency for the remainder of the period between the death and the end of the five years after the occurrence of the injury, but in no case to continue longer than five years after the injury or to amount to more than three thousand dollars on account of the compensation for the injury to that person.

c. If the deceased at the time of death leaves any persons who were partially dependent at the time of the injury they shall receive only that proportion of the benefits provided for those wholly dependent which the average amount of the wage contributed by the deceased to such partial dependent at, and for a reasonable time prior to, the time of the injury bore to the total wage of the deceased, during the same time.

d. The compensation granted by this code in case of death shall be paid to one of the following persons, if either wholly or partially dependent, who shall be entitled to receive such payments in the order in which they are named:

(1) Husband or wife, as the case may be; (2) guardian of children, (3) father, (4) mother, (5) sister, (6) brother.

Payment to a person subsequent in right shall be lawful and shall discharge all claim therefor if the person having the prior right has not claimed the payment within thirty days of the time it becomes due, and the employer does not know or by reasonable inquiry can not ascertain within a reasonable time where the payment can be made to the person prior in right.

e. The person to whom the payment is made shall apply the same to the use of the several beneficiaries according to their respective claims upon the decedent for support. In case any payee or employer is not certain as to the person to whom payment or distribution should be made, or as to the proportions thereof, and in case any beneficiary is not satisfied with the distribution thereof, application may be made to the board of arbitration to designate the person to whom payment shall be made and the apportionment thereof among the beneficiaries, and payment and distribution shall thereafter be made in accordance with the decision of the board, if the matter of proper dependents be in dispute or incapable of prompt determination, and the amount of compensation due is not disputed, the board may order the money to be paid over to it to be held for the proper dependents.

SEC. 8. In case of temporary or permanent total disability of the workman from the time the payment period begins until the end of the five-year period, or during any portion thereof, the compensation shall be fifty per cent of the first two thousand dollars of the annual wage during such disability; payment to be made at the intervals when such wage was payable as nearly as reasonably can be, but in no case to continue longer than five years from the injury, and not to include the time when the rule for payment upon death would operate.

SEC. 9. (a) In case of temporary or permanent partial disability, the workman shall receive fifty per cent of the necessary decrease on the first two thousand dollars of his annual wage during the continuance of such decrease, but not longer than five years in time from the injury and not to include the time when the rules of payment for death or total disability would operate.

(b) Whether the disability be partial or total, if the body be maimed or disfigured, the compensation shall be determined as nearly as may be as follows:

1. If there be such loss or disfigurement as amounts to, or is the equivalent of, a loss of as much as, or more than, both ears, eyes, hands or feet, or to one each of two or more thereof, then for such maiming or disfigurement forty per cent of the first two

thousand dollars of the yearly wage during so much of the five-year period as the workman remains alive.

2. Or if there be such loss or such disfigurement as not to come within the last subsection, and to amount to a loss of one of any of such organs, or to the loss of one and other injuries, then fifteen per cent of the first two thousand dollars of the annual wage during so much of the five-year period as the workman remains alive.

3. If the body be otherwise maimed or disfigured not sufficiently to come within either of the above subsections, then such percentage of the first two thousand dollars of the annual wage during the continuance of the injury, not exceeding the five-year period or the life of the workman, as would bear a just proportion to the percentages under the foregoing subsections.

4. In addition to such percentages for maiming and disfigurement, there shall be the compensation for total or partial disability as provided in and only according to the provisions of sections 4, 5, 6, 7, 8 and paragraph (a) of section 9 hereof, except that the percentages therefor under this subsection shall be figured only on the balance of the first two thousand dollars of the annual wage after allowing the percentages for maiming and disfigurement under the foregoing subsections; but this whole section shall apply during the life of the injured only, and upon his death, as a result of such injuries within the five-year period, then the percentages specified in sections 7, 8 and par. (a) of 9 shall thereafter be applicable.

SEC. 10. (a) The amounts payable periodically under the foregoing sections may be commuted on a fair basis to one or more lump sum payments by the board of arbitration, with the consent of the employer and workman or his dependents, at any time after six months if special circumstances be found which in the judgment of the board require the same.

(b) The board of arbitration may at any time by award allow any employer or any insurer of such employer with the consent of the workman or his dependent to compromise and settle any award by the transfer of property or the settlement of any annuity or other form of benefits, if special circumstances be found which in the judgment of the board require the same.

11. (a) When the workman is employed at the time of the injury in a regular capacity at a fixed and reasonable wage which remains unaltered and continuous substantially throughout the year either in his own case or in the case of persons engaged in the like employment, the wage taken as the basis of compensation under the foregoing sections shall mean the wage so paid, reckoned on such yearly basis.

(b) Where the workman is at the time of the injury employed other than as above provided, the wage so taken shall be an average or fair wage which the particular workman ought to receive on a reasonable basis, considering the rate he has been getting, his ability and willingness to work, the nature of the service he was performing, and all of the other circumstances of the case.

SEC. 12. (a) If the employer shall clearly establish that the injuries, death, or disability were due in whole or in part to the workman's previous injuries, sickness, disease, physical or mental ailments or deficiencies, age, or infirmity, then and to that extent only the compensation herein allowed shall be correspondingly reduced.

(b) If the workman or a beneficiary under this code shall clearly establish that the injured was a minor or apprentice of such age and experience or of such physical condition when injured that under natural conditions he would be expected to increase in wages, these facts may be considered in arriving at his reasonable wage, to conform to the spirit of this code.

(c) If the employer shall clearly establish that the injured was a person of such old age or physical condition at the time of the injury that under natural conditions he would not be expected to continue to earn full wages during the whole five-year period, these facts may be considered in arriving at his reasonable wage and his probable length of earning capacity at the time of the injury.

(d) The compensation or other rights or remedies provided or awarded or the defenses thereto shall never be vested except subject to such changes as the provisions of this code allow.

SEC. 13. If it be found as a fact by the board in its award that the employer had notice or knowledge of the occurrence of the injury, and also that such injury was severe enough to immediately and completely disable the workman from continuing his work then and in such case the notice under section 14 shall not be essential.

SEC. 14. (a) Unless the employer shall have the notice or knowledge provided in section 13, or unless the workman or some one on his behalf, or some of the dependents or some one on their behalf or some other person, shall give notice thereof to the employer within fourteen days or be relieved therefrom according to this code, then no compensation shall accrue until such notice is given.

(b) If the notice is given within thirty days, no want, failure, or inaccuracy of a notice shall be a bar to obtaining compensation, unless the employer shall show that

he was prejudiced by such want, defect, or inaccuracy, and then only to the extent such prejudice is shown.

(c) If the notice is given within ninety days, and if the workman or other beneficiary shall show that his failure to give prior notice was due to his mistake, inadvertence, ignorance of fact or law, or inability, or to the fraud, misrepresentation, or deceit of another person connected with, or acting for the employer or to any other reasonable cause or excuse, then compensation may be allowed, but reduced to the extent only that the employer shall show that he was prejudiced by failure to receive such notice.

(d) Unless and until such notice be given within ninety days of the injury if the service can be made within the State or relief granted under section 37 or excepted under section 23 hereof, no compensation shall be allowed.

Sec. 15. The notice may be served personally upon the employer, or upon any agent of the employer, or authority upon whom a summons may be served in a civil action, or by sending it by registered mail to the employer at the last known residence or business place thereof, and may be, and when the requirement is reasonable shall be, in substantially the following form:

"Notice to employer of personal injury received: You are hereby notified that an injury was received by (name) _____ who was in your employ at (place) _____ at the job of (kind of work) _____ on or about the day of 19.., and who is now located at (give town, street and number) _____ that so far as now known the nature of the injury was _____ and that compensation may be claimed therefor.

(Signed)

(Giving address.)

But if the employer receives a notice sent within time and improper in form, he must immediately return the same to the last known address he has for such workman and point out in writing the deficiency of such notice, or be bound as having sufficient knowledge; and if such notice is so returned an immediate new notice may be given by the workman.

Sec. 16. (a) After an injury and during the period of disability, the workman, if so requested by his employer or ordered by the board must submit himself for examination at reasonable times to a physician selected by the employer authorized to practice under the laws of the State.

(b) If the workman requests, he shall be entitled to have a physician of his own selection at reasonable times to participate in such examinations.

(d) Except as provided in this code, there shall be no other disqualification or privilege preventing the testimony of a physician who actually makes an examination.

(e) Unless there has been a reasonable opportunity thereafter, for such physician selected by the workman to participate in an examination in the presence of the physician selected by the employer, the physician selected by the employer shall not be permitted afterwards to give evidence of the condition of the workman in a dispute as to the injury.

Sec. 17. The board of arbitration shall have the power to employ a neutral physician of good standing and ability who shall, at the expense of the county, make such examination or examinations as the board may request either of its own motion or on the petition of either or both the employer and workman or dependents, and in case of death the board may require an autopsy to be held.

Sec. 18. If the employer or the workman has a physician make such an examination and no reasonable opportunity is given to the other party to have his physician make examination, then in case of a dispute as to the injury, the physician of the party making such examination shall not give evidence before the board, unless a neutral physician of the board of arbitration either has examined or then does examine the injured workman and gives testimony regarding the injuries.

Sec. 19. If the workman shall refuse examination at such reasonable time or times as the board shall order, by physicians selected by the employer, in the presence of a physician of his own selection, or an examination by the physician of the board of arbitration, he shall have no right to compensation during the period from such refusal until he or some one on his behalf notifies the employer or board of arbitration that he is willing to have such examination.

(a) If the neutral physician make an examination, he shall file with the board a certificate under oath as to the condition of the workman, and such certificate shall be competent evidence of that condition.

(b) The physician and hospital shall immediately give written notice of the injury to the employer if they know or can reasonably obtain his name and address; if either fails to comply herewith such one shall not be entitled to collect compensation or expenses for treating the injured.

Sec. 20. (a) All settlements and releases made in which the workman is given the full benefit of this code shall be binding upon all parties, except that no settlement

where the workman is entitled to receive payments longer than a period of ninety days from the injury, and no lump sum settlement, shall be binding upon the workman, unless and until the same be approved by the board.

(b) If the employer and the workman, or the legal representatives of either, or both, are able to reach an agreement in regard to compensation or any other matter under this code, a memorandum of such agreement may be filed with the board; and if approved by it as conforming to this code, an award shall be entered thereon in conformity therewith and be of the same force and effect as awards entered upon a hearing; but the board shall have the power to investigate the matter before approved sufficiently to determine whether it is a fair settlement.

(c) The board may at any time require from the employer or insurer thereof a copy or report of any settlement or release or class of settlements or releases made with the injured workman.

SEC. 21. The right of compensation granted by this code shall have the same preference for the whole thereof against the assets of the employer as is allowed by law for a priority claim for unpaid wages for labor.

SEC. 22. Claims or payments due under this code shall not be assignable, and shall be exempt from all claims of creditors and from levy, execution, or attachment; but this shall not relieve the injured from his legal duties of support as between himself and family.

SEC. 23. (a) As a condition precedent to recovery upon a claim for compensation, in case of dispute over, or failure to agree upon a claim for compensation, the workman or the dependents or others entitled to the benefits hereof as the case may be shall submit the claim for compensation hereunder both as to the fact and nature of the injuries and the amount of compensation therefor, to a board of arbitration as hereinafter specified, in substantial compliance with this code, and shall be and remain bound by the award and such modifications thereof as shall be made under the provisions of this code.

(b) If the employer or any other interested persons appear in any proceeding herein to contest the merits thereof or to get or accept or carry out the benefits of the provisions of this code, such person shall be deemed to have appeared generally and joined in a submission of such matter to the decision of the board and the conditions of this code.

(c) The board shall acquire and have jurisdiction of the employer and all other persons interested in said proceeding by the service of the notice upon them according to sections 30; 31 and 32 of this code, or by their general appearance, or by reference from the district court.

(d) When the board obtains jurisdiction of any party or matter, then it shall retain the same so long as may be necessary to carry out the purposes of this code whether the parties do or do not remain within the State; provided that while any portion of said matter be before the district court or supreme court for determination or other purposes, the jurisdiction of this board for that matter shall be suspended.

(e) No workman or dependent or other person interested in such compensation shall be entitled to commence or maintain any action at law or suit in equity for such compensation until the amount thereof shall have been determined as herein provided, and then only for the amount so awarded and according to the terms and conditions of the award and the benefits of this code; provided this whole section shall not prevent the obtaining of jurisdiction in so far as it can be done pursuant to the fundamental laws, under the next subsection hereof.

(f) In any case where service can not be made within this State to acquire jurisdiction before this board as herein otherwise provided, the usual procedure shall be had before the board to the extent of serving the notice outside of the jurisdiction of the State in the same method as it would be served within the jurisdiction of the State, and the person upon whom it shall be served shall have the regular time to appear in said proceeding before said board.

If he does not appear generally therein, then the person making the application shall have the right to institute a suit in equity in the district court of the county, setting forth the facts; and if jurisdiction can be acquired in said court by attachment or otherwise, as provided by the practice and procedure in this State in said court, then upon the joining of issue, said court shall refer the questions of fact for determination to a board of arbitration to hear, try and determine and make its award conformable to this code and report such award back to the said district court; which shall, if it approves the same on the notice specified for entering judgment upon other awards as against the objection herein provided for such other awards, then enter a judgment thereon, and the judgment when entered shall have the same force and effect and be subject to all the other provisions of this code as if the award had been made by appearance before the regular board and judgment had been entered thereon; if its disapproval of the

same requires a further finding upon any question of fact, it shall refer that question or the whole matter back to a board as it would in any case coming through the regular channels; provided that this code shall not be construed as covering cases where jurisdiction can not be properly acquired within this State, upon diligent efforts.

SEC. 24. (a) There is hereby created a board of arbitration for each county in this State, consisting of three competent members, who shall be appointed by the district court for such counties and hold their offices subject to the will and discretion of the district court by which they are appointed.

(b) The court may from time to time appoint additional boards to act for such length of time as it deems necessary for the expeditious dispatch of the business of the district.

(c) In judicial districts containing more than one county, and not having sufficient business to occupy one board's complete time in the county of original appointment, the court shall appoint a board to act in one county and then enter an order in such other county or counties as the said board can fairly cover authorizing and directing such board to act in such other county or counties hearing the matters arising therein as the board for that county. The members need not necessarily reside in the same county.

(d) The court may fill all vacancies whether temporary or permanent occurring at any time in the board.

(e) During a single vacancy the remaining two members shall exercise all the power and authority of the board until such vacancy is filled.

SEC. 25. (a) No person shall sit as an arbitrator in either a case where he is related to either party by marriage or blood within the third degree, or who has any personal interest in the matter in dispute; provided that objection to any arbitrator, if the facts be then known, must be made in writing and filed with the board before hearing; and if the matter be not otherwise disposed of, it shall be heard and determined by the district court on motion, and its determination thereof shall be final.

(b) The board shall organize by choosing one of its members as chairman.

(c) A majority of the board shall be a quorum for the hearing and decision of any matter, and the decision of any two thereof shall be the decision of the board. In case the board shall be equally divided as to any matter, the same shall be tried *de novo*, before a full board of three members.

(d) No person shall be appointed to, or be eligible for, the position of arbitrator, clerk, assistant, expert or any other office or position hereunder, who is either a relative of any member of the court appointing him or of any of the arbitrators acting within the county, or who has been active in the election or appointment of any member of the court appointing him or active in the appointment of any member of the board or superior employer hereunder, or who has solicited his own appointment either directly or indirectly.

(e) The district court shall have the same power to punish for contempt of the board that it has for a similar contempt of its own powers.

SEC. 26. (a) The district court may appoint a clerk of the board or require the clerk of said court to act and the board may employ experts and such other clerical help as it may deem necessary, but all subject to the power of said court to disapprove same.

(b) All persons required to handle monies and other funds under this code shall give such bonds as the district court shall order as being approximately twice the amount of money likely to be in their hands at any time, and the expense of such bonds shall be paid from the county funds; the court may from time to time increase or lower those bonds to comply with the intention of this code.

(c) The court may also provide for depositories of such funds and sufficient bonds therefor.

SEC. 27. (a) All salaries, fees and expenses authorized by this code, except those of the members of the board, including the fees of witnesses within thirty miles, shall be audited and paid out of the general funds, the same as district court expenses; provided that the board shall have power to limit the expense of witnesses to a reasonable amount.

(b) The compensation of the board shall be fixed by the district court, but shall in no case exceed per member five dollars per half day or ten dollars per day for actual and necessary time and the actual cash outlay for necessary expenses of extra travel, and shall be paid in the same manner and from the same funds as other county employees.

(c) The compensation of clerks and other assistants shall be fixed by the board, subject to the approval of the district court.

SEC. 28. (a) The board of arbitration shall have jurisdiction throughout their respective counties to arbitrate all controversies arising within the county and permitted by or growing out of this code, and to make awards consistent herewith.

(b) The board shall also have jurisdiction to arbitrate any such controversies arising within the State outside of their counties, if all parties interested therein shall consent thereto in writing.

(c) Any matter for arbitration commenced in one county may be transferred to another county to be heard by the arbitrators of the county in which the injury occurred or by the board in the county to which it is transferred, if all parties consent thereto in writing.

SEC. 29. (a) The district courts shall make rules of practice and procedure to apply to, but not inconsistent with, this code, and so far as possible uniform throughout the State.

(b) The board may fix the amount of compensation which any attorney of a workman or dependent shall be entitled to receive for services out of the sum awarded as compensation.

(c) There is hereby granted to the board of arbitration and to all the persons vested with rights, powers, or obligations, such further powers and means of their exercise as may be necessary and proper to carry out the purposes of this code, not inconsistent with the fundamental laws.

SEC. 30. (a) Any person in interest desiring a determination by said board of any necessary matter may bring it before the board by a written and signed request, filed with the clerk of the board.

(b) The board of its own motion by notice made and served as provided in sections 31 and 32 hereof may bring any of the parties before it for the purpose of determining whether any matter growing out of any such personal injuries is proceeding according to the spirit of this code.

(c) The request shall be in such form as may be prescribed by the board, with the approval of the district court, and shall furnish so far as possible the data for service of notice.

SEC. 31. Upon the filing of such petition, on request, the clerk shall issue under the name of the board a notice to all of the interested parties so far as known to him, and cause the same to be served in the method prescribed in this code for the service of notice of injuries to the employer; except that service under this provision must be made within the State or in accordance with the method prescribed in subdivision (f) of section 23 hereof; provided that while the board has jurisdiction of any proceeding the notices may be filed and served by registered mail sent to the last address known to the board and a reasonable time to respond allowed.

SEC. 32. The notice shall cover the following things:

(a) The request made, giving the name or names of the person or persons making the same.

(b) The general nature of the matter to be investigated sufficiently describing the same to enable the parties to prepare for hearing.

(c) A summons to appear at a time and place for the hearing and a notice that otherwise he will be awarded in default.

(d) A notice that such other and further relief may be claimed and awarded as will do justice in the premises.

(e) Service may be proven by admission in writing or by certificate of the clerk of the board or in any other manner that proof of service of a summons may be made.

SEC. 33. The time for a hearing upon the merits of a claim for compensation shall not be less than ten days, and upon other matters not less than five days, after notice given, unless as to such other matters the board shall shorten the time by order to show cause.

SEC. 34. No formal or written pleadings shall be required in the hearing of any controversy arising under this code.

SEC. 35. The board shall not be bound by the usual common law or statutory rules of evidence or by any technical or formal rules of procedure, other than as herein provided, but may make the investigation in such manner as in their judgment is best calculated to ascertain the substantial rights of the parties and to carry out justly the spirit of this code; provided that all parties must have reasonable notice of hearing and fair opportunity to be heard on all investigations, inspections and hearings.

SEC. 36. The board shall have the power—

(a) To inspect or cause to be inspected the premises where the injury occurred.

(b) To require any books or papers, tools or other movable chattels to be produced or inspected.

(c) To require any workman claiming compensation to be physically examined by a physician appointed by the board or to require an autopsy to be held on the body of any workman for whose injuries compensation may be claimed.

(d) To issue subpoenas to compel the attendance of witnesses or parties, and the production of books, papers, records or chattels.

(e) To administer oaths.

(f) To require process to run in the name of the chairman.

(g) The board shall have power to hear and decide and render awards, either on default or hearing; but defaults shall be liberally reopened upon reasonable showing.

SEC. 37. (a) The board may either retain or reacquire jurisdiction and continue from time to time the proceedings upon any claim or matter and may hold such interim hearings and make such interim awards and such modifications of prior awards, or grant and hold such rehearings as may be necessary until the claim can be justly and finally awarded for the full balance of the period; but unless otherwise provided by order of the board or by this code it shall retain jurisdiction until all payments provided and other matters arising on claims end.

(b) In case of failure to serve notice or to reach all the parties, or in case it appear that a default should be removed, or any other matter done including the modification or amendment of an award otherwise final, in the interest of fairness, the board may take such action thereon as will promote justice and tend to carry out the spirit of this code.

SEC. 38. The clerk shall keep a record of the proceedings of the board, showing separately each case by the board considered, including the nature of the injury, the names of the parties and their agents or attorneys if any appearing therein, the names of the witnesses who testified before the board, with such exhibits as can reasonably be kept, or copies or photographs thereof, furnished by the parties, and the award, and such other records as may from time to time be directed by the board.

SEC. 39. The board shall make its awards in writing in such terms as it shall decide to be consistent with the facts and the spirit and powers of this code and as nearly as may be in the following form:

1. Title of the claim.
2. We find in the above case that (workman's name) _____ on (date) _____ received injuries arising in and growing out of the course of the employment of (employer's name) _____ at (place) _____ while working at the job of (kind of work) _____ and the fair wage was the sum of \$..... per payable
3. That the injuries appear now to be and are as follows:

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4. That those injuries have caused (death or degree of disability as case may be).
 5. That for (total or partial) _____ disability, it is hereby found and awarded that the said employer shall pay compensation in the amount of \$..... per (week or month), payable to _____ for the use and benefit of the following persons (names) _____ in the respective proportions for the times set opposite their names or until modified or changed by this board upon hearing.
 6. (Amount of compensation, if any, allowed to attorney).
 7. (Any further or different material and necessary matters that conform to the facts and this code).

8. The times and places of payments.

SEC. 40. The findings and awards made hereunder shall be final and conclusive as to the nature of the injuries and the amount of compensation, unless and until reopened, modified or set aside by either the board or the court.

SEC. 41. Either party to any controversy before the board, when an interim or final award is rendered and the payment thereof has been refused, may present a certified copy thereof to the district court of the county and upon five days' notice in writing to the other party apply for judgment thereon.

SEC. 42. The district court shall thereupon render a judgment in accordance therewith, unless such award is vacated as herein provided. Such judgment shall have the same effect as though duly rendered in an action tried and determined by said court, and shall with like effect be entered and docketed, except that no execution shall be issued thereon for more than is then due and the judgment shall not be a lien on realty except for due payment. The employer may file an affidavit with the clerk of the district court stating the payment of all amounts due under the judgment, and attaching the original receipt or paid check, order or draft for the latest due payment; if it appears from said receipt and the said affidavit that all such payments have been made, they shall be deemed discharged, unless and until such record be set aside by the court which may be done upon application and cause shown.

SEC. 43. (a) Any party aggrieved by any award may, within twenty days after the filing thereof and before judgment thereon, apply to the district court of the county, upon five days' notice to the other party, for an order vacating such award and granting a new hearing; but such order may be made only on a showing of fraud or gross error of the arbitrators, want of jurisdiction or errors at law; and then if the application is granted and any other or further finding of fact necessary the claim shall be recommitted for arbitration to an unbiased board.

(b) Any person authorized to obtain relief after judgment herein may apply therefor to the district court and obtain the same, and if any finding of fact be necessary on dispute the court may open the judgment and recommit the matter to the jurisdiction of the board to find the facts.

SEC. 44. An employer who is responsible for compensation as provided in this code may insure the risk in any manner then authorized by law. But those writing such insurance shall in every case be subject to the conditions contained in sections 45 and 46.

SEC. 45. If the risk of the employer is carried by any insurer doing business for profit, or by any insurance association or corporation formed of employers or workmen, or by employers and workmen, to insure the risks under this code, operating by the mutual assessment or other plan or otherwise, then

(a) In so far as policies are issued on such risks they shall provide for compensation for the injuries according to the full benefits of this code.

(b) Such policies shall contain a clause to the effect that as between the workman and the insurer the notice and knowledge of the occurrence of the injury on the part of the employer shall be deemed notice and knowledge on the part of the insurer; that jurisdiction of the employer for arbitration or other purposes shall be jurisdiction of the insurer, and that the insurer will in all things be bound by and subject to the awards rendered against such employer upon the risks so insured.

(c) Such policies must provide that the workman shall have an equitable lien upon any amount which shall become owing on account of such policy from the employer to the insured, and in case of the legal incapacity or inability of the employer to receive the said amount and pay it over to the workman or dependents, the said insurer will pay the same direct to said workman or dependents, thereby discharging all obligations under the policy to the employer and all of the obligations of the employer and insurer to the workman, but such policies shall contain no provision relieving the insurance company from payment when the employer becomes insolvent or discharged in bankruptcy or otherwise, during the period the policy is in operation, if the compensation remains owing.

(d) The insurer must be one then authorized by law to conduct such business and must have and maintain sufficient reserves to meet the requirements of the insurance laws applicable thereto then in force in this State.

SEC. 46. It shall be lawful for the employer and the workman to agree to carry the risks covered by this code in conjunction with other and greater risks and procure other and greater benefits, not exceeding the amount of the wage, such as additional compensation, accident, sickness or old age insurance or benefits, and the fact that such plan involves the contribution by the workman shall not prevent its validity if the employer pays for the whole of the risks otherwise covered by this code and the workman gets the whole of the additional benefits; but no contracting out of this code shall be valid.

SEC. 47. (a) Every person who undertakes to execute work either on his own account or as contractor requiring such dangerous employment of workmen in, on, or about premises where he as principal contracts with any independent contractor, subcontractor or other person to do a part or the whole thereof and whom he knew or had reason to believe was either insolvent or irresponsible, and does not require such person either to insure or secure the risks covered by this code, and any such person who creates or carries into operation any fraudulent scheme, artifice or device to enable him to execute such work without himself being responsible to the workman for the provisions of this code shall himself be included in the term "employer," and with the immediate employer jointly and severally liable to pay the compensation and be subject to all the provisions of this code to the extent of one full compensation.

(b) References and provisions of this code include such employer where compensation is claimed from, or proceedings taken against the principal hereunder, but the amount of compensation shall be calculated with reference to the wage of the workman under the contractor by whom he is immediately employed.

(c) The employer shall not be required to pay for injuries due entirely to the acts of third persons not engaged in, or connected or associated with the business or occupation of the employment of the employer in the job in and out of which the injuries arise.

SEC. 48. (a) Wherever the term "board," "arbitrators" (when not referring to the individuals) or "board of arbitrators" are used they shall each be deemed to mean "board of arbitration."

(b) "Child or children" shall include posthumous children and all other children entitled by law to inherit as children of the deceased injured.

(c) The term "employer" as used herein shall include every person employing such a workman as comes within this code; and shall mean any person or corporation,

copartnership, or association or group thereof, and their successors or legal representatives, and shall include State, county, village, town, city, school district and other public employers.

(d) The husband or wife while remaining single, and the minor children until they reach their majority shall be deemed dependent; all others shall be presumed not dependent until actual dependency be shown, and then deemed dependent only to the extent shown.

(e) The term "physician" shall include "surgeon."

(f) The term "workmen" shall include the singular and plural and all ages and both sexes.

(g) The term "workmen" shall mean all employed persons engaged in industrial employments who are ordinarily known as laborers and workmen and all other employees commonly known as servants under the law of master and servant now in force in tort actions, when subjected in their work to the dangers of such employment; but shall not include independent contractors or subcontractors or their employees, except such employees as are covered by reason of the conditions provided in section 47 of this code.

Sec. 49. Without otherwise affecting either the meaning or interpretation of the abridged clause, "personal injuries arising out of and in the course of employment" it is hereby declared:

(a) Not to cover workmen except while engaged in, on, or about the premises where their services are being performed, or where their service requires their presence as a part of such service at the time of the injury and during the hours of service as such workmen, and subjects them to dangers peculiar to that employment.

(b) It shall not include employees of other persons whose agents they are for transacting such employment, except when the person who engages the principal of such agent subjects the agent to peculiar dangers in the performance of such duties.

(c) It shall cover, all injuries to the workman that are due to, or incidental to, either the dangers or risks of his employment.

(d) It shall not cover injuries occasioned by drunkenness of the workman himself, unless the employer or superior servant or agent thereof allows him to continue the work knowing that he is drunk, but shall cover such cases, and cases where the injuries are occasioned, in whole or in part, by increase of the hazards resulting from the drunkenness of a fellow servant, a superior servant or agent, or the employer himself, in connection with such work.

(e) It shall include only such disease and infection as result from the injury when reasonably treated, or as results from the failure of the employer reasonably to treat in accordance with this code, and that which is caused by the bad treatment of the employer's physician thereon; but shall not include disease or infection otherwise received after the workman has a reasonable opportunity to treat the wound.

(f) Industrial employment is used in the broad sense herein and shall mean and include each and every occupation, calling, business and pursuit, which is operated within this State for the purpose of gain or profit, or which is operated in the furtherance of gain and profit of others, whether operated by a private or public employer.

Sec. 50. This code shall not apply to injuries incurred before January 1st, 1912.

Sec. 51. This code shall take effect as to appointment of arbitrators, clerk, preparation for offices, records, rules, etc., upon its passage to allow it to be in general operation on January 1st, 1912.

OHIO COMMISSION BILL.

[As amended and passed by the legislature, May 17, 1911.]

SECTION 1. There is hereby created a State Liability Board of Awards, to be composed of three members, not more than two of whom shall belong to the same political party, to be appointed by the governor, within thirty days after the passage of this act, one of which members shall be appointed for the term of two years, one member for four years and one member for six years, and thereafter as their terms expire the governor shall appoint one member for the term of six years. Vacancies shall be filled by appointment by the governor for the unexpired term, and all appointments shall be upon and with the advice and consent of the senate.

Sec. 2. Each member of the board shall devote his entire time to the duties of his office and shall not hold any position of trust or profit or engage in any occupation or business interfering or inconsistent with his duty as such member, or serve on or under any committee of any political party.

Sec. 3. Each member of the board shall receive an annual salary of five thousand dollars, payable in the same manner as salaries of State officers are paid.

Sec. 4. The board shall be in continuous session and open for the transaction of business during all the business hours of each and every day, excepting Sundays and legal holidays. All sessions shall be open to the public, and shall stand and be adjourned without further notice thereof on its records. All proceedings of the board shall be shown on its record of proceedings, which shall be a public record, and shall contain a record of each case considered, and the award made with respect thereto, and all voting shall be had by the calling of each member's name by the secretary and each vote shall be recorded as cast.

Sec. 5. A majority of the board shall constitute a quorum for the transaction of business, and a vacancy shall not impair the right of the remaining members to exercise all the powers of the full board so long as a majority remains. Any investigations, inquiry or hearing which the board is authorized to hold, or undertake, may be held or undertaken by or before any one member of the board. All investigations, inquiries, hearings and decisions of the board, and every order made by a member thereof, when approved and confirmed by a majority of the members, and so shown on its record of proceedings, shall be deemed to be the order of the board.

Sec. 6. The board shall keep and maintain its office in the city of Columbus, and shall provide a suitable room or rooms, necessary office furniture, supplies, books, periodicals and maps. All necessary expenses shall be audited and paid out of the State insurance fund. The board may hold sessions at any place within the State.

Sec. 7. The board may employ a secretary, actuary, accountants, inspectors, examiners, experts, clerks, stenographers and other assistants, and fix their compensation. Such employments and compensation shall be first approved by the governor, and shall be paid out of the State insurance fund. The members of the board, actuaries, accountants, inspectors, examiners, experts, clerks, stenographers and other assistants that may be employed shall be entitled to receive from the State insurance fund their actual and necessary expenses while traveling in the business of the board. Such expenses shall be itemized and sworn to by the person who incurred the expense, and allowed by the board.

Sec. 8. The board shall adopt reasonable and proper rules to govern its procedure, regulate and provide for the kind and character of notices, and the services thereof, in cases of accident and injury to employes, the nature and extent of the proofs and evidence, and the method of taking and furnishing the same, to establish the right to benefits of compensation from the State insurance fund, hereinafter provided for, the forms of application of those claiming to be entitled to benefits or compensation therefrom, the method of making investigations, physical examinations and inspections, and prescribe the time within which adjudications and awards shall be made.

Sec. 9. Every employer of labor shall furnish the board, upon request, all information required by it to carry out the purposes of this act. The board or any member thereof, or any person employed by the board for that purpose, shall have the right to examine under oath any employer or officer, agent or employee thereof.

Sec. 10. Every employer of labor receiving from the board any blank with directions to fill the same, shall cause the same to be properly filled out as to answer fully and correctly all questions therein propounded, and if unable to do so shall give good and sufficient reasons for such failure. Answers to such questions shall be verified under oath and returned to the board within the period fixed by the board for such return.

Sec. 11. Each member of the board, the secretary and every inspector or examiner appointed by the board shall, for the purposes contemplated by this act, have power to administer oaths, certify to official acts, take depositions, issue subpoenas, compel the attendance of witnesses and the production of books, accounts, papers, records, documents and testimony.

Sec. 12. In case of disobedience of any person to comply with the order of the board, or subpoena issued by it as one of its inspectors, or examiners, or on the refusal of a witness to testify to any matter regarding which he may be lawfully interrogated, or refuse to permit an inspection as aforesaid, the probate judge of the county in which the person resides, on application of any member of the board, or any inspector or examiner appointed by it, shall compel obedience by attachment proceedings as for contempt, as in the case of disobedience of the requirements of subpoena issued from such court on a refusal to testify therein.

Sec. 13. Each officer who serves such subpoena shall receive the same fees as a sheriff, and each witness who appears, in obedience to a subpoena, before the board or an inspector or examiner, shall receive for his attendance the fees and mileage provided for witnesses in civil cases in courts of common pleas, which shall be audited and paid by from such State insurance fund in the same manner as other expenses

are audited and paid, upon the presentation of proper vouchers approved by the chairman and secretary of the board. No witness subpoenaed at the instance of a party other than the board or an inspector shall be entitled to compensation from the State insurance fund unless the board shall certify that his testimony was material to the matter investigated.

Sec. 14. In an investigation, the board may cause depositions of witnesses residing within or without the State to be taken in the manner prescribed by the law for like depositions in civil actions in the court of common pleas.

Sec. 15. A transcribed copy of the evidence and proceedings, or any specific part thereof, or any investigation, by a stenographer appointed by the board, being certified by such stenographer to be a true and correct transcript of the testimony on the investigation, or of a particular witness, or of a specific part thereof, carefully compared by him with his original notes, and to be a correct statement of the evidence and proceedings had on such investigation so purporting to be taken and subscribed, may be received in evidence by the board with the same effect as if such stenographer were present and testified to the facts so certified. A copy of such transcript shall be furnished on demand to any party upon the payment of the fee therefor, as provided for transcript in courts of common pleas.

Sec. 16. The board shall prepare and furnish blank forms, and provide in its rules for their distribution so that the same may be readily available, of application for benefits or compensation from the State insurance fund, notices to employers, proofs of injury or death, of medical attendance, of employment and wage earnings, and such other blanks as may be deemed proper and advisable, and it shall be the duty of insured employers to constantly keep on hand a sufficient supply of such blanks.

Sec. 17. The State Liability Board of Awards shall classify employments with respect to their degree of hazard, and determine the risks of the different classes and fix the rates of premium of the risks of the same, based upon the total pay roll and number of employees in each of said classes of employment, sufficiently large to provide an adequate fund for the compensation and expenses provided for in this act, and to create a surplus sufficiently large to guarantee a State insurance fund from year to year.

Sec. 18. The State Liability Board of Awards shall establish a State insurance fund from premiums paid thereto by employers of labor and employees as herein provided, according to the rates of risk in the classes established by it, as herein provided, for the benefit of employees of employers that have paid the premium applicable to the classes to which they belong and for the benefit of the dependents of such employees, and shall adopt rules and regulations with respect to the collection, maintenance and disbursement of said fund.

Sec. 19. The treasurer of State shall be the custodian of the State insurance fund, and all disbursement therefrom shall be paid by him, but upon vouchers signed by any two members of the State Liability Board of Awards.

Sec. 20. The treasurer of State shall give a separate and additional bond, in such amount as may be fixed by the governor, and with sureties to his approval, conditioned for the faithful performance of his duties as custodian of the State insurance fund herein provided for.

Sec. 20-1. Any employer of labor who shall pay into the State insurance fund the premiums provided by this act, shall not be liable to respond in damages at common law or by statute, save as hereinafter provided, for injuries or death of any such employee during the period covered by such premiums, provided the injured employee has remained in his service with notice that his employer has paid into the State insurance fund the premiums provided by this act; the continuation in the service of such employer with such notice, shall be deemed a waiver by the employee of his right of action as aforesaid.

Each employer paying the premiums provided by this act into the State insurance fund shall post in conspicuous places about his place or places of business typewritten or printed notices stating the fact that he has made such payment; and the same, when so posted, shall constitute sufficient notice to his employees of the fact that he has made such payment; and of any subsequent payments he may make after such notices have been posted.

Sec. 20-2. For the purpose of creating such State insurance fund, each employer and his employees shall pay, on or before January 1, 1912, and semiannually thereafter, the premiums of liability risk in the classes of employment as may be determined and published by the State Liability Board of Awards. The said employers for themselves and their employees shall make such payments to the State treasurer of Ohio, who shall receive and place the same to the credit of such State insurance fund. The premiums provided for in this act shall be paid by the employer and employees in the following proportions, to wit: Ninety per cent of the premium shall be paid by the employer

and ten per cent by the employees. Each employer is authorized to deduct from the pay roll of his employees ten per cent of the said premiums for any premium period in proportion to the pay roll of such employees; no deduction shall be made except for that portion of the premium period antedating such pay roll. Each employer shall give a receipt to each employee showing the amount which has been deducted and paid into the State insurance fund.

Sec. 21. The State Liability Board of Awards shall disburse the State insurance fund to such employees of employers as have paid into said fund the premiums applicable to the classes to which they belong, that have been injured in the course of their employment and which have not been purposely self-inflicted, or to their dependents in case death has ensued.

Sec. 21-1. All employers of labor who shall not pay into the State insurance fund the premiums provided by this act, shall be liable to their employees for damages suffered by reason of personal injuries sustained in the course of employment caused by the wrongful act, neglect or default of the employer, or any of the employer's officers, agents or employees, and also to the personal representatives of such employees where death results from such injuries and in such action the defendant shall not avail himself of the following common-law defenses:

The defense of the fellow-servant rule, defense of the assumption of risk, or the defense of contributory negligence.

But where a personal injury is suffered by an employee, or when death results to an employee from personal injuries while in the employ of an employer in the course of employment, and such employer has paid into the State insurance fund the premium provided for in this act, and in case such injury has arisen from the willful act of such employer or from the failure of such employer or any of such employer's officers or agents to comply with any municipal ordinance or lawful order of any duly authorized officer, or any statute regulating the health, comfort, life, or safety of employees, then in such event, nothing in this act contained shall affect the civil liability of such employer but such injured employee or his legal representative, in case death results from the injury, may, at his option, either claim compensation under this act or institute proceedings in the courts for his damage on account of such injury, and such employer shall not be liable for any injury to any employee or to his legal representative, in case death results, except as provided in this act.

Every employee or legal representative, in case death results, who accepts an award from the State Liability Board of Awards, waives his right to exercise his option to institute proceedings in court. Every employee or his legal representative, in case death results, who exercises his option to institute proceedings in court, as provided in section 21-1 waives his right to any award, except as provided in section 36 of this act.

Sec. 22. Where an employer has paid a judgment recovered against him for injuries, or on account of the death of an employee, he shall, if he has paid into the State insurance fund, the premiums provided for in this act to insure him against liability for such injuries or death, be reimbursed therefrom to the extent of, but in no case to exceed, the amount provided for in this act, to be paid in case of injury or death, not, however, in any case, to exceed the amount of such judgment and court costs so paid by such employer, such reimbursement to be made upon proof of payment of such judgment, satisfactory to the board and allowed by it, and payable in the same manner as benefits or compensation to injured employees or their dependents.

Sec. 23. The board shall disburse and pay from the fund, for such injury, to such employees, such amounts for medical, nurse and hospital services and medicines, as it may deem proper, not, however, in any case, to exceed the sum of two hundred dollars, in addition to such award to such employee.

Sec. 24. In case death ensues from the injury reasonable funeral expenses, not to exceed one hundred and fifty dollars, shall be paid from the fund, in addition to such award to such employee.

Sec. 25. No benefit shall be allowed for the first week after the injury is received, except the disbursement provided for in the next two preceding sections.

Sec. 26. In case of temporary or partial disability, the employee shall receive sixty-six and two-thirds per cent of the impairment of his earning capacity during the continuance thereof, not to exceed a maximum of twelve dollars per week, and not less than a minimum of five dollars per week, if the employee's wages were less than five dollars per week, then he shall receive his full wages; but not to continue for more than six years from the date of the injury, nor to exceed three thousand four hundred dollars in amount from that injury.

Sec. 27. In case of permanent total disability the award shall be 66 $\frac{2}{3}$ per cent of the average weekly wage, and shall continue until the death of such person so totally disabled. The award where death results from an injury shall not exceed thirty-four hundred dollars.

SEC. 28. In case the injury causes death the benefits shall be in the amounts and to the persons following:

1. If there be no dependents, the disbursements from the insurance fund shall be limited to the expense provided for in sections 23 and 24.

2. If there are wholly dependent persons at the time of the death, the payment shall be sixty-six and two-thirds per cent of the average weekly wage and to continue for the remainder of the period between the date of the injury and six years thereafter, and not to amount to more than a maximum of thirty-four hundred dollars, nor less than a minimum of one thousand five hundred dollars.

3. If there are partly dependent persons at the time of the death, the payment shall be sixty-six and two-thirds per cent of the average weekly wage and to continue for all or such portion of the period of six years after the date of the injury, as the board in each case may determine, and not to amount to more than a maximum of thirty-four hundred dollars.

SEC. 29. The benefits, in case of death, shall be paid to such one or more of the dependents of the decedent, for the benefit of all the dependents, as may be determined by the board, which may apportion the benefits among the dependents in such manner as it may deem just and equitable. Payment to a dependent subsequent in right may be made, if the board deem proper, and shall operate to discharge all other claims therefor.

SEC. 30. The dependent or person to whom benefits are paid shall apply the same to the use of the several beneficiaries thereof according to their respective claims upon the decedent for support, in compliance with the finding and direction of the board.

SEC. 31. The average weekly wage of the injured person at the time of the injury shall be taken as the basis upon which to compute the benefits.

SEC. 32. If it is established that the injured employee was of such age and experience when injured as that under natural conditions his wages would be expected to increase, the fact may be considered in arriving at his average weekly wage.

SEC. 33. The power and jurisdiction of the board over each case shall be continuing, and it may from time to time make such modification or change with respect to former findings or orders with respect thereto, as, in its opinion, may be justified.

SEC. 34. The board, under special circumstances, and when the same is deemed advisable, may commute periodical benefits to one or more lump sum payments.

SEC. 35. Benefits before payment shall be exempt from all claims or creditors and from any attachment or execution, and shall be paid only to such employees or their dependents.

SEC. 36. The board shall have full power and authority to hear and determine all questions within its jurisdiction, and its decision thereon shall be final.

In case the final action of such board denies the right of the claimant to participate at all in such fund on the ground that the injury was self-inflicted or on the ground that the accident did not arise in the course of employment, or upon any other ground going to the basis of the claimant's right, then the claimant within thirty (30) days after the notice of the final action of such board may, by filing his appeal in the common pleas court of the county wherein the injury was inflicted, be entitled to a trial in the ordinary way, and be entitled to a jury if he demands it. In such a proceeding, the prosecuting attorney of the county, without additional compensation, shall represent the State Liability Board of Awards, and he shall be notified by the clerk forthwith of the filing of such appeal.

Within thirty days after filing his appeal, the appellant shall file a petition in the ordinary form against such board as defendant and further pleadings shall be had in said cause according to the rules of civil procedure, and the court, or the jury, under the instructions of the court, if a jury is demanded, shall determine the right of the claimant; and, if they determine the right in his favor, shall fix his compensation within the limits and under the rules prescribed in this act; and any final judgment so obtained shall be paid by the State Liability Board of Awards out of the State insurance fund in the same manner as such awards are paid by such board.

The costs of such proceeding, including a reasonable attorney's fee to the claimant's attorney to be fixed by the trial judge, shall be taxed against the unsuccessful party. Either party shall have the right to prosecute error as in the ordinary civil cases.

SEC. 36-1. Such board shall not be bound by the usual common-law or statutory rules of evidence or by any technical or formal rules of procedure, other than as herein provided; but may make the investigation in such manner as in their judgment, is best calculated to ascertain the substantial rights of the parties and to carry out justly the spirit of this act.

SEC. 37. The board may make necessary expenditures to obtain statistical and other information to establish the classes provided for in section 17. The salaries and compensation of the secretary, and all actuaries, accountants, inspectors, examiners,

experts, clerks and other assistants, and all other expenses of the board herein authorized including the premium to be paid by the State treasurer for the bond to be furnished by him, shall be paid out of the State insurance fund upon vouchers, signed by two of the members of such board, presented to the auditor of State, who shall issue his warrant therefor as in other cases.

SEC. 38. No provision of this act relating to the amount of compensation shall be considered by, or called to the attention of the jury on the trial of any action to recover damages as herein provided.

SEC. 39. Annually on or before the 15th day of November, such board, under the oath of at least two of its members, shall make a report to the governor which shall include a statement of the number of awards made by it, and a general statement of the causes of the accidents leading to the injuries for which the awards were made, a detailed statement of the disbursement from the expense fund, and the condition of its respective funds, together with any other matters which such board deems it proper to call to the attention of the governor, including any recommendations it may have to make.

SEC. 40. The expense of such board in carrying out the provisions of this act shall be paid until January 1, 1912, out of the general revenue of the State not otherwise appropriated. Such expense shall not exceed twenty-five thousand dollars in addition to the salaries of members of such board.

BILLS DRAFTED BY ASSOCIATIONS.

DRAFT OF BILL BY THE AMERICAN FEDERATION OF LABOR.

SECTION 1. If in any employment to which this act applies personal injury or death by accident, arising out of and in the course of the employment, is caused to any employee, the employee so injured, or in case of death, the members of his family, as hereinafter defined shall be entitled to receive from his employer, and the said employer shall be liable to pay, the compensation provided for in this act. This act shall apply to every employee, who shall, at the time of his accident be engaged in employment on, in or about any railway, street railway, factory, (including any premises where steam, water or other mechanical power is used in aid of any manufacturing or other process for gain, or on which explosives or inflammables are made or used), mine, quarry, or any engineering, building or construction work in the State of _____. The employers to whom this act shall apply shall be any person or persons, association, partnership or corporation carrying on any such industry as aforesaid. Save as herein provided no such employer shall be liable for any injury or death for which compensation is recoverable under this act.

SEC. 2. The employer shall not be liable under this act in respect of any injury which does not disable the employee for a period of at least two weeks from earning full wages at the work at which he was employed, except for medical fee, as hereinafter provided, but for that period shall remain liable as though this act had not been passed.

SEC. 3. When the injury or death was approximately caused by (a) the criminal act or omission or (b) the negligence (including thereunder negligence in choice of servants but excluding the negligence of competent servants and their negligence in performance of employer's duties delegated to them) of the employer, committed or omitted by him individually if the employer be a natural person, or by any of its officers individually if the employer be a corporation, or by any of its partners individually if the employer be a copartnership, or by any member of the association individually if the employer be an association, the liability independent of this act of (such employer) shall not be affected by this act; but in such case the injured employee or in case of death the members of his family as herein defined, may elect between claiming compensation under this act, or pursuing any remedy which was available before the passage of this act.

SEC. 4. If it is proved that injury or death results from the deliberate intention of the employee to produce such result, or his willful failure to use a protection against accident required by statute and provided for him, or solely by his deliberate breach of statutory regulations affecting safety of life or limb, or by reason of his intoxication, any compensation claimed by him under this act shall be disallowed.

SEC. 5. Any employer who would be liable under this act to employees if directly employed by him, shall be liable hereunder to the employees of independent contractors for accidents occurring to them in the course of any work undertaken by such employer, or for the purposes of his business, on or in or about the premises or places under his control or management. Such liability shall be to pay such compensation as would be payable, if the employee has been directly employed by him, but at the wages he was actually receiving. Any employer who shall have paid compensation under this act for any accident, or any independent contractor who has indemnified himself, shall be subrogated to all the rights of recovery therefor of the person or persons to whom such compensation shall have been paid. An employee may, however, if he so elects, proceed against, or recover compensation directly from, any other person liable for his accident instead of from the employer.

SEC. 6. Proceedings for the recovery of compensation under this act shall not be maintainable, unless written notice of the accident, stating the time, place and cause thereof, and the name and address of the person injured has been given within thirty days after the happening of the accident, and unless claim for compensation has been made within six months from the occurrence of the accident, or in case death results therefrom, within six months from the time of death: *Provided, always*, That the want of, or any defect in such notice shall not be a bar, if the employer is not thereby prejudiced, or if such want or defect was occasioned by mistake or other reasonable cause. The failure to make a claim within the period above specified shall not be a bar, if such failure was occasioned by physical or mental incapacity or other reasonable cause. Such notice shall be delivered to or sent by registered letter addressed to the employer at his office, place of business or last known residence.

SEC. 7. There shall be selected by every employer subject to this act one or more doctors who shall be approved by the commission of arbitration and award, hereinafter constituted, and referred to as the commission, and it shall be the duty of such doctors to report forthwith to the commission every accident under this act, and also

whenever practicable, to render preliminary medical attention to the injured, and they shall be paid by the employer a fee of one dollar for such service in each case.

The amount of compensation payable under this act shall be:

(a) Where death results from the injury:

(1) If the employee leaves any dependents, who at the time of the accident were wholly dependent upon his earnings, a sum equal to his earnings in the employment of the same employer during the three years next preceding the injury, or the sum of one thousand dollars, whichever of these sums is the larger, but not exceeding in any case five thousand dollars: *Provided*, That the amount of any weekly payments made under this act shall be deducted from such sum; and if the period of the employee's employment by the same employer has been less than the said three years, then the amount of his earnings during the said three years shall be deemed to be nine hundred and thirty-six times his average daily earnings during the period of his actual employment under the same employer.

(2) If the employee leaves only dependents who at the time of the accident were partly dependent upon his earnings such sum not exceeding in any case the amount payable under the foregoing provisions of this section as may be agreed upon, or, in default of agreement, may be determined on arbitration under this act.

(3) If the employee leaves no dependents who at the time of the accident were dependent the reasonable burial and medical expenses, not exceeding in all two hundred dollars.

(b) Where total or partial incapacity results from the injury:

A weekly payment during the incapacity after the second week, not exceeding one-half of his average weekly earnings in such employment during the previous twelve months if he has been so long employed, but, if not, then for any less period during which he has been in the employment of the same employer. If, however, the employee is a minor whose average weekly earnings are less than ten dollars, his compensation shall be a payment not exceeding his full average earnings. Such weekly payments shall not in any case exceed fifteen dollars, and it shall not extend over a period exceeding ten years, unless the injured will thereafter be permanently totally disabled from engaging in any work or occupation for wages.

