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WORKMEN'S INSURANCE AND COMPENSATION SERIES

**COMPARISON OF WORKMEN'S COMPEN-
SATION LAWS OF THE UNITED STATES
AND CANADA UP TO JANUARY 1, 1920**

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COMPARISON OF WORKMEN'S COMPENSATION LAWS OF THE UNITED STATES AND CANADA.

PART I—UNITED STATES.

INTRODUCTION.

This bulletin, summarizing and comparing the principal features of the workmen's compensation laws of the United States and Canada, is a revision of a similar study made in 1917 and published as Bulletin No. 240. It covers all laws enacted up to January 1, 1920, and includes for the first time a comparison of the compensation laws of Canada (see pp. 131 to 140). A digest of the Canadian laws may be found in the chart following page 140. A brief comparison and contrast of the principal features of American and Canadian laws is found on pages 131 to 133.

Since the publication of Bulletin No. 240, 34 States have amended or supplemented their compensation laws, while 5 States¹ have been added to the list of those having such laws. At present 42 States, the 2 Territories of Alaska and Hawaii, the insular possession of Porto Rico, and the Federal Government have workmen's compensation laws upon their statute books.²

Several new features have been added in the present volume. The more important of these are on the following subjects: Occupational diseases; remarriage of widows; second injuries; rehabilitation; adequacy of partial disability schedules; relative severity of upper and lower limb injuries; contract doctors and hospitals; and hospital and medical fees.

HISTORY OF COMPENSATION LEGISLATION.³

Compensation legislation in the United States is of recent origin. The first permanent State laws were enacted by Washington and Kansas on March 14, 1911. The first law to become effective, how-

¹ Alabama, Missouri, North Dakota, Tennessee, and Virginia.

² For the sake of simplicity all jurisdictions except the United States Government will hereafter be referred to as States.

³ For a more complete history of compensation legislation, see Bulletin No. 203 of U. S. Bureau of Labor Statistics, pp. 45-50.

ever, was the one enacted by Wisconsin May 3, 1911, which took effect immediately upon its passage. Since then compensation legislation has progressed rapidly, 42 States and 3 Territories having placed such laws upon their statute books,⁴ while the Federal act has been amended to include all civil employees.

Prior to 1911, however, several States had enacted workmen's compensation laws which were later declared unconstitutional by the courts; and in addition voluntary insurance or benefit schemes had been provided for in a number of States, but these could hardly be designated compensation laws as now understood. The following is a brief summary of these early acts:

The first legislation in the United States providing for stated benefits payable without suit or proof of negligence was the cooperative insurance law of Maryland enacted in 1902. This act was of restricted application, included only mining, quarrying, railways, and municipal construction work, and was to be administered by the State insurance commission. The law was declared unconstitutional, however, as depriving parties of the right of trial by jury and conferring on an executive judicial or at least quasi-judicial functions.

The next law within the territorial jurisdiction of the United States was an enactment by the United States Philippine Commission in 1905, authorizing the continuance of wages for a period during disability, but not exceeding 90 days, in case of injury received by the employees of the Insular Government in the line of duty.

The Federal Government enacted a limited compensation law in 1908, but applicable only to certain hazardous employments.

In 1909 Montana enacted a law (effective Oct. 1, 1910) providing for the maintenance of a State cooperative fund for miners and

⁴ The following States, etc., have enacted compensation laws:

State.	Approved.	Effective.	State.	Approved.	Effective.
Washington.....	Mar. 14, 1911	Oct. 1, 1911	Indiana.....	Mar. 8, 1915	Sept. 1, 1915
Kansas.....	.....do.....	Jan. 1, 1912	Montana.....	.....do.....	July 1, 1915
Nevada.....	Mar. 24, 1911	July 1, 1911	Oklahoma.....	Mar. 22, 1915	Sept. 1, 1915
New Jersey.....	Apr. 4, 1911	July 4, 1911	Vermont.....	Apr. 1, 1915	July 1, 1915
California.....	Apr. 8, 1911	Sept. 1, 1911	Maine.....	.....do.....	Jan. 1, 1916
New Hampshire.....	Apr. 15, 1911	Jan. 1, 1912	Colorado.....	Apr. 10, 1915	Aug. 1, 1915
Wisconsin.....	May 3, 1911	May 3, 1911	Hawaii.....	Apr. 28, 1915	July 1, 1915
Illinois.....	June 10, 1911	May 1, 1912	Alaska.....	Apr. 29, 1915	July 28, 1915
Ohio.....	June 15, 1911	Jan. 1, 1912	Pennsylvania.....	June 2, 1915	Jan. 1, 1916
Massachusetts.....	July 28, 1911	July 1, 1912	Kentucky.....	Mar. 23, 1916	Aug. 1, 1916
Michigan.....	Mar. 20, 1912	Sept. 1, 1912	Porto Rico.....	Apr. 13, 1916	July 1, 1916
Rhode Island.....	Apr. 29, 1912	Oct. 1, 1912	South Dakota.....	Mar. 10, 1917	June 1, 1917
Arizona.....	June 8, 1912	Sept. 1, 1912	New Mexico.....	Mar. 13, 1917	June 8, 1917
West Virginia.....	Feb. 22, 1912	Oct. 1, 1913	Utah.....	Mar. 15, 1917	July 1, 1917
Oregon.....	Feb. 25, 1912	July 1, 1914	Idaho.....	Mar. 16, 1917	Jan. 1, 1918
Texas.....	Apr. 16, 1913	Sept. 1, 1913	Delaware.....	Apr. 2, 1917	Do.
Iowa.....	Apr. 18, 1913	July 1, 1914	Virginia.....	Mar. 21, 1918	Jan. 1, 1919
Nebraska.....	Apr. 21, 1913	July 17, 1913	North Dakota.....	Mar. 5, 1919	Mar. 5, 1919
Minnesota.....	Apr. 24, 1913	Oct. 1, 1913	Tennessee.....	Apr. 15, 1919	July 1, 1919
Connecticut.....	May 29, 1913	Jan. 1, 1914	Missouri.....	Apr. 28, 1919	Nov. 1, 1919
New York.....	Dec. 16, 1913	July 1, 1914	Alabama.....	Aug. 23, 1919	Jan. 1, 1920
Maryland.....	Apr. 16, 1914	Nov. 1, 1914			
Louisiana.....	June 18, 1914	Jan. 1, 1915	United States.....	May 30, 1908	Aug. 1, 1908
Wyoming.....	Feb. 27, 1915	Apr. 1, 1915	New act.....	Sept. 7, 1916	Sept. 7, 1916

laborers in and about the coal mines of the State. Contribution to the fund was compulsory, employers to pay on the basis of the tonnage of coal mined, and employees on the basis of their monthly gross earnings. State officials were to administer the fund, and payments for death and disability were provided for. While compulsory, the act was not exclusive as against injured workmen, who were permitted to sue under the employers' liability law, though bringing suit forfeited the benefits under this act. This double obligation imposed upon the employer by the act was held by the supreme court of the State to invalidate it, though in its essential features it was held to be a valid exercise of the law-making power.

The next law of this class was enacted by Maryland in 1910 establishing cooperative insurance funds for coal and clay miners of Allegheny and Garrett counties. This act was repealed by the compensation act of 1914.

It will be observed that the foregoing legislation, antedating what may be called the commission period, was of limited application, either as to the locality or as to the classes of employees affected, and also that there appears to have been but little regard as to whether the benefits provided were at all adequate to the needs of the workmen. The laws subsequently enacted may be said to be of general application and have generally been based on the investigations of commissions.

The first of the laws of this class was the elective compensation law of New York, 1910, followed in the same session by a compulsory law for hazardous employments. The latter law was declared unconstitutional after a very brief term of existence, but after an amendment to the constitution a new compulsory law was enacted in 1913. The real compensation period began in 1911, when 10 States enacted such laws. Each year since then additional States have fallen in line until at present, as already noted, 45 States and Territories have enacted compensation legislation.

This rapid growth of compensation legislation, involving, as it has, the almost simultaneous enactment of laws in a number of States, has operated to prevent the adoption of any one form of law as a type, so that although a single fundamental principle underlies the entire group of laws of this class, its expression and application present great diversity of details in the different States. This is true not only of the primary factors of the laws, such as the scope and the compensation benefits, but also of the system of compensation insurance, administration, methods of election or rejection, etc.