Sec. 8. All death payments under this act shall be paid into court where the accident happens, and also any payments to persons under legal disability if the court on application to it so directs. Any question as to who is a dependent and the amount payable to each dependent shall be decided by the said court, if not settled before such payment into court.

The receipt of the court shall be a sufficient discharge for any amount paid in and it shall be apportioned and distributed for the benefit of the persons entitled thereto in such manner as the court may think best: *Provided*, That the court may thereafter on application to it, vary any of its previous orders or apportionments.

The courts referred to in this act shall be the probate.

Sec. 9. The commission shall make regulations under which an employee injured shall, if so requested by the employer, submit himself for examination by a duly qualified doctor furnished and paid by the employer as soon as practicable after his injury, and also from time to time during the receipt by him of any weekly payments hereunder. A copy of the report of the employer's doctor shall be furnished to the employee, or if no such examination be made, then the employee shall be examined by his own doctor and furnish a report thereof to his employer. Such reports shall be furnished within six days after the examination. If a dispute then exists as to the employee's condition, or as to whether or to what extent the incapacity is due to the accident, such regulations shall provide for the examination of the employee by a medical referee on an order to that effect being given by the court hereinafter specified, and the payment of a fee not exceeding five dollars, to be taxed by said court. The certificate of the medical referee shall be conclusive evidence of the matters so certified. If the employee refuses to submit himself to such examinations, or in any way obstructs the same, his right to take compensation and to take or to prosecute any proceeding under this act in relation to compensation may be suspended, and his compensation during such period of suspension shall be forfeited until such examination has been made.

Sec. 10. Any weekly payment may be reviewed at the request either of the employer, or of the employee, and on such review may be ended, diminished or increased, subject to the maximum provided above: *Provided*, That where the employee was at the date of the accident under twenty-one years of age, and the review takes place more than twelve months after the accident, the amount may be increased, to any amount, not exceeding fifty per cent of the weekly sum the employee would probably have been earning at the date of the review if he had remained uninjured, but not in any case exceeding ten dollars.

SEC. 11. Where any weekly payment has been continued for not less than six months, the liability therefor may on application by or on behalf of the employer or employee, respectively, be redeemed by payment of a lump sum, but if the incapacity is permanent or total, the sum shall not exceed the purchase price of an annuity yielding seventy-five per cent of the weekly payments calculated under the American Experience Table of Mortality at four per cent per annum.

SEC. 12. If an employee receiving a weekly payment ceases to reside in the United States, he shall thereupon cease to be entitled to receive any weekly payment.

SEC. 13. In default of agreement between the parties interested, the following questions shall be settled by arbitration under this act, subject to judicial procedure as hereinafter provided: All questions as to the employer's liability to pay compensation and the amount payable, and as to the duration, review or redemption by a lump sum of any weekly payment; any question as to whether the employee is one to whom the act applies, and whether he has dependents, and if so the amounts payable to them; all questions as to the liability of an independent contractor, and of any third party by consent, under section five.

Arbitration proceedings shall be as follows:

First. The employer and his employees may choose a committee, whose unanimous adjudication of a matter within three months shall be final and binding on both parties, unless either objects in writing before it is considered.

Second. On failure of such unanimous adjudication the matter shall be investigated and settled by a single arbitrator agreed on by the parties, and in the absence of such agreement a statement of the facts shall be filed in court in such form as may be prescribed by the rules of said court, and unless within thirty days thereafter a written application for a jury trial is also filed, a jury trial shall be deemed to have been waived, and the matter shall then be determined by the judge of the said court, or by a referee appointed by the said court under such procedure as may be prescribed by rules of court, and such referee shall for the purposes of this act have full power to procure witnesses and all evidence which he may regard as necessary to his decision, and his fees shall be fixed by the commission and paid out of the appropriation for this act. Said court may compel the attendance of witnesses and the production of evidence before said referee in the same manner and under the same penalties as apply to the attendance of witnesses and the production of evidence before said court.

Any question of law may be submitted for the opinion of the State's attorney for the jurisdiction where the accident happens by any committee, arbitrator or referee, and an appeal shall lie from them to such judge, on a question of law only, and his decision shall be final. Unless reversed on appeal taken in accordance with appellate practice of the courts of the State.

The services of a medical referee may be utilized in all arbitration proceedings under regulations made by the commission.

The cost of arbitration proceedings shall be in the discretion of the committee, the arbitrator or the referee, respectively; they shall not exceed, however, the taxable costs for similar services allowed by the rules of court for

SEC. 14. Any sum awarded as compensation under this act shall be paid on receipt of the person to whom it is payable under any agreement or award; and in case of the death of the person injured the same shall be payable, as the court may determine, to the members of his family dependent upon the injured at the time of his injury, namely, the widow or husband as the case may be, and the children, or if no widow or husband or children, the parents or grandparents, or if no parents or grandparents, the grandchildren, or if no grandchildren, the brothers and sisters.

SEC. 15. All proceedings for compensation under this act shall take place in the judicial district where all the parties reside, unless otherwise prescribed by order or regulation of the commission.

SEC. 16. Whenever the amount of compensation under this act has been ascertained, or any weekly payment varied, or redeemed, or any other matter decided, by any referee, committee or arbitrator, or by agreement, a memorandum thereof, shall be sent by said referee, committee, or arbitrator, or by any party interested, to the clerk of the said court in the jurisdiction in which such decision was rendered, in the form and manner prescribed by such court. The said clerk shall forthwith send notice thereof to the parties interested, and shall seven days after the sending of such notice file such memorandum and register it without fee as the judgment of said court. Such memorandum shall thereafter for all purposes have the same force and effect as the judgment of said court: *Provided*, That the judge may at any time, on evidence proving to his satisfaction that any agreement as to the redemption of a weekly payment by a lump sum, or as to the amount of compensation payable to a person under legal disability, or to dependents, was inadequate, or was obtained by

fraud or undue influence or other improper means, order that the memorandum be not recorded, and if recorded, he may order the record to be erased within six months after it has been so recorded, and he may hear such evidence, take such proceedings, and make such order as will effectuate the purpose of this act.

SEC. 17. An agreement as to the redemption of a weekly payment by a lump sum, or as to the amount of compensation to be paid to a person under a legal disability or to dependents, if not registered in accordance with this act, shall not, nor shall any payment under such agreement, exempt the person by whom the compensation is payable, from liability to pay compensation, unless he prove that the failure to register was not due to any neglect or default on his part.

SEC. 18. The fees of any attorney or other representative of the person to whom any payment is made under this act shall be determined by the commission.

SEC. 19. No payment under this act shall be assigned or subject to attachment or liable in any way for any debts.

SEC. 20. If any employer becomes bankrupt or insolvent and has any insurance against his liability under this act to any employee killed or injured, such employee, or his beneficiaries hereunder shall thereupon be subrogated to such employer's rights and remedies therefor under such insurance; and if the employer has no such insurance, or such insurance is insufficient, any amount then due such employees or such beneficiaries shall have priority over all other claims against the bankrupt or insolvent estate.

SEC. 21. If the commission certifies in writing that any scheme of compensation, benefit, or insurance provides scales of compensation not less favorable to the employees and their dependents specified in this act than the corresponding scales contained in this act, or is on the whole not less favorable to such employees and their dependents than are the provisions of this act and that where the scheme provides for contribution by the employees, the scheme confers benefits at least equivalent to those contributions in addition to the benefits, or the equivalent thereof under this act, the employer may agree with any of his employees that the provisions of the scheme shall be substituted for the provisions of this act, and thereupon the employer shall be liable only in accordance with the scheme, but save as aforesaid this act shall apply, notwithstanding any contract to the contrary made after the passage of this act. No scheme shall be certified which contains an obligation upon the employees to agree to it as a condition of their hiring, or which does not contain provisions enabling an employee to withdraw from the scheme. Such agreement or withdrawal shall be in writing and signed by the employee. If the commission shall at any time find that the scheme no longer fulfills the requirements of this section, or other reasonable cause exists for so doing, they shall revoke the certificate. When a certificate is revoked or expires any moneys or securities held for the purpose of the scheme shall, after due provision has been made to discharge the liabilities already accrued, be distributed as may be arranged between the employer and his employees, or as may be determined by the commission in the event of a difference of opinion.

The commission may make regulations for the purpose of carrying this section into effect.

SEC. 22. Nothing in this act shall effect any proceeding for the recovery of penalties under safety appliance and other enactments relating to the safety of employees, except that hereafter, in the discretion of the judge before whom the penalty is enforced, such penalties shall be payable in whole or in part to any employees injured as a direct result of the absence of the appliance for which such proceedings were brought, or for the benefit of the family of any employee killed.

SEC. 23. There is hereby created for the purposes of this act a commission of arbitration and award, which shall be composed of three commissioners, who shall be appointed by the governor by and with the advice and consent of the senate. The commissioners first appointed under this act for the purpose thereof shall continue in office for the term of two, four and six years, respectively, from the first day of July, 1910; the terms of each to be designated by the governor; but their successors shall be appointed for terms of six years, except that any person chosen to fill a vacancy shall be appointed only for the unexpired time of the commissioner whom he shall succeed. Any commissioner may be removed by the governor for inefficiency, neglect of duty, or malfeasance in office. Not more than two of the commissioners shall be appointed for [from] the same political party. No vacancy in the commission shall impair the right of the remaining commissioners to exercise all the powers of the commission.

The commission is hereby authorized to exercise any and all lawful powers necessary to perform the duties imposed upon it by this act, and to make all such rules and regulations not otherwise provided for as they may consider necessary to carry into effect the purposes thereof.

The commission shall have full power and authority to investigate accidents to which this act applies, to administer oaths, and require the attendance and testimony of witnesses and the production of any evidence, relating to such accidents and to employ agents who shall have like power or authority. It shall be the duty of the commission to include in its annual report a list of all accidents and a full report in detail of each accident investigated, to require from employers at stated intervals returns showing amounts of compensation paid, to ascertain the means adopted for the prevention and treatment of accidents to employees covered by this act, and to make recommendations relative thereto, and to appoint such properly qualified medical practitioners as are necessary, to be medical referees for the purposes of this act, to remove them, and to determine their fees.

SEC. 24. This act shall not apply to accidents happening to seamen employed on vessels of the United States engaged in navigation.

TENTATIVE DRAFT OF A BILL BY THE NATIONAL CIVIC FEDERATION.

SECTION 1. If, in any employment to which this act applies, personal injury by accident arising out of and in the course of the employment is caused to a workman, his employer shall, subject as hereinafter mentioned, be liable to pay compensation to the workman in accordance with this act. Save as herein provided no such employer shall be liable for any injury for which compensation is recoverable under this act:

Provided, That:

(a) The employer shall not be liable under this act in respect of any injury which does not disable the workman for a period of at least two weeks from earning full wages at the work at which he is employed.

(b) If it is proved that the injury to the workman results from his deliberate intention to cause such an injury, or from his willful failure to use a guard or protection against accident required pursuant to any statute and provided for him, or solely from his deliberate breach of statutory regulations affecting safety of life or limb, or from his intoxication, any compensation in respect of that injury shall be disallowed.

SEC. 2. Where the injury was proximately caused by the individual (personal) negligence either of commission or omission of the employer, (including such negligence of the directors or of any officer if such employer is a corporation, or of any of the partners if such employer is a partnership, or of any member if such employer is an association, but excluding the negligence of competent employees in the performance of their duties or of the employer's duty delegated to them), the existing liability of the employer shall not be affected by this act, but in such case the injured workman, or if death results from such injury, his dependents as herein defined if they unanimously agree, otherwise (his legal representative, (with the approval of the probate court), may elect between any right of action against the employer upon such liability and the right to compensation under this act.

SEC. 3. Nothing in this act shall affect the liability of the employer to a fine or penalty under any other statute.

SEC. 4. (a) Where any person (in this section referred to as the principal) undertakes to execute any work which is part of his trade or business or which he has contracted to perform and contracts with any other person (in this section referred to as the contractor) for the execution by or under the contractor of the whole or any part of the work undertaken by the principal, the principal shall be liable to pay to any workman employed in the execution of the work any compensation under this act which he would have been liable to pay if that workman had been immediately employed by him; and where compensation is claimed from or proceedings are taken against the principal, then, in the application of this act, references to the principal shall be substituted for references to the employer, except that the amount of compensation shall be calculated with reference to the earnings of the workman under the employer by whom he is immediately employed:

(b) Where the principal is liable to pay compensation under this section, he shall be entitled to indemnity from any person who would have been liable to pay compensation to the workman independently of this section, and shall have a cause of action therefor.

(c) Nothing in this section shall be construed as preventing a workman from recovering compensation under this act from the contractor instead of the principal.

(d) This section shall not apply in any case where the accident occurred elsewhere than on, or in, or about premises on which the principal has undertaken to execute work or which are otherwise under his control or management.

(It is suggested that provisions be added to this section as follows:

- (e) Giving an injured workman a lien on the money due and unpaid on the contract.
- (f) Giving expressly to the principal contractor who pays compensation voluntarily to a workman of a subcontractor the right to recover over against the subcontractor.
- (g) Giving to a principal contractor when sued by a workman of a subcontractor a right to call in the subcontractor as codefendant.)

Sec. 5. Where the injury for which compensation is payable under this act was caused under circumstances creating a legal liability in some person other than the employer to pay damages in respect thereof—

(a) The workman may take proceedings both against that person to recover damages and against any person liable to pay compensation under this act for such compensation, but shall not be entitled to recover both damages and compensation; and

(b) If the workman has recovered compensation under this act, the person by whom the compensation was paid, or any person who has been called on to indemnify him under the section of this act relating to subcontracting, shall be entitled to indemnity from the person so liable to pay damages as aforesaid, and shall be subrogated to the rights of the workman to recover damages therefor.

Sec. 6. This act shall apply only to employment in the course of the employer's trade or business on, in, or about a railway, factory, mine or quarry, electric, building or engineering work, or in certain other hazardous employments, as hereinafter defined. And it shall not apply in any case where the accident occurred or the contract of employment was made before this act takes effect.

Sec. 7. In this act, unless the context otherwise requires:

(a) "Railway" means (all kinds of railways, including private railways, logging roads, etc., excluding only horse-car roads); and "employment on railways" (includes work in depots, power houses, roundhouses, and other appurtenances, and in private yards, switches, etc., and work on railways for express companies). (Limit to intra-state commerce.)

(b) "Factory" means any premises wherein (mechanical) power is used in manufacturing, making, altering, adapting, ornamenting, finishing, repairing or renovating any article or articles for the purposes of trade or gain or of the business carried on therein, (including expressly any laundry or bakery whatsoever wherein power machinery is used); and includes also any shipyard, marble cutters' and polishers' yard, brickyard, meat packing house, foundry, forge, smelter, blast furnace, coke-burning plant, lime-burning plant, phosphate works, steam-heating plant, electric-lighting plant, electric-power plant and water-power plant; and any premises where ice is harvested and stored, or wherein a process requiring the use of any dangerous explosive or extra-hazardous inflammable material is carried on, which is conducted for the purpose of business, trade or gain.

A workman employed in a factory which is a shipbuilding yard shall not be excluded from the benefit of this act by reason only that the accident occurred outside the yard, in the course of his work upon a vessel in any dock, pier or tidal water near the yard.

(c) "Mine" means any (opening in the earth) for the purpose of extracting any mineral or minerals, and all underground workings, slopes, shafts, galleries and tunnels, and other ways, cuts and openings connected therewith, including those in the course of being opened, sunk or driven; and includes also the appurtenant structures at or about the openings of a mine and any adjoining (adjacent) work place where the material from a mine is prepared for use or shipment.

(d) "Quarry" means any place, not a mine, (including a bank or pit) where stone, slate, clay, sand, gravel or other solid material is dug or otherwise extracted from the earth or ground for the purposes of trade or barter or of the employer's trade or business.

(e) "Electrical work" means any kind of work in or directly connected with the construction, installation, operation, alteration, removal or repair of wires, cables, switchboards or apparatus charged with electric currents.

(f) "Building work" means any work (in any of "the building trades") in the erection, construction, extension, decoration, alteration, repair or demolition of any building (or structural appurtenance).

(g) "Engineering work" means any work in the construction, alteration, extension, repair or demolition of a railway (as hereinbefore defined but including also a horse-car railway,) bridge, harbor, jetty, dike, breakwater, dam, pier, dock, (including dry-dock and floating dock), reservoir, canal, aqueduct, tunnel, underground conduit, sewer, well, oil tank, gas tank, water tower or waterworks (including connected stand-pipes or mains), any caisson work or work in artificially compressed air, any work in dredging, pile driving, asphalt paving (or other paving with molten material), moving buildings, moving safes, or in laying, repairing or removing underground gas pipes and connections, or in millwrighting or the erection, installing, repairing or removing of boilers, furnaces, engines and power machinery (including belting and other connections), and

any work in grading or excavating where shoring is necessary or power machinery or blasting powder, dynamite or other high explosive is in use (excluding mining and quarrying).

(h) The "other hazardous employments" to which this act applies mean any work in a general or terminal warehouse, in a grain elevator, in a malt house, in a coal yard, in a lumberyard, in a stockyard, in a building-material yard, as a shipwright or rigger, or in loading or unloading the cargo of any vessel at dock in a port of this State.

(i) "Employer" includes any body of persons, corporate or unincorporated, and the (legal representative) of a deceased employer.

(j) "Workman" means any person who has entered into the employment of or works under contract of service or apprenticeship with an employer; but does not include a person (whose employment is of a casual nature or) who is employed otherwise than for the purpose of the employer's trade or business. Any reference to a workman who has been injured, shall, where the workman is dead, include a reference to (his dependents, as hereinafter defined, or to his legal representative) or, where he is a minor or incompetent, to his committee or guardian.

(k) "Dependents" mean such members of the workman's family as were wholly or in part dependent upon the workman at the time of the accident. And "members of a family" for the purposes of this act mean only widow or husband, as the case may be, and children; or if no widow, husband or children, then parents and grandparents; or if no parents or grandparents, then grandchildren; or if no grandchildren, then brothers and sisters. In the meaning of this section parents include step-parents, children and grandchildren include step-children and step-grandchildren, and brothers and sisters include stepbrothers and stepsisters.

(l) "Accident" and "injury" in this act mean only such an accident and injury as cause the injured workman to be absent at least five consecutive hours or an entire half-day's time from his work; and "injury" includes an injury resulting in death.

Sec. 8. In case an injured workman is mentally incompetent or a minor, (or where death results from the injury, in case any of his dependents as herein defined is mentally incompetent or a minor), at the time when any right, privilege or election accrues to him under this act, his committee or guardian may, in his behalf, claim and exercise such right, privilege or election; and no limitation of time, in this act provided for, shall run, so long as such incompetent or minor has no committee or guardian.

Sec. 9. *Saving clause.* (Deemed inadvisable.)

Sec. 10. The amount of compensation under this act shall be—

(a) Where death results from the injury—

(1) If the workman leaves any dependents wholly dependent upon his earnings, a sum equal to his earnings in the employment of the same employer during the three years next preceding the injury, but not exceeding in any case (\$3,000): *Provided*, That the amount of any weekly payments made under this act shall be deducted from such sum; and, if the period of the workman's employment by the said employer has been less than the said three years, then the amount of his earnings during the said three years shall be deemed to be 156 times his average weekly earnings during the period of his actual employment under said employer: *And provided, however*, That if the workman does not leave any dependents, residing at the time of the accident in the United States or the Dominion of Canada, the amount of compensation shall not exceed in any case (\$1,000).

(2) If the workman does not leave any such dependents, but leaves any dependents in part dependent upon his earnings, such proportion of the amount payable under the foregoing provisions of this section, as may be agreed upon or determined to be proportionate to the injury to the said dependents; and

(3) If he leaves no dependents, the reasonable expense of his medical attendance and burial, not exceeding (\$100).

(b) Where total or partial incapacity for work results from the injury, a weekly payment during the incapacity, commencing at the end of the second week, equal to, in the case of total incapacity, and not exceeding, in the case of partial incapacity, 50 per cent of his average weekly earnings during the previous twelve months, if he has been so long employed, but if not, then for any less period during which he has been in the employment of the same employer: *Provided, however*, That if the workman is under twenty-one years of age at the date of the accident and his average weekly earnings are less than \$10, his compensation shall be a weekly payment not exceeding his full average earnings:

Provided further, however, That:

(1) No such weekly payment shall exceed (\$10).

(2) No such weekly payment shall extend over a period exceeding (10) years, nor continue after the workman has reached the age of (60) years, unless at the date of the injury he was over (55) years of age, in which case it may continue for a period of (5) years after such date.

SEC. 11. For the purposes of the provisions of this article relating to "earnings" and "average weekly earnings" of a workman, the following rules shall be observed:

(a) "Average weekly earnings" shall be computed in such manner as is best calculated to give the average rate per week at which the workman was being remunerated; *Provided*, That where by reason of the shortness of the time during which the workman has been in the employment of his employer, or the casual nature or the terms of the employment, it is impracticable to compute the rate of remuneration, regard may be had to the average weekly amount which, during the twelve months previous to the accident, was being earned by a person in the same grade employed at the same work by the same employer, or, if there is no person so employed, by a person in the same grade employed in the same class of employment and in the same district;

(b) Where the workman had entered into concurrent contracts of service with two or more employers under which he worked at one time for one such employer and at another time for another such employer, his "earnings" and his "average weekly earnings" shall be computed as if his earnings under all such contracts were earnings in the employment of the employer for whom he was working at the time of the accident;

(c) Employment by the same employer shall be taken to mean employment by the same employer in the grade in which the workman was employed at the time of the accident, uninterrupted by his absence from work due to illness or any other unavoidable cause:

(d) Where the employer has been accustomed to pay to the workman a sum to cover any special expenses entailed on him by the nature of his employment, the sum so paid shall not be reckoned as part of the earnings.

(e) In fixing the amount of the weekly payment, allowance shall be made for any payment or benefit which the workman may receive from the employer during the period of his incapacity.

(f) In the case of partial incapacity the weekly payment shall be computed to equal, as closely as possible, 50 per cent of the difference between the amount of the "average weekly earnings" of the workman before the accident, to be computed as herein provided, and the average weekly amount which he is most probably able to earn in some suitable employment or business after the accident, subject, however, to the limitations hereinbefore provided.

SEC. 12. The (commissioner of labor) shall prescribe reasonable regulations governing the time, place, and manner in which weekly payments shall be made within this State, having regard to the security and convenience of the employer and the welfare of the workman; but a (justice of the ——— court), upon the application of either party, may modify such regulations in a particular case, as to him may seem just. If a workman receiving a weekly payment cease to reside in the State (or in his residence at the time of the accident in an adjoining State) his right to weekly payments shall cease; but he shall be entitled to receive monthly or quarterly as may be agreed upon or as the ——— court, upon application, having regard to the welfare of the workman and the convenience of the employer, may determine, the sum of the weekly payments accruing during the preceding month or quarter, so long as he proves in such manner and at such intervals as may be prescribed by the rules of the court, his identity and the continuance of the incapacity in respect of which the weekly payment is payable.

SEC. 13. Where death results from the injury and the dependents of the deceased workman, as herein defined, have agreed to accept compensation, and the amount of such compensation and the apportionment thereof between them has been agreed to or otherwise determined, the employer may pay such compensation to them accordingly (or to an administrator if one be appointed), and thereupon be discharged from all further liability for the injury. Where only the apportionment of the agreed compensation between the dependents is not agreed to, the employer may pay the amount into (court), or to (the administrator) of the deceased workman, with the same effect. Where the compensation has been so paid into (court) or to an (administrator), (the proper probate court), upon the petition of such (administrator) or of any of such dependents, and upon such notice and proof as its rules may provide, shall determine (and decree) the distribution thereof among such dependents. (Where there are no dependents, medical and funeral expenses may be paid and distributed in like manner).

SEC. 14. (Persons entitled to compensation to be given the highest practicable preference in case of insolvency of employer. The right to compensation to be unassignable and to be given the broadest exemptions from attachment, execution, etc.; but to be extinguished by the death of the person entitled thereto).

SEC. 15. (Employers affected by this act to report annually to the commissioner of labor such reasonable particulars in regard thereto as he may require, including par-

particulars as to all releases of liability under this act and any other law. The penalty for failure to report or for false report might be to invalidate the settlement.)

Sec. 16. An injured workman shall submit himself to examination by a duly qualified medical practitioner provided and paid by the employer, as soon after the accident as demanded, and from time to time thereafter during the pendency of his claim for compensation or during the receipt by him of payments under this act; but he shall not be required to so submit himself otherwise than in accordance with regulations made by (the commissioner of labor), nor at more frequent intervals than prescribed by those regulations.

It shall be the duty of the employer to cause such an examination to be made of the injured workman immediately after the accident, and to serve a copy of the report by his medical practitioner of such examination upon the workman within six days after the accident. If no such examination be made and report furnished by the employer within that time, the workman shall be examined by his own medical practitioner, and shall furnish a report thereof by his medical practitioner to the employer, for which he shall be entitled to recover (\$1) from the employer, which amount may be added to the compensation. Upon the receipt by either party of such a report from the other party, the party receiving it, if he disputes such report or any statement therein, shall notify the other party of that fact within six days, otherwise such report shall be prima facie evidence of the facts therein stated in any subsequent proceedings under this act.

If thereafter a dispute exists as to the condition of the workman, the ——— court, upon application of either party, shall order an examination of the workman to be made by a medical examiner appointed by it. The fees of such examiner shall be fixed by the court at not to exceed (\$10), and shall be paid in advance by the applicant. Such medical examiner shall report his conclusions from such examination, in duplicate, to each party, and such report shall be prima facie evidence of the facts therein stated in any subsequent proceedings under this act.

Sec. 17. If an arbitrator has been selected or appointed pursuant to the provisions of this act, the workman shall submit himself for examination by such arbitrator or by a medical practitioner selected by him, whenever, wherever and under such conditions as such arbitrator in the exercise of a reasonable discretion may order.

Sec. 18. If the workman refuses to submit himself to an examination hereinbefore provided for or in any wise obstructs the same, his right to compensation and to take or prosecute any further proceedings under this act shall be suspended until such examination take place. And, when a right to compensation is suspended, no compensation shall be payable in respect of the period of suspension.

Sec. 19. Proceedings for the recovery of compensation under this act shall not be maintainable, unless written notice of the accident, stating the time, place and particulars thereof, and the name and address of the person injured, has been given within (7) days after the accident; and unless a claim for compensation has been made within six months after the accident, or, in case of death, within six months from the date of death. (Such notice shall be delivered by registered letter. The want of or any defect in such notice or in its service shall not be a bar unless the employer proves that he has in fact been thereby prejudiced, or if such want or defect was occasioned by mistake, physical or mental incapacity or other reasonable cause. And the failure to make a claim within the period above specified shall not be a bar, if such failure was occasioned by mistake, physical or mental incapacity or other reasonable cause).

Sec. 20. Compensation due under this act may be settled by agreement. Every such agreement, other than a release, shall be in the form hereinafter provided.

Sec. 21. If compensation be not so settled by agreement:

(a) If any committee, representative of the employer and the workman exists, organized for the purpose of settling disputes under this act, the matter shall, unless either party objects by notice in writing delivered or sent by registered mail to the other party (before the committee meets to consider the matter), be settled (in accordance with its rules) by such committee or by an arbitrator selected by it.

(b) If either party so objects, or there is no such committee, or the committee or the arbitrator to whom it refers the matter fails to settle it within ninety days from the date of the claim, the matter may be settled by a single arbitrator agreed on by the parties or selected by any person or persons or judge of court agreed on by the parties. The consent to arbitration shall be in writing and signed by the parties, and may limit the fees of the arbitrator and the time within which the award must be made. And unless such consent expressly refers other questions, only the question of the amount of compensation shall be deemed to be in issue.

Sec. 22. (The arbitrator shall not be bound by any technical rules as to procedure or evidence, but shall give the parties reasonable opportunity to be heard and act

reasonably and without partiality. He shall make and file his award, with the consent to arbitration attached, in the proper county clerk's office, within the time limited in the consent, or if no time limit is fixed therein, within ninety days after his selection, and shall give notice of such filing to the parties by mail.)

SEC. 23. Unless the arbitrator's fees be fixed by the consent to arbitration or be agreed to by the parties before the arbitration they shall be taxed by a justice of the _____ court, upon notice, (at not to exceed \$_____ per day and disbursements or in any event \$25 in all). The arbitrator shall apportion the cost of such fees in his discretion between the employer and workman (but not more than two-thirds against either one), and shall add the amount apportioned against the employer to the first payment to be made under the award. And he shall note the amount of his fees on the award, and shall have a lien therefor on the first payments due under the award.

SEC. 24. Every agreement for compensation and every award shall be in writing, signed and acknowledged by the parties or by the arbitrator or secretary of the committee hereinbefore referred to, and shall specify the amount due and unpaid by the employer to the workman up to the date of the agreement or award, and, if any, the amount of the weekly payments thereafter to be paid by the employer to the workman, and the length of time such weekly payments shall continue.

SEC. 25. It shall be the duty of the employer to file or cause to be filed every release of liability hereunder, every agreement for or award of compensation, or modifying an agreement for or award of compensation, under this act (if not filed by the committee or arbitrator), to which he is a party, (or a sworn copy thereof), in the (county clerk's office of the county in which the accident occurred), within (60) days after it is made, otherwise it shall be (void as against the workman). (The county clerk shall accept, receipt for and file any such release, agreement or award, without fee, and record or index it, etc.) Nothing herein shall be construed to prevent the workman from so filing such agreement or award.

SEC. 26. At any time within (one year) after an agreement or award has been so filed, a justice of the _____ court, may, upon the application of either party, cancel such agreement or award, upon such terms as may be just, if it be shown to his satisfaction, that the workman has returned to work and is earning the same or higher wages as or than he did before the accident, or that the agreement or award has been obtained by fraud or undue influence, or that the committee or arbitrator making the award acted without authority or was guilty of serious misconduct.

SEC. 27. At any time after the filing of an agreement or award and before judgment has been granted thereon, the employer may stay further proceedings thereon by filing in the county clerk's office wherein such agreement or award is filed: (a) (A proper certificate of a qualified insurance company that the payment of the compensation to the workman is insured by it); or (b) (a proper bond, undertaking to secure the payment of the compensation.) (Such certificate or bond to be approved by a justice of the _____ court as to form and sufficiency, etc.)

SEC. 28. At any time after an agreement or award has been filed, the workman may apply to the _____ court, for judgment against the employer for a lump sum equal to (90 per cent) of the amount of payments due and unpaid and prospectively due under the agreement or award; and, unless the agreement or award be stayed, modified or canceled, or the liability thereunder be redeemed or otherwise discharged, the court shall examine the workman under oath, and, unless satisfied that the application is made for other reasons than doubt as to the security of his compensation, shall compute the sum and direct judgment accordingly, as if in an action.

SEC. 29. An agreement or award may be modified at any time by a subsequent agreement; or, at any time after (one year) from the date of filing, it may be reviewed, upon the application of either party, on the ground that the incapacity of the workman has subsequently increased or diminished. Such application shall be made to the _____ court; and, unless the parties consent to arbitration, the court may appoint a medical practitioner to examine the workman and report to it; and upon his report and after hearing the evidence of the parties, the court may modify such agreement or award, as may be just, by ending, increasing or diminishing the compensation, subject to the limitations hereinbefore provided. (The fees of the arbitrator, or the fees of the medical examiner, to be fixed by the court at not to exceed (\$10), shall be paid in advance by the party applying. If the compensation be increased, a prior stay shall not be effective, unless the employer file a further certificate or bond to secure the increased compensation.)

SEC. 30. Where any weekly payment has been continued for not less than (six months) the liability therefor may be redeemed by the employer by the payment to the workman of a lump sum of an amount equal to 75 per cent of the sum of the weekly payments which may become due according to the award, such amount to be determined by agreement, or, in default thereof, upon application, by a justice of the _____ court. (Upon paying such amount the employer to be discharged from all further

liability on account of the injury, and to be entitled to a duly executed release, upon filing which or other due proof of payment, the liability upon any agreement or award to be discharged of record.)

SEC. 31. (Where the payment of compensation to the workman is insured, the insurer shall be subrogated to the rights and duties of the employer under this act, so far as appropriate.)

SEC. 32. All references hereinbefore to the ——— court or to a justice of such court, shall mean (such court, etc., in and for the county or district in which such accident occurred, but the objection that proceedings are in the wrong county or district may be waived). Such court shall make all rules necessary and appropriate to carry out the provisions of this act.

SEC. 33. A workman's right to compensation under this act, may, in default of agreement or arbitration, be determined and enforced by action in (any court of competent jurisdiction). In every such action the right to trial by jury shall be deemed waived and the case tried by the court without a jury, unless either party (with his notice of trial—or—when the case is placed upon the calendar, demand a jury trial and pay the fees of such a trial). The judgment in the action, if in favor of the plaintiff, shall be for a lump sum equal to the amount of the payments then due and prospectively due under this act, with interest on the payments overdue, or, in the discretion of the trial judge, for periodical payments as in an award. Where death results from the injury, the action shall be brought by (the legal representative) of the deceased for the benefit of the dependents as herein defined; and in such action the judgment may provide the proportions of the award to be distributed to or between the several dependents; otherwise such proportions shall be determined by the proper (probate) court as hereinbefore provided. An action to set aside a release or other discharge of liability on the ground of fraud, or mental incompetency may be joined with an action for compensation under this act.

SEC. 34. The cause of action shall be deemed in every case, including a case where death results from the injury, to have accrued to the injured workman at the time of the accident; and the time limited in which to commence an action for compensation therefor shall run as against him, his (legal representatives) and dependents from that date. (Amend the statute of limitations, if necessary, to make the short term, applicable to actions in tort, apply; but do not assimilate this action in terms to an action in tort.)

SEC. 35. (Contingent fees of attorneys for services in proceedings under this act shall in every case be subject to approval by the court, and a copy of every agreement for a contingent fee shall be filed within—a certain time—with the commissioner of labor.)

SEC. 36. If the (commissioner of insurance) certifies that any scheme of compensation, benefit or insurance for the workmen of an employer in any employment to which this act applies, whether or not such scheme includes other employers and their workmen, provides scales of compensation not less favorable to the workmen and their dependents than the corresponding scales contained in this act, and that, where the scheme provides for contributions by the workmen, the scheme confers benefits at least equivalent to those contributions, in addition to the benefits to which the workmen would have been entitled under this act or their equivalents, the employer may, while the certificate is in force, contract with any of his workmen that the provisions of the scheme shall be substituted for the provisions of this act; and thereupon the employer shall be liable only in accordance with that scheme; but, save as aforesaid, this act shall apply notwithstanding any contract to the contrary made after this act becomes a law.

SEC. 37. No scheme shall be so certified which does not contain suitable provisions for the equitable distribution of any moneys or securities held for the purpose of the scheme, after due provision has been made to discharge the liabilities already accrued, if and when such certificate is revoked or the scheme otherwise terminated.

SEC. 38. If at any time the scheme no longer fulfills the requirements of this article, or is not fairly administered, or other (valid and substantial) reasons therefor exist, the (commissioner of insurance) shall revoke the certificate and the scheme shall thereby be terminated.

SEC. 39. Where a certified scheme is in effect the employer shall answer all such inquiries and furnish all such accounts in regard thereto as may be required by the (commissioner of insurance).

SEC. 40. The (commissioner of insurance) may make all rules and regulations necessary to carry out the purposes of this article.

RESOLUTIONS OF THE SIXTH DELEGATES' MEETING OF THE INTERNATIONAL ASSOCIATION FOR LABOR LEGISLATION.

The sixth general meeting of delegates of the International Association for Labor Legislation was held at Lugano, Switzerland, September 26 to 28, 1910. According to the official report of the association, the organization now comprehends national sections in 15 countries: Austria, Belgium, Denmark, France, Germany, Great Britain, Hungary, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, Argentine Republic, and the United States. The association has a membership of about 5,400. The value and official character of its work are recognized by the fact that it is subsidized by the Governments of 13 countries. Over 100 delegates of the national sections and Government representatives were present at the Lugano meeting. The resolutions adopted by the delegates are given in full in the following pages:

I. INTERNATIONAL LABOR CONVENTIONS.

1. The bureau is instructed to petition the Danish and Spanish Governments to ratify at an early date the Berne convention of September 26, 1906, respecting the night work of women.

The bureau is instructed to take appropriate measures to secure the accession of Norway, Russia and Finland, Turkey, East India, the Australian and Canadian colonies, and South Africa to the Berne conventions.

2. The delegates' meeting expresses its most cordial thanks to the French, British, and Dutch Governments for the adhesion of their colonies and protectorates to the Berne convention, to the Australian Commonwealth for prohibiting the use of white phosphorus, to the American section for its efforts in this direction in the United States, and to the Hungarian minister of commerce, who has announced that the prohibition of white phosphorus will most probably be introduced in Hungary at an early date.

The bureau is instructed to persevere in its efforts to procure the adhesion of countries which have not yet joined the convention, and especially Belgium, Norway, Sweden, India, South Africa, and Japan.

II. NEW SECTIONS AND CONSTITUTIONS OF SECTIONS—FINANCES AND BULLETIN—COOPERATION WITH OTHER INTERNATIONAL ASSOCIATIONS—EXHIBITIONS OF HYGIENE AT DRESDEN AND ROME—PLACE AND DATE OF THE NEXT MEETING.

A. NEW SECTIONS AND CONSTITUTIONS OF SECTIONS.

The constitutions of the Norwegian and Swedish sections are approved.

B. FINANCES AND BULLETIN.

1. The delegates' meeting acknowledges with satisfaction the reports of the bureau, the treasurer, and the International Labor Office, and thanks them heartily for their activity.

2. The treasurer's accounts, vouchers, and cash have been audited and found correct.

3. The budget for 1910 and 1911 is approved. The meeting approves the advance payment of 3,000 francs [\$579], requested and made in consequence of the issue of the English edition of the Bulletin having been expedited. In renewing contracts for the publication of the Bulletin every effort shall be made to reduce the cost of printing.

4. The delegates' meeting expresses to the Government of the United States its hearty thanks for the increase of its appropriation.

5. The delegates' meeting instructs the bureau to express to the British Government its hearty thanks for sending official representatives, and, at the same time, to convey to it, by these delegates, a request that the British Government may make a contribution toward the expenses of the international labor office, as is done by all the industrial states of Europe and by the United States of America. This request shall emphasize the fact that such a contribution will be mainly applied to meeting the expenses of the English edition of the Bulletin, which is translated and printed in England. In case the Government of Great Britain should make an appropriation for the international labor office, the bureau is authorized, in its discretion, to contribute toward the expenses of translating the bulletin into English a sum not exceeding in any year the sum actually received from the British Government.

C. COOPERATION WITH OTHER INTERNATIONAL ASSOCIATIONS.

The bureau is authorized to enter into communication with other associations whose aims are similar to those of the International Association for Labor Legislation, in order to come to an understanding regarding any financial or economic questions in which they may have a common interest.

D. INTERNATIONAL EXHIBITIONS AT DRESDEN AND ROME.

The delegates' meeting leaves the bureau free to exhibit at the exhibitions of hygiene at Dresden and Rome any statistical tables or publications relating to industrial hygiene.

E. PLACE AND DATE OF THE NEXT MEETING.

The delegates' meeting resolves that the next (seventh) delegates' meeting of the international association shall take place in the autumn of 1912 in Zurich.

III. ADMINISTRATION OF LABOR LAWS.

I. The delegates' meeting takes note of the proof of the first comparative report drawn up by the International Labor Office on the measures adopted in European countries to enforce labor laws. This proof shall be submitted to the sections with a view to its being amended and supplemented.

II. The bureau is instructed to request the Governments, with a view to making the administration of labor laws in the different countries comparable, to supply data at least on the following points:

1. The nature and number of the establishments subject to inspection and of workers affected.

2. The number of establishments actually inspected and of workers affected.

3. The number of visits of inspection paid by inspectors, distinguishing visits paid at night.

4. The number of cases where persons were cautioned or where penalties were imposed for infringements of the law.

5. The nature and success of arrangements for securing the cooperation of the workers in the enforcement of the law—

(a) By including workers amongst the staff of inspection.

(b) By the institution of regular relations between the inspecting staff and organized and nonorganized workers.

(c) By giving workmen's trade-unions the right to take legal proceedings.

The data desired under 1 to 3 above should be classified according to industries.

The headings of the tables in inspectors' reports should be given in one of the three principal languages.

IV. CHILD LABOR.

A special commission is appointed with instructions to examine the execution, in the several countries, of the laws for the protection of child labor, and to prepare a comprehensive compilation of the results of the investigations undertaken by the sections in pursuance of the Lucerne resolutions.

V. NIGHT WORK OF YOUNG PERSONS.

Being convinced that the Lucerne resolutions form an adequate basis for the international regulation of the night work of young persons, the delegates' meeting instructs the bureau to request the Swiss Federal Council to invite the Governments to an international conference on the subject.

The meeting instructs the subcommission to continue its work in pursuance of the Lucerne resolutions and to inquire whether the exceptions to the prohibition of the night work of young persons declared by the Lucerne resolutions to be permissible could not be further limited in the case of young persons employed in glassworks and rolling mills. These investigations shall be continued until such time as the request for the international regulation of the question shall be presented to the Swiss Federal Council.

Being convinced that it is reasonable to determine a definite period for the application of transitory provisions, the delegates' meeting resolves that Resolution V, 6, of the Lucerne resolutions shall read as follows:

"Any transitory provisions applicable to rolling mills and glass-works, contained in an international convention for the regulation of the night work of young persons, should apply only for a definite period, which it is suggested should be fixed at five years."

The meeting is of opinion, that, in the absence of sufficient information, it would not be expedient to include in an international convention the question of the night work of young persons in hotels, restaurants, and public houses, shops and offices. Notwithstanding, the meeting wishes to draw the attention of the various nations to the interest which every country has in the legal limitation of the night work of young persons in these occupations.

VI. MAXIMUM WORKING DAY.

A. TEN-HOUR MAXIMUM WORKING DAY FOR WOMEN IN ESTABLISHMENTS EMPLOYING 10 OR MORE WORKERS.

The delegates' meeting confirms the resolutions of the fifth delegates' meeting, and, in view of the fact that several States have introduced the 10-hour working day for women, believes that the time has come to extend this 10-hour working day to all States by international treaty, at least in the case of establishments employing 10 or more workers.

The bureau is authorized to take such steps as may be necessary to bring about such a treaty, and for this purpose, to draft a memorandum on the subject.

The sections shall report to the bureau by 1st February, 1911, on the present state of legislation and legal decisions on the hours of work of women in their countries. The memorandum of the bureau shall be laid as soon as possible before a special commission of five members.

B. TEN-HOUR MAXIMUM WORKING DAY FOR YOUNG PERSONS.

In view of the fact that several States have by national legislation introduced the 10-hour maximum working day for young persons, the delegates' meeting believes that the time has come to extend the same by international treaty to all States.

The bureau is authorized to take the steps necessary to bring about such a treaty and to prepare for this purpose a memorandum which will take into consideration the special circumstances of individual States and define exactly any exceptions which may be necessary.

The sections shall report to the bureau by February 1, 1911, on the present state of legislation and legal decisions on the hours of work of young persons in their countries. The bureau's memorandum shall be laid as soon as possible before the special commission on the maximum working day for women.

C. TEN-HOUR WORKING DAY FOR MEN IN TEXTILE INDUSTRIES.

The commission considers it unnecessary to consider again the question of limiting the working day in the textile industries, since it is of opinion that the limitation of the working day of women necessarily involves the limitation of the working day of men.

It reserves the right, however, to take up the Lucerne resolution again, at a later date, if experience should show that this is necessary.

D. WORKING DAY IN CONTINUOUS PROCESSES.

The delegates' meeting considers the 12-hour day, which is still the general custom in continuous processes, to be injurious to health. In particular, working periods of 18, 24, and even 36 hours (in changing shifts) are to be condemned.

The bureau is instructed to appoint a special commission as soon as possible and to present to it the material which is now available as well as any further material which may be secured through the aid of the national sections.

This commission shall report in particular on the following points:

1. On the best methods of arranging shifts.
2. On the possibility of prohibiting the night work of adults in certain continuous processes or of regulating such work where for technical reasons work must be carried on at night.
3. On the necessity for the international regulation of this matter.

The delegates' meeting expects this commission to prepare its report and proposals for reform as soon as possible, and at any rate in time for the next meeting. A subcommission may be appointed if necessary to investigate the conditions of certain industries, such as the iron and glass trades.

E. EIGHT-HOUR SHIFT IN MINES.

In pursuance of the resolutions of the fifth delegates' meeting of the International Association for Labor Legislation with regard to the definition of the 8-hour shift for workmen employed below ground in coal mines, the sixth delegates' meeting is of opinion that the length of a shift should be reckoned as the period between the time when the first man of such shift leaves the surface until the time when the first man of the shift to return completes his ascent to the surface.

The bureau is requested to recommend to the various States to take this definition as the basis of their legislation regulating the duration of shifts.

In applying the above definition, the sixth delegates' meeting reaffirms the Lucerne resolution of 1908, recommending the introduction by law of a maximum 8-hour shift for all underground workers in coal mines.

F. HOURS OF WORK IN SPECIALLY DANGEROUS INDUSTRIES.

The delegates' meeting expresses the desire that the bureau will place upon the agenda of the next meeting the question of limiting the working day of men in specially dangerous and unhealthy industries.

The delegates' meeting reaffirms the resolution 1906 and at the same time declares that it is desirable for the proper authorities to have legal power to regulate the daily period of employment in processes and trades especially dangerous to health.

VII. WORKMEN'S HOLIDAYS.

The question of holidays for workmen and employees shall be placed upon the agenda of the next delegates' meeting.

The bureau is instructed to prepare a summary of existing laws on this subject in the various countries and to draw up statistical tables showing the number of establishments in which holidays are allowed, and the numbers of workmen and employees affected.

VIII. HOME WORK.

A. GENERAL.

A. The delegates' meeting reaffirms the view of the delegates' meeting at Lucerne that bad conditions in home work are due primarily to inadequacy of wages, and that consequently it is of the first importance to find means of raising wages.

Having this end in view—

I. The delegates' meeting recommends afresh the organization of home workers in trade-unions and the conclusion of collective agreements. The meeting regards the unfettered right of combination as the necessary basis of such collective agreements. In countries where collective agreements are not yet legally recognized under existing law recognition should be secured in such a manner as to insure their legal validity and their extension when required to home workers in the same occupations who were not originally concerned in the conclusion of the agreements. The delegates' meeting urges the national sections to get into touch with existing organizations of workers with a view to promoting the conclusion of collective agreements with employers and employers' federations.

II. The delegates' meeting recommends the adoption by legislation of the principle that wage agreements for insufficient amounts or of an usurious nature should be null and void and that the conclusion of such agreements should be subject to penalties. The meeting regards this principle as essential, but at the same time recognizes that the difficulties of its application are such as to prevent its adoption from being in any degree a practical solution of the problem.

III. The delegates' meeting is of opinion that at the present time the only effective remedy for the evils of home work is to be found in the establishment of wages boards such as those provided for in the British act. The meeting is of opinion that in setting up these wages boards the following principles should be observed:

(a) The boards should have to fix minimum rates of wages for home workers in certain industries and certain districts.

(b) The daily earnings of persons employed in workshops in the manufacture of the same articles should not fall below those of home workers paid under the conditions contemplated above.

(c) The delegates' meeting is of opinion that no legislation for fixing minimum rates of wages for home workers can be effective unless it provides for the imposition of penalties in cases where employers fail to pay the prescribed rates of wages.

(d) The delegates' meeting is of opinion that inspectors should be appointed to enforce the payment of the prescribed rates of wages.

(e) Trade associations of employers and workers should have power to take part in legal proceedings arising out of the legislation contemplated above.

B. The meeting reiterates and reaffirms the measures recommended at Geneva and Lucerne (compulsory registration, publication of wages lists, extension of inspection, social insurance, sanitary regulations, promotion of trade organization, consumers' leagues, etc.).

C. The sections shall report to the bureau every year on June 1 on the organization of wages boards, the methods of determining rates of wages, and the consequent results, as well as on the realization of the resolutions of the delegates' meetings at Basle, Geneva, and Lucerne. The bureau shall then compile a comparative report and incorporate the same with future editions of the comparative report on the administration of labor laws.

D. The delegates' meeting congratulates the British Government and Parliament on their successful initiative in the matter of the protection of home workers. In addition the bureau is instructed to express to the British Board of Trade the warmest thanks of the association for the memorandum on the trade boards act presented to the meeting.

B. MACHINE-MADE SWISS EMBROIDERY.

The delegates' meeting considers that it is desirable for hours of work in the machine-made swiss embroidery trade where carried on as a home industry to be uniformly regulated in all the countries concerned.

The board is instructed to approach the interested parties through the medium of the sections, and to convene, if possible, within a year, a meeting of a special commission (consisting in the first place of representatives of Germany, Austria, Italy, France, and Switzerland) appointed to report to the next delegates' meeting on appropriate measures to be adopted on this matter, including transitory provisions.

The sections concerned are requested, within their respective spheres, to take such steps as may seem good to them to secure the adoption of a uniform system of regulation and to promote at the same time measures for the protection of the home industry in question, and, in particular, the institution or encouragement of so-called crisis funds, which could be secured, for instance, by an agreement between Switzerland and the district of the Vorarlberg where the industry is carried on.

Should the special commission agree in the meantime upon such uniform regulations, the bureau shall have authority, in its discretion, to submit the same to the Governments concerned.

IX. INDUSTRIAL POISONS.

A. WHITE PHOSPHORUS.

(See I, International Labor Conventions, 3 and 4.)

B. LEAD.

(a) **PAINTING AND DECORATING.**—The delegates' meeting is of opinion that the time has come to prohibit the use of lead paints and colors for interior work and to require that all receptacles containing such colors shall be clearly marked to that effect. The bureau is instructed to approach the national sections on the matter, being guided by the principles set forth in the petition submitted to the meeting. The sections are requested to give the petition their active support on its presentation to their Governments.

(b) **CERAMIC INDUSTRY.**—The delegates' meeting resolves to recommend to the Governments, by means of a petition presented by the bureau, the following principles for the regulation of hygienic conditions in the ceramic industry:

PRINCIPLES FOR THE REGULATION OF HYGIENIC CONDITIONS IN THE CERAMIC INDUSTRY.

I. The Governments should take steps toward the abolition of the use of lead in the ceramic industry.

To this end the following measures should be adopted:

1. In the manufacture of china and earthenware fired at a high temperature the use of lead glaze should be prohibited.

2. As regards the manufacture of earthenware fired at a low temperature a provisional list of articles should be drawn up which can, at the present time, be manufactured without lead. This list, which would be subject to extension, should contain articles of common use such as pots, washing basins, dishes, mugs, bowls, etc., electrical insulators, etc.

3. As regards the manufacture of common pottery and plain stove tiles fired at a low temperature, such as are manufactured on the Continent both in small workshops and in the workers' homes, litharge and red lead should be replaced by galena or any other less dangerous glaze. The preparation and use of unfritted glazes and the fritting process should be prohibited in such works.

The following measures would tend to encourage the gradual adoption of leadless glazes in the ceramic industry:

(a) The instruction and assistance of all occupiers in the industry wishing to make a practical trial of the use of leadless glazes.

(b) The strict enforcement of hygienic regulations in works using lead glazes.

II. Existing regulations for factories and workshops should alone apply to establishments where leadless glazes are exclusively and permanently used.¹

Factory inspectors should have power to take, for purposes of analysis at any stage and at any time, samples of glaze and of the substances used in the preparation of the same.

III. The following regulations should be adopted in the case of works using lead glazes:

1. The proper authorities shall require where necessary, the glazes used to be modified in order to prevent injury to the health of workmen employed in contact with the same.

2. The mixing, grinding, and transportation of lead glazes as well as the lead used in their preparation, shall be effected either in a thoroughly damp state or in apparatus which permits no dust to escape.

¹ Within the meaning of these provisions leadless nonpoisonous glazes shall mean all compositions or frits used for glazing in the ceramic industry which contain not more than 1 per cent of lead. Compositions containing no lead compound other than galena shall be held to be leadless. All other glazes shall be held to contain lead within the meaning of these provisions.

3. Frit kilns must be so arranged that the molten frit can flow off into water, and frits must always be drawn off in such a manner.

4. Calcining shall be effected in a place separated from all the other work places, and exhaust ventilation in good working order shall be placed over the openings of the furnace.

5. Effective exhaust ventilation shall be applied in a suitable manner at all points where dust is generated, such as the openings of grinding and mixing apparatus, of transport apparatus, and of frit kilns and benches where glazes are applied in a dry manner, where glazes or colors are applied by dusting, or where ware cleaning is carried on.

All places where lead glazes or the lead used in their preparation are handled must be at least 3.5 meters [11.5 feet] in height and 15 cubic meters [530 cubic feet] of air space shall be allowed for each workman.

The floor must be solid and washable, and the walls covered to a height of 2 meters [6.6 feet] with a smooth and washable coating or paint.

6. No glazes shall be manufactured or used in living or sleeping rooms, and no lead glazes or lead used in their preparation, or pottery covered with unfired glaze, shall be brought into or stored in such rooms.

Where more than five persons are employed full time in an undertaking the said processes shall not be carried on in living or sleeping rooms or in rooms where other work is carried on, nor shall glazes, the lead used in their preparation, or pottery covered with unfired glaze be brought into or stored in such places.

7. No women or young persons under 18 shall be employed in any circumstances in the calcining process or in cleaning places where the above-mentioned substances or objects covered with unfired glaze have been manipulated or stored.

On the conclusion of a suitable period of transition no female person shall in any circumstances be employed in any kind of work whatsoever which would bring her into contact with unfired lead glazes or compounds or with the lead used in their preparation. No male young persons under 18 years of age shall be employed in such work except in so far as may be necessary for the purposes of learning the trade.

8. Hours of work shall be reduced for all persons employed in the processes mentioned in the preceding paragraphs, and especially in the case of workmen in the calcining process, who shall not be so employed continuously.

9. All workpeople employed in the manufacture of glazes containing lead, as well as those who come into contact with raw glazes or the lead used in their preparation, shall wear special working clothes.

10. The employer shall supply without charge a sufficient quantity of suitable working clothes, drinking and washing water, glasses, soap, and towels. The employer shall provide for the washing of the said working clothes and towels.

11. No person shall eat, drink, or smoke in, or bring any food, drink, or tobacco into places where lead glazes or the lead used in their preparation are handled, or which are used for storing these substances or for storing pottery covered with unfired glazes.

12. The work people in question shall be examined every three months by a medical practitioner, approved by the State authorities. The result of the examinations shall be entered in a suitable register which shall be open to inspection by the inspector of factories.

13. No workman who is suffering from lead poisoning, or who has been found by the medical practitioner named in section 12 to be unfit on medical grounds for work in contact with lead, shall be employed in the above-mentioned branches of the trade, or in rooms where such work is carried on, during such period as may be fixed by the medical practitioner, but the employer shall employ him elsewhere.

14. Two cloakrooms shall be provided, one for working and one for outdoor clothes, with a suitable lavatory and bathroom between the two. A mess room shall also be provided.

In small undertakings there shall be provided at least dust-proof cupboards where the workers' outdoor and working clothes shall be kept separately, and lavatory accommodation.

15. Employers shall give all workpeople contemplated in paragraph 9 on their entering the employment printed instructions as to the dangers of lead poisoning and its prevention, and shall affix such instructions in the work places.

16. In the case of establishments using lead glazes so composed that the consequent risk to health is small, temporary exemptions from the preceding provisions may be allowed by the authorities in exceptional circumstances.

(c) **POLYGRAPHIC INDUSTRY.**—The delegates' meeting resolves to recommend to the Governments by means of a petition presented by the bureau, the following principles for the regulation of hygienic conditions in the polygraphic industry.

PRINCIPLES FOR THE REGULATION OF HYGIENIC CONDITIONS IN PRINTING WORKS AND TYPE FOUNDRIES.

1. All places in which employees come into contact with lead or its alloys or compounds shall be well lighted and easily heated and ventilated. There must be an allowance of at least 15 cubic meters [530 cubic feet] of air space and 3 square meters [32.3 square feet] of floor space for each person employed. Workrooms in new premises shall be at least 3 meters [9.8 feet] in height.

2. Work contemplated in section 1 which causes any considerable amount of dust or an appreciable rise of temperature (such as the melting of lead or type metal, the use of monotype or linotype machines, stereotyping, finishing and dressing type, and bronzing with powdered bronze) shall be carried out in separate workrooms which must not be in a basement; except where the work is carried on only in exceptional circumstances in large establishments the composing rooms must be separate from other workrooms.

3. Rooms must be well lighted with both natural and artificial light, so as to protect adequately the eyesight, of the persons employed, consideration being paid to the nature of the work.

4. The floors of all places mentioned in section 1 shall be without cracks and washable or covered with a substance for preventing dust. The walls must be covered to a height of 2 meters [6.6 feet] with a smooth washable coating or paint of light color. No shelves or other appliances where dust can accumulate shall be fitted up, except such as are necessary for the work.

5. In larger establishments suitable lavatories and cloakrooms separated from the workrooms shall be provided. In small establishments arrangements shall be made for employees to keep their outdoor and working clothes in separate cupboards, and lavatory accommodation with sufficient water laid on, together with a plentiful supply of drinking water shall be provided. In type foundries, all large printing works, and works where night work is the rule, mess rooms shall be provided.

6. Women shall not be employed in the occupations contemplated in section 1, except in composing and operating typesetting machines. Young persons under 18 years of age shall not be employed in the occupations contemplated in section 1, provided that apprentices may be employed in any occupations for the purposes of learning the trade, but shall in no circumstances clean the workrooms or cases.

7. The floors of all workplaces, cloakrooms, and lavatories, shall be cleaned every day. Once a week all rooms shall be thoroughly cleaned, and after working hours as far as workrooms are concerned. A sufficient number of spittoons shall be provided. The workrooms shall be thoroughly aired several times a day.

8. Compositors' tables and shelves must be fixed close to the floor, or else arranged in such a way that there is a distance of at least 25 centimeters [9.8 inches] between the floor and the lowest shelf. Cases in regular use must be cleaned when necessary and not less often than once in three months; other cases must be cleaned before use. The cleaning of the cases shall be effected by suction, or where necessary, in the open air, provided that suitable precautions are taken to protect the workers from dust.

9. Melting pots and crucibles shall be fitted with sufficiently large pipes for drawing off their contents, and the crucibles and pipes shall be covered so as to be heat proof.

The temperature of workplaces where founding, stereotyping, or composing by machinery is carried on shall not exceed 25° centigrade [77° F.], unless the outdoor temperature exceeds 18° C. [64.4° F.], in which case the difference shall not exceed 7° C. [12.6° F.].

10. Coloring matter shall be prepared by mechanical means only.

11. Bronzing with bronze powder shall be effected only by machines allowing no dust to escape and provided with exhaust ventilation. Bronzing with bronze powder shall not be effected by hand, except where the work is undertaken only in exceptional circumstances and rarely, in which case respirators covering mouth and nose shall be worn.

12. All workmen employed in occupations contemplated in section 1 shall wear washable working clothes.

13. No unpurified and injurious substances shall be used to clean rollers or type, etc.

14. No person shall eat, drink, or smoke in the workplaces, or bring any food, drink, or tobacco into them.

Workmen shall wash their faces, mouths, and hands before every break in work, and before leaving work. The employer shall provide without charge towels and soap, and for each workman a separate glass for rinsing the mouth.

15. Workmen employed in composing, in melting and casting type, in linotyping, in stereotyping, and in finishing and dressing type shall be medically examined every three months by a medical practitioner, approved by the State authorities for the purpose.

Persons whom the medical practitioner shall declare unfit shall not be employed in the occupation contemplated in section 1 during such period as may be prescribed by him.

All apprentices shall be medically examined before beginning their apprenticeship.

In view of the inadequate and inexact nature of the documentary information available on the danger of poisoning to which compositors and the operators of typesetting machines are exposed, a fresh investigation shall be undertaken, the results of which shall be laid before the delegates' meeting in 1912.

C. PROTECTION OF HOME WORKERS FROM INDUSTRIAL POISONS.

This subject shall be placed upon the agenda of the next delegates' meeting.

D. LIST OF INDUSTRIAL POISONS.

The delegates' meeting takes note of the admirable list of industrial poisons drafted by Prof. Sommerfeld and amended by Dr. Fischer and the commission in the light of practical experience, and expresses its sincere thanks to these two authors.

At the same time the meeting recognizes the absolute impossibility of drawing up a complete list corresponding to industrial conditions in all countries, without the cooperation of the national sections. The bureau is requested to transmit the list to the sections and to the permanent council of hygiene. The sections shall thereupon, with the assistance of their respective Governments, revise and supplement the list by April 1, 1911. The bureau shall then arrange, in agreement with the permanent council of hygiene, for the publication of the list.

X. WORK IN COMPRESSED AIR.

A. WORK IN CAISSONS.

Since the protection of workers in caissons can not be regarded as directly affected by international competition, it is not a subject for international agreement. But at the same time it is expedient for the International Association for Labor Legislation to urge the various Governments to introduce legislation for the protection of caisson workers as has been done in France and Holland. The principles here following should form the basis of such regulations:

PRINCIPLES FOR THE REGULATION OF WORK IN CAISSONS.

1. The danger to life and health to which persons working in caissons under a high air pressure (from about 1.5 atmospheres) are in general exposed must be regarded as appallingly great.

2. The danger can be reduced to a very considerable extent by the adoption of suitable prophylactic and therapeutic measures. The introduction of such measures consequently forms an important branch of labor legislation.

3. Protective measures can not be expected to succeed unless they are designed on the right lines and strictly carried out. Consequently it is necessary for such regulations to be introduced by State legislation, and enforced by administrative authorities, and for contraventions to be punishable.

4. Regulations for the protection of caisson workers should contain provisions—

(a) Requiring the admission of persons to work in caissons to be dependent upon the result of a strict medical examination.

(b) Requiring the organization of a regular system of medical supervision on the works and wherever possible a permanent staff of medical officers.

(c) Fixing exactly the periods of employment and the manner of locking in and unlocking, according to the depth of the works and the pressure.

(d) Prescribing suitable hygienic regulations respecting the air supply in the caisson and air locks, variations of temperature, accommodation for workmen on the works, the conduct of workmen, etc.

(e) Prescribing all necessary arrangements for the protection of life and health.

(f) Insuring that suitable appliances for treating persons taken ill—especially a properly fitted up recompression lock—and the necessary staff for attending them shall be available.

(g) Requiring a register to be kept on the works, containing the name and forename of every person subject to medical examination, particulars of the result of each examination, and particulars of all cases where medical treatment was given on the works and the results of the same.

B. DIVERS.

Since divers, especially those employed in salvage operations, are liable to be called upon to work in foreign waters or on ships of a different nationality, it seems advisable that their occupation should be regulated by international agreement.

The members of the permanent council of hygiene shall collect from every country the regulations and official and private instructions respecting diving operations.

The international labor office shall thereupon transmit copies of these regulations, etc., to the members of the special commission, which shall prepare a report on the subject for the next delegates' meeting.

XI. THE PREVENTION OF ACCIDENTS.

AUTOMATIC COUPLING.

The bureau is instructed to make a further report to the next delegates' meeting regarding the international prevention of accidents and the protection of those employed on railroads and in the carrying trade. The sections are requested to petition their Governments for the introduction of automatic couplers.

XII. WORKMEN'S INSURANCE.

EQUAL TREATMENT OF FOREIGN WORKMEN.

1. The association requests the American section to continue its efforts to secure the passage in the several States of the Union of suitable laws for insurance against sickness and accident, which shall not discriminate against alien workers and thus carry out Resolution IX adopted at Geneva, and Resolution X adopted at Lucerne, and it thanks this section for the initiative which it has taken in this question of the protection of immigrants.

2. A special commission is appointed with instructions to seek ways and means by which the equal treatment of native and foreign workmen may be guaranteed, not only in respect to insurance against industrial accidents but also in other departments of social insurance, and to report to the next delegates' meeting.

REPORT OF ILLINOIS COMMISSION ON OCCUPATIONAL DISEASES.

In March, 1907, the Illinois Legislature authorized the appointment by the governor of a commission consisting of four State officials, two reputable physicians, and three other representative citizens of the State to thoroughly investigate causes and conditions relating to diseases of occupation and to report on desirable legislation respecting this subject. The time limit at first set was too short for anything to be attempted, and it was not until 1909 that the commission was able to begin its work effectively. The commissioners served without compensation, and practically the whole amount appropriated for its use—\$15,000—was used for direct expenses of investigation. The volume issued in January, 1911,¹ contains the report of the commissioners and a series of monographs embodying the findings of the various investigators.

The commissioners give an outline of the extensive field of industrial hygiene, and point out the impossibility, with the limited time and means at their disposal, of making any attempt at a comprehensive study. In the main their investigations were confined to the industrial use of poisons and the resulting effects upon the health of the workers.

The most elaborate study in the report is that by Dr. Alice Hamilton on industrial lead poisoning. Eighteen different industries or trades involving this danger, she finds, are carried on in Illinois. The degree of danger involved varies widely. Smelting and refining lead, the manufacture of white lead, the painting trades, and the manufacture of storage batteries are the most widely harmful. The danger is present in two forms—that of inhaling particles of the metal in the shape of metallic dust or fumes and that of swallowing them with food or drink. The road to comparative safety lies along the lines of prevention or diminution of dust and fumes in the worker's atmosphere by the use of hoods, exhausts, and similar devices, the provision of clean, well-ventilated workplaces, the substitution of wet for dry processes wherever practicable,² with a free use of water to keep down

¹ Report of commission on occupational diseases to his excellency Charles S. Deneen, January, 1911, 219 pages.

² That this can be done to a considerable extent is shown by the situation in England, where many of the most dangerous processes in the manufacture of white lead as carried on in America have been wholly abolished, with markedly beneficial effects to the workers.

dust, and the enforcement of strict rules concerning personal hygiene upon all workers handling lead or engaged in any of the dangerous processes. Two extremely simple precautions are the provision of respirators to be worn in all necessarily dusty work and the provision of ample facilities for washing—in some cases for bathing—and insistence upon their use. If the further precaution were taken of testing the employees and putting those who show special susceptibility to the effect of lead at the least exposed operations, the dangers of the work would be immensely diminished.

Along the first line conditions have improved considerably of late years. Machinery is steadily displacing hand workmen, and the growing demand for the metal is leading manufacturers to avoid the waste involved in the escape of dust and fumes. In regard to the personal care and instruction of the workers little or nothing is being done. Some of the industries, like smelting and the manufacture of white lead, have gained such a bad name among workmen that the better class will scarcely enter them. As a consequence, those employed in such work are, according to the report, mainly the poorest and most ignorant foreigners or Negroes. They either have no knowledge that danger exists or else have only a vague fear, with no idea where the risk lies or how it can be met. They are a notoriously unsteady, shifting class, continually moving in and out of the lead trades, thus greatly increasing the difficulty of giving instructions and taking precautions which would diminish their risks. This migratory character greatly increases, also, the difficulty of tracing cases of lead poisoning and finding how harmful the work really is.

As the investigation was undertaken to afford a basis for legal action, the economic and legal aspects of the dangers incurred by lead workers naturally took a prominent place. In the brief time available it was impossible to discover how extensively lead poisoning prevailed and how far it was responsible for economic loss and suffering, primarily to the workers and through them to the community as a whole. Five hundred and seventy-eight cases of lead poisoning, occurring during the years 1908, 1909, and 1910, were found, 12 of which resulted in permanent disability, 8 involved temporary or partial paralysis, and 18 resulted in death. One hundred and sixteen men reporting on the point showed a loss of working time from lead poisoning amounting to 65 years, and 102 men reporting on wages lost showed an aggregate loss of \$63,940. Where the burden of this loss fell is more than indicated, it is emphasized, by the fact that of the 578 workmen affected only 3 had received any compensation from their employers. One employee in smelters and metal shops was paid full wages while disabled, one paint factory worker was paid part of his wages, and another's medical expenses were paid; beyond this the workmen and their families alone bore

the cost of illness arising from trade conditions—unless some part of it was borne by the general community in the form of philanthropic relief. On this point the report is silent. The largest number of cases found, 181, was among the workmen in smelters and metal shops; 5 of these reported an average of two months apiece lost time, and 4 reported an average loss of \$71.25 each in wages. The painting trades stand next in point of numbers with 157 cases; 77 workmen reported time lost aggregating 43 years 4 months, and 72 reported an aggregate wage loss of \$46,092.

From the legal side the study throws considerable light on the responsibility of the workmen and on their assumption of the risks of the employment. Many of the dangerous conditions, such as the prevalence of dust and fumes, are absolutely beyond the workmen's control; either they must stay out of the occupation altogether or they must accept such degree of danger as the employer does not guard them against. In some of the most dangerous occupations, such, for instance, as the work in smelters and white-lead factories, intelligent workmen, as a rule, take the first alternative, and only the most ignorant, unskilled, and helpless class will enter them. How far these workmen are responsible for their own disregard of precautions, and how far they deliberately assume the risks of their employment is shown by the following quotation:

For instance, a young Bulgarian went to work in a white-lead factory the first week he arrived in Chicago, and was put to emptying pans of dry white lead. He was given no respirator and had no idea that he had a right to ask for one. Nobody told him the white dust on his hands and mustache was poisonous. He had only one suit of clothes and wore his working clothes home. He had a severe attack of lead poisoning at the end of five weeks. Another foreigner, a Russian Jew, was set to making red-lead paste in a storage battery factory. He was utterly ignorant of the substances he was handling and used to moisten his fingers in his mouth as he made the paste. He became severely poisoned after 10 days' work. We have found almost no effort in the lead works to instruct the foreigners in the care of their persons and in the avoidance of danger.

Another illustration is afforded by the mechanical artists or retouchers. This is highly skilled work, employing about 520 workers in Chicago, carried on by educated and intelligent people. "They use white paint, putting it on with a fine brush, which they habitually suck to bring it to a fine point." They also use an air brush which by means of compressed air sends a fine spray of white paint where needed. Most of the artists believe that they are using white-zinc paint and say that their employers and foremen assured them of this. Nevertheless, they say they all find the work very unhealthful and that many could not stand it more than a few years. On analyzing the white paints used it was found that 7 out of 11 were white-

lead paints, and only four establishments were found in which at least one variety of white-lead paint was not used.

From the practical side the report shows that it is entirely possible at no prohibitive cost to make most processes safe and to reduce immensely the risks of the most dangerous operations. Some employers are voluntarily taking the necessary precautions, but others neglect them altogether. The difference in the risks when strict regulation is enforced and when regulations are left almost entirely to the employer's option is strikingly shown by some comparisons between conditions in England and in Illinois:

In one English white-lead factory employing 182 men careful medical inspection failed to discover one case of lead poisoning in the year 1909-10. In an Illinois factory employing 142 men partial inspection revealed 25 men suffering from lead poisoning last year. In another English factory employing 90 men no case was discovered for five successive years. In an Illinois factory employing 94 men 28 per cent of all employees have had lead poisoning, and 40 per cent of all employed in the dustier work. The other two Illinois factories have not had medical inspection and accurate figures can not be given. One has sent four cases of lead poisoning to a hospital during the last month, the other three. These figures certainly do not represent even one-half of the probable number of cases, for many do not seek hospital care, yet even these would mean an average yearly of 36 and 48 cases, respectively.

The report does not claim to be more than a preliminary view of the field, indicating where more study is needed. It was impossible in the limited time and with the limited means available to make anything like a complete survey, to show how many were exposed to given dangers or to obtain full data as to the number and severity of the cases of lead poisoning annually occurring. It gives some indication of the annual amount of physical suffering, impaired capacity, and economic loss suffered by workers in the lead trades in Illinois, and it shows—in some cases by citing conditions prevailing abroad, in others by the experience of the more enlightened and careful employers in Illinois—how the dangers attendant on the various lead employing industries can be reduced or wholly obviated.

The study by Dr. Hayhurst of brass working in Chicago and zinc smelting in La Salle County shows that numerically these are less important than the lead employing industries. The risks seem less and the toxic effects, when incurred, less immediately and acutely harmful. Nevertheless, the work is very generally recognized as unhealthful. The brass worker's danger comes principally from zinc, though lead and other metals are used in some branches of the industry. In plating, polishing, and lacquering acid fumes and metallic dusts are encountered. Zinc is one of the important constituents of all the brass compounds, and as it volatilizes at a much

lower point than copper, the other leading constituent, it is given off freely whenever brass is made or superheated after having been made. Also, it is given off very freely when the ores containing zinc are smelted. Inhaling these fumes is liable to cause a peculiar affection known as brass founders' ague. This, Dr. Hayhurst found, was very common among workers in brass foundries, zinc smelters, and other foundries in which zinc and zinc alloys are poured. This disease is practically never found in foundries with good ventilation, either natural or artificial. It is not regarded as serious by the workmen themselves, who rarely consult a doctor for it, but continued exposure to the conditions producing it tends to establish chronic diseases affecting the lungs, digestive tract, nervous system, and kidneys, so that occupational ill health is common. Of 187 workmen questioned, 146 complained of trade sickness or disease. In view of the recent discussions of the toxic effects of fatigue it is interesting to find the workmen themselves assigning overwork as a cause of occupational disease. "Workmen complain that they are now required to do from one-half to double again as much as they were wont to do 10 to 20 years ago."

In the polishing, plating, and buffing processes the risks from metallic dusts and acid fumes are those found wherever such processes are carried on, and can be minimized or wholly done away with by the use of hoods and exhausts. There was considerable variation in the degree to which these devices were used. Of 30 plating firms visited, 27 had processes involving the use of large tanks of potassium cyanide solutions, and only 3 had any devices for removing the fumes rising from these.

In the zinc smelters the employees, about 2,000 in number, were almost exclusively Polish; no women and only a small per cent of boys and youths were employed. In the foundries and brass-working shops, a considerable proportion of English-speaking workmen were found. Women were employed to a limited extent in the foundries as coremakers, and in the brass-working shops mainly in the lacquering rooms and at polishing and buffing.

The study as a whole shows considerable risk to health in the industries considered, due in part to the nature of the materials used, but more to imperfect ventilation and other unhygienic conditions which might easily be remedied.

Owing not only to the enormous amounts of gas produced in the steel industry, but also to the large numbers of men engaged in it, the investigation into carbon monoxide poisoning was practically confined to the five large steel plants in South Chicago and Joliet. The peculiar intoxication produced by exposure to this gas in sufficient quantities is well known; the chief concern of the investigators—Drs. Matthew Karasek and George L. Apfelbach, under the direction

of Dr. Walter S. Haines—was to determine the effect of frequent or constant exposure to smaller amounts of the gas. In this respect the results obtained were inconclusive. A critical examination was made of 240 workers who were frequently exposed to the gas, but though the great majority of them were under par physically it was extremely difficult to decide how much of this was due to carbon monoxide and how much to such other factors, as unhygienic living, alcoholic excesses, etc. One constant and striking feature presented itself, however—a deficient muscular power, as indicated by the hand dynamometer.

This was so marked that a comparison was made between steelworkers and two groups of other workers. This gave the following results in 400 cases selected as being strictly comparable:

Ages 20–40. Steel company workers, South Chicago, exposed to CO, average strength, 117.13; ages over 40, average strength, 94.30.

Ages 20–40. Car company workers not exposed to CO, general hygiene, etc., good, average strength, 146.11; ages over 40, average strength, 127.35.

Ages 20–40. Workers in three companies not exposed to CO, general hygiene ordinary, average strength, 134.43; ages over 40, average strength, 113.01.

Mentally a majority of the men examined seemed below the average, but since nearly all used alcoholic liquors and 70 per cent admitted using them in excessive quantities, the investigators found it very difficult to decide what part in producing this condition should be ascribed to CO. “Since it is a well-known fact, however,” they say, “that prolonged exposure to carbon monoxide may produce a profound impression on the nervous system, we regard it as by no means improbable that a part of the sluggish mentality observed among the steelworkers may be due to frequent exposure to the gas. Further investigation along this line is to be strongly recommended.”

The prevalence of such exposure to the gas may be judged from the number of cases of gassing occurring yearly. At the time of the investigation the steel works were running at half or less than half of their full capacity. Of 10,000 men employed, 1,178 were working in the following departments and showed the following number of cases of poisoning:

Departments.	Number of men employed.	Fatal cases.	Severe cases per year.	Mild cases per year.	Sequellæ.
Blast furnaces.....	900	13 during past 4 years.	65	216	3 permanent psychoses.
Boiler houses.....	212	.....	1	55, estimated from findings.
Gas engine.....	42	1 in 1910.....	4	Variable.....	
Open hearths.....	24	.....	1	Variable.....

The dangers arising from this form of poisoning are greater than either the frequency or severity shown in the above table indicate, since even a mild degree of poisoning produces unconsciousness and a consequent risk of falling, sometimes from a height, sometimes against hot furnaces or metals, or into other dangerous positions. "Of 22 men acutely gassed, 3 showed notable burns and 3 showed bruises. * * * One worker was burned almost to a crisp before being taken out, and another fell to his death 25 feet below. Many other illustrations like these could be given."

The investigators find that within the past decade or two there has been a marked decrease in the cases of poisoning of this kind occurring in the Illinois Steel Works. This is partly due to the introduction of safer furnaces and methods of conveying gas, partly to greater care in keeping employees out of dangerous places, the use of oxygen helmets for those obliged to work in the most hazardous places, and the education of employees as to the dangers by oral or printed instructions. They recommend further precautions along the same or similar lines.

The effect upon health of turpentine as used in the painters and varnishers' trade forms the subject of a brief study by R. H. Nicholls and Drs. Flynn and Hayhurst. Observations were made upon a total of 62 men engaged in indoor branches of the work, because turpentine vapors are much less harmful when work is carried on in the open air. The age of those studied varied from 24 to over 60 years, only 9 being 51 years or over; the length of time they had spent at their trade varied from 2 to over 36 years. Nearly all claimed to have suffered from the effects of turpentine vapor more or less frequently; 14 were found to have organic diseases presumptively due to this cause, 21 had inflammation of the eye, 14 complained of respiratory symptoms, and 54 of urinary disturbances. According to their own statements these men had lost 1,098 days, representing about \$5,200 in wages, through sickness from temporary effects, or actual acute Bright's disease following the inhalation of turpentine vapors. Five of the 62 had received benefits from their unions aggregating \$236, but none had received any compensation from employers. Nine had sought charitable relief from dispensaries and hospitals. The particularly striking point in connection with these figures is that the loss, both physical and economical, involved in this form of industrial injury is absolutely unnecessary, since the simple measure of providing proper ventilation in places where the work is done would safeguard the men absolutely against the harmful effects of these fumes.

A report on caisson or compressed-air disease is presented by Dr. Peter Bassoe, who gives a résumé of the most important studies of the subject, with the results of a personal investigation of 167 men

who had suffered one or more attacks of the disease. From a layman's point of view the most striking points about the disease are that its symptoms are unique, so that when a case occurs there is no danger of its being mistaken for something else; that its cause and nature seem to be fully established and that preventive measures are well understood and, when carefully enforced, are markedly successful. The disease seems to be directly due to the well-known law of physics that a liquid can hold in solution a volume of gas proportioned to the pressure of that gas in the atmosphere to which the liquid is exposed. While at work in compressed air the men are exposed to a heavier atmospheric pressure than in free air. Consequently their blood absorbs a larger volume of nitrogen—that being by far the most voluminous constituent of air—that it can hold in solution under normal pressure. If, then, a worker whose blood has become thus saturated with gas under the pressure of the caisson atmosphere passes into the decreased pressure of a normal atmosphere the gas may be set suddenly free, causing bubbles in the blood vessels, interfering with the circulation and sometimes leading to permanent injuries.

The preventive measures are threefold. First, there should be a careful selection of workers, as some are more susceptible than others. Young men are less apt to be affected than the middle aged, and men of spare build have an advantage over the fat. Men who already have any organic diseases are particularly liable to injury. Next, the time spent in the caisson should be inversely proportioned to the pressure under which work is carried on. And third, and possibly most important of all, the passage from the compressed to the natural air should be a gradual and graduated process, the men on leaving the caisson being kept in a lock in which the air pressure is gradually reduced until they may with safety pass out. How long this process should take depends both on the length of the working shift and the pressure to which the workers have been exposed. The New York law provides that decompression shall be at the rate of 3 pounds every two minutes, unless the pressure shall be over 36 pounds, in which event the decrease of pressure shall be at the rate of 1 pound per minute.

Only one method of treatment is known for this disease: Placing the sufferer again in compressed air, and, after keeping him there some time, gradually reducing the pressure. In severe cases it may be necessary to repeat this treatment several times. If it can be applied as soon as the characteristic symptoms manifest themselves it is usually strikingly successful.

In his personal investigations Dr. Bassoe found 161 men who had suffered from caisson disease, some of them having had several attacks. All but 20 of these had had severe pains, usually in the

limbs, the so-called "bends." Thirty-four had had paralysis and 12 showed symptoms of some degree of permanent disease of the spinal cord. Eighty-seven had various affections of the ear, and 65 of these had resulting impairment of hearing. The most striking feature about the table is the comparatively short time in which the men, as a rule, had passed out from compressed to normal air.

The study closes with some suggestions for desirable legislation on the subject and the text of the laws regulating compressed-air work in New York and in Holland and in France.

In addition, the volume contains several studies dealing with rarer industrial diseases, and preliminary reports which, through lack of time, are too incomplete to indicate much more than the need for further investigation. Drs. Shambaugh and Boot made a study of occupational deafness, showing that danger of this exists in numerous lines of work where its presence is not generally suspected. Noise-producing occupations are, of course, especially objectionable from this point of view, but the volume of sound seems to be of little importance as compared with its pitch. Shrill, high-pitched tones readily result in injury to the nerve of hearing, while low-pitched sounds, no matter what their volume, seem to work no harm.

Drs. Lane and Ellis examined 500 Illinois miners in a search for miners' nystagmus without finding a single case. Increased use of machinery and changes in method of mining, they conclude, are making this rare disease still rarer.

Dr. and Mrs. Matthew Karasek make a preliminary report on poisons used in photography, photo-engraving, silvering mirrors, and etching glass, and in their very brief outline indicate, in addition to what may possibly be necessary dangers, some wholly needless risks to which workers are exposed. For instance, among photo-engravers, where the most deadly poisons are freely used, they found that very commonly there were "no posters, instructions, or warnings to employees regarding poisonous and dangerous chemicals; neither were labels present on any of the bottles containing potassium cyanide or other chemicals used in the rooms."

The report closes with a section on the legal side of the question, giving drafts of proposed laws for the regulation of some of the dangerous trades, and including an abstract of the chief provisions found in European legislation concerning the health and safety of workers. The commissioners are careful to explain that they regard the proposed laws only as a first step toward what should be accomplished. They recommend that the investigation be continued by the same or another body having more time and larger funds at its disposal.

RECENT FOREIGN STATISTICAL PUBLICATIONS.

AUSTRIA.

Die Arbeitseinstellungen und Aussperrungen in Österreich während des Jahres 1908. Herausgegeben vom k. k. Arbeitsstatistischen Amte im Handelsministerium. 169, 308 pp.

This volume contains the fifteenth annual report of the Austrian Government on strikes and lockouts. The information, which is compiled by the Austrian Bureau of Labor Statistics, is given in the form of an analysis and six tables showing: (1) Strikes according to geographical distribution; (2) strikes according to industries; (3) general summary of strikes; (4) comparative summary of strikes for the 10-year period 1899-1908; (5) details for each strike in 1908; (6) details for each lockout in 1908. An appendix gives a brief review of industrial and labor conditions in Austria, statistics of trade unions, and notes concerning the strikes and lockouts reported in the preceding pages of the report.

STRIKES IN 1908.—The number of strikes and the number of establishments affected by strikes, as well as the number of strikers and the number of persons affected by the strikes, show a marked decrease as compared with 1907. The number of strikes during 1908 was 721; the number of establishments affected was 2,702; the number of persons employed in these establishments was 135,871, and of this number 78,562 went on strike. Of the 78,562 persons on strike, 3,771 were dismissed and 3,304 found other work after the strike.

The average number of strikers to each strike in 1908 was 109, as compared with 163 in 1907, 142 in 1906, and the number of strikes as compared with the number of establishments affected was in the proportion of 1 to 3.7, as compared with 5.6 in 1907 and in 1906. In other words, the strikes of 1908, measured by the number of establishments affected by a strike, and the average number of strikers for each strike, were considerably less important in 1908 than in either 1907 or 1906.

The introduction to the report calls attention to the fact that estimates of the losses occasioned by the strikes must be accepted only with many reservations. On this basis the wage loss of 78,562 strikers, who were out 1,011,036 days, is estimated at 3,083,000 crowns (\$625,849); of this amount 147,800 crowns (\$30,003) was caused by the strikes which were successful, 1,920,800 crowns

(\$389,922) by the partly successful strikes, and 1,014,400 crowns (\$205,924) by the strikes which failed. In addition 7,810 persons not on strike were thrown out of work, and their loss in wages is estimated to have been 227,000 crowns (\$46,081).

The number of lockouts in 1908 was 35, as compared with 26 in 1907.

The following table shows by industries the number of strikes, the number of establishments affected, the number of strikers, etc., for the year 1908:

STRIKES, ESTABLISHMENTS AFFECTED, STRIKERS, AND OTHER EMPLOYEES THROWN OUT OF WORK, BY INDUSTRIES, 1908.

Industries.	Strikes.	Estab-lish-ments af-fected.	Total em-ploy-ees.	Strikers.		Other em-ployees thrown out of work.	Strik-ers re-em-ployed.	New em-ployees after strike.
				Num-ber.	Per cent of total em-ployees.			
Mining and metallurgical.....	81	107	51,364	26,803	52.2	1,448	26,505	18
Quarrying products of stone, clay, glass, etc.....	95	170	10,318	5,939	57.6	1,022	4,994	424
Metal working.....	58	419	9,484	4,605	48.6	1,149	3,903	374
Machinery, instruments, apparatus, etc.....	37	44	8,503	3,980	46.8	126	3,638	72
Woodworking, caoutchouc, carved materials, etc.....	53	230	2,296	1,742	75.9	86	1,339	195
Leather, hides, hair, leathers, etc.....	18	30	873	719	82.4	66	663	38
Textiles.....	59	65	12,907	7,284	56.4	1,664	6,665	311
Upholstering and paper hanging.....	3	167	514	462	89.9	.....	404	2
Wearing apparel, cleaning, etc.....	47	240	3,118	2,170	69.6	40	1,959	86
Paper.....	6	44	1,549	1,304	84.2	109	1,283	20
Foods and drinks (including tobacco).....	41	150	4,913	3,746	76.2	86	2,879	423
Hotels, restaurants, etc.....	6	57	804	716	89.1	.....	710	4
Chemical products, etc.....	8	8	477	265	55.6	10	206	20
Building trades.....	145	421	20,744	12,664	61.0	1,848	10,354	1,826
Printing.....	10	16	451	271	60.1	81	254	11
Commerce.....	10	10	378	315	83.3	8	287	28
Transportation.....	27	501	5,838	4,444	75.5	63	4,335	78
Other.....	17	23	1,290	1,133	87.8	4	1,109	20
Total.....	721	2,702	135,871	78,562	58.5	7,810	71,487	3,950

The industries in which the largest number of strikes occurred were the building trades with 145 strikes, quarrying with 95 strikes, and mining and metallurgical with 81 strikes. Each of three other groups had over 50 strikes; textiles with 59, metal working 58, and woodworking, caoutchouc, etc., 53. In each of the following industries more than 5,000 workers were on strike: Mining, etc., industries with 26,803 strikers, building trades industries with 12,664 strikers, textile industries with 7,284 strikers, and quarrying, etc., industries with 5,939 strikers. These four industries included 52,690 strikers, or 67.2 per cent of the total number of strikers.

The following table shows the causes of strikes for 1908, by industries:

STRIKES BY INDUSTRIES AND CAUSES OR OBJECTS, 1908.

[Strikes due to two or more causes have been tabulated under each cause; hence the industry totals of this table, if computed, would not agree with those of the preceding table.]

Industries.	Against reduction of wages.	For increase of wages.	For reduction of hours.	For discharge of foremen, workmen, etc.	Against obnoxious treatment,	Against discharge of employees.	Against obnoxious rules.	Other causes.
Mining and metallurgical.....	5	48	.....	3	1	11	9	11
Quarrying, products of stone, clay, glass, etc.....	3	66	11	2	1	13	2	14
Metal working.....	3	30	21	5	.....	13	3	5
Machinery, instruments, apparatus, etc.....	2	21	9	1	.....	9	4	1
Woodworking, caoutchouc, carved materials, etc.....	.....	33	21	1	.....	3	4	10
Leather, hides, hair, leathers, etc.....	.....	15	6	.....	.....	1	2	.....
Textiles.....	2	34	11	1	.....	8	7	8
Upholstering and paper hanging.....	.....	1	1	.....	.....	.....	.....	1
Wearing apparel, cleaning, etc.....	1	40	15	1	.....	1	2	5
Paper.....	1	3	1	.....	.....	1	.....	1
Foods and drinks (including tobacco).....	1	32	9	1	.....	3	.....	4
Hotels, restaurants, etc.....	.....	4	.....	.....	.....	.....	2	.....
Chemical products.....	.....	4	1	.....	.....	3	1	1
Building trades.....	.....	117	27	4	1	11	4	9
Printing.....	.....	3	1	.....	.....	3	.....	4
Commerce.....	1	7	.....	.....	.....	1	.....	1
Transportation.....	.....	20	4	.....	.....	6	2	1
Other.....	.....	12	.....	1	.....	.....	1	4
Total.....	19	490	138	21	3	87	43	80

As in previous years, the demands of the strikers were most frequently for increase of wages and for reduction of hours, the first demand occurring in 490 strikes and the second in 138 strikes.

The following table shows the number of strikes and of strikers in each group of industries in 1908 by results:

STRIKES AND STRIKERS, BY INDUSTRIES AND RESULTS, 1908.

Industries.	Strikes.				Strikers.			
	Succeeded.	Succeeded partly.	Failed.	Total.	Succeeded.	Succeeded partly.	Failed.	Total.
Mining and metallurgical.....	13	23	45	81	4,085	5,409	17,309	26,803
Quarrying products of stone, clay, glass, etc.....	19	39	37	95	882	3,191	1,866	5,939
Metal working.....	10	33	15	58	267	3,512	826	4,605
Machinery, instruments, apparatus, etc.....	4	18	15	37	247	2,606	1,127	3,980
Woodworking, caoutchouc, carved materials, etc.....	12	23	18	53	217	1,121	404	1,742
Leather, hides, hair, feathers, etc.....	5	10	3	18	117	525	77	719
Textiles.....	10	27	22	59	443	3,880	2,961	7,284
Upholstering and paper hanging.....	1	1	1	3	3	450	9	462
Wearing apparel, cleaning, etc.....	12	24	11	47	199	1,736	235	2,170
Paper.....	1	3	2	6	24	1,191	89	1,304
Foods and drinks (including tobacco).....	15	13	13	41	995	2,303	448	3,746
Hotels, restaurants, etc.....	2	3	1	6	630	83	3	716
Chemical products.....	2	3	3	8	25	119	121	265
Building trades.....	34	63	48	145	1,126	6,931	4,607	12,664
Printing.....	3	3	4	10	57	98	116	271
Commerce.....	4	3	3	10	76	70	169	315
Transportation.....	5	13	9	27	611	3,367	466	4,444
Other.....	8	6	3	17	158	744	231	1,133
Total.....	160	308	253	721	10,162	37,336	31,064	78,562
Per cent.....	22.2	42.7	35.1	100.0	12.9	47.5	39.6	100.0

The following table shows the number of strikes and of strikers in 1908 according to duration and results:

STRIKES AND STRIKERS, BY DURATION AND RESULTS, 1908.

Days of duration.	Strikes.				Strikers.			
	Succeeded.	Succeeded partly.	Failed.	Total.	Succeeded.	Succeeded partly.	Failed.	Total.
1 to 5.....	99	102	134	335	6,084	12,889	20,092	39,065
6 to 10.....	26	54	36	116	2,670	6,134	4,400	13,204
11 to 15.....	13	35	20	68	849	3,233	549	4,631
16 to 20.....	6	28	11	45	192	4,259	2,411	6,862
21 to 25.....	4	15	12	31	63	1,092	780	1,935
26 to 30.....	3	6	4	13	38	815	43	896
31 to 35.....	1	7	7	15	43	809	644	1,496
36 to 40.....	1	7	3	11	44	520	173	737
41 to 50.....	2	16	4	22	25	1,249	210	1,484
51 to 100.....	4	23	14	41	146	3,613	878	4,637
101 and over.....	1	15	8	24	8	2,723	884	3,615
Total.....	160	308	253	721	10,162	37,336	31,064	78,562

STRIKES DURING FIFTEEN YEARS.—The summaries for the years 1894 to 1908 were compiled partly from the report for 1908 and partly from previous reports. The following table shows the number of strikes and strikers, establishments affected, and working-days lost in Austria for the period during which the Ministry of Commerce has published reports on strikes:

STRIKES AND STRIKERS, ESTABLISHMENTS AFFECTED, AND WORKING-DAYS LOST, BY YEARS, 1894 TO 1908.

Years.	Strikes.	Establishments affected.	Strikers.	Per cent of strikers of total employees.	Working-days lost.
1894.....	172	2,542	67,061	69.5	795,416
1895.....	209	874	28,652	59.9	300,348
1896.....	305	1,499	66,234	65.7	899,939
1897.....	246	851	38,467	59.0	368,098
1898.....	255	885	39,658	59.9	323,619
1899.....	311	1,330	54,763	60.2	1,029,937
1900.....	303	1,003	105,128	67.3	3,483,963
1901.....	270	719	24,870	38.5	157,744
1902.....	264	1,184	37,471	44.0	284,046
1903.....	324	1,731	46,215	60.5	500,567
1904.....	414	2,704	64,227	64.3	606,629
1905.....	686	3,803	99,591	63.6	1,151,310
1906.....	1,083	6,049	153,688	55.6	2,191,815
1907.....	1,086	6,130	176,789	61.5	2,087,523
1908.....	721	2,702	78,562	57.8	1,011,036

The number of strikes and the number of strikers for each year of the 15-year period are shown, by industries, in the following table:

STRIKES AND STRIKERS, BY INDUSTRIES AND YEARS, 1894 TO 1908.

STRIKES.

Years.	Mining and metallurgical.	Quarrying, products of stone, clay, glass, etc.	Metal working.	Machinery, instruments, apparatus, etc.	Wood-working, caoutchouc, carved materials, etc.	Textiles.	Building trades.	Other.	Total.
1894.....	13	22	23	7	23	34	11	39	172
1895.....	4	29	37	6	38	29	24	42	209
1896.....	11	29	33	14	55	43	42	78	305
1897.....	25	27	26	20	28	28	34	58	246
1898.....	29	27	26	13	28	28	49	55	255
1899.....	26	21	22	24	35	84	33	56	311
1900.....	40	19	26	13	34	56	23	92	303
1901.....	40	29	22	15	27	28	24	85	270
1902.....	63	24	18	15	20	34	22	68	264
1903.....	40	18	34	13	48	44	37	90	324
1904.....	36	38	44	27	41	37	80	111	414
1905.....	43	76	65	45	53	54	188	162	686
1906.....	68	108	80	56	118	130	184	339	1,083
1907.....	144	96	90	54	105	152	198	247	1,086
1908.....	81	95	58	37	53	59	145	193	721
Total.....	663	658	614	359	706	840	1,094	1,715	6,649

STRIKERS.

1894.....	22,986	6,415	2,752	194	9,793	6,317	14,975	3,629	67,061
1895.....	626	9,943	3,694	253	2,336	4,065	5,361	2,354	28,652
1896.....	30,120	3,217	2,973	2,058	5,972	9,791	5,434	6,669	66,234
1897.....	3,632	3,053	1,568	4,689	1,382	11,275	4,995	7,873	38,467
1898.....	7,046	4,491	991	2,471	1,318	3,171	13,961	6,209	39,658
1899.....	3,477	2,112	2,459	1,356	3,198	30,249	7,842	4,070	54,763
1900.....	78,791	574	1,977	519	1,391	12,010	4,849	5,017	105,128
1901.....	7,496	1,698	1,393	889	2,925	2,675	3,214	4,580	24,870
1902.....	13,573	1,819	741	1,013	1,312	2,599	10,476	5,938	37,471
1903.....	12,341	2,740	2,936	705	2,846	5,220	9,645	9,782	46,215
1904.....	19,614	4,788	4,211	1,400	1,756	3,483	15,947	13,028	64,227
1905.....	10,100	9,832	7,406	4,660	2,736	5,866	35,074	23,967	99,591
1906.....	38,705	10,776	16,373	5,641	5,698	28,970	15,416	32,209	153,688
1907.....	44,501	7,204	7,735	7,904	7,021	39,725	16,638	46,061	176,789
1908.....	26,803	5,939	4,605	3,980	1,742	7,284	12,664	15,545	78,562
Total.....	319,811	74,601	61,814	37,732	51,326	172,720	176,441	186,931	1,081,376

The causes of strikes for each year of the period are shown in the following table, the cause and not the strike being the unit:

STRIKES, BY CAUSES AND YEARS, 1894 TO 1908.

[Strikes due to two or more causes have been tabulated under each cause; hence the yearly totals for this table, if computed, would not agree with those for the preceding tables.]

Years.	Against reduction of wages.	For increase of wages.	For change in method of payment.	For reduction of hours.	For discharge of foremen, workmen, etc.	Against obnoxious treatment.	Against discharge of employes.	Against obnoxious rules.	Other causes.
1894.....	23	53	5	19	12	5	35	16	31
1895.....	19	89	6	31	22	2	31	8	37
1896.....	28	140	8	67	32	5	40	12	34
1897.....	26	116	7	47	26	13	32	18	45
1898.....	33	124	8	54	29	9	36	20	39
1899.....	29	143	5	73	17	5	40	18	40
1900.....	26	152	6	69	13	10	36	14	53
1901.....	28	116	7	46	28	4	36	15	33
1902.....	28	127	7	52	9	2	37	25	36
1903.....	30	151	6	61	36	2	51	15	33
1904.....	22	213	5	91	20	6	70	30	43
1905.....	24	402	3	151	46	3	130	16	52
1906.....	13	694	4	298	73	4	193	31	59
1907.....	16	758	3	289	60	4	124	40	75
1908.....	19	490	4	138	21	3	87	43	76
Total.	364	3,768	84	1,486	444	77	888	321	686

The following table shows, for both strikes and strikers, during each year of the period, the results expressed in percentages:

PER CENT OF STRIKES AND OF STRIKERS, BY RESULTS, FOR EACH YEAR, 1894 TO 1908.

Years.	Strikes.				Strikers.			
	Number.	Per cent succeeded.	Per cent succeeded partly.	Per cent failed.	Number.	Per cent succeeded.	Per cent succeeded partly.	Per cent failed.
1894.....	172	25.0	27.9	47.1	67,061	9.2	37.3	53.5
1895.....	209	26.8	24.9	48.3	28,652	12.8	60.7	26.5
1896.....	305	21.0	36.4	42.6	66,234	4.6	62.8	32.6
1897.....	246	17.5	37.0	45.5	38,467	15.7	47.8	36.5
1898.....	255	18.8	41.2	40.0	39,658	8.4	66.4	25.2
1899.....	311	15.4	45.0	39.6	54,763	10.2	72.0	17.8
1900.....	303	20.1	44.9	35.0	105,128	4.7	85.5	9.8
1901.....	270	20.7	36.3	43.0	24,870	20.1	47.8	32.1
1902.....	264	19.7	39.0	41.3	37,471	13.9	52.6	33.5
1903.....	324	17.3	43.5	39.2	46,215	10.0	68.0	22.0
1904.....	414	24.4	44.4	31.2	64,227	18.6	41.4	40.0
1905.....	686	21.9	51.2	26.9	99,591	14.0	71.6	14.4
1906.....	1,083	22.2	47.4	30.4	153,688	12.0	66.4	21.6
1907.....	1,086	17.2	54.5	28.3	176,789	10.3	69.0	20.7
1908.....	721	22.2	42.7	35.1	78,562	12.9	47.5	39.6

LOCKOUTS.—There were 35 lockouts reported in 1908 as compared with 26 in 1907. The number of lockouts due to reported causes were 14 due to differences concerning wages and hours of labor, 12 due to strikes, and 5 to threatened strikes, and 4 due to other causes.

The following table shows the number of lockouts, establishments affected, and number of employees locked out for each year of the period, 1895 to 1908:

LOCKOUTS, ESTABLISHMENTS AFFECTED, AND EMPLOYEES LOCKED OUT, BY YEARS, 1895 TO 1908.

Years.	Lock- oujs.	Estab- lishments affected.	Em- ployees locked out.	Per cent of em- ployees locked out of total em- ployees.	Em- ployees locked out and reem- ployed.
1895.....	8	17	2,317	51.2	2,183
1896.....	10	211	5,445	79.5	4,589
1897.....	11	12	1,712	54.4	1,647
1898.....					
1899.....	5	38	3,457	60.9	3,448
1900.....	10	58	4,036	75.8	3,703
1901.....	3	3	302	70.4	302
1902.....	8	9	1,050	49.9	1,003
1903.....	8	71	1,334	51.8	905
1904.....	6	605	23,742	99.2	23,717
1905.....	17	448	11,197	75.2	9,614
1906.....	50	1,832	67,872	84.3	64,549
1907.....	26	236	14,539	78.4	14,270
1908.....	35	268	9,588	71.4	8,699

FRANCE.

Statistique des Grèves et des Recours à la Conciliation et à l'Arbitrage Survenus Pendant l'Année 1908. Direction du Travail, Ministère du Travail et de la Prévoyance Sociale. xviii, 550 pp.

The present volume is the eighteenth of a series of annual reports on strikes and conciliation and arbitration issued by the French Labor Bureau. The information is presented in the same form as in previous reports.