A comparison of these and other features which may be classed as of principal rank is essential to any fair understanding of the relative effectiveness of the laws—a fact which is recognized by insurance companies in fixing the rates of premium to be charged in

writing policies to cover the liabilities prescribed by the laws, and is of no less interest to the employer who is primarily charged with these liabilities, and to the workman for whose benefit the laws were enacted.

The compensation States contain approximately 87 per cent of the persons gainfully employed in the United States and include practically all of the industrial States. There seems to have been no causal connection between the need for compensation laws and the sequence of their enactment. Of the 10 States enacting such laws in 1911, 3 were manufacturing States on the Atlantic coast, 4 were agricultural or semi-industrial States in the Mississippi Valley, and 3 were primarily agricultural or mining States west of the Rocky Mountains. The 7 noncompensation States⁵ are primarily agricultural, though in most of them manufacturing is of considerable and increasing importance.

TENDENCIES IN LEGISLATION.

Certain provisions of workmen's compensation laws are more susceptible of change and revision than others. The scope of the acts and the partial disability schedules, for example, have undergone relatively very little change since their initial enactment, while the waiting period and particularly the requirements as to medical service are in a constant state of flux. Compensation commissioners are not always familiar with the experience and results of compensation laws in other States. This unfamiliarity, together with the human proneness to overvalue those things to which one has been accustomed, has led many of the commissions not only to prefer their own type of law but also to consider it superior to all others. These facts are of especial importance, therefore, to States having under consideration the adoption of a compensation law. The following summary shows some of the more important statutory changes which have occurred in the 40 States and Territories having had workmen's compensation experience.⁶ A large majority of these changes are of recent enactment.

Compensation and insurance systems.—There has been considerable dissatisfaction with the elective feature of compensation laws. A large proportion of employers in some of the States having such elective laws have refused to accept the compensation provisions, thus depriving their employees of the benefits of this legislation. Notwithstanding this fact, and also the fact that several compensation commissions have recommended a change from the elective to the compulsory system, only one of the elective compensation States

⁵ Arkansas, District of Columbia, Florida, Georgia, Mississippi, North Carolina, and South Carolina.

⁶ The five States (Alabama, Missouri, North Dakota, Tennessee, and Virginia) which enacted compensation laws in 1918 and 1919 have not been taken into account in the following analysis.

(Illinois) substituted the compulsory for the elective system. On the other hand, of the States in which employers were not required to insure, four⁷ changed to a compulsory insurance system. No State has established a State insurance fund which was not provided for in the original compensation act, nor has any State abolished such a State fund after its establishment.

Scope.—The scope of the various acts, i. e., the employments covered, has on the whole remained quite stationary. None of the States which originally excluded agriculture and domestic service has later included such employments. New York is the only one of the original "hazardous" States which later included nonhazardous employments, although several States in whose laws only enumerated hazardous employments were covered have added a few minor employments to enumerated statutory lists. The more important additions during the past two years were cotton ginning in Texas and retail stores in Oklahoma by the repeal of the provisions exempting them. Four States⁸ subsequently included public employees after having made no provision therefor in the original acts. In one particular, however, the scope of the compensation acts has been considerably increased. Twenty States originally exempted employers having less than a stipulated number of employees. Of these, 5 States⁹ have reduced the number of employees and 3 States¹⁰ have abolished the numerical exemption provision altogether. Many of the States originally exempted casual employments but there is a tendency to abolish this exemption.

Waiting period.—The waiting period has been changed in 22 States, 3¹¹ of which have made two or more successive changes. Of these, 20 States¹² reduced the waiting period; 1 State¹³ first increased its waiting period from 1 week to 2 weeks and then reduced it again to 1 week; and 1 State¹⁴ increased the period from 1½ days to 7 days. In addition a number of States have abolished the waiting period entirely in certain cases. Of these, 10 States¹⁵ abolished the waiting period if the disability exceeds stated periods, while 1 State¹⁶ abolished the waiting time in partial disability injuries.

⁷ California, Illinois, Nebraska, and New Jersey.

⁸ Oregon, Porto Rico, Rhode Island, and West Virginia.

⁹ Kentucky, Porto Rico, Texas, Utah, and Wisconsin.

¹⁰ Nebraska, Nevada, and Wyoming.

¹¹ California, Colorado, and Connecticut.

¹² From 2 weeks to 1 week: Connecticut, Hawaii, Indiana, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Nebraska, Nevada, Oklahoma, and Vermont; from 2 weeks to 10 days: Maine, Massachusetts, New Jersey, Pennsylvania, and South Dakota; from 3 weeks to 10 days: Colorado; from 10 days to 3 days: Utah; from 3 weeks to 2 weeks: New Mexico.

¹³ California.

¹⁴ Washington.

¹⁵ Connecticut, Delaware, Illinois, Louisiana, Nebraska, Nevada, New York, Rhode Island, Washington, and Wyoming.

¹⁶ Hawaii.

Compensation scale.—Some of the factors entering into the compensation scale have remained quite rigid, while others have been relatively more susceptible of change. In practically all of the States the compensation payments are based upon the wages of the injured employee, ranging generally from 50 to 66½ per cent. Fourteen States¹⁷ have materially increased their original percentages. Twenty-four States¹⁸ increased their weekly or monthly maximum compensation limits. Twelve States also increased the period during which compensation shall be paid. Of these, 5¹⁹ increased the period in case of death; 8²⁰ in case of total disability, and 5²¹ in case of partial disability. However, probably the most inelastic factor of the compensation scale is the schedule for permanent partial disability. Of the States having such schedules only 6²² have materially increased the compensation periods or amounts; while 3²³ have slightly increased the amounts in individual cases. Two States²⁴ have materially enlarged the list of injuries in the schedule without increasing the compensation periods, while 1²⁵ has provided for a new schedule. In addition, Texas increased its schedule substantially both as to list of injuries and as to compensation periods, but it also amended its law by making such compensation in lieu of all other payments, whereas formerly such payments were in addition to all other compensation.

Medical service.—The provisions as to medical service have undergone greater change than any other feature of the workmen's compensation laws. Thirty-two States²⁶ have increased the medical service originally provided, either as to maximum amounts or length of time during which such medical service is to be furnished. In three of these States²⁷ the maximum limit has been abolished entirely and employers must provide medical attendance as long as reasonably necessary. Most of these increases were provided in recent years. State legislatures and compensation commissions seem at last to realize the fact that adequate medical and hospital

¹⁷ From 50 to 66½ per cent: Massachusetts, Minnesota, Nebraska, and New Jersey; from 50 to 60 per cent: Iowa, Kansas, Maine, Michigan, Nevada, and Pennsylvania; from 50 to 55 per cent: Louisiana and South Dakota; from 55 to 60 per cent: Utah; from 50 to 65 in certain cases: Illinois.

¹⁸ Colorado, Connecticut, Delaware, Illinois, Iowa, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Jersey, New Mexico, Ohio, Oklahoma, Pennsylvania, Rhode Island, Utah, Washington, West Virginia, Wisconsin, and Wyoming.

¹⁹ Delaware, Massachusetts, Nebraska, Nevada, and Ohio.

²⁰ Delaware, Maryland, Minnesota, Nebraska, Nevada, Texas, West Virginia, and Wisconsin.

²¹ Connecticut, Delaware, Massachusetts, Michigan, and Nevada.

²² Indiana, Nebraska, Washington, West Virginia, Wisconsin, and Wyoming.

²³ Iowa, Nevada, and South Dakota.

²⁴ Hawaii and Nebraska.

²⁵ Kansas.

²⁶ California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Porto Rico, Rhode Island, South Dakota, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming.

²⁷ California, Connecticut, and Porto Rico.

service is absolutely essential for the complete economic rehabilitation of injured workmen. There is also a tendency toward closer State supervision over the quality of the medical service furnished by employers. A number of States recently authorized compensation commissions to approve or supervise hospitals and benefit funds maintained either by employers themselves or under contract, and to order change of physicians if necessary. There is also a trend toward allowing the injured employee to select his own physician. In 1917, for the first time in the history of the compensation legislation in this country, employees were specifically given the right by law to choose the physician when the cost of the medical service is paid by the employer.