STRIKES.—During the year 1908 there were 1,073 strikes, involving 4,641 establishments, 99,042 strikers, and 9,196 other persons thrown out of work on account of strikes. Of the strikers 89.3 per cent were men, 8.1 per cent were women, and 2.6 per cent were children. The strikes caused a loss of 1,479,071 working-days by strikers and 241,672 by other employees thrown out of work, a total of 1,720,743 working-days. In 1907 there were 1,275 strikes, in which 197,961 strikers were involved, causing a loss of 3,048,446 working-days by the strikers, and a total of 3,562,220 working-days for strikers and other persons thrown out of work by reason of strikes. The average number of days lost per striker in 1908 was 15, being the same as in 1907.

Of the 1,073 strikes in 1908, 841 involved but 1 establishment each, 86 involved from 2 to 5 establishments, 53 involved from 6 to 10 establishments, 49 involved from 11 to 25 establishments, 35 involved from 26 to 50 establishments, and 7 involved from 51 to 100 establishments. Of the remaining strikes 2 involved over 100 establishments each, 1 involved 200, and 1 involved 300 establishments. In

one strike of agricultural laborers the exact number of establishments affected could not be ascertained.

In 837 strikes all or a part of the striking employees were organized. The employers were organized in 557 strikes. Five workingmen's unions and 5 employers' associations were organized during the progress of or immediately following strikes. As a result of strikes 5 workingmen's unions and 1 employers' association dissolved. In 46 strikes regular aid was given by labor organizations to their striking members and in some cases to strikers not members. In 2 strikes, employees who remained at work gave a part of their earnings to an association furnishing aid to strikers.

Of the 1,073 strikes, 185, or 17.24 per cent of all strikes, involving 20,133 strikers, or 20.33 per cent of all strikers, succeeded; 324 strikes, or 30.20 per cent of all strikes, involving 46,599 strikers, or 47.05 per cent of all strikers, succeeded partly; and 564 strikes, or 52.56 per cent of all strikes, involving 32,310 strikers, or 32.62 per cent of all strikers, failed. In 688 strikes the striking employees were time workers, while in 183 others, they worked by the piece, and in the remaining 202 by both time and piece.

The following table shows, by groups of industries, the number of strikes, strikers, and establishments affected, according to the results of strikes; also the days of work lost by all employees and the number of strikers per 1,000 working people in each group of industries for the year 1908:

STRIKES, ESTABLISHMENTS AFFECTED, AND STRIKERS, BY RESULTS, AND WORKING-DAYS LOST, FOR EACH GROUP OF INDUSTRIES, 1908.

Industries.	Succeeded.		Succeeded partly.		Failed.		Total.	
	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.
Agriculture, forestry, and fisheries....	14	306	16	427	10	173	40	906
Mining.....	12	12	7	7	16	16	35	35
Quarrying.....	2	2	17	77	9	17	28	96
Foods and drinks.....	2	28	4	28	8	19	14	75
Chemical products (including tobacco)	2	2	11	11	11	11	24	24
Paper and printing.....	4	7	11	13	22	30	37	55
Leather and hides.....	5	8	21	145	14	28	40	181
Textiles.....	24	24	44	60	61	127	129	211
Wearing apparel, cleaning, etc.	4	5	7	97	10	143	21	245
Woodworking, carved materials, etc.	7	8	8	35	20	42	35	85
Building trades (woodwork).....	6	71	14	180	9	33	29	284
Metallurgical.....	1	1	2	2	3	3	6	6
Metal working, machinery, instru-ments, apparatus, etc.	7	27	23	234	35	36	65	297
Jewelry, gold and silver working.....					1	1	1	1
Stone cutting, products of stone, clay, glass, etc.	8	59	23	50	25	25	56	134
Building trades (stone and earth work).....	70	178	88	997	271	471	429	1,646
Transportation, commerce, etc.....	17	117	28	169	39	74	84	360
Total.....	185	855	324	2,587	564	1,249	1,073	4,641

STRIKES, ESTABLISHMENTS AFFECTED, AND STRIKERS, BY RESULTS, AND WORKING-DAYS LOST, FOR EACH GROUP OF INDUSTRIES, 1908—Concluded.

Industries.	Strikers in strikes which—			Total strikers.	Strikers per 1,000 working people in each industry. ¹	Working-days lost by all employees thrown out of work.
	Succeeded.	Succeeded partly.	Failed.			
Agriculture, forestry, and fisheries . . .	3,020	2,572	1,077	6,669	2.25	54,609
Mining	2,168	2,781	1,816	6,765	37.19	25,977
Quarrying	72	3,860	775	4,707	77.08	52,553
Foods and drinks	133	78	1,209	1,420	2.23	50,538
Chemical products (including tobacco) . . .	344	437	526	1,307	11.43	5,458
Paper and printing	347	899	592	1,838	13.91	22,007
Leather and hides	237	2,674	404	3,315	21.13	42,502
Textiles	1,379	5,499	3,506	10,384	16.84	256,803
Wearing apparel, cleaning, etc.	253	1,480	860	2,593	5.48	13,619
Woodworking, carved materials, etc.	424	727	1,140	2,291	9.36	80,412
Building trades (woodwork)	541	948	195	1,684	(²)	15,344
Metallurgical	12	100	276	388	5.49	3,384
Metal working, machinery, instruments, apparatus, etc.	407	2,517	2,500	5,424	9.92	83,455
Jewelry, gold and silver working			40	40	1.88	133
Stone cutting, products of stone, clay, glass, etc.	822	2,456	1,747	5,025	33.30	233,990
Building trades (stone and earth work)	7,941	15,273	11,888	35,102	³ 71.13	647,951
Transportation, commerce, etc.	2,038	4,298	3,759	10,090	9.27	132,006
Total	20,133	46,599	32,310	99,042	⁴ 18.12	1,720,748

¹ Based on the census of 1901.

² Included in building trades (stone and earth work).

³ Including building trades (woodwork).

⁴ Based on the total number of industrial working people in France in 1901.

Of the 17 groups of industries above shown, building trades (stone and earth work) and textiles together furnished 52 per cent of the total number of strikes during the year; with regard to the number of strikers, these 2 groups furnished 45.9 per cent.

The principal data as to strikes are shown, by causes, in the table following:

STRIKES, ESTABLISHMENTS AFFECTED, AND STRIKERS, BY RESULTS, AND WORKING-DAYS LOST, FOR EACH CAUSE, 1908.

[Strikes due to two or more causes have been tabulated under each cause; hence the totals for this table, if computed, would not agree with those for preceding tables.]

Causes or objects.	Succeeded.		Succeeded partly.		Failed.		Total.	
	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.
For increase of wages	119	740	211	2,192	298	745	628	3,677
Against reduction of wages	10	14	9	9	19	63	38	86
For reduction of hours, with present or increased wages	42	514	18	390	90	434	150	1,338
Relating to time, method, etc., of wage payments	56	543	17	299	48	168	121	1,010
For or against modification of conditions of work	11	23	15	15	29	99	55	137
Against piecework	9	230	10	113	20	97	39	440
For or against modification of shop rules	23	79	18	177	35	102	76	358
For abolition or reduction of fines	4	4	2	2	10	11	16	17
Against discharge or for reinstatement of workmen, foremen, or superintendents	25	26	20	59	124	178	169	263
For discharge of workmen, foremen, or superintendents	19	35	7	9	86	86	112	130
For discharge of female employees	1	1			2	2	3	3
For limitation of number of apprentices	2	7			3	9	5	16
Relating to deductions from wages for support of insurance and aid funds	1	10			3	6	4	16
Other causes	8	145	14	142	26	218	48	506

STRIKES, ESTABLISHMENTS AFFECTED, AND STRIKERS, BY RESULTS, AND WORKING-DAYS LOST, FOR EACH CAUSE, 1908—Concluded.

Causes or objects.	Strikers in strikes which—			Total strikers.	Working-days lost by all employees thrown out of work.
	Succeeded.	Succeeded partly.	Failed.		
For increase of wages.....	13,594	32,116	16,847	62,557	266,748
Against reduction of wages.....	887	571	973	2,431	40,730
For reduction of hours, with present or increased wages.....	7,057	4,111	5,968	17,136	117,049
Relating to time, method, etc., of wage payments.....	8,646	1,550	4,348	14,544	168,775
For or against modification of conditions of work.....	547	1,522	2,708	4,777	60,244
Against piecework.....	739	3,319	1,653	5,711	19,882
For or against modification of shop rules.	3,324	3,903	4,131	11,358	94,378
For abolition or reduction of fines.....	253	717	276	1,246	14,279
Against discharge or for reinstatement of workmen, foremen, or superintendents.....	2,729	3,273	8,169	14,171	148,060
For discharge of workmen, foremen, or superintendents.....	2,592	780	6,888	10,260	129,245
For discharge of female employees.....	71	.....	26	97	1,464
For limitation of number of apprentices.....	98	.....	103	201	4,826
Relating to deductions from wages for support of insurance and aid funds.....	120	.....	420	540	15,559
Other causes.....	2,263	6,362	3,077	11,702	50,117

The most frequent cause of strikes during the year was wage disputes, the demands for increased wages, alone or in conjunction with other demands, having figured in 628 strikes, or 58.5 per cent of the total number of strikes for the year, involving 62,557 strikers, or 63.2 per cent of the total number of strikers, and causing a loss of 266,748 working-days, including days lost by persons other than strikers who were thrown out of employment on account of strikes. Of these demands 119 were successful for 13,594 strikers, 211 partly successful for 32,116 strikers, and 298, involving 16,847 strikers, failed. The next two tables show, for both strikes and strikers, the results of strikes by duration and the results and duration of strikes by number of strikers involved.

STRIKES AND STRIKERS, BY DURATION AND RESULTS, 1908.

Days of duration.	Strikes which—			Total strikes.	Strikers in strikes which—			Total strikers.
	Succeeded.	Succeeded partly.	Failed.		Succeeded.	Succeeded partly.	Failed.	
7 and under.....	139	166	396	701	12,029	17,681	17,261	46,971
8 to 15.....	20	64	72	156	1,293	6,761	4,519	12,573
16 to 30.....	12	32	36	80	3,403	4,433	2,798	10,634
31 to 100.....	14	55	52	121	3,408	16,583	6,124	26,115
101 and over.....	.....	7	8	15	.....	1,141	1,608	2,749
Total.....	185	324	564	1,073	20,133	46,599	32,310	99,042

STRIKES, BY NUMBER OF STRIKERS INVOLVED, RESULTS, AND DURATION, 1908.

Strikers involved in each strike.	Strikes which—			Total strikes.	Strikes which lasted—				
	Suc-ceeded.	Suc-ceeded partly.	Failed.		7 days and under.	8 to 15 days.	16 to 30 days.	31 to 100 days.	101 days and over.
25 and under.....	51	84	303	438	337	54	26	19	2
26 to 50.....	46	68	106	220	140	45	12	23	.....
51 to 100.....	39	63	77	179	104	22	16	33	4
101 to 200.....	28	64	46	138	76	20	16	22	4
201 to 500.....	15	26	26	67	35	13	4	11	4
501 to 1,000.....	4	12	6	22	7	1	4	9	1
1,001 and over.....	2	7	.....	9	2	1	2	4	.....
Total.....	185	324	564	1,073	701	156	80	121	15

Considered by their duration, the largest per cent of successful strikes was found in strikes which lasted 7 days and under. In strikes of this class 19.8 per cent were successful, while of those which continued for more than 7 days only 12.4 per cent terminated favorably to the strikers. In the classes 8 to 15 days and 16 to 30 days the per cent of successful strikes were 12.8 and 15, respectively. Of strikes lasting 31 to 100 days 11.6 per cent were successful, while of the 15 strikes lasting 101 and more days none were successful.

The following table gives a summary of the most important strike statistics for each of the years 1894 to 1908. The figures for the years 1894 to 1907 have been compiled from previous reports and those for 1908 from the present report.

STRIKES AND STRIKERS, BY RESULTS, ESTABLISHMENTS AFFECTED, AND WORKING-DAYS LOST, FOR EACH YEAR, 1894 TO 1908.

Years.	Strikes.	Estab-lish-ments affected.	Strikers.	Working-days lost by all employees thrown out of work.	Strikes which—			Strikers in strikes which—		
					Suc-ceeded.	Suc-ceeded partly.	Failed.	Suc-ceeded.	Suc-ceeded partly.	Failed.
1894.....	391	1,731	54,576	1,062,480	84	129	178	12,897	24,784	16,895
1895.....	405	1,298	45,801	617,469	100	117	188	8,565	20,672	16,564
1896.....	476	2,178	49,851	644,168	117	122	237	11,579	17,057	21,215
1897.....	356	2,568	68,875	780,944	68	122	166	19,838	28,767	20,270
1898.....	368	1,967	82,065	1,216,306	75	123	170	10,594	32,546	38,925
1899.....	739	4,288	176,772	3,550,734	180	282	277	21,131	124,767	30,874
1900.....	902	10,253	222,714	3,760,577	205	360	337	24,216	140,358	58,140
1901.....	523	6,970	111,414	1,862,050	114	195	214	9,364	44,386	57,664
1902.....	512	1,820	212,704	4,675,081	111	184	217	23,533	160,820	28,351
1903.....	567	3,246	123,151	2,441,944	122	222	223	12,526	89,736	20,889
1904.....	1,026	17,250	271,097	3,984,884	297	394	335	53,555	168,034	49,508
1905.....	830	5,302	177,666	2,746,684	184	361	285	22,872	125,016	29,778
1906.....	¹ 1,309	² 19,637	³ 438,466	9,438,594	278	539	490	31,148	253,264	154,010
1907.....	1,275	8,365	197,961	3,562,220	263	490	522	24,369	130,806	42,786
1908.....	1,073	4,641	99,042	1,720,743	185	324	564	20,133	46,599	32,310

¹ Including 2 strikes not terminated July 1, 1907.
² Including 2 establishments in 2 strikes not terminated July 1, 1907.
³ Including 44 strikers in 2 strikes not terminated July 1, 1907.

The number of strikes, establishments affected, strikers, and aggregate working-days lost during 1908 show a considerable decrease as compared with the figures for 1907.

CONCILIATION AND ARBITRATION.—During the year recourse to the law of December 27, 1892, relating to the conciliation and arbitration¹ of labor disputes, was had in 182 disputes. In 20 cases recourse was had to the law before entire cessation of work had occurred. In 4 of these 20 cases the demands of the employees were granted, in 1 case a compromise was effected, and in 5 cases the employees receded from their demands, although in 1 of these cases the employer refused to agree to the proposition of conciliation. In 4 cases upon the refusal of the employers to participate in conciliation proceedings, strikes were declared; in 2 of these strikes a compromise was reached, and 2 failed. In 1 case the employees refused to agree to the proposition of conciliation and the establishment was closed for some days, though later a compromise was reached. In 1 case neither the employers nor employees presented themselves, and the strike failed. In 4 other cases a committee of conciliation was formed, but, following a disagreement among the members of the committee, strikes followed; 2 of these disputes were settled by compromise after other meetings of the committee, and 2 by agreement.

The number of disputes in which application of the law was requested in 1908 is equal to 16.96 per cent of the number of strikes that actually occurred during the year. During the preceding 15-year period such recourse was had in 2,450 disputes, or 23.87 per cent of the total strikes for the period. Of the 182 cases in which recourse was had during 1908, requests for the application of the law were made by employees in 75 disputes, by employers in 4 disputes, and by both employees and employers in 8 disputes, 87 cases in all; in the other 95 disputes in which recourse was had to the law, the initiative was taken by the justice of the peace.

As to results, it was found that 12 of the disputes had terminated by direct agreement between employers and employees before committees of conciliation were formed. The offer of conciliation was rejected in 69 of the 170 remaining disputes; the rejection coming from employers in 53 cases, from employees in 5 cases, and from both employees and employers in 11 cases. In 15 of the 69 cases in which conciliation was rejected the disputes were terminated by agreement between employees and employers in 7 cases, and in 8 cases the employees withdrew their demands. In the other 54 cases strikes were declared or continued.

Committees of conciliation were constituted for the settlement of the remaining 101 disputes; 49 of these disputes were settled directly

¹ For the provisions of this law see Bulletin of the Department of Labor, No. 25, pp. 854-856.

by such committees, 4 indirectly by committees, and in 48 cases strikes were declared or continued, after failure of conciliation and arbitration.

The following is a summary statement in regard to disputes in which recourse was had to the law concerning conciliation and arbitration during 1908 and for the preceding 15 years taken collectively:

SUMMARY OF CASES IN WHICH RECOURSE WAS HAD TO THE LAW CONCERNING CONCILIATION AND ARBITRATION, 1893 TO 1907, AND 1908.

Items.	1893 to 1907.	1908.
Total number of strikes.....	10,307	1,073
Disputes in which recourse was had to the law of 1892.....	2,450	182
Disputes settled:		
Before the creation of committees of conciliation.....	118	12
After creation but before assembling of committees of conciliation.....	4	
After refusal of request for conciliation.....	104	15
Directly by committees of conciliation.....	743	46
By arbitration.....	87	3
Directly by the parties, after having had recourse to conciliation.....	67	4
Total cases settled through the application of the law.....	1,123	80
Strikes resulting or continuing:		
After refusal of request for conciliation.....	778	54
After failure of recourse to conciliation and arbitration.....	549	48
Total cases of failure after application of the law.....	1,327	102

The above summary shows that of 182 disputes considered in 1908, 80 were settled directly or indirectly through the application of the law of 1892, and in 102 cases the recourse to the law proved fruitless. Of the 80 disputes settled, 13 were favorable to the demands of the employees, 49 succeeded partly, and 18 were favorable to employers. In the 102 disputes which continued after the failure of attempts at conciliation and arbitration the employees succeeded in 5, partly succeeded in 46, and failed in 51 cases.

LOCKOUTS IN 1908.—During the year there were 31 lockouts reported, involving 306 establishments. These establishments (not including one dispute in which 18,000 persons were locked out) employed 11,181 persons, of this number 6,817 were locked out, making the total number of persons locked out 24,817. As a result of these lockouts 586,377 working-days were lost by the employees locked out. Considered from the employers' point of view, 7 lockouts were successful, 12 partially successful, and 12 failed.

GERMANY.

Streiks und Aussperrungen im Jahre 1908. Bearbeitet im Kaiserlichen Statistischen Amt. 64 pp. (Statistik des Deutschen Reichs, Band 230.)

This is the tenth annual report on strikes and lockouts issued by the Imperial Statistical Office of Germany. The report contains analyses and summaries of the data relating to strikes and lockouts

in 1908, a series of diagrams presenting the principal features of the disputes, tables showing the data by industries and by localities, and a summary statement for the years 1899 to 1908.

STRIKES IN 1908.—The number of strikes which ended in 1908 was 1,347, and the number of establishments affected was 4,774. Of the establishments affected, 1,214 suspended operations entirely. The number of employees in the establishments affected was 199,371, and of these 68,392 participated in the strikes.¹ The number of non-strikers who were thrown out of employment was 7,405.

The following table shows the number of strikes, establishments affected, strikers, and other employees thrown out of work, by results of strikes, in 1908:

STRIKES, ESTABLISHMENTS AFFECTED, STRIKERS, AND OTHER EMPLOYEES THROWN OUT OF WORK, BY RESULTS, 1908.

[The column headed "Strikers" shows the maximum number of strikers at any time during the strike.]

Results.	Strikes.	Establishments affected.	Total employees in establishments affected.	Strikers.	Other employees thrown out of work.
Succeeded.....	206	540	23,377	7,365	480
Partly succeeded.....	437	2,894	65,687	28,429	3,549
Failed.....	704	1,340	110,307	32,598	3,376
Total.....	1,347	4,774	199,371	68,392	7,405

In 1908 the average number of establishments affected by each strike was 3.5, while the average number of strikers to a strike was 50.8; the persons on strike formed 34.3 per cent of the employees of the establishments affected. The proportion of strikes that succeeded was 15.3 per cent, those that failed 52.3 per cent, and those that succeeded partly were 32.4 per cent of the total. The number of strikers engaged in strikes which succeeded formed 10.8 per cent, those in strikes that failed formed 47.6 per cent, and those in strikes that succeeded partly formed 41.6 per cent, of the total number of strikers.

The following table shows, by principal groups of industries, the number and results of strikes, the number of establishments and strikers involved, and the number of other employees thrown out of work, on account of strikes, occurring in the year 1908:

¹ The number of strikers included in the strike statistics of Germany is the greatest number of persons on strike at any time during the progress of the strike.

NUMBER AND RESULTS OF STRIKES, ESTABLISHMENTS AFFECTED, STRIKERS, AND OTHER EMPLOYEES THROWN OUT OF WORK, BY INDUSTRIES, 1908.

[The column headed "Strikers" shows the maximum number of strikers at any time during the strike.]

Industries.	Total strikes.	Strikes which—			Estab-lishments affect-ed.	Strikers.	Other em-ployees thrown out of work.
		Suc-ceeded.	Suc-ceeded partly.	Failed.			
Gardening, florist, and nursery trades . . .	8	1	1	6	40	199	-----
Fisheries	2	1	-----	1	2	70	-----
Mining, metallurgical, salt, etc.	43	7	10	26	48	8,555	46
Quarrying, products of stone, clay, glass, etc.	138	8	46	84	290	6,987	741
Metal working	80	6	24	50	179	3,897	1,885
Machinery, instruments, apparatus, etc.	88	8	18	62	118	6,006	200
Chemical products	18	1	2	13	20	802	9
Oil, fat, soap, gas, etc.	10	1	4	7	11	398	36
Textiles	36	7	6	23	49	3,659	2,351
Paper	12	1	3	8	18	447	16
Leather	38	6	15	17	250	1,605	9
Woodworking, carved materials, etc.	156	21	44	91	259	4,346	157
Food and drinks (including tobacco)	101	14	38	49	136	2,849	106
Wearing apparel, cleaning, etc.	104	18	54	32	1,406	5,619	194
Building trades	429	93	145	191	1,614	19,593	1,881
Printing	11	1	4	6	13	264	85
Art trades	3	1	2	-----	-----	82	-----
Commerce	34	10	6	18	70	1,082	58
Transportation	31	1	13	17	226	1,730	35
Hotels, restaurants, etc.	4	-----	2	2	13	188	-----
Other	1	-----	-----	1	1	4	-----
Total	1,347	206	437	704	4,774	68,392	7,405

The building trades had by far the greatest number of strikes, the 429 disputes in this industry forming 31.8 per cent of all the strikes reported; the number of strikers also was in excess of those in any other industry, the 19,593 strikers being 28.6 per cent of all the persons on strike. The group woodworking, carved materials, etc., came next in order as regards the number of strikes, this group having had 11.6 per cent of all the strikes. The mining, metallurgical, etc., group ranked second as far as the number of strikers was concerned, with 12.5 per cent of all the persons on strike.

The two tables following present the data according to the duration of the strikes and according to the number of strikers involved:

NUMBER AND RESULTS OF STRIKES, ESTABLISHMENTS AFFECTED, STRIKERS, AND OTHER EMPLOYEES THROWN OUT OF WORK, BY DURATION, 1908.

[The column headed "Strikers" shows the maximum number of strikers at any time during the strike.]

Days of duration.	Total strikes.	Strikes which—			Estab-lishments affect-ed.	Strikers.	Other em-ployees thrown out of work.
		Suc-ceeded.	Suc-ceeded partly.	Failed.			
Less than 1	71	22	9	40	90	1,858	163
1 to 5	498	102	143	253	848	22,852	1,905
6 to 10	169	27	64	78	658	7,201	2,562
11 to 20	168	25	60	83	679	10,933	1,595
21 to 30	98	7	35	56	468	4,178	420
31 to 50	134	10	52	72	1,251	9,470	392
51 to 100	143	9	49	85	514	7,061	222
101 and over	66	4	25	37	266	4,839	146
Total	1,347	206	437	704	4,774	68,392	7,405

NUMBER AND RESULTS OF STRIKES, ESTABLISHMENTS AFFECTED, STRIKERS AND OTHER EMPLOYEES THROWN OUT OF WORK, BY NUMBER OF STRIKERS INVOLVED, 1908.

[The column headed "Strikers" shows the maximum number of strikers at any time during the strike.]

Strikers involved in each strike.	Total strikes.	Strikes which—			Estab-lish-ments affected.	Strikers.	Other em-ployees thrown out of work.
		Suc-ceeded.	Suc-ceeded partly.	Failed.			
2 to 5.....	104	20	15	69	115	420	19
6 to 10.....	181	28	41	112	235	1,449	164
11 to 20.....	306	54	90	162	521	4,646	319
21 to 30.....	178	22	61	95	399	4,521	241
31 to 100.....	237	43	78	116	726	9,500	580
51 to 100.....	194	23	83	88	836	14,028	1,983
101 to 200.....	101	15	49	37	713	13,955	2,155
201 to 500.....	36	1	15	20	506	10,073	1,944
501 and over.....	10	.....	5	5	723	9,800	.....
Total.....	1,347	206	437	704	4,774	68,392	7,405

The following table shows the results of the strikes in 1908, by causes or objects:

STRIKES, BY CAUSES AND RESULTS.

[Strikes due to two or more causes have been tabulated under each cause; the totals for the groups, therefore, are not the sums of the items for the individual causes. For example, a strike "for increase of wages and extra rate for overtime" is tabulated separately under each of these causes, while it is tabulated only once under total strikes relating to wages. For a similar reason the sums of the figures in this table exceed the totals in the preceding tables.]

Causes or objects.	Total strikes.	Strikes which—		
		Suc-ceeded.	Suc-ceeded partly.	Failed.
Strikes relating to wages:				
Against reduction of wages.....	195	48	50	97
For increase of wages.....	745	88	326	331
For extra rate for overtime.....	89	4	50	35
For extra pay for secondary work.....	44	6	26	12
Other causes affecting wages.....	71	11	23	37
Total (relating to wages).....	990	147	383	460
Strikes relating to hours of labor:				
Against increase of hours.....	25	5	10	10
For reduction of hours.....	183	10	100	73
For abolition or limitation of overtime work.....	4	.....	1	3
For reduction of hours on Saturday.....	18	1	10	7
Against introduction of overtime, Sunday work, etc.....	2	.....	1	1
For regular hours.....	6	.....	5	1
Other causes affecting hours of labor.....	22	1	13	8
Total (relating to hours of labor).....	235	17	124	94
Strikes relating to causes other than wages and hours of labor:				
Abolition, etc., of piecework.....	32	5	10	17
For introduction of piecework.....	10	.....	3	7
For reinstatement of discharged employees.....	216	23	52	141
For dismissal, etc., of employees.....	34	6	9	19
For dismissal, etc., of strike breakers.....	17	1	4	12
For dismissal of foremen.....	24	2	6	16
Against being compelled to work on May 1.....	9	.....	4	5
For recognition of workmen's committee, etc.....	19	.....	11	8
For recognition of journeymen's employment office.....	4	.....	3	1
For recognition of right to join union.....	1	.....	.....	1
Maintenance of wage agreement.....	31	10	13	8
For introduction of wage agreement.....	67	12	38	17
For change in wage agreement.....	71	14	35	22
For determination of notice on leaving or discharge.....	3	.....	1	2
Other causes not specified.....	133	14	42	77
Total (relating to causes other than wages or hours of labor).....	590	85	178	327

The results of strikes for each year from 1899 to 1908 are shown in the following table, together with number of strikers and establishments affected:

NUMBER AND RESULTS OF STRIKES, ESTABLISHMENTS AFFECTED, AND STRIKERS, BY YEARS, 1899 TO 1908.

[The column headed "Strikers" shows the maximum number of strikers at any time during strike.]

Year.	Total strikes.	Strikes which—						Estab-lish-ments affected.	Total em-ployees in estab-lish-ments affected.	Strikers.
		Succeeded.		Succeeded partly.		Failed.				
		Num-ber.	Per cent o total strikes.	Num-ber.	Per cent of total strikes.	Num-ber.	Per cent of total strikes.			
1899.....	1,288	331	25.7	429	33.3	528	41.0	7,121	256,858	99,338
1900.....	1,433	275	19.2	505	35.2	653	45.6	7,740	298,819	122,803
1901.....	1,056	200	18.9	285	27.0	571	54.1	4,561	141,220	55,262
1902.....	1,060	228	21.5	235	22.2	597	56.3	3,437	131,086	53,912
1903.....	1,374	300	21.8	444	32.3	630	45.9	7,000	198,636	85,603
1904.....	1,870	449	24.0	688	36.8	733	39.2	10,321	273,364	113,480
1905.....	2,403	528	22.0	971	40.4	904	37.6	14,481	776,984	408,145
1906.....	3,328	613	18.4	1,498	45.0	1,217	36.6	16,246	686,539	272,218
1907.....	2,266	373	16.5	930	41.0	963	42.5	13,092	445,165	192,430
1908.....	1,347	206	15.3	437	32.4	704	52.3	4,774	199,371	68,392

LOCKOUTS IN 1908.—In the year 1908 there were 177 lockouts reported; the number of establishments affected by these disputes was 1,758, the number of persons employed in these establishments was 81,286, of whom 43,718 were locked out, while 266 persons were thrown out of work because of the disputes. The average number of persons locked out in each dispute was 247, and the average number of establishments affected in each dispute was 9.9. Of the 177 lockouts, 100, or 56.5 per cent, were successful from the standpoint of the employers; 69, or 39 per cent, were partly successful; and 8, or 4.5 per cent, were unsuccessful.

The following table shows, by principal groups of industries, the number and results of lockouts, the number of establishments and persons involved in lockouts, and the number of other employees thrown out of work on account of lockouts during the year 1908.

NUMBER AND RESULTS OF LOCKOUTS, ESTABLISHMENTS AFFECTED, EMPLOYEES LOCKED OUT, AND OTHER EMPLOYEES THROWN OUT OF WORK, BY INDUSTRIES, 1908.

The column headed "Employees locked out" shows the maximum number of employees locked out at any time during lockout.]

Industries.	Total lock-outs.	Lockouts which—			Estab-lish-ments affected.	Em-ployees locked out.	Other em-ployees thrown out of work.
		Suc-ceeded.	Suc-ceeded partly.	Failed.			
Commercial gardening and nurseries.....	1	1			1	30	
Quarrying, products of stone, clay, glass, etc..	14	9	5		33	1,108	25
Metal working.....	7	4	3		13	1,004	
Machinery, instruments, apparatus, etc.....	22	17	4	1	50	18,239	
Chemicals.....	1	1			1	11	
Oil, fat, soap, gas, etc.....	1	1			1	38	
Textiles.....	21	19	1	1	140	11,054	
Paper.....	3	3			18	519	
Leather.....	2	2			14	33	
Woodworking, carved materials, etc.....	17	9	7	1	114	2,080	9
Foods and drinks (including tobacco).....	5	4	1		14	200	7
Wearing apparel, cleaning, etc.....	4	3		1	7	257	16
Building trades.....	76	25	48	3	1,288	8,833	209
Commerce.....	1	1			1	22	
Transportation.....	2	1		1	63	290	
Total.....	177	100	69	8	1,758	43,718	266

The largest number of lockouts occurred in the building trades. In this group there were 76 disputes, or 42.9 per cent of the total number, and 8,833 persons, or 20.2 per cent of the total, were locked out; the group machinery, instruments, apparatus, etc., had 22 disputes, or 12.4 per cent of the total, and 18,239 persons, or 41.7 per cent of the total; the group textiles had 21 disputes, or 11.9 per cent of the total, and 11,054 persons, or 25.3 per cent of the total. These three groups of industries included 67.2 per cent of all lockouts and 87.2 per cent of all persons locked out.

The results of lockouts for each year from 1899 to 1908, together with the number of establishments affected and employees locked out, are shown in the table following:

NUMBER AND RESULTS OF LOCKOUTS, ESTABLISHMENTS AFFECTED, AND EMPLOYEES LOCKED OUT, BY YEARS, 1899 TO 1908.

[The column headed "Employees locked out" shows the maximum number of employees locked out at any time during lockout.]

Years.	Total lock-outs.	Lockouts which—						Estab-lish-ments affected.	Total employ-ees in estab-lish-ments affected.	Em-ployees locked out.
		Succeeded.		Succeeded partly.		Failed.				
		Num-ber.	Per cent of total lockouts.	Num-ber.	Per cent of total lockouts.	Num-ber.	Per cent of total lockouts.			
1899.....	23	6	26.1	9	39.1	8	34.8	427	8,290	5,298
1900.....	35	13	37.1	17	48.6	5	14.3	607	22,462	9,085
1901.....	35	16	45.7	8	22.9	11	31.4	238	7,980	5,414
1902.....	46	30	65.2	7	15.2	9	19.6	948	18,705	10,305
1903.....	70	36	51.4	15	21.4	19	27.2	1,714	52,541	35,273
1904.....	120	44	36.7	33	27.5	43	35.8	1,115	36,312	23,760
1905.....	254	65	25.6	147	57.9	42	16.5	3,850	188,526	118,665
1906.....	298	88	29.5	174	58.4	36	12.1	2,780	152,449	77,109
1907.....	246	112	45.5	119	48.4	15	6.1	5,287	120,563	81,167
1908.....	177	100	56.5	69	39.0	8	4.5	1,758	43,718	266

GREAT BRITAIN.

Reports on Strikes and Lockouts and on Conciliation and Arbitration Boards in the United Kingdom in 1908 and in 1909. 1908. 175 pp. 1909. 136 pp. (Published by the Labor Department of the British Board of Trade.)

These two reports are the twenty-first and twenty-second of a series of annual reports, begun in 1888, on strikes and lockouts. They present statistics of strikes and lockouts beginning in the years 1908 and 1909 and of trade disputes settled by conciliation or arbitration boards. Summary tables are also given in the report, making general comparisons of results in each of the years 1908 and 1909, with the results for each of the nine preceding years.

Figures are given showing, by industries, causes, and results, the number of strikes and lockouts, persons directly and indirectly involved, and days lost. A list of trade disputes (involving cessation of work) settled in the years 1908 and 1909 by conciliation or arbitration is given, and tables are presented summarizing, by industries, the work of the permanent and district conciliation and arbitration boards.

Strikes and lockouts in which the number of persons involved was less than 10 or which lasted less than 1 day, unless the aggregate days lost exceeded 100 days, are not included.

Appendixes show the method used in classifying causes of trade disputes; trade-dispute statistics for each year from 1893 to the year of the report; great labor disputes, 1888 to 1907; and specimen forms of inquiry used.

STRIKES AND LOCKOUTS IN 1908 AND 1909.—As in previous years, so in each of the years 1908 and 1909 disputes relative to wages were the most numerous, forming 62.4 per cent of all disputes in the year 1908 and 58.7 per cent of all disputes in the year 1909, and involving each year, respectively, 78.5 per cent and 24.7 per cent of all striking and locked-out employees.

In 1908, of the 249 disputes of this class, 13.6 per cent resulted in favor of employees and 42.2 per cent in favor of employers; 43 per cent were compromised, and 1.2 per cent had no definite results. Of the total employees engaged in wage disputes, 2 per cent were in disputes settled in favor of the employees, 19.9 per cent in those settled in favor of the employers, 77.4 per cent in those that were compromised, and 0.7 per cent in those where the results were indefinite or unsettled. Of the 14 disputes relative to hours of labor, 35.7 per cent were settled in favor of the employees, 42.9 per cent in favor of the employers, and 21.4 per cent were compromised. Of the 83 disputes relative to trade-unionism and employment of particular classes or persons, 30.1 per cent were settled in favor of employees

and 43.4 per cent in favor of employers; 24.1 per cent were compromised, and in 2.4 per cent the results were indefinite or unsettled. Fifty-two per cent of the employees directly involved in these 83 disputes were in disputes settled in favor of employees, 17.5 per cent in those settled in favor of the employers, 29 per cent in those that were compromised, and 1.5 per cent in those where the results were indefinite or unsettled. Considering all disputes for the year, 19.8 per cent were settled in favor of the employees and 42.9 per cent in favor of the employers; 36.1 per cent were compromised, and 1.2 per cent were indefinite or unsettled.

There were 399 strikes and lockouts which began in 1908, affecting 295,507 persons and entailing an aggregate loss of 10,632,638 working-days. The working-days lost in 1908 in disputes begun in preceding years numbered 201,551. The number of disputes is less, while the number of persons involved and the number of working-days lost are greater than the averages for the 5-year period, 1903 to 1907.

In 1909, of the 256 disputes relating to wages, 17.2 per cent resulted in favor of employees and 39.4 per cent in favor of employers; 41.8 per cent were compromised and 1.6 per cent were in results indefinite or unsettled. Of the 27 disputes relative to hours of labor, 11.1 per cent were settled in favor of the employees and 37 per cent in favor of the employers; 51.9 per cent were compromised. Of the 94 disputes relative to trade-unionism and employment of particular classes or persons, 23.4 per cent were settled in favor of employees and 55.3 per cent in favor of employers; 21.3 per cent were compromised. Forty-eight per cent of the employees directly involved in these 94 disputes were in disputes settled in favor of employees, 26.9 per cent in those settled in favor of the employers, and 25.1 per cent in those that were compromised. Considering all disputes for the year, 18.1 per cent were settled in favor of the employees and 45.6 per cent in favor of the employers; 35.1 per cent were compromised and 1.2 per cent were indefinite or unsettled.

There were 436 strikes and lockouts which began in 1909, affecting 300,819 persons and entailing an aggregate loss of 2,560,425 working-days. The working-days lost in 1909 in disputes begun in preceding years numbered 213,561. The number of disputes and the number of working-days lost are both less than the averages (440 and 3,995,913, respectively) for the 5-year period 1904 to 1908, while the number of persons involved is nearly double the average (168,298) for the same period.

The following tables show the number of strikes and lockouts, the number of strikers and persons locked out and of other persons thrown out of work by reason of strikes and lockouts in each of the years 1908 and 1909, and the number of working-days lost by all employees thrown out of work, classified according to principal causes and by results:

STRIKES AND LOCKOUTS, BY CAUSES AND RESULTS, AND AGGREGATE WORKING-DAYS LOST.

["Aggregate working-days lost by all employees thrown out of work" include aggregate duration in specified years of disputes which began in preceding years, and excludes duration in the following year of disputes which began in the specified year.]

1908.

Principal causes or objects.	Strikes and lockouts, the results of which were—				Total strikes and lockouts.	Aggregate working-days lost by all employees thrown out of work.
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.		
Wages.....	34	105	107	3	249	10,197,867
Hours of labor.....	5	6	3	.....	14	56,189
Employment of particular classes or persons.....	9	27	18	.....	54	213,318
Working arrangements, rules, and discipline.....	14	16	13	.....	43	237,806
Trade-unionism.....	16	9	2	2	29	97,559
Sympathetic disputes.....	.....	6	1	.....	7	28,370
Other causes.....	1	2	.....	.....	3	3,080
Total.....	79	171	144	5	399	10,834,189

1909.

Wages.....	44	101	107	4	256	1,396,861
Hours of labor.....	3	10	14	.....	27	786,971
Employment of particular classes or persons.....	13	39	11	.....	63	184,965
Working arrangements, rules, and discipline.....	10	22	11	1	44	194,160
Trade-unionism.....	9	13	9	.....	31	161,731
Sympathetic disputes.....	.....	7	1	.....	8	22,905
Other causes.....	.....	7	.....	.....	7	26,993
Total.....	79	199	153	5	436	2,773,986

STRIKERS AND EMPLOYEES LOCKED OUT, BY CAUSES AND RESULTS, AND OTHER EMPLOYEES THROWN OUT OF WORK.

1908.

Principal causes or objects.	Strikers and employees locked out in disputes, the results of which were—				Total strikers and employees locked out.	Other employees thrown out of work.
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.		
Wages.....	3,564	34,951	136,221	1,153	175,889	53,640
Hours of labor.....	236	7,096	1,045	.....	8,377	708
Employment of particular classes or persons.....	2,579	3,584	4,915	.....	11,078	6,300
Working arrangements, rules, and discipline.....	3,254	6,466	2,747	.....	12,467	6,063
Trade-unionism.....	9,542	502	1,830	344	12,218	1,173
Sympathetic disputes.....	.....	2,888	92	.....	2,980	3,554
Other causes.....	10	950	.....	.....	960	100
Total.....	19,185	56,437	146,850	1,497	223,969	71,538

1909.

Wages.....	4,134	17,155	19,812	927	42,028	57,364
Hours of labor.....	663	4,175	82,529	.....	87,367	60,076
Employment of particular classes or persons.....	2,689	5,202	5,601	.....	13,492	3,830
Working arrangements, rules, and discipline.....	1,636	4,223	2,978	55	8,892	6,442
Trade-unionism.....	10,001	1,092	1,032	.....	12,935	1,311
Sympathetic disputes.....	.....	3,183	355	.....	3,538	1,188
Other causes.....	.....	2,006	.....	.....	2,006	1,350
Total.....	19,123	37,846	112,307	982	170,258	130,561

In 1908, of all employees directly affected by labor disputes, 8.6 per cent were engaged in disputes settled in favor of the employees; 25.2 per cent in those settled in favor of the employers; 65.6 per cent in those that were compromised; and 0.6 per cent in those the results of which were indefinite or unsettled. In 1909, the corresponding percentages are 11.2, 22.2, 66, and 0.6.

The following table shows the number of strikes and lockouts, employees thrown out of work, and working-days lost, according to classified number of employees thrown out of work:

STRIKES AND LOCKOUTS, EMPLOYEES THROWN OUT OF WORK, AND WORKING-DAYS LOST, BY CLASSIFIED NUMBER OF EMPLOYEES THROWN OUT OF WORK.

[“Aggregate working-days lost by all employees thrown out of work” refers exclusively to disputes which began in the specified year, and includes working-days lost in the following year due to disputes which extended beyond the specified year.]

1908.

Classified number of employees thrown out of work.	Strikes and lockouts.	Employees thrown out of work.		Aggregate working-days lost by all employees thrown out of work.	
		Number.	Per cent.	Number.	Per cent.
5,000 and over.....	6	182,089	61.6	8,319,954	76.8
2,500 and under 5,000.....	4	13,957	4.7	372,289	3.4
1,000 and under 2,500.....	28	37,976	12.9	605,062	5.6
500 and under 1,000.....	32	22,888	7.7	476,467	4.4
250 and under 500.....	45	15,054	5.1	374,616	3.5
100 and under 250.....	100	16,278	5.5	497,198	4.6
50 and under 100.....	56	3,926	1.3	103,461	.9
25 and under 50.....	71	2,499	.9	62,325	.6
Under 25 ¹	57	940	.3	26,503	.2
Total.....	399	295,507	100.0	10,837,875	100.0

1909.

5,000 and over.....	5	129,000	42.9	622,000	22.0
2,500 and under 5,000.....	10	31,269	10.4	175,069	6.2
1,000 and under 2,500.....	43	67,415	22.4	759,227	27.9
500 and under 1,000.....	59	37,564	12.5	436,519	15.4
250 and under 500.....	52	17,023	5.6	316,386	11.2
100 and under 250.....	71	11,364	3.8	319,290	11.3
50 and under 100.....	50	3,364	1.1	96,360	3.4
25 and under 50.....	79	2,724	.9	48,986	1.7
Under 25 ¹	67	1,096	.4	24,355	.9
Total.....	436	300,819	100.0	2,828,192	100.0

¹ Disputes involving fewer than 10 workpeople and those which lasted less than 1 day have been omitted, except when the aggregate duration exceeded 100 working-days.

In 1908 there were 6 and in 1909 there were 5 disputes in which the number of employees involved was 5,000 and over; in 1907 there was only 1 dispute of like magnitude. The disputes affecting 500 employees and over in 1908 were but 17.5 per cent of the total number of disputes, while these disputes affected 86.9 per cent of all employees thrown out of work. The disputes affecting 500 employees and over in 1909 were 26.8 per cent of the total number of disputes, and involved 88.2 per cent of all employees thrown out of work.

In the following table are given the number of strikes and lockouts, employees thrown out of work, and working-days lost, classified according to duration of the disputes:

STRIKES AND LOCKOUTS, EMPLOYEES THROWN OUT OF WORK, AND WORKING-DAYS LOST, BY DURATION.

[“Aggregate working-days lost by all employees thrown out of work” refers exclusively to disputes which began in the specified year, and includes working-days lost in the following year due to disputes which extended beyond the specified year.]

1908.

Duration of strikes or lockouts.	Number of disputes.	Employees thrown out of work.	Aggregate working-days lost by all employees.
Under 1 week.....	128	45,982	98,516
1 week and under 2 weeks.....	71	30,759	184,992
2 weeks and under 4 weeks.....	53	13,665	199,426
4 weeks and under 6 weeks.....	39	12,472	315,130
6 weeks and under 8 weeks.....	27	124,560	4,995,103
8 weeks and under 10 weeks.....	9	4,879	204,420
10 weeks and under 15 weeks.....	25	4,891	325,557
15 weeks and under 20 weeks.....	19	42,205	2,215,056
20 weeks and under 25 weeks.....	7	1,227	124,345
25 weeks and over.....	21	14,867	2,175,330
Total.....	399	296,507	10,837,875

1909.

Under 1 week.....	182	102,619	246,178
1 week and under 2 weeks.....	70	48,936	297,337
2 weeks and under 4 weeks.....	71	120,855	770,451
4 weeks and under 6 weeks.....	29	7,383	180,159
6 weeks and under 8 weeks.....	17	6,711	247,251
8 weeks and under 10 weeks.....	16	3,277	152,990
10 weeks and under 15 weeks.....	16	6,514	337,375
15 weeks and under 20 weeks.....	18	1,549	122,460
20 weeks and under 25 weeks.....	2	228	18,695
25 weeks and over.....	15	2,747	455,296
Total.....	436	300,819	2,828,192

In 1908 the number of strikes and lockouts which lasted under 2 weeks formed 49.6 per cent of all disputes, and the number of persons thrown out of work in these two groups formed 26 per cent of all persons thrown out of work by strikes and lockouts. The strikes and lockouts which lasted 6 weeks and under 8 formed only 6.8 per cent of all strikes and lockouts during the year, yet involved 42.2 per cent of all employees thrown out of work and 46.1 per cent of the total working-days lost during the year. There were 21 disputes, or 5.3 per cent of all disputes, which had a duration of 25 weeks and over. While the number of employees involved in disputes in this group formed but 5 per cent of all employees affected by strikes and lockouts, yet the aggregate days lost by strikers and locked-out employees was 20 per cent of the aggregate working-days lost by all employees engaged in disputes of the year.

In 1909 the number of strikes and lockouts which lasted under 2 weeks formed 57.8 per cent of all disputes, and the number of

persons thrown out of work in these 2 groups formed 50.4 per cent of all persons thrown out of work by strikes and lockouts. There were 15 disputes, or 3.4 per cent of all disputes, which had a duration of 25 weeks and over. While the number of employees involved in disputes in this group formed but 0.9 per cent of all employees affected by strikes and lockouts, yet the aggregate days lost by strikers and locked-out employees was 16.1 per cent of the aggregate working-days lost by all employees engaged in the disputes of the year.

The following tables, in which the disputes are classified by results, show the number of disputes and of persons affected and the number of working-days lost in each group of industries:

STRIKES AND LOCKOUTS, BY RESULTS, AND WORKING-DAYS LOST, FOR EACH GROUP OF INDUSTRIES.

["Aggregate working-days lost by all employees thrown out of work" includes aggregate duration in specified years of disputes which began in preceding years, and excludes duration in the following year of disputes which began in the specified year.]

1908.

Industries.	Strikes and lockouts, the results of which were—				Total strikes and lockouts.	Aggregate working-days lost by all employees thrown out of work.
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.		
Building trades.....	2	10	7	.....	19	73,919
Mining and quarrying.....	38	53	50	4	145	1,351,429
Metal, engineering, and shipbuilding.....	7	31	23	1	62	3,835,661
Textile trades.....	14	30	25	.....	69	5,365,096
Clothing trades.....	7	12	13	.....	32	69,341
Transportation.....	3	6	12	.....	21	51,634
Miscellaneous trades.....	8	29	13	.....	50	86,965
Employees of public authorities.....	.....	.....	1	.....	1	144
Total.....	79	171	144	5	399	10,834,189

1909.

Building trades.....	3	7	5	.....	15	19,360
Mining and quarrying.....	29	88	87	3	207	2,229,487
Metal, engineering, and shipbuilding.....	11	30	20	1	62	179,689
Textile trades.....	10	24	21	1	56	177,912
Clothing trades.....	9	13	7	.....	29	19,473
Transportation.....	3	10	6	.....	19	94,697
Miscellaneous trades.....	14	25	7	.....	46	52,918
Employees of public authorities.....	.....	2	.....	.....	2	450
Total.....	79	199	153	5	436	2,773,936

STRIKERS AND EMPLOYEES LOCKED OUT, BY RESULTS, AND OTHER EMPLOYEES THROWN OUT OF WORK, FOR EACH GROUP OF INDUSTRIES.

1908.

Industries.	Strikers and employees locked out in disputes, the results of which were—				Total strikers and employees locked out.	Other employees thrown out of work.
	In favor of employees.	In favor of employers.	Compromised.	Indefinite or unsettled.		
Building trades.....	73	831	1,810	.....	2,714	178
Mining and quarrying.....	14,917	23,272	20,842	1,443	60,474	26,548
Metal, engineering, and shipbuilding.....	600	24,974	3,392	54	29,020	29,318
Textile trades.....	2,318	2,250	115,015	.....	119,583	13,220
Clothing trades.....	748	1,609	876	.....	3,233	1,429
Transportation.....	243	915	3,202	.....	4,360	534
Miscellaneous trades.....	286	2,586	1,665	.....	4,537	311
Employees of public authorities.....	.....	.....	48	.....	48	.....
Total.....	19,185	56,437	146,850	1,497	223,969	71,538

1909.

Building trades.....	46	640	786	.....	1,472	120
Mining and quarrying.....	15,185	29,059	104,443	889	149,576	123,178
Metal, engineering, and shipbuilding.....	1,411	2,646	2,441	20	6,518	3,206
Textile trades.....	869	1,642	2,214	73	4,798	1,997
Clothing trades.....	486	455	944	.....	1,885	693
Transportation.....	671	1,911	1,229	.....	3,811	1,063
Miscellaneous trades.....	455	1,250	250	.....	1,955	304
Employees of public authorities.....	.....	243	.....	.....	243	.....
Total.....	19,123	37,846	112,307	982	170,258	130,561

In both years, 1908 and 1909, the number of disputes, persons directly affected, persons indirectly affected, and aggregate working-days lost in the mining and quarrying, metal, engineering, and shipbuilding, and textile groups of industries exceed similar items in every other industrial group. Of the total in 1908, there were 79 disputes, involving 19,185 workpeople, which resulted in favor of employees; 171 disputes, involving 56,437 workpeople, which resulted in favor of employers; and 144 disputes, involving 146,850 workpeople, which were compromised. The remaining 5 disputes were indefinite or unsettled as to results. Of the total in 1909, there were 79 disputes, involving 19,123 workpeople, which resulted in favor of employees; 199 disputes, involving 37,846 workpeople, which resulted in favor of employers; and 153 disputes, involving 112,307 workpeople, which were compromised. The remaining 5 disputes were indefinite or unsettled as to results.

STRIKES AND LOCKOUTS DURING FIVE YEARS.—During the 5-year period 1905 to 1909 there was a yearly average of 456 disputes, affecting an average of 211,020 employees yearly and entailing an average yearly loss of 4,253,866 working-days.