Administrative system.—Nebraska and New Jersey are the only States which have materially changed their system of administration since 1913, a compensation commission replacing the former method of administration by the courts. The original compensation laws of Illinois and Nevada, enacted in 1911, also, did not provide for administrative systems, but both States created administrative commissions in 1913. In addition Massachusetts and New York have abolished the arbitration committee system.

Sectional variations.—A review of the workmen's compensation laws of the several States brings out three significant facts. One is the absence of these laws in most of the Southern States;²⁸ another is the refusal of most States to be guided by the experience of other States; and the third is the inclination of the far Western States to strike out along new lines, as shown by the following facts: The only States²⁹ which have established exclusive State insurance systems are in the far West. Also, the only States³⁰ which have established pension systems, the amounts presumably based upon the need of the workman or his dependents rather than upon loss of earning power, are in the far West. Washington is the only State providing for the administration of medical service through local medical aid boards patterned after the German system. The only laws which provide for the maintenance of contract hospitals to which the employee is required to contribute his proportionate share have been enacted by far Western States.³¹ And of the four States³² in which the administrative commissions are authorized to formulate and have formulated elaborate schedules for permanent partial disabilities based as far as possible upon the actual loss of earning power, three are in the far West.

²⁸ North Carolina, South Carolina, Georgia, Florida, Mississippi, Arkansas, and the District of Columbia have not yet enacted workmen's compensation laws.

²⁹ Nevada, Oregon, Washington, and Wyoming. (Porto Rico also has an exclusive State insurance fund.)

³⁰ Oregon, Washington, and Wyoming.

³¹ Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Washington.

³² California, North Dakota, Washington, and West Virginia.

One regrettable fact in connection with the enactment of workmen's compensation legislation, as already noted, is the disinclination of most States to be guided by the experience developed under the laws of other States. The type of law, including scope, compensation scale, administrative system, etc., usually adopted by a State is determined generally by two factors—contiguity and the economic and political progressiveness of the State. An examination of the laws of the 10 States enacting compensation laws since 1916 shows that these two factors were most influential in determining the type of law enacted. The far Western States especially have been inclined to pattern their laws after those adopted by contiguous States, due in part to the fact that, owing to the great distances, investigating commissions and others responsible for the enactment of the laws have found it inexpedient to acquaint themselves with the experience of the Eastern States by personal investigations. Eventually, no doubt, all of the States will adopt those compensation laws which shall have been empirically proved to be the best, but apparently it is necessary for each State to attain this through experience alone.

COMPENSATION AND INSURANCE SYSTEMS.

Compensation laws may be classified as compulsory, elective (optional), or voluntary, depending upon the degree of constraint to which employers are subjected to accept the compensation provisions. Since these terms will be used repeatedly it may be advisable to define them. A compulsory law is one which requires every employer within the scope of the compensation law to accept the act and pay the compensations specified. There is no choice. Usually, but not always, the employee also must accept the provisions of the act. In Arizona, for example, the law is compulsory as applied to the employer, but the employee, after an injury, has the option of accepting compensation or suing for damages.

An elective act is one in which the employer has the option of either accepting or rejecting the act, but, in case he rejects, the customary common-law defenses are usually abrogated. In other words, the employer is penalized if he does not elect. The employee also has the right to accept or reject the act.

None of the compensation laws covers all employments. Usually agriculture, domestic service, employments casual in nature or not conducted for the purpose of the employer's business, and in some laws nonhazardous employments, are exempted from the provisions of the act. In some States such employments, however, may come under the provisions of the law through the voluntary acceptance of the employer or the joint election of employer and employee in these exempted classes, but the employer loses no rights or defenses

if he does not accept. Such action on the part of the employer is called voluntary and to this extent the compensation law is a voluntary one. Thus a law may be either compulsory or elective as to the employments covered, and voluntary as to employments exempted.

Furthermore, the employments referred to above are private employments. An act may be elective as to private but compulsory as to public employments. In fact, one-half of the elective compensation laws are compulsory as to public employees. Classification, however, is based exclusively upon private employments.

Distinction must also be made between the effective and theoretical scope of an act. A compulsory compensation law may be limited in its scope, but at least all employees within this scope are covered, while an elective act may include all employments and yet fail to cover a large proportion of employees because of the employers' refusal to accept the provisions of the law.

Hereafter, unless otherwise specified, the theoretical scope of an act is meant, and when such expressions as 50 per cent of employees are "covered" by the act, or "affected" by the act, or "come under" the act, or are "subject to" the act, it is presumed that all employers in the State referred to have accepted the compensation provisions of the law. It is hoped that by thus defining the terms, ambiguity and confusion will be avoided, or at least minimized. The extent to which employers in elective States have actually accepted the law will be discussed in another connection.

Compensation laws may be classified upon different bases. As already noted, one method of classification is the division into compulsory and elective compensation laws, depending upon whether the compensation provisions are obligatory or optional. The requirements as to insurance constitute another basis for classification. On this basis the laws may be classified as compulsory, including all laws in which some form of insurance is required, or optional, including laws in which no insurance is required. Table 1 shows the compensation States grouped according to these two classifications.

14 COMPARISON OF COMPENSATION LAWS OF UNITED STATES.

TABLE 1.—COMPENSATION STATES CLASSIFIED ACCORDING TO WHETHER LAW IS COMPULSORY OR ELECTIVE.

Compensation compulsory. (14)		Compensation elective. (31)	
Insurance required. (13)	Insurance not required. (1)	Insurance required. (26)	Insurance not required. (5)
California. Hawaii. Idaho. Illinois. Maryland. New York. North Dakota. Ohio. Oklahoma. Puerto Rico. ¹ Utah. Washington. Wyoming.	Arizona.	Colorado. Connecticut. Delaware. Indiana. Iowa. Kentucky. Maine. Massachusetts. Michigan. Missouri. Montana. Nebraska. Nevada. New Hampshire. New Jersey. New Mexico. Oregon. Pennsylvania. Rhode Island. South Dakota. Tennessee. Texas. Vermont. Virginia. West Virginia. Wisconsin.	Alabama. Alaska. Kansas. Louisiana. Minnesota.

¹ In a decision rendered June 3, 1919, the United States Circuit Court of appeals held that the Porto Rican compensation law is compulsory (*Camunas v. N. Y. & P. R. S. S. Co.*, 260 Fed., 40).

It will be noted that of the 45 compensation States 14 are compulsory and 31 are elective as to compensation provisions, while 39 are compulsory and 6 elective as to insurance requirements.

Very considerable differences appear in the methods provided by the laws of the 39 States in which insurance is obligatory. Thus the State may make provision for the carrying of such insurance, and require all employers coming under the act to avail themselves of such provision; or the State fund may simply offer one of alternative methods. Again, the State may refrain entirely from such action, but require insurance in private companies, stock or mutual; and lastly, self-insurance may be permitted, i. e., the carrying of the risk by the individual, subject to such safeguards as the law may prescribe.

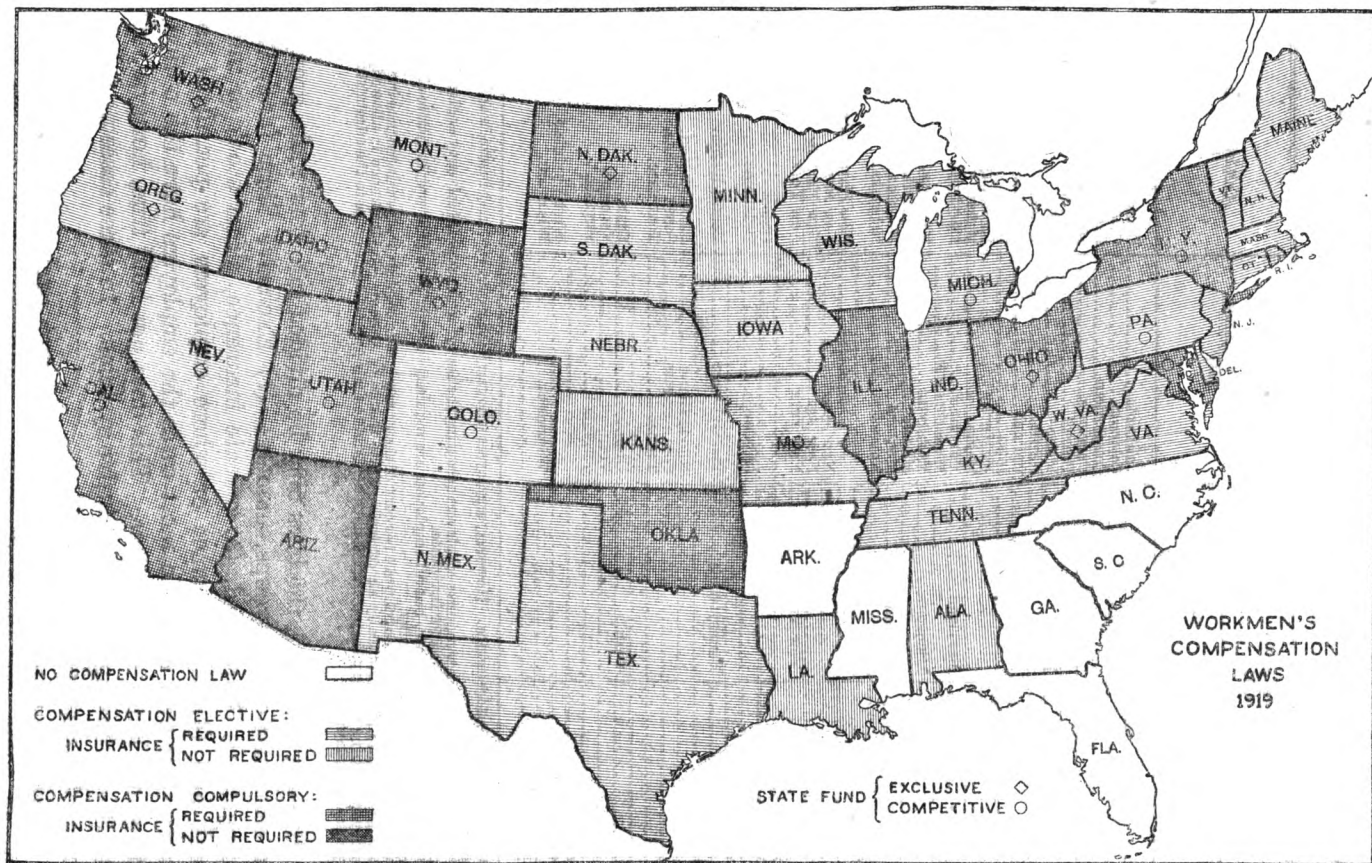


Table 2 shows the groupings on the bases indicated:

TABLE 2.—COMPULSORY INSURANCE STATES, CLASSIFIED AS TO DIFFERENT KINDS OF INSURANCE ALLOWED.

State fund. (17)		Private insurance. (31)	Self-insurance. (31)
Exclusive. (8)	Competitive. (9)		
	California	California	California
	Colorado	Colorado	Colorado
		Connecticut	Connecticut
		Delaware	Delaware
		Hawaii	Hawaii
	Idaho ¹	Idaho ¹	Idaho
		Illinois	Illinois
		Indiana	Indiana
		Iowa	Iowa
		Kentucky	Kentucky
		Maine	Maine
	Maryland	Maryland	Maryland
		Massachusetts	
	Michigan	Michigan	Michigan
		Missouri	Missouri
	Montana	Montana	Montana
		Nebraska	Nebraska
Nevada			
		New Hampshire ²	New Hampshire ²
		New Jersey	New Jersey
		New Mexico	New Mexico
	New York	New York	New York
North Dakota			
Ohio ³		Oklahoma	Ohio ³
Oregon			Oklahoma
	Pennsylvania	Pennsylvania	Pennsylvania
Porto Rico			
		Rhode Island	Rhode Island
		South Dakota	South Dakota
		Tennessee	Tennessee
		Texas	
	Utah	Utah	Utah
		Vermont	Vermont
		Virginia ⁴	Virginia ⁴
Washington			
West Virginia ⁵			West Virginia ⁵
Wyoming		Wisconsin	Wisconsin

¹ Idaho permits self-insurance. However, employers who carry their own risk may insure in authorized guaranty companies.

² The New Hampshire law requires employers accepting the act to furnish proof of solvency or give bond, but makes no other provision for insurance.

³ Ohio permits self-insurance, but all employers are required to contribute their proportionate share to the State insurance fund surplus.

⁴ Self-insurers required to contribute 4 per cent of their premium to commission's maintenance fund.

⁵ West Virginia has practically an exclusive State insurance system. Self-insurance is allowed, but employers desiring to carry their own risk must contribute their proportionate share to the administrative expenses of the law.

Broadly speaking, the laws may be divided into four main groups or combination of groups, namely: (1) Exclusive State fund, (2) competitive State fund, (3) private insurance, either stock or mutual, and (4) self-insurance or where employers are permitted to carry their own risk. In most cases the employers have the option of several kinds of insurance. This does not hold true, however, of the States having strictly exclusive systems. In these cases no other form of insurance is permitted.

It will be noted that six States have such exclusive systems. In two of these, Nevada and Oregon, compensation is elective and

insurance is therefore not absolutely compulsory, since employers need not accept the act, but should they accept, insurance in the State fund is compulsory. In North Dakota, Washington, and Wyoming both compensation and insurance are compulsory. In these six States the State becomes the sole insurance carrier. It classifies the industries into groups according to hazard, fixes and collects premiums, adjudicates claims, and pays compensation. Two other States (Ohio and West Virginia) are nearly exclusive in character. They allow no private casualty company to operate, but permit self-insurance. Ohio permits employers to carry their own risk, though all such employers are required to contribute their proportionate share to the State insurance fund surplus. Self-insurers, however, are not permitted to insure their risk in private companies. West Virginia has practically an exclusive State insurance system. It permits no private insurance, but does allow self-insurance. The employers, however, who desire to carry their own risk must contribute their proportionate share to the administrative expenses of the law.

In the other 31 States having compulsory insurance laws some form of competition exists, or at least the employer is given an option as to the method of insuring his risk. In nine of these States ³³ the laws provide for a State fund through which the State conducts a workmen's compensation insurance business in competition with private liability companies. Private casualty companies, however, are permitted to write compensation insurance in all of these States. Idaho differs somewhat from the other States having competitive State funds. It allows employers to carry their own risk and also permits substitute insurance schemes if the benefits provided equal those of the act. Self-insurers, however, as evidence of satisfactory security, may furnish a surety bond or guaranty contract with any authorized surety or guaranty company. Moreover, the attorney general has held that the words "guaranty contract" includes insurance contracts and consequently self-insured employers may transfer their compensation liability to authorized private casualty companies.

Three States ³⁴ have so-called State mutual insurance companies. Massachusetts was the first State to provide for this type of insurance. The original purpose was to create an insurance monopoly conducted by an employers' mutual company and supervised by the State. Before the law was finally enacted, however, private companies were given practically the same privileges as the so-called State company, which at present is a regular competing private mutual company. The other two States merely copied the provi-

³³ California, Colorado, Idaho, Maryland, Michigan, Montana, New York, Pennsylvania, and Utah.

³⁴ Kentucky, Massachusetts, and Texas.

sions of the Massachusetts law. Massachusetts and Texas do not permit self-insurance, while Kentucky does.

Of the 39 compulsory insurance States, 31 permit private companies to operate, the only exceptions being the 8 exclusive State fund States.

Thirty-one States allow employers to self-insure or carry their own risk, the exceptions being the exclusive States of Nevada, North Dakota, Oregon, Porto Rico, Washington, and Wyoming, and the States of Massachusetts and Texas. Employers who avail themselves of this privilege are required either to give proof of their financial solvency and ability to pay compensation or to furnish bonds or other security, or to do both. In several States such employers are also permitted to secure their compensation payments by guaranty insurance.