The following table shows the number of strikes and lockouts, employees thrown out of work, and working-days lost in each year of the period named.

STRIKES AND LOCKOUTS, EMPLOYEES THROWN OUT OF WORK, AND WORKING-DAYS LOST, BY YEARS, 1905 TO 1909.

["Aggregate working-days lost by all employees thrown out of work" includes aggregate duration in each year of disputes which began in previous years and extended beyond the year in which they began, and excludes the duration in 1910 of disputes which began in 1909.]

Years.	Strikes and lockouts.	Strikers and employees locked out.	Other employees thrown out of work.	Total employees thrown out of work.	Aggregate working-days lost by all employees thrown out of work.
1905.....	358	67,653	25,850	93,503	2,470,189
1906.....	496	157,872	59,901	217,773	3,028,816
1907.....	601	100,728	46,770	147,498	2,162,151
1908.....	399	223,969	71,538	295,507	10,834,189
1909.....	436	170,268	130,561	300,819	2,773,986

The number of strikes and lockouts and employees thrown out of work in each year from 1905 to 1909 are shown in the following table, by industries:

STRIKES AND LOCKOUTS AND EMPLOYEES THROWN OUT OF WORK, BY INDUSTRIES AND YEARS, 1905 TO 1909.

Industries.	Strikes and lockouts.					Employees thrown out of work.				
	1905.	1906.	1907.	1908.	1909.	1905.	1906.	1907.	1908.	1909.
Building trades.....	31	19	22	19	15	6,637	1,441	1,280	2,892	1,692
Mining and quarrying.....	106	96	112	145	207	44,791	83,833	52,567	87,022	272,754
Metal, engineering, and shipbuilding.....	70	125	134	62	62	12,753	42,040	19,576	58,338	9,724
Textile trades.....	67	124	153	69	56	15,736	75,114	47,429	132,803	6,795
Clothing trades.....	29	42	64	32	29	3,540	8,912	11,643	4,662	2,578
Transportation.....	11	19	29	21	19	2,112	1,888	8,708	4,894	4,874
Miscellaneous trades.....	39	58	82	50	46	7,159	4,272	6,028	4,848	2,259
Employees of public authorities.....	5	3	5	1	2	725	264	317	48	243
Total.....	358	496	601	399	436	93,503	217,773	147,498	295,507	300,819

The following table shows, by groups of industries, the aggregate working-days lost by all employees thrown out of work for each year of the period 1905 to 1909:

AGGREGATE DURATION IN WORKING-DAYS OF STRIKES AND LOCKOUTS, BY INDUSTRIES AND YEARS, 1905 TO 1909.

["Aggregate working-days lost by all employees thrown out of work" includes aggregate duration in each year of disputes which began in previous years and extended beyond the year in which they began, and excludes the duration in 1910 of disputes which began in 1909.]

Industries.	Aggregate working-days lost by all employees thrown out of work.				
	1905.	1906.	1907.	1908.	1909.
Building trades.....	412,633	56,201	23,128	73,919	19,360
Mining and quarrying.....	1,255,514	922,102	569,061	1,351,429	2,229,487
Metal, engineering, and shipbuilding.....	467,571	1,118,282	467,633	3,835,661	179,689
Textile trades.....	126,483	762,999	642,460	5,365,096	177,912
Clothing trades.....	71,435	92,139	277,949	69,341	19,473
Transportation.....	67,089	10,021	85,471	51,634	94,697
Miscellaneous trades.....	64,290	62,184	91,128	86,965	52,918
Employees of public authorities.....	5,174	4,888	5,231	144	450
Total.....	2,470,189	3,028,816	2,162,151	10,834,189	2,773,986

There were more strikes and lockouts during 1907 than during any other year of the 5-year period, but the number of employees thrown out of work in 1907 is less than the number thrown out of employment in any other year, except 1905. During the 5-year period the greatest number of disputes arose in the mining and quarrying industry, the yearly average being 133, and in 1909 the number of disputes constituted 47.5 per cent of all disputes in the year. The textile industry ranks second, and the metal, engineering, and ship-building industry third in number of disputes for the period, the yearly averages being 94 and 91, respectively. In 1908 the textile trades show the greatest number of employees thrown out of work and of aggregate working-days lost. In 1909 similar items are greatest in the mining and quarrying industry.

The number of strikes and lockouts and the number of strikers and employees locked out for each year of the period 1905 to 1909 are shown in the next table, by principal causes.

STRIKES AND LOCKOUTS AND STRIKERS AND EMPLOYEES LOCKED OUT, BY PRINCIPAL CAUSES AND YEARS, 1905 TO 1909.

Principal causes or objects.	Strikes and lockouts.					Strikers and employees locked out.				
	1905.	1906.	1907.	1908.	1909.	1905.	1906.	1907.	1908.	1909.
Wages	235	332	384	249	256	38,737	87,933	56,058	175,889	42,028
Hours of labor.....	14	13	16	14	27	3,145	7,086	2,080	8,377	87,367
Employment of particular classes or persons.....	47	53	88	54	63	6,406	4,734	13,699	11,078	13,492
Working arrangements, rules, and discipline.....	37	52	57	43	44	5,546	6,536	11,802	12,467	8,892
Trade-unionism.....	21	32	50	29	31	9,377	50,750	16,439	12,218	12,935
Sympathetic disputes.....	2	2	3	7	8	243	33	368	2,980	3,538
Other causes.....	2	2	3	3	7	4,197	800	282	960	2,006
Total.....	358	486	601	399	436	67,653	157,872	100,728	223,969	170,258

The number of disputes relative to wages in 1909 made no significant change from the number in 1908, but shows a material decrease from the number recorded in 1906 and in 1907. The number of strikers and employees locked out in 1908 by far exceeded the number in any other year of the period, but in 1909 decreased by nearly one-fourth the number recorded in 1908. The number of disputes in 1908 relative to hours of labor was practically the same as in the three preceding years, but nearly doubled in 1909, while the number of strikers and employees locked out in 1909 was more than ten times the number in 1908. Disputes in 1908 and 1909 on account of the employment of particular classes of persons numbered 54 and 63, respectively, as compared with the high number 88 in 1907, while the employees involved numbered 11,078 and 13,492, respectively, as compared with 13,699 in 1907, the greatest number in the 5-year period. Disputes arising from the remaining named causes show for

1908 and 1909 a record not strikingly different from that of the preceding years.

The following table shows, by results, the number of strikes and lockouts and employees directly affected during each year, 1905 to 1909:

STRIKES AND LOCKOUTS AND STRIKERS AND EMPLOYEES LOCKED OUT, BY RESULTS AND YEARS, 1905 TO 1909.

[The figures for years previous to 1909 have been revised to include the results of disputes terminated after the reports of those years were published.]

Results.	Strikes and lockouts.					Strikers and employees locked out.				
	1905.	1906.	1907.	1908.	1909.	1905.	1906.	1907.	1908.	1909.
In favor of employees.....	70	153	193	30	79	16,702	67,159	32,883	19,475	19,123
In favor of employers.....	168	180	247	174	199	23,029	38,667	27,483	57,606	37,846
Compromised.....	119	151	161	145	153	27,894	52,018	40,362	146,888	112,307
Indefinite or unsettled.....	1	2	.....	.....	5	28	28	.....	.....	962
Total.....	358	496	601	399	436	67,653	157,872	100,728	223,969	170,258

This table shows that for each year during the 5-year period the number of disputes resulting in favor of the employees was less than the number in which the employers were successful. The total number of disputes during the 5-year period was 2,280, of which 575, or 25.2 per cent, were settled in favor of the employees; 968, or 42.5 per cent in favor of the employers; 729, or 32 per cent, were compromised, and 8, or 0.3 per cent, were indefinite or unsettled. In 1909, of the 436 disputes, 18.1 per cent were favorable to the employees and 45.6 per cent to the employers, 35.1 per cent were compromised, and 1.2 per cent were indefinite or unsettled at the end of the year.

During the 5-year period there were in the aggregate 720,480 employees directly affected by strikes and lockouts. Of this number, 155,342 employees, or 21.6 per cent of all employees directly affected, were involved in disputes in which employees were successful; 184,631, or 25.6 per cent in disputes in which the employers were successful; 379,469, or 52.7 per cent, in disputes which were compromised, and 1,038, or 0.1 per cent in those of which the settlement was indefinite or which were unsettled.

In the following table the number of strikes and lockouts and the number of strikers and employees locked out are shown by methods of settlement for each year of the period 1905 to 1909:

STRIKES AND LOCKOUTS AND STRIKERS AND EMPLOYEES LOCKED OUT, BY
 METHODS OF SETTLEMENT AND YEARS, 1905 TO 1909.

[The figures for the years previous to 1909 have been revised to include the results of disputes terminated after the reports for those years were published.]

Methods of settlement.	Strikes and lockouts.					Strikers and employees locked out.				
	1905.	1906.	1907.	1908.	1909.	1905.	1906.	1907.	1908.	1909.
Arbitration.....	9	17	14	24	26	2,224	4,611	2,115	7,675	13,925
Conciliation.....	22	23	31	33	36	8,752	3,674	11,337	150,166	59,945
Direct arrangement or negotiation between parties or their repre- sentatives.....	220	340	395	251	271	48,155	129,614	74,160	55,967	75,794
Submission of employees.....	47	39	70	40	51	5,550	17,293	8,980	7,338	11,603
Replacement of employees.....	53	60	84	43	40	2,126	2,497	3,325	2,057	1,625
Closing of works.....	3	3	6	7	7	714	128	461	647	1,384
Indefinite or unsettled.....	4	4	1	1	5	132	55	350	119	982
Total.....	358	486	601	399	436	67,653	157,872	100,728	223,969	170,258

In each year most of the disputes were settled by direct arrangement or negotiation, the per cent of disputes settled by this method being 61.5, 70, 65.7, 62.9, and 62.2 of all disputes for the respective years 1905 to 1909. Disputes settled by submission of employees, replacement of employees, and closing of works together formed 28.8, 21, 26.6, 22.6, and 22.5 per cent of all disputes for the respective years. Sixty-two disputes, involving 46.3 per cent of all persons directly affected, were settled by arbitration and conciliation during 1909. The number of disputes so settled, however, is greater than the average for the four preceding years, which is 43.

NETHERLANDS.

Werkstakingen en Uitsluitingen in Nederland gedurende 1907. *Werkstakingen en Uitsluitingen in Nederland gedurende 1908.* Uitgegeven door het Centraal Bureau voor de Statistiek. 1908. lxxviii, 69 pp. 1909. lxxx, 62 pp.

These two volumes are the seventh and eighth annual reports of the Central Bureau of Statistics of the Netherlands on strikes and lockouts. As in previous reports, the information is given in the form of an analysis, with summary tables and a tabular statement showing in detail the important facts concerning each strike and lockout.

STRIKES.—The number of strikes reported in 1907 was 138 and in 1908 it was 108. These strikes involved 478 establishments and 11,646 strikers in 1907. Data are reported in 1908 for only 106 strikes, affecting 502 establishments, with but 5,650 persons striking. The number of strikes, establishments involved, strikers, and the aggregate days lost by strikers and by other employees in each group of industries are shown for each year in the table on next page.

STRIKES, STRIKERS, AND AGGREGATE DAYS LOST BY STRIKERS AND BY OTHER EMPLOYEES, BY INDUSTRIES.

1907.

Industries.	Strikes.	Estab- lish- ments involved.	Strikers.	Aggre- gate days lost by strikers.	Strikes for which aggregate days lost by employees other than strik- ers was reported.	
					Strikes.	Days lost.
Products of stone, clay, glass, etc.....	12	12	207	2,691	12	813
Cutting of diamonds and other precious stones.....	22	22	874	63,300	15	1,495
Printing.....	6	6	64	1,822	6	.....
Building trades.....	24	83	730	8,584	24	631
Woodworking, cork, straw, etc.....	7	9	201	1,797	6	.....
Clothing.....	1	1	24	24	1	.....
Leather, oilcloth, rubber, etc.....	1	1	12	24	1	.....
Mining.....	3	133	2,700	16,350	3	.....
Metal working.....	6	6	206	9,027	6	93
Machinery, instruments, etc.....	2	2	98	3,059	2	.....
Car and ship building.....	4	4	421	3,471	3	.....
Paper.....	1	1	18	1,718	1	.....
Textiles.....	11	11	588	27,474	11	9,376
Foods and drinks (including tobacco).....	19	22	252	10,467	18	863
Agriculture.....	3	102	1,020	26,574	2	62
Commerce.....	4	12	153	4,920	4	.....
Transportation.....	12	51	4,078	148,687	8	201
Total.....	138	478	11,646	330,289	123	13,534

1908.

Products of stone, clay, glass, etc.....	4	5	100	712	4	249
Cutting of diamonds and other precious stones.....	2	2	46	76	2	.....
Printing.....	3	3	52	2,455	3	2
Building trades.....	33	60	1,660	14,148	31	121
Woodworking, cork, straw, etc.....	8	8	125	5,663	8	24
Clothing.....	1	1	15	10	1	.....
Mining.....	5	103	910	5,610	4	300
Metal working.....	8	17	116	3,825½	8	.....
Machinery, instruments, etc.....	1	1	20	10	1	4
Car and ship building.....	2	2	72	68½	2	.....
Textiles.....	5	5	694	12,686	5	2,325
Gas and electricity.....	1	1	12	48	1	.....
Foods and drinks (including tobacco).....	16	16	296	6,955½	16	621
Agriculture.....	8	1,248	2,128	12,380	6	300
Fishing and hunting.....	1	1	28	150	1	14
Commerce.....	5	24	145	3,964	5	.....
Transportation.....	5	5	231	1,748	5	.....
Total.....	108	1,502	15,650	56,882½	103	3,960

¹ Not including 2 strikes for which this item is not reported.² Not including 1 strike for which this item is not reported.³ Not including 3 strikes for which this item is not reported.

It is seen by reference to the foregoing table that in both years the greatest number of strikes occurred in the building trades. Mining furnished the largest number of establishments involved in 1907, and agriculture in 1908. In 1907 transportation furnished the largest number of strikers, while in 1908 the largest number was found in agriculture. The greatest loss in working-days to strikers in 1907 took place in the transportation industry, and to employees other than strikers in textiles; in 1908 textiles showed the greatest loss in respect of both these items, though the reported loss to strikers in agriculture is nearly as great.

The results of strikes, arranged by industries, are shown in the table which follows:

STRIKES, BY INDUSTRIES AND RESULTS.

1907.

Industries.	Num-ber.	Results.							
		Succeeded.		Succeeded partly.		Failed.		Indefinite or not reported.	
		Num-ber.	Per cent.	Num-ber.	Per cent.	Num-ber.	Per cent.	Num-ber.	Per cent.
Products of stone, clay, glass, etc.....	12	1	8.3	5	41.7	6	50.0		
Cutting of diamonds and other pre- cious stones.....	22	9	40.9	9	40.9	1	4.5	3	13.7
Printing.....	6			2	33.3	2	33.3	2	33.4
Building trades.....	24	6	25.0	9	37.5	8	33.3	1	4.2
Woodworking, cork, straw, etc.....	7	1	14.3	4	57.1	2	28.6		
Clothing.....	1			1	100.0				
Leather, oilcloth, rubber, etc.....	1			1	100.0				
Mining.....	3			1	33.3	2	66.7		
Metal working.....	6	1	16.7	1	16.7	4	66.6		
Machinery, instruments, etc.....	2			1	50.0			1	50.0
Car and ship building.....	4			2	50.0	2	50.0		
Paper.....	1							1	100.0
Textiles.....	11			8	72.7	3	27.3		
Foods and drinks (including tobacco).	19	3	15.8	8	42.1	8	42.1		
Agriculture.....	3			1	33.3	2	66.7		
Commerce.....	4	1	25.0			2	50.0	1	25.0
Transportation.....	12	2	16.7	3	25.0	7	58.3		
Total.....	138	24	17.4	56	40.6	49	35.5	9	6.5

1908.

Products of stone, clay, glass, etc.....	4	1	25.0			2	50.0	1	25.0
Cutting of diamonds and other pre- cious stones.....	2			2	100.0				
Printing.....	3	1	33.3	1	33.3			1	33.4
Building trades.....	31	11	35.5	8	25.8	10	32.3	2	6.4
Woodworking, cork, straw, etc.....	8	2	25.0	2	25.0	4	50.0		
Clothing.....	1	1	100.0						
Mining.....	5	1	20.0	3	60.0	1	20.0		
Metal working.....	7			3	42.9	4	57.1		
Machinery, instruments, etc.....	1					1	100.0		
Car and ship building.....	2					2	100.0		
Textiles.....	5			2	40.0	2	40.0	1	20.0
Gas and electricity.....	1					1	100.0		
Foods and drinks (including tobacco).	16	2	12.5	7	43.8	4	25.0	3	18.7
Agriculture.....	8	2	25.0			6	75.0		
Fishing and hunting.....	1					1	100.0		
Commerce.....	5	1	20.0			4	80.0		
Transportation.....	5	2	40.0			3	60.0		
Total.....	105	24	22.8	28	26.7	45	42.9	8	7.6

¹ Not including 2 sympathetic strikes which ended with the original strikes; of these 1 succeeded and 1 failed.

² Not including 1 sympathetic strike which ended with the original strike; this was compromised.

³ Not including 4 sympathetic strikes, of which 1 succeeded, 1 failed, and 2 were compromised.

The following table shows the number of strikes, establishments involved, strikers, aggregate days of duration of strikes, and number of working-days lost by strikers and by other employees, the facts being classified according to causes or objects of strikes:

STRIKES, BY CAUSES OR OBJECTS.

1907.

[Strikes due to two or more causes have been tabulated under each cause; hence the totals for this table do not agree with those for other tables.]

Causes or objects.	Strikes.		Estab-lish-ments.	Strik-ers.	Aggre-gate days of dura-tion.	Work-ing-days lost by strik-ers.	Strikes for which aggregate working-days lost by employees other than strikers were reported.	
	Num-ber.	Per cent.					Strikes.	Work-ing-days lost.
For increase of wages	88	38.8	417	9,839	3,592	285,973	75	4,229
Against reduction of wages.....	8	3.5	16	179	268	1,256	8	96
Other disputes concerning wages.....	24	10.6	58	1,268	796	41,292	23	9,496
Hours of labor	14	6.2	75	3,734	717	154,381	13	97
For recognition of trade-union.....	7	3.1	7	251	668	16,688	7	450
Against employment of nonunion workmen	1	.4	18	144	19	204	1	80
For reinstatement of discharged employees.....	28	12.3	41	1,096	1,045	24,120	27	1,403
Regulations governing work.....	13	5.7	42	3,695	410	156,408	12	463
Other causes.....	44	19.4	103	4,972	1,824	196,699	41	10,115
Total.....	227	100.0	777	25,178	9,339	876,021	207	27,429

1908.

For increase of wages	57	37.0	367	3,752	922	27,590	54	1,198
Against reduction of wages.....	9	5.8	8	202	17	402	8	18
Other disputes concerning wages.....	20	13.0	63	1,145	607	10,916	20	375
Hours of labor	7	4.6	32	368	138	13,254	7	2,219
For recognition of trade-union.....	3	2.0	3	84	212	4,594	3	.....
For reinstatement of discharged employees.....	15	9.7	15	277	553	8,406	15	158
Regulations governing work.....	8	5.2	8	123	270	4,360	8	390
Other causes.....	35	22.7	35	984	1,058	26,314	34	665
Total.....	154	100.0	531	6,935	3,677	95,836	149	5,023

As in previous years, the strikes were mostly due to wage disputes, approximately 53 per cent, involving 63 per cent of the establishments, being attributable to this cause in 1907, while in 1908 such disputes amounted to nearly 56 per cent of the total number, and affected 73.5 per cent of the strikers.

The following table shows the results of strikes:

STRIKES, BY RESULTS.

1907.

Results.	Strikes.		Establishments involved.		Strikers.		Aggregate days lost by strikers.		Strikes for which aggregate days lost by employees other than strikers were reported.	
	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Strikes.	Days lost.
Succeeded.....	24	17.39	65	13.60	635	5.45	4,091	1.24	22	237
Succeeded partly.....	56	40.58	214	44.77	6,706	57.58	235,368	71.26	47	2,029
Failed.....	49	35.51	186	38.91	4,061	34.87	69,630	21.08	45	11,084
Indefinite.....	7	5.07	11	2.30	230	1.98	21,126	6.40	7	284
Not reported.....	2	1.45	2	.42	14	.12	74	.02	2	.....
Total.....	138	100.00	478	100.00	11,646	100.00	330,289	100.00	123	13,534

1908.

Succeeded.....	24	22.86	97	19.80	996	17.83	3,924	7.11	21	310
Succeeded partly.....	28	26.67	96	19.59	1,267	22.68	14,705	26.64	27	618
Failed.....	45	42.86	289	58.98	3,196	57.20	35,430	64.20	45	2,623
Indefinite.....	2	1.90	2	.41	4	.07	124	.22	2	152
Not reported.....	6	5.71	6	1.22	124	2.22	1,009	1.83	5	257
Total.....	105	100.00	490	100.00	5,587	100.00	55,199	100.00	100	3,960

Of the 11,646 persons taking part in strikes in 1907, 5.45 per cent were in strikes which succeeded, 57.58 per cent were in strikes which succeeded partly, and 34.87 per cent were in strikes which failed. Of the remaining strikers 230, or 1.98 per cent of the entire number, were in strikes the results of which were indefinite, and 14, or 0.12 per cent, were in strikes the results of which were not reported.

In 1908 a considerably larger proportion (17.83 per cent) of the strikers were successful, while the number in strikes succeeding partly was much smaller than in the previous year. More than one-half (57.2 per cent) of all strikers failed to gain the object of their strikes.

In the following table, showing the results of strikes, the cause is taken as the basis for the tabulation:

STRIKES, BY CAUSES AND RESULTS.

1907.

[Strikes due to two or more causes have been tabulated under each cause; hence the totals for this table do not agree with those for other tables.]

Causes or objects.	Succeeded.	Succeeded partly.	Failed.	Indefinite or not reported.	Total.
For increase of wages.....	11	44	25	8	8
Against reduction of wages.....	4	3	1	.....	8
Other disputes concerning wages.....	4	13	6	1	24
Hours of labor.....	4	7	.....	3	14
For recognition of trade-union.....	.....	1	3	3	7
Against employment of nonunion workmen.....	1	.....	.....	.....	1
For reinstatement of discharged employees.....	5	7	14	2	28
Regulations governing work.....	.....	7	6	.....	13
Other causes.....	5	20	16	3	44
Total.....	34	102	71	20	227

1908.

For increase of wages.....	13	18	23	3	57
Against reduction of wages.....	7	1	1	.....	9
Other disputes concerning wages.....	2	8	8	2	20
Hours of labor.....	1	2	4	.....	7
For recognition of trade-union.....	.....	1	1	1	3
For reinstatement of discharged employees.....	2	4	6	3	15
Regulations governing work.....	1	2	4	1	8
Other causes.....	4	9	17	5	35
Total.....	30	45	64	15	154

The proportion of successful strikes was greatest in both years in case of strikes undertaken to prevent reduction of wages and least in those to secure the recognition of trade-unions and to affect regulations governing work. Of 120 strikes in 1907 in which wages were the subject, 50 per cent were reported as partly successful, 15.8 per cent as successful, and 26.7 per cent as failing. In 1908 there were 86 strikes on wage subjects, of which 31.4 per cent succeeded partly, 25.6 per cent succeeded, and 37.2 per cent failed. In neither year was a strike for the recognition of a trade-union successful, and of 21 strikes in the two years undertaken for the purpose of affecting regulations governing work, but 1 succeeded, though 7, or 53.8 per cent of those undertaken in 1907, are reported as partly successful, as were 2, or 25 per cent, of those in 1908.

The duration and results of strikes are shown in the table which follows:

STRIKES, BY DURATION AND RESULTS.
1907.

Results.	Days of duration.									Total.
	Under 1.	1 to 2.	3 to 7.	8 to 14.	15 to 28.	29 to 42.	43 to 91.	Over 91.	Not reported.	
Succeeded.....	2	7	6	3	6	.....	.....	.....	.....	24
Succeeded partly....	6	14	6	9	2	6	8	5	.....	56
Failed.....	2	14	11	5	4	1	3	9	.....	49
Indefinite.....	.....	.....	.....	.....	.....	.....	2	5	.....	7
Not reported.....	1	.....	.....	1	.....	.....	.....	.....	.....	2
Total.....	11	35	23	18	12	7	13	19	.....	138

1908.

Succeeded.....	3	11	9	.....	1	.....	.....	.....	.....	24
Succeeded partly....	2	5	8	2	5	3	1	2	.....	28
Failed.....	5	9	11	7	3	1	5	3	1	45
Indefinite.....	.....	.....	.....	.....	1	.....	1	.....	.....	2
Not reported.....	.....	1	2	1	1	.....	.....	.....	1	6
Total.....	10	26	30	10	11	4	7	5	2	105

It is seen from the foregoing table that in 1907, of the 138 strikes reported, 69, or precisely one-half, lasted 7 days or less. Of These 15, or 21.7 per cent, succeeded; 26, or 37.7 per cent, succeeded partly, and 27, or 39.1 per cent, failed. In the case of 1 strike the result was not reported. Of strikes lasting longer than 7 days, 9, or 13 per cent, succeeded; 30, or 43.5 per cent, succeeded partly, and 22, or 31.9 per cent, failed. In 7 strikes the results were indefinite and in 1 strike the result was not reported.

In 1908 a larger proportion lasted not longer than 7 days, the number being 66 and the percentage 62.9; of these, 34.8 per cent succeeded, 22.7 per cent succeeded partly, and 37.9 per cent failed. Of strikes reported as of more than 7 days' duration, 37 in number, but 1 succeeded; 11, or 29.7 per cent, succeeded partly, and 19, or 51.4 per cent, failed.

The following table shows the principal facts concerning strikes in 1907, classified according to methods of settlement:

STRIKES, BY METHODS OF SETTLEMENT.

1907.

[Where two or more methods of settlement have been employed, the data were reported in each case, hence the totals for this table do not agree with those for other tables.]

Methods of settlement.	Strikes.		Strikes which—				Establishments involved.	Strikers.	Aggregate days lost by strikers.
	Number.	Per cent.	Succeeded.	Succeeded partly.	Failed.	Ended with result indefinite or not reported.			
Direct negotiation between employer and employees.....	33	21.57	6	23	3	1	163	2,216	30,365
Negotiation in which one or both parties were represented by their organizations.....	66	43.14	18	30	17	1	138	5,549	216,684
Mediation of third parties.....	11	7.19	1	7	3		210	5,804	181,103
Arbitration.....	1	.65			1		1	17	176½
Employment of other workmen.	20	13.07			20		20	657	21,735
Disintegration of strike.....	1	.65			1		1	17	1,091
Defeat of one of the parties without negotiation.....	14	9.15			14		69	1,929	41,043
Other means.....	7	4.58				7	11	230	21,126
Total.....	153	100.00	25	60	59	9	613	16,419	513,323½

1908.

Direct negotiation between employer and employees.....	31	26.50	11	11	9		93	1,752	16,634
Negotiation in which one or both parties were represented by their organizations.....	31	26.50	9	16	4	2	170	910	19,321
Mediation of third parties.....	5	4.27		4	1		5	155	4,581
Arbitration.....									
Employment of other workmen.	15	12.82			15		15	184	5,413
Disintegration of strike.....									
Defeat of one party without negotiation.....	22	18.80	3		19		206	2,609	14,744
Other means.....	3	6.84			6	2	8	161	1,662
Unknown.....	5	4.27	1			4	5	82	906
Total.....	117	100.00	24	31	54	8	502	5,853	63,558

LOCKOUTS.—There were 16 lockouts reported in 1907, involving 59 establishments and affecting 3,508 persons. The most important lockout, with regard to the number of establishments and persons involved, occurred in the cigar industry. This lockout, which was sympathetic in character, involved 2,800 persons, employed in 37 establishments, and lasted 42 days. Eight other lockouts in the cigar industry affected 15 establishments, employing 111 persons, and caused a loss of 4,010 working-days. A lockout in the metal-working industry involved 304 persons and caused a loss of 608 working-days. Of 15 lockouts for which the facts were reported, 4 terminated favorably to the employers, 3 terminated favorably to the employees, and 5 were compromised. In 2 of the 3 remaining cases the results were indefinite and in 1 the result was unknown.

In 1908 there were reported 27 lockouts, affecting 1,515 workmen in 155 establishments. The time lost by the workmen locked out was 34,979 days, besides 6,287 days lost by others thrown out of employment on account of the lockouts. Of the 27 lockouts, 10, affecting 147 workmen, were among cigarmakers; 5, affecting 714 workmen, were in textile industries; and 1, affecting 365 workmen, was directed against engineers and firemen on steamboats. Questions of wages caused 7 lockouts, and a like number arose from disputes relative to the acceptance by employers of new contracts, while disputes as to trade unions occasioned 4 lockouts. From the employers' standpoint, 6 lockouts succeeded, 14 succeeded partly, and 4 failed. In 2 cases the results were doubtful.

SPAIN.

Estadística de las Huelgas, 1907. Instituto de Reformas Sociales. 1908. 162 pp.

The present volume is the third report on strikes in Spain published by the Institute of Social Reform of that country. The data contained in the report relate to strikes occurring during the year 1907.

The number of employees in establishments involved in strikes, the number of strikes, and the number of strikers are shown in the following table, by sex of persons affected and by industries:

STRIKES AND STRIKERS, BY INDUSTRIES, 1907.

Industries.	Strikes.	Employees in establishments affected.			Strikers.		
		Males.	Females.	Total.	Males.	Females.	Total.
Agriculture.....	2	460	120	580	300	120	420
Fisheries.....	2	42		42	39		39
Mining and quarrying.....	15	4,358	62	4,420	1,749	7	1,756
Salt works.....	1	60		60	40		40
Textiles.....	15	1,145	523	1,668	907	346	1,253
Leather, hides, etc.....	4	759		759	442		442
Woodworking.....	9	689	91	780	461		461
Metal working.....	6	526	32	558	238		238
Ceramics.....	1	7		7	4		4
Chemicals.....	2	162		162	141		141
Foods and drinks.....	12	306	27	333	277	13	290
Clothing.....	8	574	378	952	446	250	696
Furniture.....							
Building.....	21	7,498		7,498	3,932		3,932
Vehicles.....	3	775		775	87		87
Printing, art trades, etc.....	9	457	30	487	367	15	382
Marine transportation.....	4	400	34	434	311		311
Street transportation, etc.....	3	203		203	179		179
Other industries.....	1	(¹)	(¹)	(¹)	2,000		2,000
Total.....	118	18,421	1,297	19,718	11,920	751	12,671

¹ Not reported.

During the year there were 118 strikes reported, in which 12,671 strikers were involved, of whom 11,920 were males and 751 were females. The largest number of strikers in any one industry was found in the building trades, which furnished 31 per cent of all

strikers reported; one other strike, industry not specified, furnished 15.8 per cent, while mining and quarrying furnished 13.9 per cent of the total number of strikers.

The following table shows the strikes and strikers by industries and results:

STRIKES AND STRIKERS, BY INDUSTRIES AND RESULTS, 1907.

Industries.	Total strikes.	Strikes which—			Total strikers.	Strikers in strikes which—		
		Succeeded.	Succeeded partly.	Failed.		Succeeded.	Succeeded partly.	Failed.
Agriculture.....	2	1		1	420	340		80
Fisheries.....	2	1	1		39	12	27	
Mining and quarrying.....	15	2		11	1,756	195	139	1,422
Salt works.....	1			1	40			40
Textiles.....	15	5	1	9	1,253	477	88	738
Leather, hides, etc.....	4	1		3	442	24		418
Woodworking.....	9	7		2	461	341		120
Metal working.....	6	1	2	3	238	35	41	162
Ceramics.....	1			1	4			4
Chemicals.....	2		1	1	141		16	125
Foods and drinks.....	12	5		7	290	99		191
Clothing.....	8	5		3	696	426		270
Furniture.....								
Building.....	21	10	6	5	3,932	3,257	635	40
Vehicles.....	3	1		2	87	12		75
Printing, art trades, etc.....	9	2	1	6	382	27	50	305
Marine transportation.....	4	1	1	2	311	13	150	148
Street transportation, etc.....	3	1	1	1	179	27	90	62
Other industries.....	1			1	2,000			2,000
Total.....	118	43	16	59	12,671	5,285	1,186	6,200

Of the 118 strikes reported, 43, or 36.4 per cent, were successful, 16, or 13.6 per cent, were partially successful, and 59, or 50 per cent, failed. The number of strikers involved in strikes which were successful was 5,285, or 41.7 per cent of all strikers; in the strikes which were partly successful the number was 1,186, or 9.4 per cent of all strikers; and in strikes which failed it was 6,200, or 48.9 per cent of all strikers. In the building trades, which furnished the largest number of strikers, 82.8 per cent of the strikers were in strikes which were successful, 16.2 per cent were in strikes which were partly successful, and 1 per cent were in strikes which failed.

The following table shows the number of strikes, strikers, and the strikes in which employees and employers were organized, classified according to duration of strikes:

STRIKES AND STRIKERS, BY DURATION, 1907.

Days of duration.	Strikes.	Strikers.	Strikes in which—	
			Employees were organized.	Employers were organized.
Under 2.....	19	5,728	14	6
2 to 5.....	31	1,807	20	6
6 to 10.....	15	1,284	12	3
11 to 15.....	16	1,209	8	4
16 to 20.....	9	625	7	1
21 to 30.....	12	961	8	1
31 and over.....	14	1,013	13	7
Not reported.....	2	44	2	
Total.....	118	12,671	84	28

Of the 118 strikes, 65, or 55.1 per cent, involving 69.6 per cent of all strikers, lasted less than 11 days. In the 14 strikes, involving 1,013 strikers, which lasted longer than 30 days, the employees were organized in 13 instances and the employers in 7 instances.

The two following tables show the results of strikes and the days of duration, classified according to method of settlement:

STRIKES AND STRIKERS, BY RESULTS AND METHODS OF SETTLEMENT, 1907.

Methods of settlement.	Total strikes.	Strikes which—			Total strikers.	Strikers in strikes which—		
		Succeeded.	Succeeded partly.	Failed.		Succeeded.	Succeeded partly.	Failed.
Direct negotiations between employers and employees.....	20	14	4	2	1,391	1,142	187	62
Between employers and workmen's unions.....	8	7	1	.....	351	183	168	.....
Intervention of authorities.....	53	18	10	25	7,088	3,911	681	2,496
Without intervention.....	37	4	1	32	3,841	49	150	3,642
Total.....	118	43	16	59	12,671	5,285	1,186	6,200

STRIKES AND STRIKERS, BY DURATION AND METHODS OF SETTLEMENT, 1907.

Methods of settlement.	Strikes of which days of duration were—							
	Under 2.	2 to 5.	6 to 10.	11 to 15.	16 to 20.	21 to 30.	31 and over.	Not reported.
Direct negotiations between employers and employees.....	4	6	2	3	2	3	.....	.....
Between employers and workmen's unions.....	2	2	3	.....	.....	.....	1	.....
Intervention of authorities.....	8	18	5	10	4	3	5	.....
Without intervention.....	5	5	5	3	3	6	8	2
Total.....	19	31	15	16	9	12	14	2

Methods of settlement.	Strikers in strikes of which days of duration were—							
	Under 2.	2 to 5.	6 to 10.	11 to 15.	16 to 20.	21 to 30.	31 and over.	Not reported.
Direct negotiations between employers and employees.....	266	421	40	191	28	445	.....	.....
Between employers and workmen's unions.....	96	41	194	.....	.....	.....	20	.....
Intervention of authorities.....	3,273	917	392	855	568	240	843	.....
Without intervention.....	2,093	428	658	163	29	276	150	44
Total.....	5,728	1,807	1,284	1,209	625	961	1,013	44

The group of strikes settled by the intervention of the authorities furnished the largest number of strikes and strikers in 1907. Of the strikers in such strikes, 3,911, or 55.2 per cent, were in strikes which were successful; 681, or 9.6 per cent, were in strikes which were partially successful; and 2,496, or 35.2 per cent, were in strikes which failed. As to duration, 64.6 per cent of the strikers engaged in strikes settled in this manner were in strikes which lasted 10 days

and under, 23.5 per cent were in strikes lasting from 11 to 30 days, and 11.9 per cent were in strikes which continued longer than 30 days.

The results of strikes, classified according to cause, are shown in the following table:

STRIKES, BY CAUSES AND RESULTS, 1907.

Causes.	Total strikes.	Strikes which—			Strikers.	Em- ployees in estab- lishments affected.
		Suc- ceeded.	Suc- ceeded partly.	Failed.		
Wage disputes	33	14	5	14	2,529	3,891
Hours of labor.....	10	7	1	2	3,857	7,443
Shop rules.....	21	7	6	8	1,128	1,792
Employment or discharge of persons.....	29	10	1	18	1,411	3,424
Trade-unionism.....	3	.....	.....	3	412	688
Sympathy with strikers.....	7	1	.....	6	2,360	402
Affront to dignity of employees.....	2	.....	.....	2	117	117
Hours of labor and wage disputes.....	7	3	2	2	634	1,752
Wage disputes and employment or discharge of persons.....	1	.....	.....	1	47	66
Shop rules and trade-unionism.....	5	1	1	3	146	163
Total.....	118	43	16	59	12,671	19,718

It is seen from the foregoing table that the largest number of strikers participated in strikes concerning hours of labor. This cause alone furnished 30.4 per cent of all strikers for the year. Strikes resulting from wage disputes furnished 20 per cent of all strikers, and strikes in sympathy with other strikes furnished 18.6 per cent of all strikers. Of the strikes due to hours of labor, 70 per cent were successful, 10 per cent partly successful, and 20 per cent failed. The cause for the largest number of strikes was wage disputes, which alone furnished 28 per cent of all strikes; and it, where it occurred as a factor in combination with other causes, formed 34.7 per cent of all disputes. The cause next in importance as regards number of strikes was employment or discharge of employees, which furnished 24.6 per cent of all strikes.

SWEDEN.

Arbetsinställelser i Sverige under år 1908. Utgifven af K. Kom-
merskollegii afdelning för arbetsstatistik. 1909. 130 pp.

This report covers strikes and lockouts occurring in Sweden in 1908, and follows the plan of a report covering the years 1902 to 1907, a digest of which appeared in Bulletin No. 86. The data presented are in the form of tables with general discussion and detailed accounts of a number of the more important disputes. Forms of the schedules of inquiry used are also given.

There were 302 labor disputes during the year, of which 229 were strikes, 38 were lockouts, and 35 are reported as mixed or indefinite.

The following table shows the number for each year from 1903 to 1908, together with the number of establishments and of employees affected, by classes of disputes:

LABOR DISPUTES, BY YEARS, 1903 TO 1908.

Years.	Strikes.			Lockouts.			Mixed or indefinite.			Total.		
	Num-ber.	Estab-lish-ments in-vo-lved.	Em-ployees affect-ed.	Num-ber.	Estab-lish-ments in-vo-lved.	Em-ployees affect-ed.	Num-ber.	Estab-lish-ments in-vo-lved.	Em-ployees affect-ed.	Num-ber.	Estab-lish-ments in-vo-lved.	Em-ployees affect-ed.
1903.....	109	256	5,970	16	96	982	17	126	17,619	142	478	24,571
1904.....	169	383	8,299	12	62	1,218	34	153	2,731	215	598	12,248
1905.....	152	325	13,186	12	12	456	25	510	19,264	189	847	32,906
1906.....	239	668	15,050	8	12	580	43	49	3,045	290	729	18,655
1907.....	243	498	11,278	23	37	5,669	46	283	6,593	312	818	23,540
1908.....	229	473	17,187	38	125	2,672	35	826	20,498	302	1,424	40,357
Total.....	1,141	2,603	70,970	109	344	11,557	200	1,947	69,750	1,450	4,894	152,277

The average number of persons affected by each strike in 1908 was 75, by each lockout 70, and by each dispute of a mixed or an indefinite character 586. Ninety per cent of all disputes affected from 1 to 5 establishments. The average was somewhat greater than for the preceding years, the number being 4.7 as against 2.5 in 1906 and 1907, 4.5 in 1905, and 3 in 1903 and 1904. The average in 1908 was, however, considerably affected by a single large strike.

The following table shows the disputes for each year, 1903 to 1908, classified according to results:

RESULTS OF LABOR DISPUTES, BY YEARS, 1903 TO 1908.

Years.	Results.								Total.	
	In favor of em-ploy-ers.		In favor of em-ploy-ees.		Compromised.		Unknown.		Strikes and lock-outs.	Em-ployees affect-ed.
	Strikes and lock-outs.	Em-ployees affect-ed.	Strikes and lock-outs.	Em-ployees affect-ed.	Strikes and lock-outs.	Em-ployees affect-ed.	Strikes and lock-outs.	Em-ployees affect-ed.		
1903.....	37	17,411	45	1,632	47	4,666	13	862	142	24,571
1904.....	63	1,629	68	3,540	73	6,925	11	154	215	12,248
1905.....	47	1,840	71	5,122	53	25,557	18	387	189	32,906
1906.....	73	2,739	116	7,487	90	8,152	11	277	290	18,655
1907.....	70	2,589	93	4,121	126	15,893	23	937	312	23,540
1908.....	94	8,953	80	2,479	115	28,584	13	341	302	40,357
Total.....	384	35,161	475	24,381	504	89,777	89	2,958	1,450	152,277

Thirty-one per cent of the strikes, involving 22 per cent of the strikers, resulted favorably to the employers; 27 per cent, involving but 6 per cent of the strikers, resulted in favor of the employees, while 38 per cent of the strikes, in which 71 per cent of the employees were affected, were settled by compromise, leaving 4 per cent, affecting 1 per cent of the employees, in which the results were unknown.

In the following table are shown by groups of industries the number and results of disputes and the number of establishments involved and employees affected:

LABOR DISPUTES, BY INDUSTRIES AND RESULTS, 1908.

Industries.	Disputes.	Establishments involved	Employees affected.	Results.			
				In favor of employers.	In favor of employees.	Compromised.	Unknown.
Agriculture, stock raising, and gardening...	13	12	371	9	1	3	.....
Forestry.....	14	24	2,758	7	3	3	1
Mining.....	6	6	553	2	1	3	.....
Other excavating and extractive industries.	6	6	173	3	1	2	.....
Food products.....	17	56	2,272	3	5	9	.....
Textiles.....	5	6	283	3	2	.....	.....
Clothing.....	28	145	4,842	5	6	16	1
Leather, hair, and rubber goods.....	10	15	660	5	1	3	1
Woodworking.....	46	61	1,680	14	15	16	1
Wood pulp and paper.....	13	75	2,228	5	4	3	1
Ore smelting and refining.....	2	2	96	1	1	.....	.....
Metal working.....	17	36	319	7	3	5	2
Machinery and ship building.....	11	11	355	5	1	5	.....
Clay, stone, etc., products.....	29	30	1,452	5	8	11	5
Chemical products.....	3	3	139	.....	1	2	.....
Building trades.....	62	847	18,498	14	19	28	1
Lighting, waterworks, etc.....	4	4	111	1	1	2	.....
Commerce and trade.....	6	51	214	1	4	1	.....
Transportation:							
Land.....	7	31	3,338	3	2	2	.....
Water.....	1	1	8	.....	.....	1	.....
Hotels, cafes, and restaurants.....	2	2	7	1	1	.....	.....
Total.....	302	1,424	40,357	94	80	115	13

Disputes in the building trades were the most numerous and of greatest magnitude of those occurring during 1908, the average number of establishments involved in each dispute being 13.7, and the average number of employees involved 298.3. The number of employees affected in this group during the year almost equaled the total for the period 1903 to 1907, the total for the 5 years being 19,644 as against 18,498 in 1908. In 19 strikes the employees succeeded, and in 14 they failed. In 28 disputes settlement was effected in each case by a compromise. The next largest number of strikers and of establishments involved was found in the clothing industry, and here, too, the number of strikes in which the employees were successful was somewhat greater than the number of those in which they failed, though more than one-half the total number of disputes were settled by compromise.

The duration of labor disputes, grouped according to results, is shown in the next table:

DURATION OF LABOR DISPUTES, BY RESULTS, 1908.

Days of duration.	Results.								Total.	
	In favor of employers.		In favor of employees.		Compromised.		Unknown.			
	Dis-putes.	Em-ployees.	Dis-putes.	Em-ployees.	Dis-putes.	Em-ployees.	Dis-putes.	Em-ployees.	Dis-putes.	Em-ployees.
7 and under.....	26	1,452	31	1,415	28	1,585	1	60	86	4,512
8 to 14.....	18	1,599	14	218	17	675	1	17	50	2,509
15 to 30.....	13	942	17	417	20	1,072	.....	.....	50	2,431
31 to 90.....	9	1,023	5	148	26	5,328	.....	.....	40	6,499
91 to 180.....	3	2,564	4	50	16	19,157	.....	.....	23	21,771
Over 180.....	2	115	3	43	3	232	.....	.....	8	390
Unknown.....	23	1,258	6	188	5	535	11	264	45	2,245
Total.....	94	8,953	80	2,479	115	28,584	13	341	302	40,357

From this table it appears that while the number of disputes lasting 7 days and under was 28.5 per cent of the total number, these disputes affected but 11.2 per cent of the total number of employees involved, indicating that those strikes of short duration were considerably below the average in importance. The largest group of employees affected (more than one-half the total) is found in the period, 91 to 180 days, in which 23 disputes fall, showing an average of 946.6 persons to each dispute. Of these important and severely contested disputes, 4 were settled in favor of the employees and 3 failed entirely from the standpoint of the workmen. A table carrying the analysis somewhat further shows that in the 16 disputes that were compromised, the employer gained the advantage in 3 cases, in which 3,549 employees were involved; that the employees were favored in 1 instance, involving 89 work people, and that in 12 disputes, affecting 15,519 employees, equal concessions were made.

The majority of disputes, 61.5 per cent, lasted not longer than 30 days, and affected only 23.4 per cent of the workmen.

The next table shows the results of disputes by the principal causes or objects.

RESULTS OF LABOR DISPUTES, BY CAUSES OR OBJECTS, 1908.

Causes or objects.	Results.				Total.
	In favor of employers.	In favor of employees.	Compromised.	Unknown.	
Increase of wages.....	33	14	76	7	130
Reduction of wages.....	2	10	3	3	18
Other questions affecting wages.....	15	26	10	.....	51
Recognition of unions.....	5	5	1	1	12
Collective contracts.....	3	11	6	.....	20
Other questions affecting unions.....	5	1	.....	.....	6
Hours of labor.....	7	1	5	.....	13
Personal questions.....	1	2	.....	1	4
Reinstatement or discharge of employees.....	13	5	7	.....	25
Shop rules.....	2	1	1	.....	4
Interpretation of contract.....	1	2	2	.....	5
Other causes.....	7	2	4	1	14
Total.....	94	80	115	13	302

Questions relating to wages gave rise to 65.9 per cent of all disputes in 1908, as compared with 62 per cent during the five years previous. The next most frequent cause is found in questions relating to unions and the collective agreement, the number of disputes arising from these causes being 38, or 12.6 per cent of the total. In the matter of wage questions, neither employers nor employees seem to have gained a decided advantage in so far as is shown by the results here given. In questions affecting organized action, the balance was decidedly in favor of the employees, they being favored in 17 instances and the employers in 13. In the matter of hours of labor, the reinstatement or discharge of workmen, and questions of shop rules, the employers were generally successful.

The following table shows the number of disputes occurring each year from 1903 to 1908, by the number of employees affected, also the total working-days lost each year:

LABOR DISPUTES, BY YEARS AND NUMBER OF EMPLOYEES AFFECTED, 1903 TO 1908.

Years.	Employees affected.						Total strikes and lockouts.	Total working-days lost.
	1 to 5.	6 to 25.	26 to 50.	51 to 100.	Over 100.	Unknown		
1903.....	13	58	27	21	22	1	142	642,000
1904.....	32	94	31	27	26	5	215	386,000
1905.....	17	69	47	20	32	4	189	2,390,000
1906.....	42	93	60	47	44	4	290	479,000
1907.....	33	124	49	49	47	10	312	514,000
1908.....	39	110	61	37	46	9	302	1,842,200
Total.....	176	548	275	201	217	33	1,450	6,253,200

The number of employees affected did not exceed 25 in practically one-half the disputes occurring in 1908, the same being true for the 6-year period, 1903 to 1908. The number of working-days lost in the last year is in excess of the number lost in any other year than 1905, in which year nearly one-half the employees affected (15,349 out of a total of 32,906) were in disputes lasting more than 180 days.

The question as to the organization of employers was answered in 235 of the 302 disputes in 1908, it appearing that they were organized or partly organized in 125 cases and unorganized in 110 cases reported. In 39 cases where employers were organized the dispute was settled in their favor, as against 25 in the employees' favor and 59 cases compromised. Where the employers were not organized, they gained in 33 disputes, lost in 28, and in 44 a compromise was affected.

In 16 instances it was reported that the employers broke a collective agreement, and that employees broke such an agreement in 21 cases. Arbitration was resorted to in 6 cases, and in 29 the dispute was settled by the intervention of official mediators.

DECISIONS OF COURTS AFFECTING LABOR.

[Except in cases of special interest, the decisions here presented are restricted to those rendered by the Federal courts and the higher courts of the States and Territories. Only material portions of such decisions are reproduced, introductory and explanatory matter being given in the words of the editor.]

DECISIONS UNDER STATUTE LAW.

ALIEN CONTRACT LABORERS — DEPORTATION — EVIDENCE — *Ex parte George, United States District Court, Northern District of Alabama, 180 Federal Reporter, page 785.*—Harry George was arrested under a warrant issued by the Secretary of Commerce and Labor and held for deportation to Greece, the country from which he had emigrated two years and nine months before the proceedings in question, the act of Congress of February 20, 1907 (34 Stat. 898), prohibiting the immigration of alien contract laborers. George petitioned for a writ of habeas corpus, on which petition the present trial was had in July, 1910. The result was a dismissal of the petition, George being remanded to custody to be held for deportation.

There was proof of conviction for a felonious offense, but as the case was decided independently thereof it will not be here considered. It was not disputed that the proprietor of a shoe-shining establishment in Birmingham, Ala., while in Greece had offered to advance transportation money for George, taking a mortgage on his land as security therefor, and promising to employ George at a rate of \$20 per month, out of which wages the loan for transportation should be repaid. The petitioner's plea was that the warrant did not designate the transaction with sufficient clearness, as to which Judge Grubb, speaking for the court, said:

The warrant charges that he was induced or solicited to migrate to this country by offers or promises of employment and in consequence of an agreement to perform labor in this country. The petitioner was fully apprised by the warrant that his deportation was sought by the Government because of a promise made to him or an agreement made with him to perform labor in this country, which induced his immigration. There could be no room for doubt on the part of petitioner as to the identity of the transaction relied on by the Government, since he could have received but one such promise and made but one such agreement. The warrant was sufficient as to this charge, certainly when unobjected to on the hearing and criticized for the first time after deportation was ordered and collaterally upon

a writ of habeas corpus. The warrant charges each of the elements of the ground of deportation relied on, and is not void.

Continuing, the court said:

The evidence shows without conflict that the petitioner was within the excluded class, called "contract laborers." Upon a promise to employ him upon his arrival in this country at stipulated wages in a definite occupation, made by one who advanced him money for his passage, secured by a mortgage on his property, and accompanied him on his journey, he came to this country, went to work for such person at the stipulated wages and at the designated occupation, repaid the advance out of his wages, and continued in the employment of the person who made the promise and advance for a year.

The writ is discharged, and the petitioner is remanded to the custody of the sheriff to await the execution of the warrant of deportation.

EIGHT-HOUR LAW—CONSTRUCTION OF LEVEES ON THE MISSISSIPPI RIVER—EMERGENCIES—*United States v. Garbish, United States Circuit Court for the Eastern District of Louisiana, 180 Federal Reporter, page 502.*—This case involved the construction of the emergency provision of the Federal eight-hour law of August 1, 1892 (27 Stat. 340; U. S. Comp. St. p. 2521). This law restricts the employment of labor on public works to eight hours per day, with exceptions for cases of extraordinary emergencies. Harman Garbish was indicted for a violation of this statute by working his men in the construction of a levee. There was no question as to the facts, but only as to the application of the law to the facts. Garbish demurred to the indictment, and the demurrer was sustained, as appears from the quoted opinion of Judge Foster, who spoke for the court.

The opinion follows:

Stripped of the surplusage, the indictment charges that on August 17, 1908, the defendant, a contractor, was engaged in building certain public levees on the banks of the Mississippi River in the parish of St. James, La., and required and permitted the laborers employed by him, and engaged in the said work, to work more than eight hours in one calendar day. The indictment further sets up that during the months of August, September, October, November, and December the waters of the Mississippi River annually fall below the level of the surrounding land and are retained within its banks without the necessity of artificial levees; that the work was being done in the ordinary and usual course of levee building by the Government of the United States, in preparation for the high waters that annually come down the river; that the existing levee was not of sufficient size and strength and did not comply with the Government standard, and was being destroyed and replaced by the new, higher, and stronger levee; that nothing unusual or out of the ordinary had required the destruction of the old levee, or the building of the new levee; and that the contractor had the usual time to complete the levee, so as to allow it to settle and pack and become ready to withstand the next annual rise of the river.

The defendant rests his case on the proposition that the building of levees on the Mississippi River, in the eastern district of Louisiana, at all times presents an extraordinary emergency; and hence that particular work is exempted from the operation of the law. This is denied by the Government, and the indictment contains the general averment that no extraordinary emergency existed. The question thus squarely presented is decisive of the case, if defendant's contention be sustained.

The building of levees in Louisiana has at all times presented many problems. It is absolutely necessary, not only for the preservation of property and to permit the cultivation of the land, but to safeguard the very lives of the inhabitants as well, that levees should be built on the banks of the Mississippi River in this locality. Therefore it has always been usual that levee work proceed with the greatest dispatch, and the labor of the day has never been restricted to eight hours. In the nature of things, it is impossible to employ an unlimited number of men or teams in the building of levees, as, no matter how great a force the contractor may assemble, the work will not permit of crowding. It is necessary that levees be built in as short a time as possible, in order that they may settle as much as they can, and that the grass may become well rooted upon them, before they are called upon to bear the strain of a high river.

It is true that the months of August, September, October, November, and December are the most favorable for levee building, but there is no certainty that during any part of these months the river will maintain a low stage. When the river is bank full, necessarily no levees can be built. Statistics of the river's height, at New Orleans, show that during the past 25 years the river has been bank full on nearly every day of the year, and these statistics may well apply to the locality where the defendant was working. An unprecedented rain, or an early freeze followed by a thaw, anywhere in the valley of the Mississippi River or its tributaries, might unexpectedly cause the river to rise at New Orleans. No one can foresee or anticipate the acts of nature, and who can say that a few days' more time, in which it might have become solidified, would not have so materially added to the levee's strength as to enable it to withstand the pressure, and without which it might signally fail.

All of these facts are within the common knowledge of the people of this district, and, in connection with the specific allegations of fact in the indictment, overcome the mere conclusion of the pleader that no extraordinary emergency existed. The case presented here is not that of a contractor trying to complete his job on schedule time, nor is it a question of expediency or the saving of expense. In my opinion, the building of levees on the banks of the Mississippi River in the eastern district of Louisiana presents at all times an extraordinary emergency, within the meaning of the statute.

It may be that the indictment is otherwise demurrable, but I prefer to base my decision on the broad ground above set forth.

The demurrer will be sustained, and the defendant discharged.

EMPLOYERS' LIABILITY—COMPENSATION LAW—LIABILITY WITHOUT FAULT—DUE PROCESS OF LAW—CONSTITUTIONALITY OF STATUTE—*Ives v. South Buffalo Railway Company, Court of Appeals of New York (copy of opinion furnished by State reporter).*—This case came before the court of appeals on an appeal from a decision by the supreme court sustaining the validity of chapter 674 of the Acts of 1910. (124 N. Y. Supp. 920.) This law required employers in designated dangerous employments to compensate their workmen for injuries befalling them in the course of employment, resulting merely from the risk of the employment, and without regard to the negligence of the employer. (For the text of the law see Bulletin No. 90, pp. 713, 714; Bulletin No. 91, pp. 1100–1102.) The plaintiff Ives was a brakeman in the employment of the railway company named, and was injured without negligence, but solely by reason of the necessary risks of his employment. The company resisted his claim to compensation under the law on the ground that the law was unconstitutional, denying equal protection of the law in contravention of the provisions of the fourteenth amendment, and violating the right of trial by jury guaranteed by the constitution of the State. From a decision in the plaintiff's favor in the supreme court the company appealed, securing a reversal of the judgment of the lower court on grounds that appear in the following opinion, which was delivered by Judge Werner on March 24, 1911, all judges concurring. Judge Werner said:

In 1909 the legislature passed a law (ch. 518) providing for a commission of 14 persons, 6 of whom were to be appointed by the governor, 3 by the president of the senate from the senate, and 5 by the speaker of the assembly from the assembly, "to make inquiry, examination and investigation into the working of the law in the State of New York relative to the liability of employers to employees for industrial accidents, and into the comparative efficiency, cost, justice, merits and defects of the laws of other industrial States and countries, relative to the same subject, and as to the causes of the accidents to employees." The act contained other provisions germane to the subject and provided for a full and final report to the legislature of 1910, if practicable, and if not practicable, then to the legislature of 1911, with such recommendations for legislation by bill or otherwise as the commission might deem wise or expedient. Such a commission was appointed and promptly organized by the election of officers and the appointment of subcommittees, the chairman being Senator Wainwright, from whom it has taken the name of the "Wainwright commission," by which it is popularly known. No word of praise could overstate the industry and intelligence of this commission in dealing with a subject of such manifold ramifications and of such far-reaching importance to the State, to employers and to employees. We can not dwell in detail upon the many excellent features of its comprehensive report, because the limitations of time and space must necessarily confine us to such of its aspects as have a necessary relation

to the legal questions which we are called upon to decide. As the result of its labors the commission recommended for adoption the bill which, with slight changes, was enacted into law by the legislature of 1910, under the designation of article 14-a of the labor law. This act is modeled upon the English workmen's compensation act of 1897, which has since been extended so as to cover every kind of occupational injury. Our commission has frankly stated in its report that the classification of the industries which will be immediately affected by the present statute is only tentative, and that other more extended classifications will probably be recommended to the legislature for its action.

The statute, judged by our common-law standards, is plainly revolutionary. Its central and controlling feature is that every employer who is engaged in any of the classified industries shall be liable for any injury to a workman arising out of and in the course of the employment by "a necessary risk or danger of the employment or one inherent in the nature thereof; * * * provided that the employer shall not be liable in respect of any injury to the workman which is caused in whole or in part by the serious and willful misconduct of the workman." This rule of liability, stated in another form, is that the employer is responsible to the employee for every accident in the course of the employment, whether the employer is at fault or not, and whether the employee is at fault or not, except when the fault of the employee is so grave as to constitute serious and willful misconduct on his part. The radical character of this legislation is at once revealed by contrasting it with the rule of the common law, under which the employer is liable for injuries to his employee only when the employer is guilty of some act or acts of negligence which caused the occurrence out of which the injuries arise, and then only when the employee is shown to be free from any negligence which contributes to the occurrence. The several judicial and statutory modifications of this broad rule of the common law we shall further on have occasion to mention. Just now our purpose is to present in sharp juxtaposition the fundamentals of these two opposing rules, namely, that under the common law an employer is liable to his injured employee only when the employer is at fault and the employee is free from fault; while under the new statute the employer is liable, although not at fault, even when the employee is at fault, unless this latter fault amounts to serious and willful misconduct. The reasons for this departure from our long-established law and usage are summarized in the language of the commission as follows:

"First, that the present system in New York rests on a basis that is economically unwise and unfair, and that in operation it is wasteful, uncertain and productive of antagonism between workmen and employers.

"Second, that it is satisfactory to none and tolerable only to those employers and workmen who practically disregard their legal rights and obligations, and fairly share the burden of accidents in industries.

"Third, that the evils of the system are most marked in hazardous employments, where the trade risk is high and serious accidents frequent.

"Fourth, that, as matter of fact, workmen in the dangerous trades do not, and practically can not, provide for themselves adequate accident insurance, and, therefore, the burden of serious accidents falls

on the workmen least able to bear it, and brings many of them and their families to want."

This indictment of the old system is followed by a statement of the anticipated benefits under the new statute as follows: "These results can, we think, be best avoided by compelling the employer to share the accident burden in intrinsically dangerous trades, since by fixing the price of his product the shock of the accident may be borne by the community. In those employments which have not so great an element of danger, in which, speaking generally, there is no such imperative demand for the exercise of the police power of the State for the safeguarding of its workers from destitution and its consequences, we recommend, as the first step in this change of system, such amendment of the present law as will do away with some of its unfairness in theory and practice, and increase the workman's chance of recovery under the law. With such changes in the law we couple an elective plan of compensation which, if generally adopted, will do away with many of the evils of the present system. Its adoption will, we believe, be profitable to both employer and employee, and prove to be the simplest way for the State to change its system of liability without disturbance of industrial conditions. Not the least of the motives moving us is the hope that by these means a source of antagonism between employer and employed, pregnant with danger for the State, may be eliminated."

This quoted summary of the report of the commission to the legislature, which clearly and fairly epitomizes what is more fully set forth in the body of the report, is based upon a most voluminous array of statistical tables, extracts from the works of philosophical writers and the industrial laws of many countries, all of which are designed to show that our own system of dealing with industrial accidents is economically, morally and legally unsound. Under our form of government, however, courts must regard all economic, philosophical and moral theories, attractive and desirable though they may be, as subordinate to the primary question whether they can be molded into statutes without infringing upon the letter or spirit of our written constitutions. In that respect we are unlike any of the countries whose industrial laws are referred to as models for our guidance. Practically all of these countries are so-called constitutional monarchies in which, as in England, there is no written constitution, and the Parliament or law-making body is supreme. In our country the Federal and State constitutions are the charters which demark the extent and the limitations of legislative power; and while it is true that the rigidity of a written constitution may at times prove to be a hindrance to the march of progress, yet more often its stability protects the people against the frequent and violent fluctuations of that which, for want of a better name, we call public opinion.

With these considerations in mind we turn to the purely legal phases of the controversy for the purpose of disposing of some things which are incidental to the main question. The new statute, as we have observed, is totally at variance with the common-law theory of the employer's liability. Fault on his part is no longer an element of the employee's right of action. This change necessarily and logically carries with it the abrogation of the "fellow-servant" doctrine, the "contributory negligence" rule, and the law relating to the employee's assumption of risks. There can be no doubt that the first two of

these are subjects clearly and fully within the scope of legislative power; and that as to the third, this power is limited to some extent by constitutional provisions.

The "fellow-servant" rule is one of judicial origin engrafted upon the common law for the protection of the master against the consequences of negligence in which he has no part. In its early application to simple industrial conditions it had the support of both reason and justice. By degrees it was extended until it became evident that under the enormous expansion and infinite complexity of our modern industrial conditions the rule gave opportunity, in many instances, for harsh and technical defenses. In recent years it has been much restricted in its application to large corporate and industrial enterprises, and still more recently it has been modified and, to some extent abolished, by the labor law and the employers' liability act.

The law of contributory negligence has the support of reason in any system of jurisprudence in which the fault of one is the basis of liability for injury to another. Under such a system it is at least logical to hold that one who is himself to blame for his injuries should not be permitted to entail the consequences upon another who has not been negligent at all, or whose negligence would not have caused the injury if the one injured had been free from fault. It may be admitted that the reason of the rule is often lost sight of in the effort to apply it to a great variety of practical conditions, and that its efficacy as a rule of justice is much impaired by the lack of uniformity in its administration. In the admiralty branch of the Federal courts, for instance, we have what is known as the rule of comparative negligence under which, when there is negligence on both sides, it is apportioned and a verdict rendered accordingly. In many of the States contributory negligence is a defense which must be pleaded and proved by the defendant, and in some States it has been entirely abrogated by statute. In our own State the plaintiff's freedom from contributory negligence is an essential part of his cause of action which must be affirmatively established by him, except in cases brought by employees under the labor law, by virtue of which the contributory negligence of an employee is now made a defense which must be pleaded and proved by the employer; and under the employers' liability act which provides that the employee's continuance in his employment after he has knowledge of dangerous conditions from which injury may ensue, shall not, as matter of law, constitute contributory negligence.

Under the common law the employee was also held to have assumed the ordinary and obvious risks incident to the employment, as well as the special risks arising out of dangerous conditions which were known and appreciated by him. This doctrine, too, has been modified by statute so that under the labor law and the employers' liability act the employee is presumed to have assented to the necessary risks of the occupation or employment and no others; and these necessary risks are defined as those only which are inherent in the nature of the business and exist after the employer has exercised due care in providing for the safety of his employees, and has complied with the laws affecting or regulating the business or occupation for the greater safety of employees.

We have said enough to show that the statutory modifications of the "fellow-servant" rule and the law of "contributory negligence" are clearly within the legislative power. These doctrines, for they

are nothing more, may be regulated or even abolished. This is true to a limited extent as to the assumption of risk by the employee. In the labor law and the employers' liability act, which define the risks assumed by the employee, there are many provisions which cast upon the employer a great variety of duties and burdens unknown to the common law. These can doubtless be still further multiplied and extended to the point where they deprive the employer of rights guaranteed to him by our constitutions, and there, of course, they must stop, as we shall endeavor to demonstrate later on.

Passing now to the constitutional objections which are presented against the new statute, we will first eliminate those which we regard as clearly or probably untenable. The appellant [company] argues and the respondent [Ives] admits that the new statute can not be upheld under the reserved power of the legislature to alter and amend charters. It is true that the defendant in the case at bar is a railroad corporation, but the act applies to eight enumerated occupations or industries without regard to the character of the employers. They may be corporations, firms or individuals. Nowhere in the act is there any reference to corporations. The liability sought to be imposed is based upon the nature of the employment and not upon the legal status of the employer. It is, therefore, unnecessary to decide how far corporate liability may be extended under the reserved power to alter or amend charters, except as that question may be incidentally discussed in considering the police power of the State.

The appellant contends that the classification in this statute, of a limited number of employments as dangerous, is fanciful or arbitrary, and is, therefore, repugnant to that part of the fourteenth amendment to the Federal Constitution which guarantees to all our citizens the equal protection of the laws. Classification, for purposes of taxation, or of regulation under the police power, is a legislative function with which the courts have no right to interfere unless it is so clearly arbitrary or unreasonable as to invade some constitutional right. A State may classify persons and objects for the purpose of legislation provided the classification is based on proper and justifiable distinctions (*St. John v. New York*, 201 U. S. 633; *Missouri Pac. Ry. Co. v. Mackey*, 127 U. S. 205 [8 Sup. Ct. 1161]; *Minneapolis & St. L. Ry. Co. v. Herrick*, 127 U. S. 210 [8 Sup. Ct. 1176]; *Chicago, K. & W. R. R. Co. v. Pontius*, 157 U. S. 209), and for a purpose within the legislative power. There can be no doubt, we think, that all of the occupations enumerated in the statute are more or less inherently dangerous to a degree which justifies such legislative regulation as is properly within the scope of the police power. We need not look for illustration or authority outside of the labor law to which this new statute has been added. The whole of that law which precedes the latest addition is devoted to restrictions and regulations imposed upon employers in specified occupations or conditions for the conservation of the health, safety and morals of employees. These restrictions and regulations do not affect all employers alike in all occupations, nor are they designed to have that effect. The mandate of the Federal Constitution is complied with if all who are in a particular class are treated alike. (*Missouri Pac. Ry. Co. v. Humes*, 115 U. S. 512, 523; *Barbier v. Connolly*, 113 U. S. 27; *Soon Hing v. Crowley*, 113 U. S. 703; *Magoun v. Ill. Trust & Sav. Bank*, 170 U. S. 283, 294; *People ex rel. Hatch*

v. Reardon, 184 N. Y. 431; *People ex rel. Farrington v. Mensching*, 187 N. Y. 8, 16), and that, we think, is the effect of this classification.

Another objection urged against the statute is that it violates section 2 of article 1 of our State constitution which provides that "The trial by jury in all cases in which it has been heretofore used shall remain inviolate forever." This objection is aimed at the provisions of sections 219-a and 219-d of the statute, which relate to the "scale of compensation" and "settlement of disputes," and has no reference to the fundamental question whether the attempt to impose upon the employer a liability when he is not at fault, constitutes a taking of property without due process of law. In other words, the objection which we are now considering bears solely upon the question whether the two last-mentioned sections of the statute deprive the employer of the right to have a jury fix the amount which he shall pay when his liability to pay has been determined against him. If these provisions relating to compensation are to be construed as definitely fixing the amount which an employer must pay in every case where his liability is established by the statute, there can be no doubt that they constitute a legislative usurpation of one of the functions of a common-law jury. In all cases where there is a right to trial by jury there are two elements which necessarily enter into a verdict for the plaintiff: 1. The right to recover. 2. The amount of the recovery. It is as much the right of a defendant to have a jury assess the damages claimed against him as it is to have the question of his liability determined by the same body. (*East Kingston v. Towle*, 48 N. H. 57; *Wadsworth v. Union Pacific Ry. Co.*, 18 Col. 600; *Fairchild v. Rich*, 68 Vt. 202.) This part of the statute, in its present form, has given rise to conflicting views among the members of the court, and, since the disposition of the questions which it suggests is not necessary to the decision of the case, we do not decide it.

Thus far we have considered only such portions of the statute as we deem to be clearly within the legislative power, and one as to which there is difference of opinion. This we have done because we desire to present no purely technical or hypercritical obstacles to any plan for the beneficent reformation of a branch of our jurisprudence in which, it may be conceded, reform is a consummation devoutly to be wished. In this spirit we have called attention to those features of the new statute which might be upheld as consonant with legislative authority under our constitutional limitations, as well as to the sections upon which we are in doubt. We turn now to the two objections which we regard as fatal to its validity.

This legislation is challenged as void under the fourteenth amendment to the Federal Constitution and under section 6, article 1, of our State constitution, which guarantee all persons against deprivation of life, liberty or property without due process of law. We shall not stop to dwell at length upon definitions of "life," "liberty," "property" and "due process of law." They are simple and comprehensive in themselves and have been so often judicially defined that there can be no misunderstanding as to their meaning. Process of law in its broad sense means law in its regular course of administration through courts of justice, and that is but another way of saying that every man's right to life, liberty and property is to be disposed of in accordance with those ancient and fundamental principles which were in existence when our constitutions were adopted. "Due proc-

ess of law implies the right of the person affected thereby to be present before the tribunal which pronounces judgment upon the question of life, liberty or property in its most comprehensive sense; to be heard by testimony or otherwise, and to have the right of controverting by proof every material fact which bears upon the question of right in the matter involved. If any question of fact or liability be conclusively presumed against him this is not due process of law." (*Ziegler v. S. & N. Ala. R. R. Co.*, 58 Ala. 594). Liberty has been authoritatively defined as "the right of one to use his faculties in all lawful ways, to live and work where he will, to earn his livelihood in any lawful calling, and to pursue any lawful trade or avocation" (*Matter of Jacobs*, 98 N. Y. 98, 106); and the right of property as "the right to acquire, possess and enjoy it in any way consistent with the equal rights of others and the just exactions and demands of the State." (*Bertholf v. O'Reilly*, 74 N. Y. 509, 515.) The several industries and occupations enumerated in the statute before us are concededly lawful within any of the numerous definitions which might be referred to, and have always been so. They are, therefore, under the constitutional protection. One of the inalienable rights of every citizen is to hold and enjoy his property until it is taken from him by due process of law. When our constitutions were adopted it was the law of the land that no man who was without fault or negligence could be held liable in damages for injuries sustained by another. That is still the law, except as to the employers enumerated in the new statute, and as to them it provides that they shall be liable to their employees for personal injury by accident to any workman arising out of and in the course of the employment which is caused in whole or in part, or is contributed to, by a necessary risk or danger of the employment or one inherent in the nature thereof, except that there shall be no liability in any case where the injury is caused in whole or in part by the serious and willful misconduct of the injured workman. It is conceded that this is a liability unknown to the common law and we think it plainly constitutes a deprivation of liberty and property under the Federal and State constitutions, unless its imposition can be justified under the police power which will be discussed under a separate head. In arriving at this conclusion we do not overlook the cogent economic and sociological arguments which are urged in support of the statute. There can be no doubt as to the theory of this law. It is based upon the proposition that the inherent risks of an employment should in justice be placed upon the shoulders of the employer, who can protect himself against loss by insurance and by such an addition to the price of his wares as to cast the burden ultimately upon the consumer; that indemnity to an injured employee should be as much a charge upon the business as the cost of replacing or repairing disabled or defective machinery, appliances or tools; that, under our present system, the loss falls immediately upon the employee who is almost invariably unable to bear it, and ultimately upon the community which is taxed for the support of the indigent; and that our present system is uncertain, unscientific and wasteful, and fosters a spirit of antagonism between employer and employee which it is to the interests of the State to remove. We have already admitted the strength of this appeal to a recognized and widely prevalent sentiment, but we think it is an appeal which must be made to the

people and not to the courts. The right of property rests not upon philosophical or scientific speculations nor upon the commendable impulses of benevolence or charity, nor yet upon the dictates of natural justice. The right has its foundation in the fundamental law. That can be changed by the people, but not by legislatures. In a government like ours theories of public good or necessity are often so plausible or sound as to command popular approval, but courts are not permitted to forget that the law is the only chart by which the ship of state is to be guided. Law as used in this sense means the basic law and not the very act of legislation which deprives the citizen of his rights, privileges or property. Any other view would lead to the absurdity that the constitutions protect only those rights which the legislatures do not take away. If such economic and sociologic arguments as are here advanced in support of this statute can be allowed to subvert the fundamental idea of property, then there is no private right entirely safe, because there is no limitation upon the absolute discretion of legislatures, and the guarantees of the constitution are a mere waste of words. (*Wynehamer v. People*, 13 N. Y. 378; *Taylor v. Porter*, 4 Hill, 140, 145; *Norman v. Heist*, 5 Wats. & Serg. 193; *Hake v. Henderson*, 4 Dev. 15.) As stated by Judge Comstock in the case of *Wynehamer v. People*, "these constitutional safeguards, in all cases, require a judicial investigation, not to be governed by a law specially enacted to take away and destroy existing rights, but confined to the question whether, under the pre-existing rule of conduct, the right in controversy has been lawfully acquired and is lawfully possessed" (p. 395). If the argument in support of this statute is sound we do not see why it can not logically be carried much farther. Poverty and misfortune from every cause are detrimental to the State. It would probably conduce to the welfare of all concerned if there could be a more equal distribution of wealth. Many persons have much more property than they can use to advantage and many more find it impossible to get the means for a comfortable existence. If the legislature can say to an employer, "you must compensate your employee for an injury not caused by you or by your fault," why can it not go farther and say to the man of wealth, "you have more property than you need and your neighbor is so poor that he can barely subsist; in the interest of natural justice you must divide with your neighbor so that he and his dependents shall not become a charge upon the State?" The argument that the risk to an employee should be borne by the employer, because it is inherent in the employment may be economically sound, but it is at war with the legal principle that no employer can be compelled to assume a risk which is inseparable from the work of the employee, and which may exist in spite of a degree of care by the employer far greater than may be exacted by the most drastic law. If it is competent to impose upon an employer, who has omitted no legal duty and has committed no wrong, a liability based solely upon a legislative fiat that his business is inherently dangerous, it is equally competent to visit upon him a special tax for the support of hospitals and other charitable institutions, upon the theory that they are devoted largely to the alleviation of ills primarily due to his business. In its final and simple analysis that is taking the property of A and giving it to B, and that can not be done under our constitutions. Practical and simple illustrations of the extent to which this theory

of liability might be carried could be multiplied ad infinitum, and many will readily occur to the thoughtful reader. There is, of course, in this country no direct legal authority upon the subject of the liability sought to be imposed by this statute, for the theory is not merely new in our system of jurisprudence, but plainly antagonistic to its basic idea. The English authorities are of no assistance to us, because in the king's courts the decrees of the Parliament are the supreme law of the land, although they are interesting in their disclosures of the paternalism which logically results from a universal employers' liability based solely upon the relation of employer and employee, and not upon fault in the employer. There are a few American cases, however, which clearly state the legal principle which, we think, is applicable to the case at bar, and with a brief reference to them we shall close this branch of the discussion. In the nitroglycerine case (*Parrot v. Wells, Fargo & Co.*, 15 Wall. 524) the plaintiff, who was the common landlord of the defendants and other tenants, sought to hold the defendants liable for damages occasioned to the premises occupied by the other tenants, by an explosion of nitroglycerine which had been delivered to the defendants as common carriers for shipment. It appeared that the defendants were innocently ignorant of the contents of the packages containing the dangerous explosives, and that they were guilty of no negligence in receiving or handling them. Upon these facts the Federal Supreme Court held that it was a case of unavoidable accident for which no one was legally responsible. In *Ohio & Mississippi Ry. Co. v. Lackey*, 78 Ill. 55, the question was whether the railroad company was liable under a statute which provided that "every railroad company running cars within this State shall be liable for all the expense of the coroner and his inquest, and the burial of all persons who may die on the cars, or who may be killed by collision or other accident occurring to such cars, or otherwise." In speaking of the effect of that section of the law Mr. Justice Breese observed: "An examination of the section will show that no default, or negligence of any kind, need be established against the railroad company, but they are mulcted in heavy charges if, notwithstanding all their care and caution, a death should occur on one of their cars, no matter how caused, even if by the party's own hand. Running of trains by these corporations is lawful and of great public benefit. It is not claimed that the liability attaches for the violation of any law, the omission of any duty or the want of proper care or skill in running their trains. The penalty is not aimed at anything of this kind. We say penalty, for it is in the nature of a penalty, and there is a constitutional inhibition against imposing penalties where no law has been violated or duty neglected. Neither is pretended in this case, nor are they in contemplation of the statute. A passenger on a train dies from sickness. He is a man of wealth. Why should his burial expenses be charged to the railroad company? There is neither reason nor justice in it; and if he be poor, having not the means for a decent burial, the general law makes ample provision for such cases." To the same effect are the numerous cases arising under statutes passed by different States imposing upon railroad corporations absolute liability for killing or injuring upon their rights of way horses, cattle, etc., by running over them, in which this liability was held to constitute a deprivation of property without due process

of law. (*Jensen v. Union Pacific Ry. Co.*, 6 Utah, 253; *Ziegler v. South & North Alabama Ry. Co.*, 58 Ala. 594; *Birmingham Ry. Co. v. Parsons*, 100 Ala. 662; *Bielingbery v. Montana Union Ry. Co.*, 8 Mont. 271; *Schenk v. Union Pacific Ry. Co.*, 5 Wyo. 430; *Cottrell v. Union Pacific Ry. Co.*, 2 Wyo. 540.)

A different interpretation has been given to statutes imposing upon railroad corporations the duty to fence their rights of way, under which the liability is imposed for failure to obey the command of the statutes. (*Quackenbush v. Wis. Ry. Co.*, 62 Wis. 411; *Missouri Pac. Ry. Co. v. Humes*, 115 U. S. 512; *Minneapolis & St. L. Ry. Co. v. Beckwith*, 129 U. S. 26.) "But even such statutes," says Black in his work on Constitutional Law (2d ed. p. 351), "can not go beyond the imposition of such a penalty in cases where the fault lies at the door of the company. If the law attempts to make such companies liable for accidents which were not caused by their negligence or disobedience of the law, but by the negligence of others or by uncontrollable causes, or does not give the company an opportunity to show these facts in its own defense, it is void."

We conclude, therefore, that in its basic and vital features the right given to the employee by this statute, does not preserve to the employer the "due process" of law guaranteed by the constitutions, for it authorizes the taking of the employer's property without his consent and without his fault. So far as the statute merely creates a new remedy in addition to those which existed before it is not invalid. The State has complete control over the remedies which it offers to suitors in its courts even to the point of making them applicable to rights or equities already in existence. It may change the common law and the statutes so as to create duties and liabilities which never existed before. It is true, as stated by Mr. Justice Brown in *Holden v. Hardy*, 169 U. S. 366, 385, 386, that "the law is, to a certain extent, a progressive science; that in some of the States methods of procedure, which at the time the Constitution was adopted were deemed essential to the protection and safety of the people, or to the liberty of the citizen, have been found to be no longer necessary; that restrictions which had formerly been laid upon the conduct of individuals, or of classes of individuals, had proved detrimental to their interests; while, upon the other hand, certain other classes of persons, particularly those engaged in dangerous or unhealthful employments, have been found to be in need of additional protection. Even before the adoption of the Constitution, much had been done toward mitigating the severity of the common law, particularly in the administration of its criminal branch. * * * The present century has originated legal reforms of no less importance. The whole fabric of special pleading, once thought to be necessary to the elimination [sic] of the real issue between the parties, has crumbled to pieces. The ancient tenures of real estate have been largely swept away, and land is now transferred almost as easily and cheaply as personal property. Married women have been emancipated from the control of their husbands and placed upon a practical equality with them with respect to the acquisition, possession and transmission of property. Imprisonment for debt has been abolished. Exemptions from execution have been largely added to, and in most of the States homesteads are rendered incapable of seizure and sale upon forced process. Witnesses are no longer incompetent by reason of interest, even though they be

parties to the litigation. Indictments have been simplified, and an indictment for the most serious of crimes is now the simplest of all. In several of the States grand juries, formerly the only safeguard against a malicious prosecution, have been largely abolished, and in others the rule of unanimity, so far as applied to civil cases, has given way to verdicts rendered by a three-fourths majority." The power of the State to make such changes in methods of procedure and in substantive law is clearly recognized. (*Hurtado v. California*, 110 U. S. 516; *Hayes v. Missouri*, 120 U. S. 68; *Missouri Pac. Railway Co. v. Mackey*, 127 U. S. 205; *Hallinger v. Davis*, 146 U. S. 314; *Matter of Kemmler*, 136 U. S. 436; *Duncan v. Missouri*, 152 U. S. 377.) We repeat, however, that this power must be exercised within the constitutional limitations which prescribe the law of the land. "Due process of law" is process due according to the law of the land, and the phrase as used in the fourteenth amendment of the Federal Constitution with reference to the power of the States means the general law of the several States as fixed or guaranteed by their constitutions. As stated by Mr. Webster, in the Dartmouth College case, "the law of the land is the general law; the law which hears before it condemns, which proceeds upon inquiry and renders judgment only after trial."

If we are warranted in concluding that the new statute violates private right by taking the property of one and giving it to another without due process of law, that is really the end of this case. But the auspices under which this legislation was enacted, no less than its intrinsic importance, entitle its advocates to the fullest consideration of every argument in its support, and we, therefore, take up the discussion of the police power under which this law is sought to be justified. The police power is, of course, one of the necessary attributes of civilized government. In its most comprehensive sense it embraces the whole system by which the State seeks to preserve the public order, to prevent offenses against the law, to insure to citizens in their intercourse with each other the enjoyment of their own so far as is reasonably consistent with a like enjoyment of rights by others. Under it persons and property are subjected to all kinds of restraints and burdens in order to secure the general comfort, health and prosperity of the State. But it is a power which is always subject to the constitution, for in a constitutional government limitation is the abiding principle, exhibited in its highest form in the constitution as the deliberative judgment of the people, which moderates every claim of right and controls every use of power. In the language of Chief Justice Shaw, in *Commonwealth v. Alger*, 7 Cush. 85; "It is much easier to perceive and realize the existence and sources of this power than to mark its boundaries or prescribe limits to its exercise." It covers a multitude of things that are designed to protect life, limb, health, comfort, peace and property according to the maxim *sic utere tuo ut alienum non lædas*, but its exercise is justified only when it appears that the interests of the public generally, as distinguished from those of a particular class, require it, and when the means used are reasonably necessary for the accomplishment of the desired end, and are not unduly oppressive. (*Lawton v. Steele*, 152 U. S. 133, 137; *Colon v. Lisk*, 153 N. Y. 188, 196; *Wright v. Hart*, 182 N. Y. 330.) In order to sustain legislation under the police power the courts must be able to see

that its operation tends in some degree to prevent some offense or evil, or to preserve public health, morals, safety and welfare. If it discloses no such purpose, but is clearly calculated to invade the liberty and property of private citizens, it is plainly the duty of the courts to declare it invalid, for legislative assumption of the right to direct the channel into which the private energies of the citizen may flow, or legislative attempt to abridge or hamper the right of the citizen to pursue, unmolested and without unreasonable regulation, any lawful calling or avocation which he may choose, has always been condemned under our form of government. Concrete illustrations of what may and what may not be done under the police power are to be found in this very labor law of which the new statute is a part. As this statute stood before article 14-a was added, it regulated electric work, the operation of elevators, work on scaffolds, work with explosives and compressed air, the construction of tunnels and railroad work. It regulated the hours of work in certain employments; it directed the payment of wages in cash at specified periods; it provided for the protection of employees engaged in the erection of buildings; it compelled the employer to guard dangerous and exposed machinery; to construct fire escapes and ventilating appliances; to provide toilet facilities, pure drinking water and sanitary arrangements; it prohibited the employment of women, and of children under certain ages, in specified occupations; it regulated the hours of labor of minors; it modified the fellow-servant rule, the law of contributory negligence and the assumption of risks; and, in short, it imposed upon the employer many restrictions and duties which were unknown to the common law. Broadly classified, all these and similar statutory provisions which are designed, in one way or another, to conserve the health, safety or morals of the employees, and to increase the duties and responsibilities of the employer, are rules of conduct which properly fall within the sphere of the police power. (*Holden v. Hardy*, 169 U. S. 366; *Missouri Pac. Ry. Co. v. Mackey*, 127 U. S. 205.) But the new addition to the labor law is of quite a different character. It does nothing to conserve the health, safety or morals of the employees, and it imposes upon the employer no new or affirmative duties or responsibilities in the conduct of his business. Its sole purpose is to make him liable for injuries which may be sustained wholly without his fault, and solely through the fault of the employee, except where the latter fault is such as to constitute serious and willful misconduct. Under this law, the most thoughtful and careful employer, who has neglected no duty, and whose workshop is equipped with every possible appliance that may make for the safety, health and morals of his employees, is liable in damages to any employee who happens to sustain injury through an accident which no human being can foresee or prevent, or which, if preventable at all, can only be prevented by the reasonable care of the employee himself. That this is the unmistakable theory and purpose of the act is made perfectly plain by the recital in section 215, which sets forth that from the nature, conditions or means of prosecution of the work in the employments which are classified as dangerous, "extraordinary risks to the life and limb of workmen engaged therein are inherent, necessary or substantially unavoidable, and as to each of which employments it is deemed necessary to establish a new system of compensation

for accidents to workmen." And to make the matter still more plain, the learned counsel for the commission argues in his brief that "if it is competent for the legislature to say to the employer in a dangerous trade, 'use the utmost care in giving your workmen safe work, so that no act of yours, or implement of yours, or work that you set them to do shall hurt them, and if you fail you shall be liable in damages,' if it is competent to make such a law, then it is equally competent to say as in this new act directly, 'you shall be responsible for all damages caused by unsafe condition of work,' and that is just what the liability for trade risks under the new act means." In this argument the learned counsel ignores, or at least misses, as we think, the vital distinction between legislation which imposes upon an employer a legal duty, for the failure to perform which he may be penalized or rendered liable in damages, and legislation which makes him liable notwithstanding he has faithfully observed every duty imposed upon him by law. At pages 46 and 47 of the report of the commissioners are quoted the several pertinent provisions of our State constitution. (Art. 1, sec. 18; art. 1, sec. 2; art. 1, sec. 1; art. 1, sec. 6.) With reference to these, the commissioners say: "It is obvious, on a mere reading, that the first section makes it impossible for the legislature to enact any law which will take away from the representatives of an injured workman the right of action there named for injuries causing death, nor can the legislature limit it in any way. It is equally obvious, it seems to us, that it was the intention of the second section of the constitution (Art. 1, sec. 2), to provide that in all controversies in the courts of law either side should finally have a right to a jury trial on the question of liability, and however successful or unsuccessful jury trials may be in cases of employer's liability, or in other cases, that solemn mandate of the constitution can not be set aside. The third and fourth sections of the constitution above quoted are practically those which, like the fourteenth amendment of the Federal Constitution, provide for due process of law in all legislation, that is, speaking generally, which prohibit the passage by the legislature of such legislation as shall arbitrarily deprive any of the citizens of the State of life, liberty or property."

These are interesting and salient admissions, but the ease with which these constitutional provisions are brushed aside is startling. Continuing, the commissioners say: "But we regard it as settled that the legislature has power, if it so chooses, to change or abrogate the common law on employer's liability, or the employers' liability act, or any other statutes in regard thereto. * * * The legislature of this State, in the exercise of its general powers, * * * has in the past so legislated as to prescribe that employers in New York industries, shall conduct their business, use their machines and use their property in such ways as shall conduce to the safety of the employees and the prevention of accident and disease. Such is the whole purpose of the labor law. * * * We are of opinion that it is competent for the legislature to take a further step and provide conditions of the carrying on of such dangerous industries—not at the moment conditions as to the method of carrying them on—but conditions providing that any man in the State who carries on such dangerous trades shall be liable to make compensation to the employees injured either by the fault of the employer, or by those unavoidable

risks of the employment. The effect of such a statute would be to reverse the common-law doctrine that the employee assumes the risk of his employment."

With all due respect to the members of the commission we beg to observe that the statute enacted in conformity with their recommendations, does not stop at reversing the common law; it attempts to reverse the very provisions of the constitution which, the commissioners admit, are obviously beyond the reach of the legislature. We can not understand by what power the legislature can take away from the employer a constitutional guaranty of which the employee may not also be deprived. If it is beyond the power of the legislature to take from the representatives of deceased employees their rights of action under the constitution, by what measure of power or justice may the legislature assume to take from the employer the right to have his liability determined in an action at law? Conceding, as we do, that it is within the range of proper legislative action to give a workman two remedies for a wrong, when he had but one before, we ask, by what stretch of the police power is the legislature authorized to give a remedy for no wrong? If, before the passage of this law, the employer had a right to a jury trial upon the question of liability, where and how did he lose it? Can it be taken from him by the mere assertion that this statute only reverses the common-law doctrine that the employee assumes the risk of his employment? It would be quite as logical and effective to argue that this legislation only reverses the laws of nature, for in everything within the sphere of human activity the risks which are inherent and unavoidable must fall upon those who are exposed to them. We must admit that what the legislature may prohibit it may absolutely control. Where the right to exist, as in case of corporations, depends upon the will of the legislature, that right may be granted subject to prescribed conditions. In such a case an employer may be made an insurer of the safety of his employees as a condition of the permission to engage in business. But when an industry or calling is per se lawful and open to all, and, therefore, beyond the prohibitive power of the legislature, the right of governmental control is subject to such reasonable enactments as are directly designed to conserve health, safety, comfort, morals, peace and order. (*Lochner v. New York*, 198 U. S. 45.) For the failure of an employer to observe such regulations the legislature may unquestionably enact direct penalties or create presumptions of fault which, if not rebutted by proof, may be regarded as sufficient evidence of liability for damages. That must be the extreme limit of the police power, for just beyond is the constitution which, in substance and effect, forbids that a citizen shall be penalized or subjected to liability unless he has violated some law or has been guilty of some fault.

The limitations of the police power are illustrated in a great variety of cases. In *Matter of Jacobs*, 98 N. Y. 98, 99, it was held that an act was void which made it a misdemeanor to manufacture cigars or prepare tobacco in certain tenements. In *People v. Marx*, 99 N. Y. 377, this court condemned an act absolutely prohibiting the manufacture or sale of oleomargarine, upon the ground that it interfered with a lawful industry, not injurious to the public and not fraudulently conducted, although in a later case (*People v. Arensberg*, 105 N. Y. 123) another statute relating to the same subject was upheld because it was directly aimed at a designed and intentional imitation

of dairy butter. In *People v. Gillson*, 109 N. Y. 389, 404, it was held that a statute was not within the police power which prohibited the sale or disposal of any article of food upon any representation or inducement that anything else will be delivered as a gift, prize, premium or reward to the purchaser. The ground of the decision was that it was not a health law; that it was not designed to prevent the adulteration of food, and that it was not in the power of the legislature to convert an innocent act into a crime. In *Colon v. Lisk*, 153 N. Y. 188, the statute under consideration provided for the summary seizure of any boat or vessel, used by one person in interfering with the oysters or shellfish of another, and for its forfeiture and sale. It was held that the statute sanctioned an unauthorized confiscation of private property for the mere protection of private rights and was not within the police power of the State. In *People v. Hawkins*, 157 N. Y. 1, this court decided that a statute was void which made it a misdemeanor to sell or expose for sale any goods made in a penal institution unless they were labeled "convict made." In *People v. Orange County Road Con. Co.*, 175 N. Y. 84, it was held that the State can not dictate to independent contractors on State work the hours of labor which they shall prescribe for their employees, where there was nothing in the character of the work or in the provisions of the contract to justify legislative interference. In *Beardsley v. N. Y., L. E. & W. R. R. Co.*, 162 N. Y. 230, what is known as the "mileage book act," which required railroad companies to issue mileage books and provided a penalty for refusal, was unconstitutional as to railroad corporations in existence at the time of its enactment, because it was an illegal invasion of the vested property rights of such corporations. In *Schnaier v. Navarre Hotel & I. Co.*, 182 N. Y. 88, the court pronounced invalid a statute which provided that it should be unlawful for a copartnership to engage in the business of employing or master plumber unless each and every member thereof shall have registered, after examination and certification by an examining board of plumbers. In *People v. Marcus*, 185 N. Y. 257, it was held that a section of the penal code was void which provided, in substance, that no person shall make the employment of another, or the continuance of such employment, conditional upon the employee's not joining or becoming a member of a labor organization. In *People v. Williams*, 189 N. Y. 131, 134, this court condemned that part of the labor law which prohibited the employment of an adult female in a factory before 6 o'clock in the morning or after 9 o'clock in the evening, and held that it was not a proper exercise of the police power, since it had no reference to the number of hours of labor or to the healthfulness of the employment.

We have yet to consider certain special cases upon which the exponents of this new law have planted their faith and hope, and these run along such divergent lines as to indicate, more clearly than anything else, the absence of any sound legal theory upon which this legislation can be sustained. These cases are cited in support of the contention that the common law and our statutes furnish many illustrations of legal liability without fault, but we shall endeavor by analysis to show how inapplicable they are to the questions now before the court. The case of *Marvin v. Trout*, 199 U. S. 212, arose under an Ohio statute which subjected premises used for gambling to a lien for money lost in gambling. The statute forbade gambling, and the

court very properly argued that "the power of the State to enact laws to suppress gambling can not be doubted, and, as a means to that end, we have no doubt of its power to provide that the owner of the building in which gambling is conducted, who knowingly looks on and permits such gambling, can be made liable in his property which is thus used, to pay a judgment against those who won the money, as is provided in the statute. * * * The liability of the owner of the building to make good the loss sustained, under the circumstances set forth in the statute, was clearly part of the means resorted to by the legislature for the purpose of suppressing the evil in the interests of the public morals and welfare." (p. 224.) A more cogent illustration of the undoubted application of the police power can not be found. In the interest of good morals it is not merely the right but the duty of the State to suppress gambling, and the case, so far from being an authority for the idea of liability without fault, proceeds directly upon the theory that the owner was at fault in permitting his premises to be used for an illegal purpose. Then there is the case of *Bertholf v. O'Reilly*, 74 N. Y. 509, in which this court upheld the so-called "civil damage act" which gave to every husband, wife, parent, guardian, employer or other person who should be injured in person or property or means of support by any intoxication of any person, a right of action against any person who by selling or giving away intoxicating liquors caused the intoxication, in whole or in part, and subjecting to the same liability any person or persons owning or renting or permitting the occupation of any building or premises with knowledge that intoxicating liquors were to be sold thereon. In that case, as in the case of *Marvin v. Trout*, supra, the controlling principle was that the State had the right to prohibit and, therefore, the absolute right to control. As Judge Andrews pertinently observed, "the right of the State to regulate the traffic in intoxicating liquors, within its limits, has been exercised from the foundation of the Government, and is not open to question. The State may prescribe the persons by whom and the conditions under which the traffic may be carried on. It may impose upon those who act under its license such liabilities and penalties as in its judgment are proper to secure society against the dangers of the traffic and individuals against injuries committed by intoxicated persons under the influence of or resulting from their intoxication." (p. 517) The defendant in that case, it is true, was not the licensee, but he had rented his premises for the traffic in intoxicating liquors knowing that they were to be so used. Upon that feature of the case Judge Andrews said: "The liability imposed upon the landlord for the acts of the tenant is not a new principle in legislation. His liability only arises when he has consented that the premises may be used as a place for the sale of liquors. He selects the tenant, and he may, without violating any constitutional provision, be made responsible for the tenant's acts connected, with the use of the leased property." (p. 525) That is very far from being a case of liability without fault. The enactment of the "civil damage act" was clearly within the police power, and the liability imposed did not deprive either the tenant or the landlord of "due process of law," for each had the right to his day in court and an opportunity to disprove the facts upon which the statutory right of action depended. Let us suppose, however, that the statute had gone so far as to provide that the mere fact of selling

liquor by the tenant, or the mere fact of renting the premises for that purpose by the landlord, should be deemed conclusive proof of the intoxication of the person to whom the liquor was sold, and of the fact that the person bringing the suit had suffered injury thereby, so that the person sued could not be heard to deny or disprove his responsibility for the intoxication or the injuries resulting therefrom. Would that be "due process of law?" Suppose that the Ohio statute, which was also clearly within the general scope of the police power, had imposed upon the landlord a liability for money lost in gambling on his premises without his knowledge of the purpose for which the building was used, and had declared that evidence of the mere loss of the money should be sufficient to sustain a judgment against him. That would clearly be a case of liability without fault; but what court, controlled by constitutional limitations, would render such a judgment? We are referred to the case of *Chicago, Rock Island & Pacific Ry. Co. v. Zerneck*, 183 U. S. 582, as an illustration of liability without fault. We think that case has no analogy to the case at bar. There a statute of Nebraska imposed upon railroad corporations a liability for all injuries to passengers except when occasioned by the criminal negligence of the person injured, or when the injury was sustained in the violation of some express rule or regulation of the corporation. The point decided in that case was that this rule of liability was a part of the very statute under which the corporation took its charter. The defendant in the case at bar is a railroad corporation, and as such may be subject to State regulations which would not apply to other corporations or to individuals, but we are not now concerned with that question, since the statute before us has reference to employers in their relations with their employees, and not to railroads in their service to the public.

In support of this new statute we are also asked to consider the supposed analogies of the law of deodands; the common-law liability of the husband for the torts of his wife; the liability of the master for the acts of his servant, and the liability of a ship for the care and maintenance of sick or disabled seamen. From the historical point of view, these subjects might be very entertainingly elaborated, but for the practical purposes of this discussion they may be very briefly disposed of. If the law of deodands was ever imported into this country it has never, to our knowledge, found expression in a single statute or judicial decision. It was one of those primitive conceptions of justice under which a chattel which caused the death of a human being was forfeited to the King. We are unable to see what bearing it can have upon the question whether, under our constitutions, it is due process of law to render a man liable for damages when he has been guilty of no fault. Quite as far-fetched seems the argument based upon the common-law liability of the husband for the torts of his wife. Under the common-law unity of husband and wife, the latter was presumed to act under the compulsion of the former; and the wife could never be sued alone. As the marriage vested the husband with the personal property of the wife, it was simply logical that he should pay her obligations. So with the liability of the master for the acts of his servant, the whole theory is expressed in the maxim *qui facit per alium facit per se*. He who acts through another acts himself. How do these illustrations support the principle of liability without fault? Could a husband or master be held

liable under the common law when the wife or servant had been guilty of no wrong? Would the common law have denied to the husband or master the right to provide that no tort had been committed by the wife or servant? The admiralty cases of *The Osceola*, 189 U. S. 158, *The City of Alexandria*, 17 Fed. Rep. 399, and the case of *Scarff v. Metcalf*, 107 N. Y. 211, seem to us equally inapplicable as authorities for the proposition that the law recognizes liability without fault. It is common knowledge that the contracts and services of seamen are exceptional in character. A seaman engages for the voyage. He is subject to physical discipline, and exposed to hardships and dangers peculiar to the sea. He is, in effect, a co-venturer with the master, and shares in the risks of shipwreck and capture, often losing his wages by casualties which do not affect workmen on land. For these and many other obvious reasons the maritime law has wisely and benevolently built up peculiar rights and privileges for the protection of the seaman which are not cognizable in the common law. When he is sick or injured he is entitled to be cared for at the expense of the ship, and for the failure of the master to perform his duty in this regard, the ship or the owner is liable. That is a right given to the seaman, and a duty enjoined upon the master, by the plainest dictates of justice, which arises out of the necessities of the case; and, because of the reason of the rule, the right and duty cease when the contract has terminated and the seaman has been returned to the port of shipment or discharge, or has been furnished with means to do so. But beyond this duty on the part of the master or owner, there seems to be no liability whatever for injuries sustained by the seaman in the course of his work. We think it may confidently be asserted that within the whole range of the maritime law there will be found no rule which renders master, owner or ship liable in damages for an injury sustained by the seaman without fault on the part of anyone, or without any fault except his own. The case of *Scarff v. Metcalf*, 107 N. Y. 211, was not disposed of upon any such theory, but was based upon the neglect of the master to perform the duty of caring for the injured seaman imposed by the maritime law. The legal status of seamen is clearly illustrated in the case of *Robertson v. Baldwin*, 165 U. S. 275, where it was held that compulsory personal service of a seaman in performance of his contract was not a violation of the thirteenth amendment to the Federal Constitution forbidding slavery or involuntary servitude. In that case the learned justice who wrote for the court suggested that enforced service under a seaman's contract was not involuntary within the Constitution, although the contract would not be enforced by the courts. But in the later case of *Clyatt v. United States*, 197 U. S. 207, it was held that peonage or enforced service, whether under a voluntary contract of service or not, was involuntary servitude and forbidden by the Constitution in all cases save those arising out of the exceptional relations of the seaman to his ship, the child to its parents and the apprentice to his master. In the review in *Robertson v. Baldwin*, supra, of the various decisions in admiralty, it is made quite clear that the courts have always regarded seamen as irresponsible to a degree which makes them incapable of fully protecting their own rights. With the power given to the employer of seamen to compel specific performance of their contracts, there are imposed certain obligations unknown to any other relation. It is a relation which rests on

affirmative law and not on natural right. We can find no analogy between a case arising out of such a relation and one in which an adult of sound mind and capable of freely contracting for himself voluntarily enters upon employment from which he is at liberty to withdraw whenever he will.