New Hampshire's compensation law is exceptional in that employers who accept the act must furnish proof of financial solvency or deposit adequate security, but the law makes no other provision as to insurance.

SCOPE OF THE LAWS.

No two compensation laws are alike. A number of provisions have been adopted quite uniformly by nearly all the States, and those of certain States have been taken as models by others. For example: Michigan and Texas have followed Massachusetts in important particulars; Oregon and Nevada have copied after Washington, and Maryland adopted New York's law quite generally. But taken as a whole the laws are distinguished more for their dissimilarities than for their likenesses.

In attempting to compare and weigh the various acts it is necessary to concentrate upon the more important features. The scope of an act is perhaps of foremost importance. In other words, what industries are covered, what persons are compensated, and what exemptions are made? These are vital questions. It is of no particular importance to an injured workman to know that his State has an efficient administrative system, or that the compensation scale is high, or that payments are well secured by adequate supervision over insurance carriers, if his occupation is excluded from the benefits of the act.

The amount of compensation received is probably the next most important feature of a compensation law. This includes the compensation scale, the length of time for which compensation is paid, the maximum and minimum limits, the amount of medical service provided, and the length of the waiting period.

A third important feature is the provision for an administrative system. It is essential that the rights of injured workmen be looked after by some responsible agency in order that employees may receive prompt and just settlements and to prevent intimidation on the part of employers. It is desirable that injured employees should receive the full amount of compensation due them and receive it immediately and regularly. Other important provisions are those relating to security of compensation payments and injuries covered.

No State compensation act, even when full use of the elective provisions is taken into account, covers all employees. The nearest approach to universal coverage is the New Jersey act, which exempts only casual laborers, public officials, and public employees receiving salaries in excess of \$1,200. The principal exemptions, in the order of their importance, perhaps are: (1) Nonhazardous employments; (2) agriculture; (3) domestic service; (4) numerical exceptions, i. e., employers having less than a specified number of employees; (5) public employees; (6) casual laborers or those not employed for the purpose of the employer's business; and (7) employments not conducted for gain. In addition, there are a number of minor exemptions affecting individual States.

As already noted, most of the States which exempt certain employments provide that the parties exempted may accept the provisions of the compensation system through voluntary agreements or joint election, but the ordinary defenses of the employer are not abrogated if they do not elect. As a matter of fact, in most States this privilege has not been taken advantage of to any great extent ³⁵ and its effect in increasing the scope of an act is negligible.

³⁵ For example: In California, in 1918, 15,182 out of a total of not less than 77,000 employing farmers, not under the act by compulsion, had come under it voluntarily; in Connecticut, in 1916, 1,500 out of 70,000 employees had elected to come under the act; in Maryland, in 1915, only 42 of all the employers in nonhazardous industries, and thus not compelled to accept the act, had voluntarily done so; and in Nebraska, in 1915, only 87 employers of those exempt from all compulsion had voluntarily accepted the act.

Table 3 shows the inclusions and exclusions of the various States arranged according to the foregoing classifications:

TABLE 3.—SCOPE OF COMPENSATION LAWS.

Inclusions.		Exclusions.						
Both hazardous and nonhazardous employments.	Hazardous employments only.	Numerical exemptions.	Agriculture.	Domestic service.	Casual labor and employment not for employer's business.	Employments not conducted for gain.	Public employments.	Other employments.
Ala.....	Alaska.	Ala. ¹ .	Ala.....	Ala.....	Ala. ²	Ala. ³	Conn. (outworkers). Del. (outworkers). Hawaii (private employees receiving over \$36 a week; public employees over \$1,800 a year). Idaho (outworkers; charitable institutions; employees receiving over \$2,400 a year). Ind. (railroad employees in train service). Iowa (clerks not subject to hazard of industry). Me. (logging). Md. (country blacksmiths; employees receiving over \$2,000 a year). Minn. (steam railroads). Mo. (outworkers; employees receiving over \$3,000 a year). Nebr. (outworkers). N. H. (only workmen engaged in manual or mechanical labor included). N. J. (public employees receiving over \$1,200 a year). N. Dak. (steam railroads).
Calif.....	Ariz.....	Alaska ⁴.....	.....	.....	.....	.....	Alaska. Ariz.....
Colo.....	.....	Colo. ⁵	Calif.....	Calif.....	Calif. ⁶.....	.....	(*)
Conn.....	.....	Conn. ⁶	Colo.....	Colo.....	Colo. ⁷	Colo.....	Del.....
Del.....	.....	Del. ⁶	Del.....	Del.....	Del. ⁷	Hawaii ⁸.....	.....
Hawaii.....	.....	.....	.....	.....	.....	.....	.....
Idaho.....	.....	.....	Idaho.....	Idaho.....	Idaho ⁷	Idaho.....	.....
Ill.....	Ill.....	.....	Ill.....	Ill.....	Ill. ⁹.....	.....	.....
Ind.....	.....	.....	Ind.....	Ind.....	Ind. ².....	.....	.....
Iowa.....	.....	.....	Iowa.....	Iowa.....	Iowa ⁸.....	.....	Iowa ¹⁰
Kans.....	Kans.....	Kans. ¹¹	Kans.....	Kans.....	Kans. ⁹	Kans.....	Kans. ¹²	Me. (logging). Md. (country blacksmiths; employees receiving over \$2,000 a year). Minn. (steam railroads). Mo. (outworkers; employees receiving over \$3,000 a year). Nebr. (outworkers). N. H. (only workmen engaged in manual or mechanical labor included). N. J. (public employees receiving over \$1,200 a year). N. Dak. (steam railroads).
Ky.....	Ky. ¹³	Ky. ¹³	Ky.....	Ky.....	La. ⁹.....	.....	Ky. ¹⁴
Me.....	Me. ¹⁵	Me. ¹⁵	Me.....	Me.....	Me. ⁸.....	.....	.....
Md.....	Md.....	Md.....	Md.....	Md.....	Md. ⁷	Md.....	Md. ¹⁶	
Mass.....	.....	.....	Mass.....	Mass.....	Mass. ⁹.....	.....	Mass. ¹⁷
Mich.....	.....	.....	Mich.....	Mich.....	.....	.....	.....
Minn.....	.....	.....	Minn.....	Minn.....	Minn. ².....	.....	Minn. ¹⁸
Mo.....	Mo. ⁶	Mo. ⁶	Mo.....	Mo.....	Mo. ².....	.....	.....
Mont.....	.....	.....	Mont.....	Mont.....	Mont. ⁹.....	.....	.....
Nebr.....	Mont.....	.....	Nebr.....	Nebr.....	Nebr. ⁸	Nebr.....	.....
Nev.....	N. H.....	N. H. ⁶	Nev.....	Nev.....	Nev. ²	N. H.....	N. H. (only workmen engaged in manual or mechanical labor included). N. J. (public employees receiving over \$1,200 a year). N. Dak. (steam railroads).
N. J.....	.....	.....	.....	.....	N. J. ⁷.....	.....	.....
N. Mex.....	N. Mex.....	N. Mex. ¹⁹.....	.....	.....	N. Mex. ²	N. Mex.....	N. Mex.....
N. Y.....	N. Y. ²⁰	N. Y. ²⁰	N. Y.....	N. Y.....	N. Dak. ²	N. Y.....	.....
N. Dak.....	Ohio ⁶	Ohio ⁶	N. Dak.....	N. Dak.....	Ohio ².....	.....	.....
Ohio.....	.....	.....	.....	.....	.....	.....	.....

¹ Less than 16 excluded.

² Casual and not for purpose of employer's business.

³ Except State employees.

⁴ Less than 4 excluded.

⁵ Members of National Guard excluded.

⁶ Less than 5 excluded.

⁷ Casual only.

⁸ Casual or not for purpose of employer's business.

⁹ Not for purpose of employer's business.

¹⁰ City teachers excluded by ruling of commissioner.

¹¹ Less than 5 excluded. Mines excepted from this provision.

¹² Except municipal and county workmen.

¹³ Less than 3 excluded.

¹⁴ State and municipalities having less than 3 employees.

¹⁵ Less than 6 excluded.

¹⁶ Except workmen.

¹⁷ Except State workmen.

¹⁸ State.