Great reliance is placed upon the case of *St. Louis & San Francisco Ry. Co. v. Mathews*, 165 U. S. 1, in support of the contention that there may be liability where there is no delinquency. That was an action brought by an owner of land adjoining the defendant's railroad to recover damages for the destruction of his dwelling house and other buildings, caused by fire which spread from sparks emitted by the defendant's locomotives. The action was brought under a statute of the State of Missouri which provided that "each railroad corporation, owning or operating a railroad in this State, shall be responsible in damages to every person and corporation whose property may be injured or destroyed by fire communicated, directly or indirectly, by locomotive engines in use upon the railroad owned or operated by such railroad corporation; and each such railroad corporation shall have an insurable interest in the property upon the route of the railroad owned or operated by it, and may procure insurance thereon in its own behalf, for its protection against such damages." The statute was upheld as being within the legislative power of the State. That decision is amply supported by a number of reasons which have no application to the controversy at bar. To begin with, the constitution of Missouri contained a clause, which was in force when the railroad company obtained its charter, providing that "the exercise of the police power of the State shall never be abridged, or so construed as to permit corporations to conduct their business in such manner as to infringe the equal rights of individuals, or the general well-being of the State." (Missouri const., art. 12, sec. 5.) Another ample reason is found in the fact that railroads alone "have the privilege of taking a narrow strip of land from each owner, without his consent, along the route selected for the track, and of traversing the same at all hours of the day and night, and at all seasons whether wet or dry, with locomotive engines that scatter fire along the margin of the land not taken, thereby subjecting all combustible property to extraordinary hazard of loss." (*Grissell v. Housatonic R. R. Co.*, 54 Conn. 447.) Then, again, "the right to use the agencies of fire and steam in the movement of trains is derived from legislation of the State; and it certainly can not be denied that it is for the State to determine what safeguards must be used to prevent the escape of fire, and to define the extent of the liability for fires resulting from the operation of trains by means of steam locomotives. This is a matter within State control." (*Hartford Ins. Co. v. Chi., Mil. & St. Paul Ry. Co.*, 62 Fed. Rep. 904.) A legislature may, if it chooses, make it a condition of the right to run carriages propelled by the agency of fire, that the corporation employing them shall be responsible for all injuries which fire may cause. (*Ingersoll & Quigley v. Stockbridge & Pittsfield R. R. Co.*, 8 Allen 438; *Grand Trunk Ry. Co. v. Richardson*, 9 U. S. 454.) And, finally, these statutes are designed to protect the rights of those who have no contractual relations to the corporations which inflict the injury. In such a case, when both parties are equally faultless, the legislature may properly consider it to be just that the duty of insuring

private property against loss or injury caused by the use of the dangerous instruments should rest upon the railroad company, which employs the instruments and creates the peril for its own profit, rather than upon the owner of the property who has no control over or interest in these instruments. Quite aside from the considerations which support such a statutory liability against railroad corporations, it may be added that it is in no sense an extension of the rule of the common law to modern conditions, but in reality a return to the original common-law doctrine under which every person who permitted fire started by him to escape beyond his house or close was liable to every one who suffered loss or injury thereby. The severity of that early English rule was moderated by numerous statutes, among which are 6 Anne and 14 Geo. III. As to these two last-mentioned statutes it has been held that they became by adoption a part of the common law of this State, under which neither individuals nor corporations are liable for escaping fire unless there is negligence. [Cases cited.] The cited cases arising out of injuries inflicted by animals of known dangerous or vicious propensities, and the liability which has often been imposed for the maintenance of private nuisances, we shall not discuss, for we think they are governed by well-settled principles which clearly have no application to the questions now before us.

In the addenda to the instructive brief of the counsel for the commission our attention is called to three decisions of the Federal Supreme Court which have been but recently decided and not yet officially reported. (*Noble State Bank v. Haskell*, 219 U. S. 104; *Assaria State Bank v. Dolley*, 219 U. S. 121, and *Engel v. O'Malley*, 219 U. S. 128.) These cases, it is contended, strongly support the validity of the legislation which we are condemning because, as counsel asserts, they go directly to the ultimate question: "Is the act an unreasonable regulation of the status of employment?" We have tried to make it clear that in our judgment this statute is not a law of regulation. It contains not a single provision which can be said to make for the safety, health or morals of the employees therein specified, nor to impose upon the enumerated employers any duty or obligation designed to have that effect. It does not affect the status of employment at all, but writes into the contract between the employer and employee, without the consent of the former, a liability on his part which never existed before and to which he is permitted to interpose practically no defense, for he can only escape liability when the employee is injured through his own willful misconduct. That is a defense which needs no legislative sanction, since it would be abhorrent to the most primitive notions of justice to permit one to impose liability for his willfully self-inflicted injuries upon another who is wholly free from responsibility for them. The case of *Engel v. O'Malley*, supra, is so clearly distinguishable from the case at bar that we need only state the facts to mark the contrast. The *Engel* Case arose under a New York statute which provides that individuals and firms shall not engage in the business of receiving deposits for safe keeping or for transmission, or for any other purpose, or in the business of banking, without first obtaining from the State comptroller a license. The same statute further provides that applicants for such a license must pay a prescribed fee, give bonds and submit to other restrictions. We have already passed upon the constitutionality of certain parts

of that statute (L. 1907, ch. 185) in *Musco v. United Surety Co.*, 196 N. Y. 459, which was an action upon a bond given under it, and have held that "the regulation of the business of receiving deposits is plainly within the power possessed by the State to regulate the conduct of various pursuits when necessary for the protection of the public" (p. 465). The portion of the statute under consideration in the last cited case was plainly directed against an obvious evil which vitally affected the public welfare. The city of New York is the gateway through which this country admits each year thousands of poor and ignorant immigrants who deal with individuals and firms engaged in the business of exchanging domestic for foreign money, receiving deposits and transmitting remittances to foreign ports. It is a business which may, and probably does, attract some irresponsible and mercenary adventurers. A law designed to regulate and safeguard such a business in a way which affects no constitutional property rights, is plainly within the police power of the State. That is all that was involved in the *Musco* Case, and that is the extent to which this court has passed upon the constitutionality of the New York statute (L. 1907, ch. 185). It need hardly be argued that a law passed under the guise of such a purpose, but having in fact no relation to it, and accomplishing nothing to make the business of receiving deposits more safe, would be as far beyond the sphere of the police power as an amendment to the banking law requiring banks and bankers to protect their customers, to whom they pay moneys, against thefts or other physical losses thereof; or an amendment to the labor law which would compel the industrial employers to give each employee a vacation on full pay during two months of every year.

As to the cases of *Noble State Bank v. Haskell*, 219 U. S. 104, and *Assaria State Bank v. Dolley*, 219 U. S. 121, we have only to say that if they go so far as to hold that any law, whatever its effect, may be upheld because by the "prevailing morality" or the "strong and preponderant opinion" it is deemed "to be greatly and immediately necessary to the public welfare," we can not recognize them as controlling of our construction of our own constitution. That the business of banking in the several States may be regulated by legislative enactment is too obvious for discussion. That the extent to which such State regulation may be carried must depend upon the difference in constitutional provisions is also plain. How far these late decisions of the Federal Supreme Court are to be regarded as committing that tribunal to the doctrine that any citizen may be deprived of his private property for the public welfare we are not prepared to decide. All that it is necessary to affirm in the case before us is that in our view of the constitution of our State the liability sought to be imposed upon the employers enumerated in the statute before us is a taking of property without due process of law, and the statute is, therefore, void.

The judgment of the appellate division should be reversed and judgment directed for the defendant, with costs in all courts.

Chief Justice Cullen, concurring, said:

I concur in the opinion of Judge Werner for reversal of the judgment appealed from. I concede that the legislature may abolish the rule of fellow-servant as a defense to an action by employee against the employer. Indeed, we have decided that in upholding the so-called *Barnes Act*. (*Schradin v. N. Y. C. & H. R. R. R. Co.*,

194 N. Y. 534.) I concede that the legislature may also abolish as a defense the rule of assumption of risk and that of contributory negligence unless the accident proceed from the willful act of the employee. I concede that in a work, occupation or business of such a nature that the legislature might prohibit its pursuit or exercise altogether, the legislature may prescribe terms under which it may be carried on. Plainly, this litigation does not present such a case. The legislature could not revoke the franchise it had previously given to the defendant to operate a railroad. (*People v. O'Brien*, 111 N. Y. 1.) I am not prepared to deny that where the effects of the work, even though prosecuted carefully, go beyond a person's own property and injure third persons in no way connected therewith, the person for whose account the work is done may be held liable for injuries occasioned thereby. I also concede the most plenary power in the legislature to prescribe all reasonable rules for the conduct of the work which may conduce to the safety and health of persons employed therein. But I do deny that a person employed in a lawful vocation, the effects of which are confined to his own premises, can be made to indemnify another for injury received in the work unless he has been in some respect at fault. I am not impressed with the argument that "the common law imposed upon the employee entire responsibility for injuries arising out of the necessary risks or dangers of the employment. The statute before us merely shifts such liability upon the employer." It is the physical law of nature, not of government, that imposes upon one meeting with an injury, the suffering occasioned thereby. Human law can not change that. All it can do is to require pecuniary indemnity to the party injured, and I know of no principle on which one can be compelled to indemnify another for loss unless it is based upon contractual obligation or fault. It might as well be argued in support of a law requiring a man to pay his neighbor's debts, that the common law requires each man to pay his own debts, and the statute in question was a mere modification of the common law so as to require each to pay his neighbor's debts. It is urged that the legislation before us can be upheld on the decision of the Supreme Court of the United States in *Noble State Bank v. Haskell*, 219 U. S. 104. In support of the claim there is cited from the opinion the following: "It may be said in a general way that the police power extends to all the great public needs. (*Camfield v. United States*, 167 U. S. 518.) It may be put forth in aid of what is sanctioned by usage, or held by the prevailing morality or strong and preponderant opinion to be greatly and immediately necessary to the public welfare." (p. 111.) It is possible that the doctrine of these two sentences would justify the statute before us and possibly any legislation, if only supported by a sufficient popular demand, but it is both unfair and unsafe to excerpt fragmentary sentences from the opinion of a court and interpret them apart from the context of the whole opinion. However that may be, the decision in the *Noble Bank Case* is not controlling upon this court in the construction of the constitution of our own State, and I am not disposed to accept it, at least, until it has received the approval of a majority of the court. I concur with Judge Werner that the act, as applicable to the case before us, can not be considered as an exercise of the power of the State to regulate corporations. The act is general, not confined to corporations, and even if it were, I

think its effect would be a deprivation of property not authorized by the reserved power to regulate.

As to corporations hereafter formed, the question is very different. The franchise to be a corporation is not one inherent in the citizen, but proceeds solely from the bounty of the legislature, and for that reason the legislature may dictate the terms on which it will be granted and require the acceptance of the provisions of this act as a condition of incorporation. (*Purdy v. Erie R. R. Co.*, 162 N. Y. 42; *Minor v. Erie R. R. Co.*, 171 N. Y. 566; *People ex rel. Schurz v. Cook*, 110 N. Y. 443; S. C., 148 U. S. 397; *Chicago, R. I. & Pac. R. Co. v. Zerneck*, 183 U. S. 582.) Even in the case of existing corporations, the corporate existence of all those created since the constitution of 1846 may be revoked by the legislature, though the property rights of such corporations and their special franchises other than the one to be a corporation can not be impaired. (Const. Art. VIII, sec. 1; *Lord v. Equitable Life Assur. Socy.*, 194 N. Y., 212.) The property and franchise would have to be managed by the owners as partners or tenants in common, and the legislature might require as a condition of the continued right to be a corporation that before the expiration of a reasonable period the provisions of the statute should also be accepted by them. They are in the condition of a tenant at will who, when the landlord raises the rent, must either comply with his terms or, after the expiration of a reasonable time prescribed by a notice to quit, surrender his rights under the lease. But individual citizens, following the ordinary vocations of life, asking no favors of the Government, whether a corporate or other franchise, but only the protection of life and property, which every Government owes to its citizens, and guilty of no fault, can not be compelled to contribute to the indemnity of other citizens who, by misfortune or the fault of themselves or others, have suffered injuries, except by the exercise of the power of taxation imposed on all, at least all of the same class, for the maintenance of public charity. Of course, I am not now referring to obligations springing from domestic relations.

EMPLOYERS' LIABILITY—DEPARTMENTS OF LABOR—CONSTRUCTION OF STATUTE—*Judd v. Letts, Supreme Court of California, 111 Pacific Reporter, page 12.*—Frances Augusta Judd was employed by Arthur Letts as a saleswoman in his store, and at the close of her day's labor on February 21, 1908, she entered an elevator to go for her wraps on another floor of the building. By the negligence of the elevator operator, as was alleged, Miss Judd was injured, and she sued to recover damages for her injuries. Damages were awarded in the superior court of Los Angeles County, and this judgment was, on appeal, affirmed.

The decision turned on the construction of section 1970 of the Civil Code as amended in 1907 (Acts of 1907, ch. 97). The particular point involved was the meaning of the words "department of labor" as used in this statute. The view taken by the court is set forth in that portion of its opinion here reproduced, which was

delivered by Judge Sloss September 8, 1910. Judge Sloss said, in part:

Prior to 1907, the section read as follows: "An employer is not bound to indemnify his employee for losses suffered by the latter in consequence of the ordinary risks of the business in which he is employed, nor in consequence of the negligence of another person employed by the same employer in the same general business, unless the negligence causing the injury was committed in the performance of a duty the employer owes by law to the employee or unless the employer has neglected to use ordinary care in the selection of the culpable employee." The amendment added this proviso: "*Provided, nevertheless,* That the employer shall be liable for such injury when the same results from the wrongful act, neglect or default of any agent or officer of such employer, superior to the employee injured, or of a person employed by such employer having the right to control or direct the services of such employee injured, and also when such injury results from the wrongful act, neglect or default of a coemployee engaged in another department of labor from that of the employee injured, or employed upon a machine, railroad train, switch signal point, locomotive engine, or other appliance than that upon which the employee injured is employed, or who is charged with dispatching trains, or transmitting telegraphic or telephonic orders upon any railroad, or in the operation of any mine, factory, machine shop, or other industrial establishment." While the proviso is framed in a manner that may leave a doubt concerning the proper relation of some of the phrases, we think it quite clear that the intent of the amendment was to take from all classes of employers the benefit of the fellow-servant rule, in cases where the employee injured and the one at fault are engaged in different departments of labor. The appellant argues that the concluding words of the proviso, "upon any railroad, or in the operation of any mine, factory, machine shop or other industrial establishment," qualify all the preceding clauses following the words, "and also." So arguing, he claims that the Broadway Department Store is not a railroad, mine, factory, machine shop, or other industrial establishment, and that therefore the "department of labor" exception has no application. There is no rule of grammatical construction which requires that the final clause be given the effect claimed. The interpretation thus urged would, we think, unduly limit the effect of the proviso.

This brings us to a consideration of the meaning of the phrase "another department of labor." The general rule exempting employers from liability for injuries sustained by one servant through the negligence of another servant in the same common employment has been declared, in the absence of any statute on the subject, by all the courts applying the doctrines of the common law. The decisions are by no means in accord with respect to the fundamental reason or basis for the rule, and this phase of the subject has called forth the expression of a multitude of varying views. With a discussion of these we need not here concern ourselves. So, too, the courts have differed in their attempts to define the relation of common service. In the absence of any statutory limitation of the doctrine, there have been in some jurisdictions decisions denying to the employer exemption in cases where the injured employee and the one

whose negligence was asserted were not "consociated" in the same "department," or "line of employment." In this State no such modification had ever, prior to the amendment of section 1970, been recognized. That section, as it formerly stood, was regarded as declaratory of the common law (*Congrave v. S. P. R. R. Co.*, 88 Cal. 360, 26 Pac. 175), under its terms, a common employment existed when each of the servants in question was employed "in the same general business" (*Mann v. O'Sullivan*, 126 Cal. 61, 58 Pac. 375, 77 Am. St. Rep. 149).

It would seem clear from these considerations that the purpose of the amendment to section 1970 was to modify, in the interest of those employed, the rigor of the rule which, in many cases, denied them relief for loss or injury sustained without their fault. The enactment is remedial in character, and should be construed liberally with a view to carrying out the object sought. Such appears to have been the tendency of the courts in dealing with similar statutes. The term "department of labor" used in our statute has failed to receive definition at the hands of the legislature, and must, therefore, be construed by the courts according to the ordinary significance of the words used, taken in connection with the apparent purpose of enactment.

It would be difficult, if not impossible, to formulate a definition of the phrase "department of labor" in such terms as to furnish an exact test by which to determine on any given state of facts, whether two employees are in different departments. In a general way it may be said that the question of identity of department is to be determined by inquiring, among other things, whether the employees in question are habitually associated or brought together in the performance of their duties, whether they are under the immediate direction and control of the same superior, and whether the duties of one have any relation to or connection with those of the other. Where the facts are disputed, or, if undisputed, are such as to reasonably permit contrary inferences, the jury should be permitted to determine whether the servants were engaged in the same department of labor. But, where the facts are such that reasonable minds could not differ as to the conclusion, the question becomes one of law for the court. In *Morgan v. J. W. Robinson Co.*, 107 Pac. 695, the only case in which we have had occasion to consider the effect of the amendment of section 1970, the court had no hesitation in declaring that, as matter of law, the employees there involved (i. e., a carpenter engaged in the construction of a building and a man operating a freight elevator used in a retail store) were engaged in different departments of labor. We are satisfied that the same result must be reached on the facts here shown. The plaintiff's only duties were those connected with the sale of cloaks and suits. The operation of the passenger elevator was an entirely separate and distinct branch of service. There was no relation between the two beyond the fact that, at the close of her day's service, the plaintiff was permitted, for her convenience, to use the elevator in going from her place of work to the dressing room. It could not be said that she and the elevator boy were engaged in the same department of labor without perverting the ordinary meaning of words and destroying the effect of the amendment. The court rightly instructed the jury with reference to this point.

EMPLOYERS' LIABILITY—FELLOW-SERVANT LAW—NATURE OF LIABILITY—INJURIES CAUSING DEATH—SURVIVAL OF RIGHT OF ACTION—DAMAGES—*Beeler v. Butte & London Copper Development Company, Supreme Court of Montana, 110 Pacific Reporter, page 528.*—Edwin Beeler was killed while in the employment of the company named above as a pump man in one of its mines. This action was brought by his heirs to recover damages under the provisions of sections 5248 to 5250 of the Revised Codes of Montana, and from a judgment in their favor in the district court of Silver Bow County the company appealed. The appeal resulted in the judgment of the lower court being affirmed, as appears from the following quotations from the opinion of the court as delivered by Judge Sanner. Numerous errors were alleged as grounds for reversal of the judgment, but these were reduced to a few general propositions which the supreme court discussed in part as follows. Taking up the first objection raised, Judge Sanner said:

It is urged that the complaint fails to state a cause of action in this: (a) That the action is not maintainable by plaintiffs, since it does not survive to the heirs but only to the personal representatives of the person injured; (b) that the action is upon a liability created by statute, and, having been commenced more than two years after the cause of action accrued, it is barred by the provisions of subdivision 1, section 6449, Revised Codes.

(a) The authority for this action is in the act approved February 20, 1905 (ch. 23, p. 51, Laws 1905), reexpressed in sections 5248, 5249, and 5250 of the Revised Codes. In section 5250 it is expressly provided that the right of action shall survive and may be prosecuted and maintained by the heirs or personal representatives of the person injured. The complaint alleges that the plaintiffs are the widow and child, respectively, and that there are no other heirs, of the person injured and since deceased. This is a sufficient answer as to the right of plaintiffs to maintain this suit.

(b) The theory of limitation, as disclosed in the chapter of the code on that subject, has no reference to the defenses that may or may not be interposed in resistance to a plaintiff's demand; but it is grounded in every instance upon the nature of the demand itself—whether it be upon a judgment, written contract, account, etc. Subdivision 1, section 6449, must be viewed in the light of the fact that the phrase "liability created by statute" has come to have a fixed application to a class of cases quite distinct from those elsewhere mentioned or referred to in the same chapter. If the action at bar had been for injuries resulting from the negligence of a vice principal, instead of a fellow servant, it would be recognized at once as a straight action in tort, governed, as to its limitation, without any thought of its being a "liability created by statute." Now, the fact that the injury which is the basis of the action, resulted from the negligence of a fellow servant instead of a vice principal does not affect the essential nature of the action; it is still an action for personal injuries founded upon actionable negligence. And while it may properly be said (see *Kelly v. Northern Pacific Ry. Co.*, 35 Mont. 243, 88 Pac. 1009) that under the act approved February 20, 1905,

an employer's liability exists where none existed before, yet the true function of that act must be regarded, not as creating a new cause of action, but merely to carry forward the right of the injured party and to remove a defense theretofore available in this class of causes (*Dillon v. Great Northern Ry. Co.*, 38 Mont. 485, 100 Pac. 960). It follows that in the sense employed by the chapter on limitations of actions, this is not an action on a "liability created by statute," and the contention that it is barred by subdivision 1, section 6449, is not sound. Such being our conclusion, it is unnecessary to consider whether, under the conditions presented by the record, the statute of limitations could be available to appellant in the absence of a special plea thereof.

The nature of the accident and the acts that caused it were then reviewed, with the conclusion that it resulted from the negligence of a fellow servant, and that, while Beeler was dead at the time when he was discovered, it does not appear that death was instantaneous, but, on the contrary, that there was sufficient competent evidence to support the conclusion that he lived an appreciable time after the injuries were sustained. These facts were regarded by the court as sufficient to warrant the refusal of the court below to direct a verdict for the defendant company.

Of the other points considered, none of which was found to furnish a basis for interfering with the judgment of the lower court, only that relating to the grounding of a claim for damages need be noted. On this point Judge Sanner said:

Complaint is made of instruction F, as follows: "The court instructs the jury that if under all the evidence and all of the instructions of the court your verdict should be for the plaintiffs and against the defendant, then it will be necessary for you to assess and write into that verdict the amount of damages caused proximately to Edwin Beeler by the acts, if proven, of the hoisting engineer. In determining this amount you are limited to a sum of money which would have compensated Edwin Beeler for the pain and suffering of mind and body which the injuries caused (if any such pain and suffering were caused), between the time that he was injured and the time he died, if he survived the injuries for any length of time, and to the further sum that would have compensated him, unless you find that death was instantaneous, for the impairment, if any, which was caused by the injuries, of his capacity to earn money in the future if he had not been injured. Now gentlemen, the amount sued for and claimed in the complaint of \$25,000 must not be to you any criterion in determining the amount of your verdict, if you do render any, in favor of the plaintiffs, but I charge you that in no event shall your verdict be in excess of the amount of \$25,000."

We see no error here. The phrase "any length of time" read in juxtaposition with the phrase "unless you find death was instantaneous" makes it clear that the court intended to advise the jury that there must have been an appreciable period of suffering. The statute authorizing this suit gives to the heirs the right to prosecute and maintain the same action that the injured man could have maintained, had he lived. Unquestionably, his right of action

included damages for the pain and suffering that he endured and for his diminished and lost earning capacity for the period of his natural expectancy. No reason exists why the scope of the action should diminish because of his death; to inject such a change into the statute would do violence to its language, and would, pro tanto at least, destroy its very purpose.

EMPLOYERS' LIABILITY—MINE REGULATIONS—SHOT FIRERS—CONSTRUCTION OF STATUTE—*Houglund et al. v. Avery Coal & Mining Company, Supreme Court of Illinois, 93 Northeastern Reporter, page 40.*—Blanche Houglund and others had sued the company named to recover damages for the death of William Stevenson and William Houglund as the result of an explosion in a mine operated by the company. Judgment was granted in favor of the plaintiffs, and the company appealed, alleging various grounds for reversal, none of which was allowed, and the judgment was affirmed. Various points were raised by the company, of which but one is of sufficient general importance to call for consideration here. This was the contention that a shot firer is not protected by the laws of Illinois (Acts of 1905, p. 328, as amended by Acts of 1907, p. 401; Twenty-second Annual Report of the Commissioner of Labor, 1907, pp. 370, 371). On this point Judge Farmer, speaking for the court, said:

The principal ground upon which plaintiff in error asks a reversal of these judgments is that a shot firer does not come within the protection of the general act concerning mines and miners. The shot firers' act was originally passed in 1905 (Laws 1905, p. 328), and was amended by the addition of three sections in 1907 (Laws 1907, p. 401). The amendments, however, do not affect the decision of the question raised by the plaintiff in error. The reason given by plaintiff in error for its contention that shot firers are not within the protection of the general act concerning mines and miners is that the shot firers' act is a separate and independent legislative enactment in nowise amendatory of the general act; also, that shot firers are experts to whom the entire mine is turned over when they commence the discharge of their duties, and no inspection is required or can be made after the miners quit work and before the shot firers enter upon the discharge of their duties. In *Davis v. Illinois Collieries Co.*, 232 Ill. 284, 83 N. E. 836, a shot firer was held to be within the protection of the general act concerning mines and miners. This case was cited with approval in *Brennen v. Chicago & Carterville Coal Co.*, 241 Ill. 610, 89 N. E. 756, where it was said the provisions of the general act "are for the safety and protection of all who are employed in the mine, including engineers, firemen, pump men, shot firers, drivers, and other workmen and employees."

Plaintiff in error insists that since those cases were decided this court has held in *Hollingsworth v. Chicago & Carterville Coal Co.*, 243 Ill. 98, 90 N. E. 276, that the shot firers' act is an independent act, and not an amendment to the general mining act, and that the decisions in those cases are therefore no authority. We can not agree to

this position. In the Hollingsworth case the coal company did not employ shot firers, and the shot fired by one of the miners caused an explosion, resulting in the death of another miner. The widow of the deceased brought an action against the coal company, and alleged as a ground of recovery that the mine was of such condition and character that the law required shot firers to be employed therein, and that the coal company willfully failed to employ shot firers, by reason whereof her husband was killed. We held the shot firers' act being no part of the general mines and miners' act but being an independent act, and containing no provision authorizing a widow to sue for damages for failure to comply with its provisions, as is the case with the general act, the suit could not be maintained. There is no intimation in the opinion in that case that shot firers are not within the protection of the general act, and that decision is in nowise inconsistent with the previous decisions of this court holding that they are within the protection of said act.

Complaint is made of the ruling of the trial court in permitting witnesses experienced in the business of mining and shot firing to testify, over the objection of plaintiff in error, that the shot in the second west entry was a workmanlike and practical shot. One of these witnesses prepared the shot, another saw it before it was fired, and the others made their examinations afterwards. Some of them testified it split the coal so that it was easily mined afterwards, but did not knock it down, as is usually the case. Some of them called it a "standing shot." All testified that it was prepared in a workmanlike and practical manner. It is conceded by the plaintiff in error that the subject was one for expert testimony, and no complaint is made that the witnesses did not possess the proper qualifications. The contention is that they should not have expressed any opinions, but that they should have described the shot and left it to the jury to determine whether it was a workmanlike and practical shot. Without stopping to inquire whether the latitude allowed by the court is too broad, it is sufficient to say that whether it was or not could have no controlling force on our decision. If the explosion occurred from the willful failure of plaintiff in error to provide proper air currents and keep the roadways cleaned and sprinkled, as charged in the declaration, contributory negligence of the deceased in firing a shot prepared in an unskillful manner would not defeat a recovery. (*Davis v. Illinois Collieries Co.*, supra.)

EMPLOYERS' LIABILITY—NOTICE—SUPERINTENDENCE—CONSTRUCTION OF STATUTE—*Smith v. Milliken Brothers, Court of Appeals of New York, 93 Northeastern Reporter, page 184.*—James Smith sued the company named on account of an injury received by him while in their employment. Smith was engaged in adjusting some heavy machinery in the plant of his employers and was standing on a cog-wheel not at that time in motion. While he was in this position one, C. E. Smith, who was in immediate charge of the work being done, directed one Miller, who was the superintendent in general charge of the work, to start the machinery with the result that James Smith suffered injury. Judgment had been rendered in James Smith's

favor in the courts below and on appeal this judgment was affirmed in the court of appeals.

The question was raised as to the sufficiency of the notice served under the liability law of the State (Consolidated Laws, ch. 31). On this point Judge Hiscock, who delivered the opinion, found that no material defect in the notice existed, saying that while it was not a model in form it did state with all necessary completeness the time and place and the nature of the injuries; also that the employer was apprised with reasonable certainty of the real cause of the accident, so that though there were admitted inaccuracies in the notice there was not sufficient lack of definiteness to invalidate it as given.

The point about which the strongest contention was made was that C. E. Smith who gave the order resulting in the injury was not under the act performing the work of a superintendent; but that since Miller, who was his superior, was present, any negligence of C. E. Smith would be nothing more than the act of a fellow servant. On this point Judge Hiscock spoke in part as follows:

There was evidence that Miller, the superintendent, directed respondent [James Smith] to obey the orders of Smith, and that he had been doing so for some time. While Miller had charge of a large number of men, Smith also had charge of a considerable number who were subject to his orders, and some or all of whom were engaged at the time in work upon this machine. He directed the respondent what to do at the time he was injured, and he was occupying a position on the machine where he could observe the work which was being done and give directions in connection therewith, while Miller, who, generally speaking, was his superior, was on this occasion engaged in performing part of the manual labor connected with adjusting the machine, and was not giving any orders.

The mere presence of a superior does not necessarily prevent a subordinate from acting as a superintendent. This is apparent, and the principle was practically involved and settled in *Andersen v. Penn. Steel Co.*, wherein a judgment for the plaintiff was affirmed. (197 N. Y. 606, 91 N. E. 1100.) In that case the intestate was killed through the alleged negligence in superintendence of one Lannon, who was a mere "pusher" or foreman of a gang of men in removing some steelwork in connection with Blackwells Island Bridge, while one Wright was foreman in general charge. The court was asked to charge "that if they find Wright, the foreman, was present at the time of the accident, Lannon can not be treated as superintendent within the meaning of the law." It declined so to do, and instead charged: "If Wright was present and engaged in superintendence of this particular work upon which the decedent was engaged at the time of the accident, then they can not find that Lannon was there acting as superintendent." This was excepted to, and, of course, approved by the affirmance of the judgment.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—STREET RAILWAYS—CONSTRUCTION OF STATUTE—*Conover v. Public Service Railway, Supreme Court of New Jersey, 78 Atlantic Reporter, page 187.*—This was an action brought by James W. Conover against the railway company named to recover damages for injury received by him while in the employment of the corporation named in the operation of a street railway. The declaration was demurred to by the company on the ground that the statute in question (paragraph 3 of section 1 of chapter 83 of the laws of New Jersey of 1909) related to steam railways and not to street railways. This view was taken by the supreme court of the State, which held that the statute creating liability for the injury or death of a person occasioned "by reason of the negligence of any person in the service of the employer who has the charge or control of any signal, switch, locomotive engine or train upon a railroad," could not under the construction placed upon other legislation of the State be held to apply to street railways. The concluding paragraph of the opinion, which was delivered by Judge Minturn, is as follows:

We can give to the words "locomotive engine" or "train upon a railway," as employed in this act, the construction contended for by the demurrant, so as to apply it to street railways, only by indulging in a liberality of construction and interpretation radically divergent from the accepted use of the words in popular and colloquial phrase and totally opposed, as has been seen, to the hitherto legislative and judicial acceptation of the terms. The collocation of these terms, "signal, switch, locomotive engine or train upon a railroad" affords some aid in enabling us to determine the legislative intent by according to them, as we must under the familiar canons of construction, their ordinary and common meaning in the absence of a legislative intent to the contrary, and a similar result is reached by the application of the maxim of construction, "Noscitur a sociis." (Black. Int. Laws, 135; Bacon's Ab. 4, p. 26; *Bishop v. Elliott*, 11 Exch. 113.) The plain inference from this collocation is, that the legislature in enacting the legislation in question had in mind that public policy of differentiation between two distinct systems of railroads which has consistently marked the legislation upon the subject and which has been repeatedly recognized by judicial determination as the declared public policy of the State.

EMPLOYERS' LIABILITY—RAILROADS—FEDERAL STATUTE—JURISDICTION OF STATE AND FEDERAL COURTS—INTERSTATE COMMERCE—CONSTRUCTION OF STATUTE—*Colasurdo v. Central Railroad of New Jersey, United States Circuit Court, Southern District of New York, 180 Federal Reporter, page 832.*—Michael Colasurdo was a trackwalker, assisting in the repair of a switch on the above-named railroad on the evening of December 25, 1908, and while so engaged was injured by being struck by one of the four cars that were running down the

track without a locomotive. There were three men at the switch, each with a lantern, and Colasurdo had his back to the cars by which he was injured. It was in evidence that the cars carried no light, and while there was a man on the cars who saw the lights of the three workmen, he testified that he thought their attention had been attracted to the cars and that they would move in time to escape injury.

Suit was brought by Colasurdo in a State court, but was removed by the defendant company to a Federal court on grounds of diversity of citizenship of the plaintiff and the employing company. During the trial it was shown that both parties were citizens of New Jersey, whereupon the company sought to have the case remanded to a State court for failure of jurisdiction of the Federal court. Inasmuch as the action was brought under the Federal statute of April 22, 1908 (35 Stat. 65), the court retained the case as involving the construction of a Federal statute, and judgment was given for the plaintiff. The present case was the hearing of a motion for a new trial, which was refused, and judgment was directed on the verdict.

The various points were taken up in order by Judge Hand, speaking for the court, who delivered his opinion July 1, 1910. Having stated the facts as above, Judge Hand said:

The question is squarely raised in this case of the jurisdiction of this court. In so far as it depends upon diverse citizenship, the case must be remanded under act March 3, 1875, c. 137, 18 Stat. 470 (U. S. Comp. St. 1901, p. 507). If, however, the dispute or controversy is one arising under a law of the United States, then this court has jurisdiction, and it makes no difference that the defendant could not have been originally sued in such a controversy outside of its domicile. Such a dispute or controversy is within its jurisdiction if the correct construction of the law, which is laid in the complaint as the basis of the right of action, is necessarily involved in the decision, and it is quite clear in this case that it is necessary to determine the meaning of the phrase "person employed by such carrier in such commerce." Therefore this court has jurisdiction, even though the complaint should be dismissed because the plaintiff was not a person so employed. In short, a decision of the meaning of that act is necessary, and such a necessity gives me jurisdiction, regardless of the result of the case.

Coming then to the merits, I will take up the points raised by the defendant seriatim. First, upon the motion to direct a verdict, I think that the refusal was proper. From the evidence the jury could have found that the plaintiff, who was under the orders of Nighland, and had been standing facing east so that the train came upon him from the rear, while Nighland himself was at work facing either south or west, and the other trackwalker stood apparently between the two. If this was the relative position of the three men, the jury could have found that the plaintiff was relying upon the other trackwalker or Nighland to look west and to observe the trains. If both failed to warn plaintiff of the train coming from that direction, the

accident was due to their negligence in a duty reasonably imposed upon them, and, though they were fellow servants, yet under this statute their negligence was that of the master. The fellow-servant rule has been so much ingrained in both bench and bar that this point was not made on the trial; but it was directly in the evidence and justified a refusal to dismiss for lack of the defendant's negligence.

Besides, there was also evidence in the case that the rear of the train was not lighted, that no warning was given of the train's approach, and that the man at the rear, although he saw the lights, waited too long before trying to check the train. Since the accident happened at night, and the train was running swiftly and without any ready means of control, I think the case is clearly differentiated from *Aerkfetz v. Humphreys*, 145 U. S. 418, 12 Sup. Ct. 835, 36 L. Ed. 758, and I certainly do not think that as matter of law there was no negligence in operating in a freight yard four cars under their own impetus, after dark, without warning and without light. None of the cases cited by the defendant have a set of facts similar to this. Upon these two grounds therefore, and without considering the question of the necessity of stationing a man to watch the three, I am satisfied that there was evidence of the defendant's negligence.

The only important exception which remains is to that part of the charge which permitted the jury to find the defendant negligent in not stationing some one to watch the gang of men while at work. It was possible under the charge for the jury to find that, although there were lights upon the train, and that the trainman acted reasonably in not trying to stop the train before he did, yet the defendant was negligent in not giving standing instructions in such cases for some employee to watch for trains.

Such a person might have to engage in the work from time to time; but it is at least a fair question of fact whether some one should not all the time watch for the approach of trains. Had I myself sat upon such a jury, I should have thought that it was a reasonable necessity for the safety of the men, regardless of the practice of other roads, and that a railroad should have a rule instructing its employees always to maintain a watch, while at work in the dark. It seems quite clear that, unless this is done, the attention of all will of necessity at times become directed upon the work rather than upon the danger.

The remaining question is of the application of the act of 1908, and that turns on whether the plaintiff was employed in interstate commerce. The act in question was passed after the decision of the Supreme Court in the *Employers' Liability Cases*, 207 U. S. 463, 28 Sup. Ct. 141, 52 L. Ed. 297, in which a similar act was declared unconstitutional by a divided court, because it applied generally to all carriers engaged in interstate commerce. Some questions, however, were decided by the whole court in those cases, and one of these was that the act was not unconstitutional because it regulated the relation of master and servant; all the justices recognizing that Congress might regulate those relations while the master and servant were employed in interstate commerce. The present act was clearly passed to meet the objection of that decision, and I think it should therefore be construed as intending to include within the term "person employed in such commerce" all those persons who could be so included within the constitutional power of Congress; that is to say,

the act meant to include everybody whom Congress could include. Under this construction the inquiry becomes whether Congress could constitutionally have passed a statute regulating the relation between a carrier-master and a servant who was engaged in the repair of a track used both for interstate and intrastate commerce. Preliminarily the distinction should be noted that the act will not necessarily apply to the same person in all details of his employment. One man might have duties including both interstate and intrastate commerce, and he would be subject to the act while engaged in one and not the other. This being so, the question is whether his repairing of a switch is such employment, when the switch is used indifferently in both kinds of commerce. Suppose the track had crossed a corner of a State, and there was only one station within that State so that all trains crossing over that track must necessarily be engaged in interstate commerce. Would not a track worker engaged in the repair of such a track be engaged in interstate commerce? I do not think that he would be any the less so engaged than the engineer on the locomotive or the train dispatcher who kept the trains at proper intervals for safety. Of course, it is not necessary that the man must personally cross a State line. If the repair of such a track be interstate commerce, does it cease to be such because there are two stations within the State and some of the trains start at one and stop at the other? I can not think that this is true, although counsel have referred me to no case upon the subject and I have found none. The track is none the less used for interstate commerce, because it is also used for intrastate commerce, and the person who repairs it is, I think, employed in each kind of commerce at the same time.

Despite the earlier ruling in *Gibbons v. Ogden*, 9 Wheat. 1, 6 L. Ed. 23, it has in recent times been stated several times by the Supreme Court that State statutes may indirectly regulate interstate commerce, even though Congress may at any time itself under its proper constitutional powers, enact a provision of directly opposite tenor. (*Sherlock v. Alling*, 93 U. S. 99, 23 L. Ed. 819; *Reid v. Colorado*, 187 U. S. 137, 23 Sup. Ct. 92, 47 L. Ed. 108.) If, as was held in those cases, a State has the power to regulate such commerce until Congress intervenes, because it is as well within the State's proper powers, must not the corollary be true as well, that Congress may intervene, even when the effect of that intervention be incidentally the regulation of intrastate commerce as well? Could not Congress, for example, provide that all tracks used in interstate commerce must be of a standard width and weight? Would that not affect all tracks used in such commerce, although they likewise were used for intrastate commerce? Of course, anyone could use any other tracks he chose for intrastate commerce; but it can surely not be a ground to limit Congress's proper powers that the track has a joint use. If so, the repair of such tracks must be a part of interstate commerce, and under the *Employers' Liability Cases*, supra, the relations of master and servant arising between the railroad and its employees engaged in repairing the track are similarly within the power of Congress.

I am therefore of opinion that the plaintiff was at the time engaged in interstate commerce and entitled to the rights secured by this act. That being so, it is a matter of no consequence whether the train that struck him was engaged in that commerce or not. It is true that the act is applicable to carriers only "while engaged" in inter-

state commerce, but that includes their activity when they are engaging in such commerce by their own employees. In short, if the employee was engaged in such commerce, so was the road, for the road was the master, and the servant's act its act. The statute does not say that the injury must arise from an act itself done in interstate commerce, nor can I see any reason for such an implied construction.

I will therefore deny the new trial and direct judgment on the verdict. The defendant, if it wishes, may have a certificate on the jurisdictional point direct to the Supreme Court, though that opens only a limited review.

HOURS OF LABOR OF EMPLOYEES ON RAILROADS—FEDERAL STATUTE—TIME ON DUTY—*United States v. Illinois Central Railroad Company, United States District Court for the Northern District of Iowa, 180 Federal Reporter, page 630.*—The United States brought an action against the company named for a violation of the law of March 4, 1907 (34 Stat. 1415), which limits the hours of labor of certain employees on railroads to 16 in any 24-hour period. The particular point involved was the rule of the company requiring men to report 30 minutes before the time for their trains to leave, which time the company contended should not be counted as a part of the duty period. This view was rejected by the court, as appears from the following quotation from the opinion, which was delivered by Judge Morris:

The question here is as to the effect of the rule of the company requiring men to report 30 minutes before the leaving time of the train to do the things required by the rule, coupled with the fact that this man did comply with that rule.

I do not think the custom of the company not to strictly enforce the rule makes any difference. This man complied with the rule. He arrived at the engine 30 minutes before the leaving time of the train, and was actually engaged in doing the things required by the rule; and the question here is whether he was during that time, within the meaning of the act, actually engaged in or connected with the moving of that train. That is the question here. In my opinion this man was on duty, within the meaning of the act, from the time he went there and commenced to supervise, or overlook, that engine in preparation for the trip. It does not make any difference whether he was paid for this time or not. That was the time his work and the strain on him began. The work of an engineer, an employee of the railroad, begins when under the rule of the company he is there and is at work in connection with the preparation of the engine for the moving of the train. He must look over that engine. He must see that it is oiled up. He must see that the air brakes are all right. He must move the engine down over the tracks and across the switches to connect it with the train. And in my opinion he is on duty, within the meaning of the act, during the time he is doing these things. If he goes there a half an hour before the time to start to do these things, during the time he is there doing them he is on duty. That is my view of it.

MINE REGULATIONS—INSPECTION—GOOD FAITH AS DEFENSE AGAINST LIABILITY FOR INJURY—*Aetitus v. Spring Valley Coal Company*, Supreme Court of Illinois, 92 Northeastern Reporter, page 579.—This was an action by Charles Aetitus to recover damages for an injury received by him on January 21, 1907, while employed by the company named as a miner. Aetitus and another were directed by the mine manager to cut recesses for timbers in an entryway to be converted into a stable, and while so engaged rock fell upon and injured the plaintiff. The mining law of Illinois, chapter 93, Hurd's R. S. 1909, requires a legally qualified mine examiner to inspect working places before men are set to work therein and to mark dangerous places. The mine manager, the assistant mine manager, and the mine examiner testified that they had each examined the working place in question and that it was not a dangerous place, so that no report of danger was made nor were any danger marks placed. The jury found on the evidence that the place was in fact dangerous and that it should have been so marked. Damages were awarded in the circuit court of Bureau County and affirmed on appeal to the appellate court. The company again appealed to the supreme court, which in turn affirmed the judgment for damages, June 29, 1910, though by a divided court. The point on which the court differed was as to the duty of the inspector and the employer's right to rest on a bona fide performance thereof. On this point Judge Hand, who delivered the opinion of the court, said in part:

The case was apparently tried by plaintiff in error on the theory that if the mine examiner and the mine manager looked the place over where the injury occurred and thought it was not dangerous, and their determination of that fact was made in good faith, the plaintiff in error would not be liable for the injury to defendant in error even though the jury were justified, from the evidence, in finding the place was dangerous and should have been marked as a dangerous place; in other words, that "good faith" on the part of the owner or operator of a coal mine in a suit for a willful violation of the mines and mining act is a defense. We do not think the owner or operator of a mine can excuse himself from liability growing out of a willful violation of the mines and mining act—that is, from a conscious violation of the act—in failing to properly examine the mine and mark dangerous places therein which are known to him, on the ground that his examiner or manager in good faith thought the place was not dangerous. If this were the law, the right of recovery would not rest upon a conscious violation of the statute but upon the opinion of the owner or operator or his vice principal—that is, his examiner or manager—as to whether the mine was safe or in a dangerous condition. It has been repeatedly held by this court that it is the duty of the owner or operator of a mine to have his mine examined and if it is in a dangerous condition to have the dangerous places designated by the statutory marks, and if he fails in either particular, with knowledge of its dangerous condition or with knowledge of facts from which he ought to know of its dangerous

condition, he is liable to a person in the mine under his employ who is injured as a result of his willful failure to obey the mandates of the statute. If the mine is in a dangerous condition, and the owner or operator has failed, with knowledge of its condition, to comply with the statute, he is liable, and he can not excuse himself on the ground that he had the mine examined and in good faith thought it was not dangerous. His liability does not rest upon the ground that in good faith or bad faith he thought there was no danger in the mine, but upon the ground that he has, knowing the facts which made the mine dangerous, failed to have the statutory marks properly placed in the mine. When the mine owner or operator is advised of the conditions in the mine, he must place in the mine, if it is dangerous, the statutory marks, and, if he fails to do so, he acts at his peril, and he can not excuse himself because he or his examiner or manager may think the mine safe. To so hold would be to permit the mine owner or operator, or his examiner or manager, to usurp the functions of the court and jury, and to pass upon a question which, in every case like this, is a matter of proof and is to be determined as a fact by the jury.

It is said by the plaintiff in error that the duties imposed upon the owner or operator of a mine by the mines and mining act in some instances are mandatory, while in others the performance of the duties imposed by that act upon the owner or operator involves the exercise of judgment, and that the performance of the latter class of duties, among which is that of discovering and marking dangerous places in the mine, involves only the exercise of good faith on the part of the owner or operator. We do not think the distinction pointed out a valid one, but are of the opinion this court is committed to a different doctrine. In *Eldorado Coal and Coke Company v. Swan* [227 Ill., 586, 81 N. E., 691], the claimed violation was the failure to maintain a light at the bottom of the shaft. The evidence showed there was a light at that place, but was conflicting as to the size and power of the light. The statute required a light sufficient to show the landing and surrounding objects distinctly, and the contention was made that the determination of the question whether the light was sufficient to show the landing and its surroundings distinctly involved the exercise of judgment, and, if the appellant company had attempted in good faith to comply with the requirements of the statute in that particular, it was relieved from liability. The court held otherwise. On page 590 of 227 Ill., page 692 of 81 N. E., it was said: "Appellant's most serious contention is that, even if it be conceded that the light was not fully up to the legal requirements in respect to the amount of light, still, when the evidence all shows that appellant had made an honest effort to comply with the statute and had partially failed, it can not be adjudged guilty of a willful violation of the law even if its partial failure arises from negligence on its part in the selection of the means or the method of their application with the view of complying with the statute. This argument is more ingenious than sound. The fallacy of the argument results from the assumed meaning of the word 'willful,' as it is used in the miners' act. If it were necessary to show an evil intent or any blamable conduct to establish the willfulness contemplated by this statute, then there would be more force in this contention. But no such construction of this statute

has ever been recognized by this court. On the contrary, it has often been held that an act consciously done—that is, proceeding from the free and voluntary will—is willful, within the statute.”

The dissenting opinion is as follows:

We do not agree with the majority that every failure on the part of a mine examiner to discover a dangerous condition in a mine is a willful violation of the statute, nor do we think that the cases cited in the majority opinion support that doctrine. A willful violation of this statute must necessarily be a conscious or knowing violation. To hold that a mine examiner is bound to discover a dangerous condition in the mine, even though by the honest application of every known means it is impossible to detect it at the time of the examination, and that a failure to discover such condition under such circumstances is willful, is to read into the statute that which is not there, and is to require of a mine operator that which is impossible for him to perform. This statute is not meant to make the operator an insurer against every accident in his mine which results from dangerous conditions, but only requires him to cause an examination to be made by an authorized examiner to make the required records of the examination, and to mark such places as are found, upon proper examination and the honest use of approved methods, to be dangerous. It is only a failure to make such an examination that constitutes a willful violation of the statute in respect to guarding against dangerous conditions in mines.

PICKETING—POLICE POWER—MUNICIPAL REGULATIONS—*Ex parte Williams, Supreme Court of California, 111 Pacific Reporter, page 1035.*—J. J. Williams had been arrested for the violation of a municipal ordinance of the city of Los Angeles prohibiting certain acts, among them the picketing of places of employment for the purpose of intimidating, threatening, and coercing employees therein. Williams applied for a writ of habeas corpus, which was denied, as appears from the following opinion of Chief Justice Beatty, who spoke for the court:

This is a petition for a writ of habeas corpus which has been denied by the court.

The prisoner was arrested upon a complaint accusing him of violating a penal ordinance of the city of Los Angeles. The ordinance is quite comprehensive in its enumeration of the acts which it declares to be misdemeanors, and the prisoner was charged in the information with two distinct offenses, as defined by the ordinance: First, with “loitering” on a public street in front of the Fulton Engine Works, for the purpose of inducing and influencing persons to refrain from doing and performing services and labor at said works; second, with “picketing” in front of said works, for the purpose of intimidating, threatening, and coercing such persons.

It is argued in support of the petition that the ordinance is invalid. As to the provision concerning “picketing,” for the purpose of intimidation, threatening, etc., I have no doubt that it is a valid

exercise of the powers of the local legislature. As to the provisions relating to "loitering," I have very serious doubts. They are so vaguely comprehensive that a person stopping on the street anywhere in the vicinity of a place of business for the purpose of dissuading an employee from continuing in his employment might be convicted of a misdemeanor.

I therefore concur in the order denying the writ, only upon the ground that the charge of picketing for the purpose of intimidation, etc., gives the police court jurisdiction to try the charge.

DECISIONS UNDER COMMON LAW.

BOYCOTT—INJUNCTION—LABOR ORGANIZATIONS AS PARTIES—INTERFERENCE WITH EMPLOYMENT—PROOF—*Irving v. Joint District Council, United Brotherhood of Carpenters, etc., United States Circuit Court, Southern District of New York, 180 Federal Reporter, page 896.*—Irving & Casson, partners operating a factory in the State of Massachusetts for the production of fine interior woodwork, had been made the objects of a movement by labor organizations of carpenters and joiners to influence them to run their factory as a closed shop. Letters had been written by officers of the unions to a number of persons with whom Irving & Casson were in business relations, actual or prospective, and instances were set out in the complainant's affidavits in which they had lost business because of notifications coming from the unions that they regarded the firm as unfair. Threats were also shown to have been made to take all union labor off contracts on which Irving & Casson were interested to the extent of furnishing some of the material. An injunction to restrain such acts was prayed for and granted, the case having been heard in July, 1910.