¹⁹ Less than 4 excluded. Structural operations, 10 feet above ground, excepted from this provision.

²⁰ Less than 4 workmen or operatives excluded; numerical exemption applies only to nonhazardous employments.

TABLE 3.—SCOPE OF COMPENSATION LAWS—Concluded.

Inclusions.		Exclusions.						
Both hazardous and nonhazardous employments.	Hazardous employments only.	Numerical exemptions.	Agriculture.	Domestic service.	Casual labor and employment not for employer's business.	Employments not conducted for gain.	Public employments.	Other employments.
.....	Okla..	Okla. ¹⁵	Okla..	.....	.....	Okla....	Okla. ¹⁶	Okla. (persons not engaged in manual or mechanical work).
.....	Oreg..	.....	Oreg..	.....	.....	.....	.....	Pa. (outworkers).
Pa.....	.....	.....	Pa.....	Pa.....	Pa. ².....	.....	.....	P. R. (clerical occupations; employees receiving over \$1,500 a year).
P. R.....	.....	P. R. ¹⁹	P. R.....	P. R.....	.....	.....	P. R. ²³	R. I. (employees receiving over \$1,800 a year).
R. I.....	.....	R. I. ¹⁴	R. I.....	R. I.....	R. I. ².....	.....	.....	Tenn. (coal mines).
S. Dak.....	.....	.....	S. Dak.....	S. Dak.....	S. Dak. ⁴.....	.....	.....	Tenn. (railways used as common carriers).
Tenn.....	.....	Tenn. ²²	Tenn.....	Tenn.....	Tenn. ⁹.....	.....	Tenn.....	Utah (public employees receiving over \$2,400 a year).
Tex.....	.....	Tex. ¹³	Tex.....	Tex.....	Tex. ⁶.....	.....	Tex.....	Vt. (employees receiving over \$2,000 a year).
Utah.....	.....	Utah ¹³	Utah.....	Utah.....	Utah ².....	.....	.....	Va. (steam railroads).
Vt.....	.....	Vt. ²³.....	.....	Vt.....	Vt. ⁶	Vt.....	Vt. ¹⁸	W. Va. (traveling salesmen; corporation officers; employees not "regularly" employed).
Va.....	.....	Va. ²³	Va.....	Va.....	Va. ⁸.....	.....	.....	Wyo. (officials; clerks not subject to hazard of industry).
W. Va.....	Wash.....	.....	W. Va.....	W. Va.....	.....	.....	Wash. ¹⁶.....	.....
Wis.....	.....	Wis. ¹³	Wis.....	.....	Wis. ⁹.....	.....	.....	.....
.....	Wyo.....	.....	.....	.....	Wyo. ²	Wyo.....	Wyo. ¹⁶.....	.....

¹ Casual and not for purpose of employer's business.² Casual or not for purpose of employer's business.³ Not for purpose of employer's business.⁴ Less than 3 excluded.⁵ Less than 6 excluded.⁶ Except workmen.⁷ State.⁸ Except employees engaged on public works performed by the administration.⁹ Less than 10 excluded.¹⁰ Less than 11 excluded.

HAZARDOUS EMPLOYMENTS.

It will be noted that 13 of the 45 States include only hazardous employments. In these States the industries covered are enumerated and classified in varying degrees of detail, ranging from 5 classifications in New Hampshire to 43 in Maryland. These lists may, in some cases, be further extended at the discretion of the administrative commissions, or through decisions of the courts. There is also considerable diversity in the scope and number of hazardous employments included. It is impossible within the bounds of a chart or summary to present all the details of inclusion. In Alaska, only mining operations are included, but in the other States the principal hazardous employments are covered, including manufacturing, mining, transportation, and construction work. In enumerating the industries covered various phrases are used to denote the unusual

degree of risk to which the employees are exposed. In three States ³⁶ the term "hazardous" employment is used, in five ³⁷ "extrahazardous," and in one ³⁸ "inherently hazardous"; one State ³⁹ employs the word "dangerous," while two ⁴⁰ use "especially dangerous." Such phrases, however, have on the whole only a euphonious utility. Not only are the enumerated employments not always based on the actual hazard of the industry, but generally recognized hazardous employments are specifically excluded. In Maine, for example, logging operations, conceded to be one of the most hazardous employments, are exempted from the compensation act, while coal mines are exempted in Tennessee. In no State is agriculture, generally admitted to be a hazardous employment, included in terms, while in six States ⁴¹ it is specifically excluded. Five States ⁴² also provide for numerical exclusions, i. e., exempting the small employer from the operation of the act.

Obviously the scope of the law in the foregoing groups of States is much more limited than in all other States, since it would exclude the trades, professions, clerical occupations, and domestic service. It may be noted, however, that compensation is compulsory in six of these "hazardous" States.

The exclusion of employments or employers on the ground of having a low hazard is indefensible from every point of view and especially from that of the injured workman whose misfortune is not at all alleviated by the suggestion that the injury was quite unusual or unexpected. An injury received in a mercantile establishment may be just as severe and entail just as much economic distress as one received in a mine. And, furthermore, if an occupation is in fact only slightly hazardous, the additional burden to the industry and society will be slight because of the very fact that accidents are infrequent in these exempted employments.

NUMERICAL EXEMPTIONS.

A second exclusion is the exemption of small employers from the operation of the law. Twenty-two States exempt employers having less than a stipulated number of employees, as shown in Table 4.

³⁶ Louisiana, Oklahoma, and Oregon.

³⁷ Illinois, Maryland, New Mexico, Washington, and Wyoming.

³⁸ Montana.

³⁹ New Hampshire.

⁴⁰ Arizona and Kansas.

⁴¹ Illinois, Kansas, Maryland, Montana, Oklahoma, and Oregon.

⁴² Alaska, Kansas, New Hampshire, New Mexico, and Oklahoma.

TABLE 4.—NUMERICAL EXEMPTION STATES CLASSIFIED ACCORDING TO NUMBER OF EMPLOYEES EXEMPTED.

Employers having less than—						
3 employees. (8)	4 employees. (3)	5 employees. (7)	6 employees. (2)	10 employees. (1)	11 employees. (2)	16 employees. (1)
Kentucky. Oklahoma. Porto Rico. Texas. Utah. Wisconsin. ¹	Colorado. New Mexico. New York.	Alaska. Connecticut. Delaware. Kansas. Missouri. New Hampshire. Ohio.	Maine. Rhode Island.	Tennessee.	Vermont. Virginia.	Alabama.

¹In Wisconsin the numerical exemption provision does not apply if the employer has at any time since September 1, 1917, had three or more employees.

Several reasons have been advanced for the exclusion of the small employer, one being based upon the theory that the hazard of fellow service is low in employments where only a few workmen are employed. Another reason given is that the cost of insurance for such employees would be proportionately high. A third reason is that such exemption automatically excludes two important classes of employments, namely, agriculture and domestic service. A large proportion of casual labor and employments not in the usual course of the employer's business are also excluded through the numerical-exemption provision.

AGRICULTURE.

Every State except two ⁴³ exempts agriculture. The exclusion is either direct or, what amounts to the same thing, the employer's defenses are not abrogated in case he does not elect. In 33 States agriculture is excluded specifically in the law, while in three States ⁴⁴ its exclusion is accomplished through the exemption of the small employer. In the other seven States ⁴⁵ only hazardous employments are covered and agriculture is not included in the enumerated lists.

The reason for the almost universal exclusion of agriculture in the United States can hardly lie in the fact of its nonhazardous character. European experience, combined with available accident statistics in this country, proves quite conclusively that agriculture is a highly hazardous employment. The opposition of the farming element no doubt explains the exclusion, in 43 States, of agricultural laborers from the benefits of compensation acts.

⁴³ Hawaii and New Jersey.

⁴⁴ Connecticut, Ohio, and Vermont.

⁴⁵ Alaska, Arizona, Louisiana, New Hampshire, New Mexico, Washington, and Wyoming.

DOMESTIC SERVICE.

Domestic service is exempted in all but one State.⁴⁶ In 29 States the exclusion is direct, while in three⁴⁷ it is brought about by exempting the small employers; in one State⁴⁸ the exclusion is accomplished by limiting the field of compensation to "industrial employments" and exempting those not conducted for gain; in the other 11 States only hazardous employments are covered.