As defendants there were named the unincorporated labor organization of carpenters and joiners and a number of officers and members named individually. The objection was raised that an organization of this sort could not be brought before the court, as to which Judge Ward, who delivered the opinion of the court, said:

The defendants object that the Joint District Council, being a voluntary unincorporated association, is not a citizen of any State, and therefore the court has no jurisdiction of it or of its members generally. I think this objection good. (*Chapman v. Barney*, 129 U. S. 677, 9 Sup. Ct. 426, 32 L. Ed. 800; *Taylor v. Weir*, 171 Fed. 636, 96 C. C. A. 438.) The bill may be dismissed as to the Joint District Council and its members generally, and stand as to the other defendants, in accordance with the practice indicated in *Oxley Stave Co. v. Coopers' Union* (C. C.) 72 Fed. 695, affirmed 83 Fed. 912, 28 C. C. A. 99. There are intimations that service upon some of the members of such associations may be good as against the association and the other members in *United States v. Coal Dealers Ass'n* (C. C.) 85 Fed. 252, *American Steel and Wire Co. v. Wire Drawers' Unions 1 and 3* (C. C.) 90 Fed. 598, and *Evenson v. Spaulding*, 150 Fed. 517, 82 C. C. A. 263,

9 L. R. A. (N. S.) 904. If these cases mean more than that members of the associations not served may be held guilty of contempt if they knowingly assist in the violation of an injunction which has been granted, I am not disposed to follow them.

The question of sufficient proof of interference with business was raised by the defendants, the various instances of alleged loss of business on account of the action of the organization and its officers being declared not sufficiently precise and authentic. As to this Judge Ward said:

No doubt more and better evidence would be required on final hearing, but all that is needed upon a motion for a preliminary injunction is to satisfy that a cause of action exists and that irreparable injury will be done the complainants unless they are protected. In such a case a preliminary injunction ought to issue.

The court then took up the more general question of the right of the firm to an injunction, which he allowed, speaking as follows:

The right of workmen to unite for their own protection is undoubted, and so is their right to strike peaceably because of grievances; but their right to combine for the purpose of calling out the workmen of other employers who have no grievances, or to threaten owners, builders, and architects that their contracts will be held up if they or any of their subcontractors use the complainants' trim, is quite another affair. To take the converse of the proposition: Will the defendants admit that employers may combine to prevent any employer from using union labor? May the employers agree not to sell to or contract with anyone who deals with an employer who uses union labor?

Either of these propositions is destructive of the right of free men to labor for or to employ the labor of anyone the laborer or the employer wishes. See the language of Justice Harlan in *Adair v. United States*, 208 U. S. 161, 174, 28 Sup. Ct. 277, 52 L. Ed. 436. If the struggle is persisted in between labor and capital to establish a contrary view, ultimately either the workmen or the employers will be reduced to a condition of involuntary servitude.

Whether the complainants do a large business, or, as the defendants allege, a small business, there is no doubt that the defendants by combination between themselves and with others have determined to force them against their will to maintain a closed shop in Massachusetts or go out of business, and to compel all persons in their employment, whether they will or not, to become members of the union or lose their employment. Of certain suggestions in the defendants' papers that the complainants are seeking to prevent the workmen from organizing and striking and from communicating with each other, it may be said in the words of Brown, J., in the supreme court of Pennsylvania, in *Purvis v. Local No. 500, United Brotherhood of Carpenters and Joiners*, 214 Pa. 348, 63 Atl. 585:

"The zeal of counsel may account for, but can hardly excuse, the statement in appellants' paper book of the questions involved on this appeal. They are there stated to be: 'Is the dissemination by means of printed notices by a lawfully constituted lodge of union laborers

to its members and employers of labor, of its adopted rules by virtue of its constitution forbidding its members to work nonunion material, an unlawful conspiracy? Is it lawful by peaceful means to make effective such rules? From an examination of the averments of plaintiffs' bill, the ample proofs submitted in support of them, and of the facts found by the court below, it is most manifest that the only question before us is whether the appellants were properly enjoined from injuring and destroying the business of the appellees, in pursuance of a conspiracy to do so, as a penalty for their refusal to unionize their mill. This would mean to the appellees, as they aver, that they would be compelled to employ only union workmen, and to yield their free and unrestricted right to select their own employees in the conduct of their business; that they would be compelled to submit themselves to the control of the union, and to put themselves within its power to dictate to them the number of hours to constitute a day's work in their mill, the compensation to be paid therefor, the time of payment thereof, and the selection of their employees. It would be a recognition of the power of the agents of the union to practically control their business."

The particular acts sought to be enjoined in this case are the calling out of the employees in other trades, who have no grievance against their employers, and the notification of owners, builders, architects, and third persons that they are likely to have their operations held up if they use the complainants' trim. Whether the complainants may be found to have other rights on final hearing, and whether persons not parties may be guilty of contempt if they knowingly assist in the violation of the preliminary injunction to be issued, need not now be considered.

Motion granted, with leave to the parties to submit within one week forms of order which they respectively think appropriate under this opinion.

EMPLOYER AND EMPLOYEE—INJURY TO THIRD PERSON BY EMPLOYEE—LIABILITY OF EMPLOYER—SCOPE OF AUTHORITY—*Tillar v. Reynolds*, *Supreme Court of Arkansas*, 131 *Southwestern Reporter*, page 969.—Mattie Reynolds, administratrix of the estate of William Reynolds, sued T. F. Tillar to recover damages for the wrongful death of her husband, William Reynolds. At the time of injury alleged to have occasioned Reynolds's death he was a prisoner working out a sentence of fine and imprisonment for a misdemeanor and was leased to Tillar under a contract with the county of Lincoln in the State of Arkansas. After having been on the convict farm for a week or two Reynolds died as the result, it was alleged, of an assault and whipping at the hands of one Gentry, who was Tillar's warden. Judgment was rendered Mrs. Reynolds in the amount of \$3,750, whereupon Tillar appealed, raising three objections: First, that there was a misjoinder of actions; second, that the instruction of the lower court charging the employer with responsibility for his employee's actions was erroneous; and, third, that the evidence did not sustain the verdict. It was also claimed that the verdict was excessive. The joinder of

actions referred to was that of bringing together the suit for the benefit of the widow and next of kin of the decedent and the other for the benefit of his estate. This the court held to be proper, stating that if the two actions had been brought separately they could have been consolidated by the court itself.

The instruction complained of was as follows: "You are further instructed that the employer who puts his agent or employee in a place of trust or responsibility, or commits to him the management of his business, is responsible when the agent or employee acting within the scope of his authority, through lack of judgment or discretion, or under the influence of passion, inflicts an unjustifiable injury upon another, even though he go beyond the strict line of his duty or authority." The portion of the instruction objected to was the clause "even though he go beyond the strict line of his duty or authority." It appeared from the evidence that the warden compelled Reynolds to strip and lie down across a log or block, face downward, and that he whipped him on the bare back with a leather strap 30 inches long, and from one-half to three-fourths of an inch thick. This strap was fastened to a staff which Gentry used, striking with both hands from 12 to 15 hard blows; one witness stated that he whipped him on the small part of the back. A rule of the penitentiary board prohibits whipping of any convict on his naked body, or at all except by authority of the superintendent, and limits the number of strokes to be administered to ten at any one time.

The court held that the instruction as to the employer's liability for his servant's act was not objectionable, saying:

It is undisputed that Gentry, the warden, was defendant's agent in charge of the convict farm at the time Reynolds was delivered to the farm and at the time of his death, and for months thereafter, and that he was instructed to observe the rules laid down by the penitentiary board governing the convicts confined in the penitentiary, and charged by defendant not to depart from said rules in the management and punishment of the convicts placed on the farm. He had the authority to punish, and was acting within the scope of it when he inflicted the injury.

In *Ward v. Young*, 42 Ark. 543, 544, in discussing the liability of the master for the tort of his servant, this court said: "If Hawkins was clothed with the authority to protect the property, then his act was, in law, the act of Ward, notwithstanding it may have been contrary to express orders. Having employed the servant to protect his property or to maintain his possession, he is liable for all the acts done in pursuance of his employment, and within the power implied therefrom, even though he expressly directed the servant what to do. Having set in motion the agency for producing mischief, he is bound at his peril to prevent the mischievous consequences." Further: "It is not necessary, in order to fix the master's liability, that the servant should at the time of the injury have been acting under the master's orders or directions, or that the master should know that

the servant was to do the particular act that produced the injury in question. It is enough if the act was within the scope of his employment, and, if so, the master is liable, even though the servant acted willfully, and in direct violation of his orders." Continuing on page 553: "It is generally sufficient to make the master responsible that he gave to the servant an authority or made it his duty to act in respect to the business in which he was engaged when the wrong was committed, and that the act complained of was done in the course of his employment." "The master who puts the servant in a place of trust or responsibility or commits to him the management of his business or the care of his property is justly held responsible when the servant through lack of judgment or discretion, or from infirmity of temper, or under the influence of passion aroused by the circumstances or the occasion, goes beyond the strict line of his duty or authority, and inflicts an unjustifiable injury upon another." (Conley [Cooley?] on Torts, p. 538.) In *Railway v. Hackett*, 58 Ark. 387, 24 S. W. 882, this court said: "The question is, Was he acting in the course of his employment?" "If he was, the company is liable in damages for any wrongful act of his in the course of his employment, resulting in injury to another, though he exceeded his authority as such night watchman." "A servant may do an act expressly forbidden by his employer, and yet if it be within the scope of his authority, the employer may be liable for resulting injury. This rule is constantly enforced in the cases against railroads, electric light, and gas companies, and it applies to private persons who employ servants to transact their business." (*Pine Bluff W. & L. Co. v. Schneider*, 62 Ark. 116, 34 S. W. 548, 33 L. R. A. 366.) This court on a question of this kind quoted with approval *Clark & Skyles Law of Agency*: "It is a well-established rule that a principal is liable for all torts, negligence, or rather malfeasances committed by his agent in the course of his employment and for the principal's benefit, although such torts or negligences are not authorized by the principal, or even though he had forbidden or disapproved of them and the agent disobeyed or deviated from his instructions in committing them." "This rule is not based on the ground that the agent had authority, express or implied, to commit the tort, as is the case with contractual obligations binding on the principal; but is based on the ground that in such cases the agent represents the principal, and all acts done by the agent in the course of his employment are of the principal, and it is also on the ground of public policy that, where one of two innocent persons must suffer from the agent's wrongful act, it is just and reasonable that the principal, who has put it in the agent's power to commit such wrong, should bear the loss rather than the innocent third person." (*St. L., I. M. & S. R. Co. v. Grant*, 75 Ark. 585, 88 S. W. 582.) There was no error in giving the instruction, and, on the whole, the instructions fairly presented the issues of fact to the jury. The evidence, although somewhat contradictory, tended strongly to show that the deceased was unlawfully and brutally whipped and beaten on his bare back with a leather strap 4 inches wide, and from one-half to three-fourths of an inch thick, and about 30 inches long, attached to a staff or handle about 18 inches long, by defendant's agents and warden; that he wielded the strap with both hands striking more licks than felons in the penitentiary are permitted to be whipped and on the bare skin, even if against defendant's directions;

that deceased was compelled to work thereafter in the sun till he reeled and staggered like a drunken man, and was sent from the field groaning with pain and urinating blood, and died that night early without being furnished any medical attention; that the beating might have and probably did produce death, and the jury so found, and the evidence amply sustains the verdict.

With reference to the question as to whether or not the verdict was excessive the court said:

Was Wm. Reynolds' life of the value of \$3,750 to his widow and minor children? He was a strong man of sound bodily health, the sole support of his wife and children, about 31 years old, with an expectancy of life of 34 years, and shown to have been earning shortly before his death from \$50 to \$60 a month, most of which was contributed to the maintenance and support of his family, and the jury fixed the damages at that sum which we do not regard excessive.

Finding no error in the case, it is affirmed.

EMPLOYERS' LIABILITY—INCOMPETENT FELLOW SERVANT—EVIDENCE—*Robbins v. Lewiston, Augusta and Waterville Street Railway Company, Supreme Judicial Court of Maine, 77 Atlantic Reporter, page 537.*—This case was an action by Ocellar Robbins, employed as a motorman by the defendant company, to recover damages for an injury received by him on July 20, 1907, through the negligence, as was alleged, of an incompetent crew on another car. The particular negligence of Taylor, the motorman, and Sanborn, the conductor, of the other car, consisted in the violation of an order to stop the special car which they were operating at the proper place, whereby a collision with the plaintiff's car was occasioned, resulting in serious and permanent injuries. Judgment was awarded Robbins in the supreme judicial court of Kennebec County, and exceptions were taken to the admission of evidence as to prior acts of the members of the negligent crew such as made the employing company liable for injuries resulting from their retention in service. These exceptions were overruled and the judgment of the lower court stood.

The views of the appellate court appear in the following extract from its opinion, which was delivered by Judge Spear, August 15, 1910. Having stated the facts, Judge Spear said:

From this statement it will be seen that the plaintiff's action rests upon the claim that the defendant was negligent in the selection and retention of its servants Taylor and Sanborn, especially Taylor, the motorman, when it knew, or by the exercise of due care should have known, his incompetency. The negligent act complained of was the running into the block without orders and against orders in violation of the rule.

The fate of the motion depends upon the result of the exceptions. If the exceptions prevail, the evidence in support of the verdict disappears. If the exceptions fail, the verdict is well founded. In other

words, the evidence, if admissible, amply sustains both the charge of unfitness of the servant and such notice thereof to the defendant that it knew or by due care ought to have known of his incompetency.

But it is contended that the negligent acts of the servant which by the verdict we must assume to be proven were not of such a character as to fairly warrant the conclusion of incompetency. We think differently. Time after time he ran his car, in violation of rules and orders and against the protest even of the conductor, round curves at an excessive rate of speed. So persistently and recklessly did he do this that one conductor, after repeated reports of these willful acts of misconduct to the superintendent of the defendant company, resigned his position rather than continue the hazard of further employment with this young man acting as motorman. He violated the controller handle rule, which forbids a motorman to leave the car without taking his controller handle with him. He ordered the substation to shut down the power, clearly exceeding his authority. He refused to exchange passengers as ordered, thereby disobeying the direct order of the superintendent. He refused to obey the conductor's signal bells.

These varied acts of insubordination seem to us more potent in their tendency to establish character for willful disobedience than the repetition for an equal number of times of the same act, involving the precise element of character. The conduct of this servant as manifested by these various acts fully brings him within the rule of legal incompetency. In the legal sense, incompetency or unfitness is not predicated solely upon a want of ability and comprehension. It may be found side by side with even eminent skill, respecting the particular thing to be done, and yet that skill so often and persistently exercised in violation of rules, orders, and regulations as to establish a character for such reckless acts as to render a person, in every way mentally competent, legally incompetent. Such is the theory of the decisions.

In *Consol. Coal Co. v. Seniger*, 179 Ill. 370, 53 N. E. 733, the court say: "One is incompetent who is wanting in the requisite qualifications for the business intrusted to him. (He) was incompetent, if he was wanting in the qualifications required for the performance of the service, whether arising out of lack of knowledge or capacity, or other imprudence, indolence, or habitual carelessness." In *Maitland v. Gilbert Paper Co.*, 97 Wis. 476, 72 N. W. 1129 [65 Am. St. Rep. 137], the court say: "A competent man is a reliable man. Incompetency exists not alone in physical or mental attributes, but in the disposition with which a person performs his duties, and, though he may be physically and mentally able to do all that is required of him, his disposition toward his work, and toward his employer and toward fellow servants, may make him an incompetent man." And it has been said in the recent case of *Hamann v. Bridge Co.*, 127 Wis. 550, 105 N. W. 1084: "Incompetence in the law of negligence means want of ability suitable to the task, either as regards natural qualities or experience, or deficiency of disposition to use one's abilities and experience properly."

Therefore, if the evidence of these specific acts of the servant was admissible to prove both incompetency and knowledge, then, the defendant being amply charged with knowledge, the jury were

authorized to find the servant incompetent, and to declare it negligence in longer retaining this young man in its employ as a motorman.

This brings us to the question raised by the exceptions: Is the evidence of specific acts of prior negligence admissible to prove (1) incompetency, (2) knowledge to the master? All the exceptions but one, which will be discussed later, present the same question of law, and may be considered together.

The defendant does not question the assertion that the great weight of authority is in favor of the admission of such testimony, and cites only Massachusetts and Pennsylvania in opposition. On the other hand, it appears from the plaintiff's brief that 29 of the 31 States that have passed upon this question have decided in the affirmative. The precise question has never been raised in this State. We are therefore free to adopt that rule which seems best calculated upon the principles of reason and authority to attain the best results. Upon a careful examination of the authorities, it is the opinion of the court that the rule admitting specific acts of prior negligence tending to prove the incompetency of a servant when the master has actual knowledge of such acts or by the exercise of due care should have had such knowledge is the safer and better rule to establish. In arriving at this conclusion, we have carefully reviewed and considered the reasons advanced by the courts for the directly opposite views by them declared.

It is conceded that the plaintiff, when injured, was in the discharge of his duties and in the exercise of due care. The evidence discloses that he was injured by the negligence of the defendant's servant, that the servant was in fact incompetent, and that his incompetency was known to the defendant when the plaintiff was injured and prior thereto, and yet he was retained in its employ.

Motion and exceptions overruled.

EMPLOYERS' LIABILITY—NEW TRIAL—SUCCESSIVE VERDICTS—DAMAGES.—*Carr v. American Locomotive Company, Supreme Court of Rhode Island, 77 Atlantic Reporter, page 104.*—Peter F. Carr was employed by the defendant company as a rivet heater in the boiler shop, in which oil was used as a fuel, and was injured as a result of an alleged defective condition of the valve supplying the oil to the furnace. The defect was said to consist in the condition of the threads on the valve stem which had become so worn that when partly opened it was in danger of being blown out by the pressure necessary to feed the oil as a spray for burning. Carr testified that on June 28, 1902, he started the fire in his heater in the usual way, and that when he had given the valve stem two or three turns it blew out and a stream of oil poured upon him which became ignited and seriously burned his body, face, and arms. The company offered in court as an exhibit, marked "Exhibit A," a combination of valves claimed by it to be the identical apparatus which Carr was using at the time that he was injured. This Carr denied, so that the identity of the valve became an important question in determining the negligence of the

employer and his corresponding liability. During the statement of the facts involved, Judge Sweetland who delivered the opinion of the court said:

This case has been tried four times. The first trial was in the common pleas division of the supreme court and resulted in a disagreement of the jury. The second trial was in the common pleas division of the supreme court, and the jury returned a verdict for the plaintiff for \$18,000, with a special finding that Exhibit A includes the identical burner valve and stem which were operated by the plaintiff at the time of the accident. Upon petition the appellate division of the supreme court granted a new trial. (*Carr v. American Locomotive Co.*, 26 R. I. 180, 58 Atl. 678.) Upon the establishment of the superior court this case was transferred to that court and the last two trials have been in that court. The third trial resulted in a verdict for the plaintiff for \$20,000, with a special finding that the burner valve stem forming a part of Exhibit A was not the stem operated by the plaintiff at the time of the accident. The justice who presided at that trial denied the defendant's motion for a new trial. Upon exception to that decision this court sustained the exception and ordered a new trial. (*Carr v. American Locomotive Co.*, 29 R. I. 276, 70 Atl. 196.) A fourth and last trial was had with the result herein stated, of a verdict of \$22,895, for the plaintiff, with a special finding by the jury that the burner valve stem forming a part of Exhibit A was not the stem operated by the plaintiff at the time of the accident.

The present appeal, therefore, was from the last trial in the superior court, based on exceptions made by both parties, Carr excepting to an order by the superior court granting a new trial in that court, and the company filing numerous exceptions to various rulings and instructions of the presiding justice. The trial resulted in the judgment of the superior court being affirmed and the order for a new trial reversed with directions that judgment be entered upon the verdict, none of the company's exceptions being allowed. The opinion of the court, which was delivered on July 12, 1910, is in part as follows:

From the record before us it does not appear whether at the first two trials the justices were asked to direct verdicts in favor of the defendant; but in each instance the case was submitted to the jury. At the third trial a motion was made that the jury be directed to return a verdict for the defendant. The motion was denied, and this court said in *Carr v. American Locomotive Co.*, 29 R. I., at page 290, 70 Atl., at page 203: "The forty-sixth exception was taken to the court's denial of a motion to direct a verdict for the defendant upon all the testimony. The evidence was conflicting and was properly left to the jury." At the last trial the justice presiding refused to direct a verdict in the defendant's favor. We have carefully read and considered the transcript of the testimony given at the last trial. The plaintiff has produced the testimony of seven new witnesses in support of his claim as to the defendant's negligence and the identity of the middle stem on Exhibit A. The case for the plaintiff is much stronger than at the former trial.

Upon this testimony, to order judgment for the defendant would be highly improper. If this case was before us for the first time, we should hesitate to disturb the verdict of the jury but for the decision of the justice presiding at the trial, whose decision will in ordinary cases be given much persuasive force by this court in appellate proceedings. Thus it has appeared to every judicial mind which has considered the testimony in this case that the deductions which may fairly be made upon the evidence are conflicting, that there is substantial evidence to support a verdict for the plaintiff, and that it is a case in which, under the constitution of this State, the determination of the facts must be made by a jury. The effect of the two opinions of this court in granting new trials was not that the verdicts in the plaintiff's favor were entirely unjustified, for in that case the court would have exercised its authority and ordered a judgment for the defendant. The opinions indicate rather that the court was not satisfied that justice had been done, that in its opinion another opportunity should be given to the parties to present further testimony if they were able, and that the court might have the benefit of the finding of another jury upon the issues. In some States it has been provided by statute that there shall not be granted in any case to the same party more than two new trials on the ground that the verdict is contrary to the evidence, or that it is not sufficiently supported by the evidence. Thus fixing in those States the rule as to the effect of concurring verdicts when there has been no error of law. In the absence of such statutory provision the doctrine has been generally accepted by the courts of the various States, that, in cases where the evidence is conflicting and a judgment can not be directed and successive juries have returned a verdict for the same party, there comes a time when the court upon the facts will no longer oppose their judgment to that of the jury but will bring long-continued litigation to a close. This doctrine has not been accepted in a few cases and by some eminent jurists in dissenting opinions and the position has been taken as in the dissenting opinion in *McCann v. New York, etc.*, 73 App. Div. 305, 76 N. Y. Supp. 684: "A wrong committed, no matter how often, never makes a right. This verdict is wrong; it is the result of misconception, prejudice or partiality and ought not to be approved by the court. Upon substantially the same state of facts we have several times declared that the plaintiff ought not to recover, and yet we are about to permit a recovery, because the jury forsooth have, for the fourth time, committed the same wrong. The law imposes a duty upon this court to review verdicts, and whenever it can be seen that injustice has been done, by reason of the jury not properly considering the evidence, or that its action has been influenced either by prejudice or partiality, then the court ought, in the discharge of its duty, to fearlessly exercise the power given to it by the statute (Code Civ. Proc., sec. 1317) and right the wrong by setting the verdict aside and ordering a new trial, and this as many times as may be necessary to accomplish the proper result. Justice never tires, and an act ought not to be approved in its name which wrongfully takes property from one person and gives it to another." This position presupposes in the judicial mind an infallibility in the determination of conflicting issues of fact which few courts would claim for themselves. If it is unquestioned in the mind of the court that a wrong has been com-

mitted by the verdict of the jury, surely the verdict should not be allowed to stand. The law provides a method by which such wrong can be corrected, and regardless of the jury's verdict a judgment should be ordered for the other party. That an appellate court has twice remanded a cause for a new trial indicates that the evidence of a wrong committed is not indubitable. The court may have an opinion or a suspicion that an injustice has been done, but it is unable to so declare with certainty. Courts recognize that it is not given to human tribunals to determine with the exactness of mathematical demonstration what is the true and just conclusion upon conflicting facts, with regard to which there is the opposing testimony of witnesses, as to whose reliability and good faith different minds may reasonably disagree. Cases involving such conflicting statements of fact must of necessity be determined in the courts, ultimately by the finding of a jury, but the true solution can not be found with demonstrative certainty. Hence an appellate court, having given sufficient opportunity for a fair determination of such disputed questions, will not longer interfere with the finding of the jury. To take this course is not to weakly permit or to approve the doing of a wrong in the name of justice, but is to recognize the proper functions of the court and the jury, and, after exercising due caution to prevent injustice, places the determination of disputed questions of fact in the tribunal provided by our constitution and laws. This doctrine has been recognized by this court.

In the case at bar we are of the opinion that the time has now arrived when this rule with regard to concurring verdicts should be applied, and if there has been no error of law occurring at the trial, which affects the jury's verdict, that verdict should be allowed to stand. This conclusion as to the force and effect of the three successive verdicts for the plaintiff, notwithstanding the decision of the justice of the superior court is not in disregard of the rule in *Wilcox v. Rhode Island Co.*, 29 R. I. 292, 70 Atl. 913. The doctrine as to the force of concurring verdicts is superior to the rule in the *Wilcox* case. When the time comes in any case for the application of that doctrine, it will be applied not only in disregard of the decision of the justice of the superior court, but also in disregard of our own former conclusions in the case.

The defendant does not press before us the question of excessive damages which was one of the grounds for its motion for a new trial before the superior court. We have, however, considered the question, and although the amount awarded by the jury is large, in view of the very serious permanent injury to the plaintiff, we can not say that it is excessive.

The plaintiff's exceptions are sustained and the case is remitted to the superior court, with direction to enter judgment upon the verdict.

EMPLOYERS' LIABILITY—SAFE PLACE TO WORK—ACT OF FOREMAN—*Campbell v. Jones*, *Supreme Court of Washington*, 110 *Pacific Reporter*, page 1083.—Murdock Campbell sued E. N. Jones and others to recover damages for injury received by him in the course of his employment. Campbell was engaged by a firm, Jones & Onserud,

contractors for the construction of a railway, and was injured by the act of his foreman, Lundin, who, in uprooting a small stump for the purpose of procuring fuel for a fire to heat the tools used, accidentally loosened a stone on a hillside above the place where Campbell was at work. The suit was brought against both the railroad company and the contractors, and recovery was denied as against both parties in the superior court of Spokane County. On appeal, however, the case was reversed as against the contractors, while the railroad company was held to be in no way responsible.

The principal point of interest is the ruling of the court on the contention of the defendants that the act of Lundin in loosening the stone was that of a fellow servant, for which they were not responsible. This view the court rejected, as appears from the following quotation from its opinion, as delivered by Judge Fullerton, October 3, 1910:

We think the court erred in sustaining the challenge to the evidence made on behalf of the defendants Jones & Onserud. They were the appellant's [Campbell's] employers, and owed to him the duty of furnishing him with a reasonably safe place in which to work, and the duty of keeping the place reasonably safe as long as they required him to work therein. This duty was nondelegable, and when they intrusted it to another they became responsible for the negligent performance of the duty by that other. If, therefore, Lundin, in uprooting the stump, acted negligently, and the place of work which had been furnished the appellant was thereby rendered dangerous or unsafe, there can be no question of the liability of his principals therefor. His negligence was their negligence, and any negligent act in the line of his duty, which would render him personally responsible to the appellant, would render his principals likewise personally responsible. The liability of the respondents Jones & Onserud, therefore, turns on the question whether the act of uprooting the stump was in itself negligent. But as to this we think the evidence made a case for the jury. The position of the stump with reference to the working place of the appellant, the manner in which it was uprooted, the frozen condition of the ground, and the fact that the act did in fact loosen a rock, which rolled down the hill and injured the appellant, were all matters to be considered by the jury in determining the character of the act, and the court should have submitted the question of negligence to them.

We are aware of the contention of the respondents to the effect that Lundin, when he uprooted the stump, was not engaged in the master's work, but was performing the labor of a servant; that he was at that time a fellow servant, and his acts, being those of a fellow servant, would not render the master liable for injuries resulting therefrom, even though it were considered that the acts were negligent. But this reasoning overlooks the fact that the duty of the respondents to oversee the appellant's place of work was a continuing duty, obligatory upon them at all times; that, while the work itself may have been servant's work, the duty to see that its performance did not result in injury to the servants working elsewhere was the

master's duty. This duty, as we say, could not be delegated, and if the injury to appellant was caused by its negligent performance the master is liable.

LABOR ORGANIZATIONS—IDENTITY—TRANSFER OF AFFILIATION—EFFECT ON RIGHTS TO ASSOCIATION FUNDS—*Shipwrights', Joiners' and Calkers' Association, Local No. 2, of Seattle, v. Mitchell, Supreme Court of Washington, 111 Pacific Reporter, page 780.*—The association named sued John McFarland Mitchell and another to recover certain funds claimed by the association, which had been transferred to alleged trustees of an association claiming the property on the ground that by a change of affiliation the association had forfeited its property rights. The association recovered judgment, whereupon Mitchell and his codefendant appealed, the appeal resulting in the judgment of the lower court being affirmed. The opinion in the supreme court was delivered by Chief Justice Rudkin, and is as follows:

The Shipwrights', Joiners' and Calkers' Association was organized in the city of Seattle about 25 years ago. The association is unincorporated, and is composed of numerous craftsmen voluntarily banded together for their mutual benefit and protection, and to provide health and death benefits for members. It is supported wholly by dues collected from members, which have varied from 25 cents to 70 cents per month, per capita, for several years last past. At various times since its organization the association has affiliated with different labor organizations, such as the American Federation of Labor, the Central Labor Council of Seattle, the International Union of Shipwrights, Calkers and Joiners, and the Pacific Coast Maritime Builders' Federation. From 1902 until late in 1906 the association was affiliated with the International Union of Shipwrights, Calkers and Joiners, as Local No. 11, and from the latter date until the present controversy arose, with the Pacific Coast Maritime Builders' Federation, as Local No. 2. While the membership in the association is continually changing by deaths, withdrawals, and removals, and while its affiliations with other organizations have changed from time to time, the association itself remains, and has at all times maintained its entity and separate existence. On the 21st day of August, 1907, the association had in the National Bank of Commerce in Seattle, the sum of \$1,138.51, deposited in the name of the Shipwrights', Joiners' and Calkers' Association, Local No. 2. On the latter date, the defendants, who were or had been president and treasurer respectively of the association, withdrew these funds from the bank and turned them over to three persons, claiming to be trustees of the Shipwrights', Joiners' and Calkers' Association, Local No. 11. The present action was instituted by the association, and by a large number of its members in its behalf, to recover the above sum for the benefit of the association. The case was tried before the court without a jury, and from a judgment in favor of the plaintiffs the defendants have appealed.

The case presents questions of fact only. The fundamental error underlying the defense grows out of the erroneous assumption that

the respondent association changed and became a different and separate entity every time it changed its affiliations with other labor unions or organizations. This assumption has no foundation in law or in fact. Regardless of the changes in membership, and the changes in its affiliations, the association itself has remained the same, and the appellants were guilty of gross breach of trust when they took it upon themselves to pay over its funds to a rival organization without warrant or authority.

The judgment of the court below is therefore affirmed.

STRIKE INSURANCE—REPRESENTATIONS—CONSTRUCTION OF POLICY—INDEMNITY—*Buffalo Forge Company v. Mutual Security Company, Supreme Court of Errors of Connecticut, 76 Atlantic Reporter, page 995.*—This was a case involving the construction of a policy guaranteeing to the Buffalo Forge Co. indemnity for losses caused by strikes. The payment of such indemnity had been demanded and refused, whereupon action was brought in the superior court of New Haven County, and judgment given the plaintiff. The insurance company then appealed, claiming a number of errors in the procedure of the lower court. On review the judgment was affirmed on July 12, 1910, on grounds which appear in the opinion of the court as delivered by Judge Robinson.

The opinion is in part as follows:

We will first consider those reasons of appeal having relation to the claimed breaches of warranties and concealments and misrepresentations of material facts. The nature and novelty of this kind of insurance, and the numerous and interesting questions raised, seem to render it necessary to go somewhat into detail to define properly the attitude which this court has taken with reference to them.

It appears from the record that the plaintiff on or before the 1st day of April, 1906, was a New York corporation and engaged in the manufacture of forges, blowers, engines, etc., at its factory located in Buffalo, N. Y. It also appears that the defendant on and before May 1, 1906, was a Connecticut corporation organized under the law of this State with power to make contracts of insurance to protect, indemnify, and guarantee persons, firms, or corporate bodies engaged in the business of manufacturing against any loss or damage resulting directly or indirectly from any interference with or interruption or suspension of business, or the use and operation of any manufacturing establishment in whole or in part by reason of a strike of the employees. It further appears that on April 9, 1906, the defendant's agent called upon the plaintiff in Buffalo and solicited the insurance in question, and that the application for the policy in suit, containing the "schedule of warranties," was executed April 9, 1906. The policy itself was executed by the defendant, and on May 1, 1906, mailed to the plaintiff, and received by the plaintiff at Buffalo on May 2, 1906. The plaintiff was a member of the Buffalo Foundrymen's Association, a local association affiliated with the National Foundrymen's Association, and was also a member of the so-called

“National Metal Trades Association.” The Buffalo Foundrymen’s Association and the National Foundrymen’s Association just referred to, recognized, dealt, and negotiated with the Molders’ Union, and other unions through their officers; and the plaintiff was prior to, and during the entire year of, 1906, a member of all of said associations, and recognized unions through said associations, but did not recognize or deal with unions in any other way and did not operate any department of its factory as a union shop any further than as above stated, and the plaintiff was a union shop only to the extent indicated by membership in said associations. These are some of the material facts found by the trial court as bearing upon particular interrogatories and answers contained in certain paragraphs of the “schedule of warranties” which the defendant now claims were not truthfully answered by the plaintiff. The defendant claims that questions 7 and 8 are of this class, and further that the language employed by the plaintiff in answering the eighth question was not correctly construed by the superior court.

The finding of the court definitely settles any question of the untruthfulness in the answer to the seventh paragraph. This seventh paragraph was as follows: “State any existing dispute with or demand made by employees in the last 60 days.” The answer was, “None.” The trial judge finds that the plaintiff told the exact truth as to this matter.

The eighth question and answer are as follows: “(8) Are you a union shop, and, if so, how many, and what unions do you recognize? Answer. Only so far as the National Foundrymen’s Association and National Metal Trades Association.” The trial judge construed this answer to mean that the plaintiff was a union shop and recognized union shops only to the extent that the National Foundrymen’s Association or the Metal Trades Association did so. The defendants criticize this construction as erroneous. We are unable to see how the court could with reason or propriety have adopted any other construction. That offered by the defendants was clearly not a solution of the matter, especially when we read in this connection the ninth and tenth answers in this schedule of warranties, and consider the character of the organizations therein referred to. These questions and answers read as follows: “(9) If you are a nonunion shop, state the different lines of craftsmen employed and the approximate number of each? Answer. Are nonunion in forge and blower department; sheet iron department; pattern department. Number employees about 75, 50, and 20 each, respectively. (10) State what national and local organizations you are a member of? Answer. National Foundrymen’s Association, National Metal Trades Association, and local branch of both associations.” The construction of the eighth answer which the defendants claim should have been adopted by the trial judge is “that the plaintiff’s shop was not any more of a union shop than the National Foundrymen’s Association and the National Metal Trades Association, and that the plaintiff recognized as unions only the National Foundrymen’s Association and the National Metal Trades Association.” The weakness of this claim is manifest, when we consider that the organizations thus referred to were not “unions” of workingmen, but organizations of manufacturers created for the purpose, among others, of dealing with trades unions; and it is quite apparent from the tenth question and

answer that the defendant insurance company so understood the fact, and could not reasonably have attached any other meaning to the answer of the eighth warranty than that adopted by the court below, to wit, that the plaintiff was a union shop, and recognized unions only through its membership in the two national associations referred to in the answer. But if the answers were ambiguous, indefinite, or lacking in clearness of expression, the defendant company certainly waived any objection on that score, by issuing its policy on the application containing such defects. "The issuance of a policy on an application containing ambiguous, indefinite, or imperfect answers to questions propounded therein will waive any objections to the answers on the ground of defects therein." (Cooley, vol. 3, p. 2634.)

The defendant further claims that the answer in the seventh paragraph of the "schedule of warranties" is, in effect a continuing warranty from the date of the application, April 6, 1906, to the delivery of the policy, May 2, 1906, and that even if this answer were true when made, if the plaintiff knew of the impending strike trouble on April 21 or 22, 1906, it then became the plaintiff's duty immediately to inform the defendant of the change of situation, and that its failure to do so vitiated the policy.

It is hardly worth while to consider the validity of this claim as thus stated, in view of facts established on the trial and appearing in the finding of the trial judge. The court has found that the policy of insurance in question was mailed to the plaintiff on the 1st day of May, and received by the plaintiff at Buffalo on the 2d day of May, shortly after the molders in the employ of the plaintiff had on that same morning gone out on a strike; and the court further finds that on the same day, May 2, the plaintiff mailed its check for \$500 to the defendant, as the premium on this policy of insurance, and accompanied this check with a letter acknowledging the receipt of the policy, and containing a statement that the molders had just gone out that morning on a strike, and that the Molders' Union had notified the Buffalo Foundrymen's Association some time ago that they would demand a nine-hour day, and the same rate of pay as stated in their present demand; and the letter contained the further statement that during the conference of the last few days the employees had withdrawn their nine-hour demand, and, although they were in conference all day with the foundrymen, they came to no agreement, and, after an adjournment at 10 o'clock, they met and decided to place this agreement before the foundrymen this morning (May 2) and insist upon its being signed before returning to work; that the foundrymen had practically agreed to their wage rate, but objected to signing any agreement. The writer further says these matters are very uncertain, but expresses his private opinion that it will only be a day or two before the men return to work. It appears that the defendant received the check for \$500, inclosed in this letter, and accepted and cashed it with full knowledge of the contents of this letter, and knowing that the molders in the plaintiff's employ had gone out on a strike on the morning of May 2, 1906, and that the controversy out of which this strike grew had been in existence for some time prior to May 2, 1906. The court finds that with such knowledge as this the defendant accepted this premium of \$500 and retained it.

These facts make it quite immaterial whether the warranty contained in the answer to the seventh paragraph of this schedule of warranties is or is not a continuing warranty, for, whichever it be, the defendant elected to accept the premium and take the chances of an early settlement of the strike trouble. Instead of assuming at once the position that the warranty was a continuing one, returning the premium, and canceling the policy, on discovering that the conditions stated in the warranty had not in fact continued throughout the entire period after the application for and before the delivery of the policy, the defendant accepts and retains that premium with full knowledge of this situation. This must be treated as a waiver. Common honesty forbids their claiming a forfeiture of this policy under these circumstances.

Again, the defendant company claims errors in the construction of those parts of the policy which relate to the amount recoverable, and to the mode in which such amount should be calculated. This necessitates an examination of the entire contract with some degree of care, and the questions arising, as to the several parts above indicated, will be best considered together. The amount of indemnity to the plaintiff stipulated in the agreement is "an amount not exceeding \$50,000," and this indemnity is "against all direct damage from suspension of operations at their factory plant situate at Buffalo, N. Y., caused by a strike of their employees, and hereinafter called a strike." This is insurance against "all direct damage from suspension of operations" caused by a strike. Looking a little further at the contract, we find that the liability of the defendant company is stated as follows: "If a strike occurs during the continuance of this policy, so as to entirely suspend the production of goods, this company shall be liable for loss of net profits and for fixed charges, to an amount not exceeding \$166 $\frac{2}{3}$ per day for such working day of such entire suspension; and in case a strike prevents the making of a full daily average production of goods, this company shall be liable for that proportion of the net profits and fixed charges which the production so prevented from being made bears to the average daily product not exceeding in any case the amount insured. The average daily product shall be determined from the amount of goods last produced during a period of twelve months full work previous to the strike, and losses shall be computed from the day of the occurrence of any strike to such time as the assured is able to produce the former daily average, and shall not be limited by the day of expiration named in this policy."

Now, it appears in this case that the suspension of production was partial only, and the contract makes provision for liability on the part of the insurance company for only a proportion of the net profits and fixed charges, something less than in the case of an entire suspension of production of goods. Now, looking at the contract, how do we find that proportion is to be measured and determined, and how are profits to be ascertained? What profits are to be taken? What is the criterion, what the standard by which to ascertain, whether the insured has lost profits by the partial suspension of production? It seems to us that the standard is plainly fixed by the contract, and that the net profits of the preceding year furnish the basis of estimate, and is the same as in the case of entire suspension of production. In the latter it is the whole of such loss up to the

amount insured. In the case of partial suspension, it is the entire loss thus suffered up to the amount insured, but what that loss is must be ascertained through the medium of this proportional statement and calculation.

In case of a partial suspension of production, the insurance company is to be liable for such proportion of the net profits and fixed charges as the production so prevented bears to the average daily production, not exceeding the amount insured. The contract assumes that there is a just and equitable relation between the two, and this relation they attempt to utilize in determining and adjusting the loss of the assured. They undertake to indemnify a party from loss occasioned by a suspension of his business, which from the very nature of the undertaking, must be attended with and hampered by more or less uncertainty. However, this is the kind of contract which they wished to enter into and which they did in fact enter into. And apparently appreciating the difficulties and desiring to present an insurance proposition as free as possible from uncertainty and difficulty in adjustment of loss, they arrange that in case of a partial suspension of production the insurance company shall be liable for such proportion of the net profits and fixed charges, as the production so prevented bears to the average daily production, not exceeding, of course, \$50,000. The difference between the entire and the partial suspension being only a difference in amount, but computed from and by the same standard. This is, we think, quite plainly provided for in the contract, and this we think is the interpretation which the trial judge placed upon the language of the contract.

The defendant's contention is that this part of the contract should be interpreted precisely as if it read "this company shall be liable for that proportion of the loss of net profits and fixed charges," etc. If it were interpreted in that way, the company would be liable for only a part of the entire loss caused by the partial suspension of production—something quite foreign both to the terms and good faith of the contract. The terms of this contract negative any claim of liability for the actual loss of net profits or any proportion of such actual loss in case of partial suspension of production; there were evidently insuperable objections to any such assumption of liability as that because of the character of controversy likely to arise in each case, whether the partial suspension of production related to the most profitable or to the least profitable part of the business of the insured. The mode of calculating the loss actually adopted in the contract in case of partial suspension of production avoids such controversy by assuming that the net profits are equally distributed over the entire production. And while this may be a fiction, it is a fiction which the insurance company evidently adopted, when it entered into this contract; and adopted it as an ingenious method of avoiding disputes as to the net profits of the particular portion of the business which was suspended.

It is provided in the contract that, if the assured in the judgment of two-thirds of the directors of the insurance company is needlessly prolonging a strike, the company may demand of the assured that it be settled within one month, and if this is not done the company may, at its discretion, cancel the policy on five days' notice. To shut down in whole or in part the works affected by the strike, and to disband the organization of the manufacturing and selling depart-

ments proportionately to the loss of production caused by the strike, "would needlessly prolong" the strike period and delay the resumption of ordinary production. And the correctness of this view is emphasized by the fact that by the terms of the contract the loss shall be computed from the date of the strike to such time "as the assured is able to produce the former daily average and shall not be limited by the date of the expiration named in the policy." The trial judge held that by "fixed charges" were meant those expenses necessarily incurred in maintaining the organization in such a state of efficiency as would enable it to resume normal production without substantial delay after the strike was ended, or as the strike might be broken by a gradual return of employees. We see no error in this.

It is a novel contract; but its novelty and the difficulties which the defendants themselves have introduced into it can not fairly or justly be urged as reasons why the indemnity should not be paid by them, if calculated fairly and with approximate accuracy, which indeed is the only kind of accuracy apparently contemplated by all parties to the contract.

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State or country.	Name of bureau.	Title of chief officer.	Location of bureau.
UNITED STATES.			
United States.....	United States Bureau of Labor.....	Commissioner.....	Washington, D. C.
California.....	Bureau of Labor Statistics.....	Commissioner.....	San Francisco.
Colorado.....	Bureau of Labor Statistics.....	Deputy Commissioner.	Denver.
Connecticut.....	Bureau of Labor Statistics.....	Commissioner.....	Hartford.
Idaho.....	Bureau of Immigration, Labor, and Statistics.....	Commissioner.....	Boise.
Illinois.....	Bureau of Labor Statistics.....	Secretary.....	Springfield.
Indiana.....	Bureau of Statistics.....	Chief.....	Indianapolis.
Iowa.....	Bureau of Labor Statistics.....	Commissioner.....	Des Moines.
Kansas.....	Bureau of Labor and Industry.....	Commissioner.....	Topeka.
Kentucky.....	Department of Agriculture, Labor, and Statistics.....	Commissioner.....	Frankfort.
Louisiana.....	Bureau of Statistics of Labor.....	Commissioner.....	Baton Rouge.
Maine.....	Bureau of Industrial and Labor Sta- tistics.....	Commissioner.....	Augusta.
Maryland.....	Bureau of Industrial Statistics.....	Chief.....	Baltimore.
Massachusetts.....	Bureau of Statistics.....	Director.....	Boston.
Michigan.....	Bureau of Labor and Industrial Sta- tistics.....	Commissioner.....	Lansing.
Minnesota.....	Bureau of Labor.....	Commissioner.....	St. Paul.
Missouri.....	Bureau of Labor Statistics and In- spection.....	Commissioner.....	Jefferson City.
Montana.....	Bureau of Agriculture, Labor, and Industry.....	Commissioner.....	Helena.
Nebraska.....	Bureau of Labor and Industrial Sta- tistics.....	Deputy Commissioner.	Lincoln.
New Hampshire.....	Bureau of Labor.....	Commissioner.....	Concord.
New Jersey.....	Bureau of Statistics of Labor and In- dustries.....	Chief.....	Trenton.
New York.....	Department of Labor.....	Commissioner.....	Albany.
North Carolina.....	Bureau of Labor and Printing.....	Commissioner.....	Raleigh.
North Dakota.....	Department of Agriculture and La- bor.....	Commissioner.....	Bismarck.
Ohio.....	Bureau of Labor Statistics.....	Commissioner.....	Columbus.
Oklahoma.....	Department of Labor.....	Commissioner.....	Guthrie.
Oregon.....	Bureau of Labor Statistics and In- spection of Factories and Work- shops.....	Commissioner.....	Salem.
Pennsylvania.....	Bureau of Industrial Statistics.....	Chief.....	Harrisburg.
Philippine Islands.....	Bureau of Labor.....	Director.....	Manila.
Rhode Island.....	Bureau of Industrial Statistics.....	Commissioner.....	Providence.
South Carolina.....	Department of Agriculture, Com- merce, and Industries.....	Commissioner.....	Columbia.
Texas.....	Bureau of Labor Statistics.....	Commissioner.....	Austin.
Virginia.....	Bureau of Labor and Industrial Sta- tistics.....	Commissioner.....	Richmond.
Washington.....	Bureau of Labor.....	Commissioner.....	Olympia.
West Virginia.....	Bureau of Labor.....	Commissioner.....	Wheeling.
Wisconsin.....	Bureau of Labor and Industrial Sta- tistics.....	Commissioner.....	Madison.
FOREIGN COUNTRIES.			
Argentina.....	Departamento Nacional del Trabajo.....	Presidente.....	Buenos Aires.
Austria.....	K. K. Arbeitsstatistisches Amt im Handelsministerium.....	Vorstand.....	Wien.
Belgium.....	Office du Travail (Ministère de l'In- dustrie et du Travail).....	Directeur Général.....	Bruxelles.
Canada.....	Department of Labor.....	Minister of Labor.....	Ottawa.
Canada: Ontario.....	Bureau of Labor (Department of Public Works).....	Secretary.....	Toronto.
Chile.....	Oficina de Estadística del Trabajo.....	Jefe.....	Santiago.
Finland.....	Industristatistiska Byråen.....	Industristatist.....	Helsingfors.
France.....	Office du Travail (Ministère du Tra- vail et de la Prévoyance Sociale).....	Directeur.....	Paris.
Germany.....	Abteilung für Arbeiterstatistik Kaiserliches Statistisches Amt.....	Präsident.....	Berlin.

¹ Issues a bulletin of labor.

Directory of bureaus of labor in the United States and in foreign countries—Concluded.

State or country.	Name of bureau.	Title of chief officer.	Location of bureau.
FOREIGN COUNTRIES—concl'd.			
Great Britain and Ireland.	Labor Department (Board of Trade).	Commissioner of Labor.	London.
Italy	Ufficio del Lavoro (Ministero di Agricoltura, Industria e Commercio).	Direttore Generale	Roma.
Netherlands	Directie van den Arbeid	Directeur-Generaal ...	's Gravenhage.
New South Wales	State Labor Bureau	Director of Labor	Sydney.
New Zealand	Department of Labor	Minister of Labor	Wellington.
Spain	Instituto de Reformas Sociales	Secretario General	Madrid.
Sweden	Afdelning för Arbetsstatistik (Kgl. Kommerskollegii).	Diröktör	Stockholm.
Switzerland	Secrétariat Ouvrier Suisse (semiofficial).	Secrétaire	Zürich.
Uruguay	Oficina del Trabajo (Ministerio de Industrias, Trabajo é Instrucción Pública).	.....	Montevideo.
International	International Labor Office	Director	Basle, Switzerland.

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- No. 1. Private and public debt in the United States, by George K. Holmes.¹
Employer and employee under the common law, by V. H. Olmsted and S. D. Fessenden.¹
- No. 2. The poor colonies of Holland, by J. Howard Gore, Ph. D.¹
The industrial revolution in Japan, by William Eleroy Curtis.¹
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The wealth and receipts and expenses of the U. S., by W. M. Steuart.¹
- No. 3. Industrial communities: Coal Mining Co. of Anzin, by W. F. Willoughby.
- No. 4. Industrial communities: Coal Mining Co. of Blanzy, by W. F. Willoughby.¹
The sweating system, by Henry White.¹
- No. 5. Convict labor.¹
Industrial communities: Krupp Iron and Steel Works, by W. F. Willoughby.¹
- No. 6. Industrial communities: Familistère Society of Guise, by W. F. Willoughby.¹
Cooperative distribution, by Edward W. Bemis, Ph. D.¹
- No. 7. Industrial communities: Various communities, by W. F. Willoughby.¹
Rates of wages under public and private contract, by Ethelbert Stewart.¹
- No. 8. Conciliation and arbitration in the boot and shoe industry, by T. A. Carroll.¹
Railway relief departments, by Emory R. Johnson, Ph. D.¹
- No. 9. The padrone system and padrone banks, by John Koren.¹
The Dutch Society for General Welfare, by J. Howard Gore, Ph. D.¹
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Building and loan associations.¹
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The municipal or cooperative restaurant of Grenoble, France, by C. O. Ward.¹
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- No. 14. The Negroes of Farmville, Va.: A social study, by W. E. B. Du Bois, Ph. D.¹
Incomes, wages, and rents in Montreal, by Herbert Brown Ames, B. A.¹
- No. 15. Boarding homes and clubs for working women, by Mary S. Fergusson.¹
The trade union label, by John Graham Brooks.¹
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Workmen's compensation acts of foreign countries, by Adna F. Weber.
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- No. 53. Wages and cost of living.
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Wages in the United States and Europe, 1890 to 1903, by G. W. W. Hanger.

¹ Bulletin out of print.

- Cost of living and retail prices in the United States, 1890 to 1903, by G. W. W. Hanger.
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