PUBLIC EMPLOYEES.

The provisions in regard to public employees also lack uniformity. Some States differentiate between the employees of the State and of municipalities. Others include only those engaged in manual labor. In some States, again, the inclusion is compulsory, in others it is optional, while in still others no provision at all is made.

Twenty-six States⁴⁹ include both State and municipal employees, while seven States⁵⁰ include neither. In the other 12 States⁵¹ the inclusion of public employees is only partial. The status of each State is shown in Table 3.⁵² Of the 38 States which include public employees, either in whole or in part, in all but 8⁵³ such inclusions are compulsory. In these eight elective States compensation is also elective as to private employers.

CASUAL LABOR.

Two other exceptions are found in most of the compensation laws. These are casual laborers and persons not employed for the purpose of the employer's trade, business, profession, or occupation. The term "casual labor" is not readily defined nor is its meaning clear. The various courts and commissions differ in their construction of the term. The Nevada law defines casual labor as employment where the work contemplated is to be completed in not exceeding 10 working days, without regard to the number of men employed, and where the total labor cost of such work is less than \$100. The New Jersey act defines casual employments, "if in connection with the employer's business, as employment the occasion for which arises by chance or is purely accidental; or if not in connection with any business of the employer as employment not regular, periodic, or recurring." Cali-

⁴⁶ New Jersey.

⁴⁷ Connecticut, Ohio, and Wisconsin.

⁴⁸ Hawaii.

⁴⁹ California, Colorado, Connecticut, Hawaii, Idaho, Illinois, Indiana, Louisiana, Maine, Michigan, Missouri, Montana, Nebraska, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Virginia, West Virginia, and Wisconsin.

⁵⁰ Alaska, Arizona, Delaware, New Hampshire, New Mexico, Tennessee, and Texas.

⁵¹ Alabama, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Minnesota, Oklahoma, Porto Rico, Vermont, Washington, and Wyoming.

⁵² See pp. 20, 21.

⁵³ Alabama, Connecticut, Kansas, Kentucky, Minnesota, Oregon, Vermont, and West Virginia.

ifornia has interpreted the phrase as meaning employment for less than one week. Six States ⁵⁴ have recently eliminated the "casual labor" provision from the act entirely.

Distinction must also be made between persons not employed in the usual course of the employer's business, on the one hand, and employments not conducted for gain, on the other. The former refers primarily to employees as such and would include personal and household servants; employments not conducted for gain refer primarily to employers and would include religious and charitable institutions. Casual employment may or may not be for gain, regularity being the principal criterion; employments not in the usual course of the employer's business may or may not be casual and may or may not be for the employer's pecuniary gain; but persons employed in employments not conducted for gain by the employer may be, and usually are, employed in the usual course of the employer's business. The Wisconsin Industrial Commission has interpreted the word "usual," as used in the phrase "usual course of employer's trade, etc.," as modifying "course" and not "trade." Any person, therefore, in the service of another performing work for his employer is covered by the law, provided such work is in the *usual course* of the trade, business, profession, or occupation. South Dakota, however, has construed the phrase differently. The attorney general of the State has held that laborers employed in constructing a church were not covered by the act because it is not the usual business of the church to build buildings.

Thirty-four States make exceptions of this kind, while 11 ⁵⁵ do not. Six States ⁵⁶ exempt both casual laborers and those not employed in the usual course of the employer's business; while in 16 States ⁵⁷ the employment must be both casual and not in the usual course of the employer's business, thus limiting the exclusions considerably. Four States ⁵⁸ exempt only casual labor, while eight States ⁵⁹ exempt only persons not in the usual course of the employer's business.

EMPLOYMENTS NOT FOR GAIN.

As already noted, employments not conducted for gain or profit refer primarily to businesses or institutions and not to employees as such. Eleven States exempt such employments. Charitable, educational, and religious institutions are included within this group. In New York the court held that even public employments, irrespective

⁵⁴ Illinois, Massachusetts, Michigan, Texas, West Virginia, and Wisconsin.

⁵⁵ Alaska, Arizona, Kentucky, Michigan, New Hampshire, New York, Oklahoma, Oregon, Porto Rico, Washington, and West Virginia.

⁵⁶ Hawaii, Iowa, Maine, Nebraska, Vermont, and Virginia.

⁵⁷ Alabama, California, Colorado, Delaware, Indiana, Minnesota, Missouri, Nevada, New Mexico, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Utah, and Wyoming.

⁵⁸ Connecticut, Idaho, Maryland, and New Jersey.

⁵⁹ Illinois, Kansas, Louisiana, Massachusetts, Montana, Tennessee, Texas, and Wisconsin.

of the fact that they were specifically included in another provision of the act, were excluded from the operation of the law, because such employments were not conducted for gain. The law was later amended⁶⁰ so as definitely to include public employments, regardless of the question of gain.

EXTRATERRITORIALITY.

Another feature pertaining to the scope of compensation laws is the question of extraterritoriality, i. e., whether employees injured outside of the State are entitled to compensation. Some States include such injuries, either specifically by law or through the decisions of the commissions and court; some exclude them, while others make no provision. In 19 States⁶¹ the laws have extraterritorial effect; in 14 States⁶² injuries occurring without the State are not compensable; while in 12 States⁶³ the law is not explicit.

MISCELLANEOUS EXEMPTIONS.

In addition to the foregoing exclusions, many States have special exemptions of more or less importance, the most frequent being the exclusion of highly paid employees. Nine States⁶⁴ have exemptions of this character. Because of the recent rise in the wage level the exclusion of such workmen has become a serious defect in the compensation laws having this provision. Other exemptions are: Outworkers in Connecticut, Delaware, Idaho, Missouri, Nebraska, and Pennsylvania; coal mines in Tennessee; logging in Maine; all railways used as common carriers in Texas; country blacksmiths in Maryland; charitable institutions in Idaho; traveling salesmen in West Virginia; clerical occupations in Iowa, Porto Rico, and Wyoming; steam railroads in Minnesota, North Dakota, and Virginia; and railroad employees engaged in train service in Indiana.

INTERSTATE AND FOREIGN COMMERCE.⁶⁵

The employments and employees heretofore enumerated are all subject to State legislation and State jurisdiction. Another employment which must necessarily be excluded is interstate railroads. The power to legislate for them is vested in the Federal Congress, and since it has acted the State laws can not enter the field.

⁶⁰ Ch. 622, Laws of 1916.

⁶¹ Alabama, Colorado, Connecticut, Hawaii, Idaho, Indiana, Maine, Missouri, Nevada, New Jersey, New York, Ohio, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, and Wisconsin (court ruling).

⁶² Alaska, California, Delaware, Illinois (court decision), Kansas, Kentucky (court decision), Maryland (exception as to miners), Massachusetts, Michigan, Minnesota, Pennsylvania, Rhode Island (court decision), Washington, and West Virginia (commissioner's ruling).

⁶³ Arizona, Iowa, Louisiana, Montana, Nebraska, New Hampshire, New Mexico, North Dakota, Oklahoma, Oregon, Porto Rico, and Wyoming.

⁶⁴ Hawaii, Idaho, Maryland, Missouri, New Jersey, Porto Rico, Rhode Island, Utah, and Vermont.

⁶⁵ For a thorough discussion of this subject see article, "Employees engaged in interstate and foreign commerce," by L. D. Clark, in November, 1913, issue of the Monthly Labor Review, pp. 294 to 310.

This exclusion is automatic by force of the facts, but several of the laws state that they do not apply to such employment or that they apply only so far as the operation of such roads is not regulated by Federal statute.

A peculiar exclusion is that of the law of Texas, affecting all steam and street railways, while Minnesota, North Dakota, and Virginia exclude all steam railroads, and Indiana excludes employees engaged in train service. In Texas and Minnesota, however, the legislature has provided for this class of employees by enacting a liability law patterned after the Federal statute.

The difficulties in interpreting and determining the jurisdiction of State and Federal liability laws, when both were based on the question of negligence, were sufficiently great, but the entrance of State compensation laws, involving new and different ideas of responsibility, introduced questions of even greater complexity. The judicial answers for the solution of these problems, moreover, were at first irreconcilably conflicting. The New York and New Jersey courts adopted the view that though Congress had spoken in cases of the interstate employer's negligence, it had said nothing which applied to cases of injury due to other causes, and therefore the State might enter the field without conflict with the Federal prerogative. The Illinois courts took the opposite view. The decisions of the United States Supreme Court in the two *Winfield* cases,⁶⁶ however, declared that when an employee engaged in interstate commerce was injured, his only right to recover arose under the provision of the Federal Employers' Liability Act, regardless of the question of negligence. The power of the States to supplement such legislation was denied. Theoretically, therefore, all conflict of legal jurisdiction has been cleared up by these decisions and a clear line of demarcation has been established; but in practice it is frequently, if not usually, necessary to try each case in order to ascertain whether or not the tribunal undertaking to hear and determine the controversy has jurisdiction over the parties to the proceeding.

Various methods of solution have been proposed, most of them having in view the establishment of a single jurisdiction over railroad employees, intrastate as well as interstate. One solution proposes the abrogation by Congress of the liability law in those States in which an adequate compensation law has been enacted, a precedent for such a step being found in the so-called Webb-Kenyon law, which subjects interstate shipments of intoxicants to the operation of State laws on arrival within the jurisdiction of the State affected. A second suggestion proposes a Federal statute providing compensation for injuries to employees engaged in interstate commerce by railroad, the law to be administered by referees who may also be

⁶⁶ *New York Central R. R. Co. v. Winfield* (244 U. S. 147), and *Eric R. R. Co. v. Winfield* (244 U. S. 170).

referees or administrative officers under the compensation laws of the State in which they act, thus permitting an award under the proper law on the presentation of evidence to a single individual or authority. A third proposition is that because of the progress of compensation legislation making adequate provision, which did not exist at the time of the enactment of the Federal liability law of 1908, no Federal compensation law be enacted, that the act of 1908 be repealed, and the whole subject relegated to State law, as it practically was prior to the enactment of the Federal liability statute. Still another method is that embodied in a proposed amendment to the Federal liability law providing that Congress do not assume to interfere with the power of the various States to provide a method of compensation for death and injury in cases not based upon negligence. This would enact into law the doctrine laid down by the courts of last resort of New Jersey and New York. A special committee⁶⁷ recently appointed by the International Association of Industrial Accident Boards and Commissions has been at work attempting to formulate an adequate compensation plan for railroad employees acceptable to the brotherhoods, railroads, and the State compensation commissions.

The foregoing proposals and discussions have to do solely with railroad employees. State jurisdiction over employees engaged in interstate commerce by water has been generally assumed since no statute has been enacted by Congress governing water transportation. But the recent far-reaching decision of the United States Supreme Court in the *Jensen* case⁶⁸ proved this assumption to be incorrect. The case involved the death of a stevedore on shipboard while engaged in unloading a steamship in New York Harbor. The New York courts had held that the case was not covered by the Federal statute governing interstate carriers by railroad, and as no statute has been enacted by Congress governing carriage by water, there was no Federal legislation applicable to the case. The decision of the Supreme Court was identical so far as the application of the Federal liability law was concerned, but an objection raised by the company to the decision of the court below that the compensation law was "unconstitutional in that it violates Article III, section 2, of the Constitution, conferring admiralty jurisdiction upon the courts of the United States," was upheld by the Supreme Court as regards the particular portion applying the law to maritime injuries. The Supreme Court, however, did not decide the question of admiralty jurisdiction over all injuries to sailors and stevedores

⁶⁷ Composed of Royal Meeker, United States Commissioner of Labor Statistics, chairman; Fred M. Wilcox, Wisconsin Industrial Commission, vice-chairman; T. J. Duffy, Ohio Industrial Commission; W. A. Marshall, Oregon Industrial Accident Commission; A. J. Pillsbury, California Industrial Accident Commission; C. H. Verrill, United States Employees' Compensation Commission.

⁶⁸ *Southern Pacific Co. v. Jensen* (244 U. S. 295), May, 1917.

without regard to whether the injury occurred on ship or on the dock. The condition brought about by this decision, however, has since been remedied by the enactment of a Federal law⁶⁹ giving States concurrent jurisdiction over maritime cases.^a

There are at present approximately 1,400,000 railroad employees in the United States not covered by workmen's compensation laws. Of these nearly 400,000 are railroad trainmen, practically all of whom are members of some railroad brotherhood. Some of these brotherhoods have been somewhat apathetic toward a Federal compensation law, preferring an employers' liability act under which the employee could obtain heavy damages for those accidents in which the railroad company was negligible, while other injuries could be taken care of through the brotherhood's benefit and insurance funds. It should be borne in mind, however, that the trainmen proper constitute but 24 per cent of the total railroad employees, exclusive of shopmen. The thousands of trackmen, section hands, and other employees have no strong organizations to look after their interests in case of accident. Moreover, of the total number of steam railroad accidents (excluding shop accidents) in the United States in 1916 sustained by railroad employees, trainmen sustained but 50 per cent of the fatal accidents and 42 per cent of the nonfatal accidents. Thus it will be seen that less than one-fourth of the railroad employees and only one-half of the railroad accidents are covered by the four railroad brotherhoods.⁷⁰

NUMBER OF PERSONS SUBJECT TO COMPENSATION ACTS.

Thus far only the theoretical or statutory scope of the compensation laws has been discussed, without reference to its application to actual conditions in the several States. But what do the various inclusions and exclusions really mean when applied in each State? How many employees are actually excluded through the nonhazardous, or numerical, or agricultural, or domestic service exemptions? Then, again, how does the same statutory exclusion affect different States? The exemption of agriculture in Rhode Island, for instance, is of little importance as compared to a similar exemption in Texas.

An attempt has been made to work out the number of employees affected by compensation laws in the various States. The computations are based upon the Federal occupation census of 1910. The absolute figures of the census of 1910, of course, understate the numbers as they exist at present, but probably the percentages would

⁶⁹ 40 Stat. at L. 395.

^a This law was declared unconstitutional by the United States Supreme Court on May 17, 1920 (*Knickerbocker Ice Co. v. Stewart*).

⁷⁰ For a further discussion of this subject see article "Comparison of experience under workmen's compensation and employers' liability systems," in the March, 1919, issue of the *Monthly Labor Review*, pp. 230-248.

remain practically the same except in the case of such States as have witnessed a marked change in the character of their industrial development. These computations, although based upon a detailed study of the census figures, are in some cases merely estimates, and no claim is laid to such accuracy as the figures would suggest. The aim has been, however, to maintain uniformity of treatment as between States, so that while the percentage of error for a given State may be considerable, the percentages given would show the relative status of each State with a reasonable degree of accuracy.

The method adopted has been as follows: The employers (including farmers, independent workers, etc.) were first deducted from the number gainfully employed as reported by the census, the remainder being the bona fide employees or wage earners; from the latter group were then excluded those employees exempted by the provisions of law as interpreted by the court or commission of each State. It has been difficult, and in some cases impossible, to apply the census classifications to those of the compensation acts. The classifications as enumerated in the census and in the laws do not agree, and furthermore the census gives occupations only and does not classify persons employed according to industry or as to whether they are employees.

Table 5 shows the number of persons gainfully employed;⁷¹ the number of employers, and the per cent this group is of the total gainfully employed; the number of employees covered and not covered and the per cent these groups are of the total gainfully employed; and the per cent the employees covered and not covered are of the *total employees*. The phrase "gainfully employed" is used in the same sense as used in the census, i. e., it includes all persons engaged in any gainful occupation irrespective of whether they are employees, employers, or independent workers.

⁷¹ The figures in the table do not include Federal employees and interstate railroad employees, on the ground that such persons are not subject to State laws. The number of such employees in each of the compensation States is given below. The sum of these figures added to the total persons gainfully employed (column 1 of the table) would correspond to the total persons gainfully employed as given in the census of occupations, 1910.

Alabama.....	10,917	Maryland.....	17,945	Pennsylvania.....	134,318
Alaska.....	1,225	Massachusetts.....	33,414	Porto Rico.....	1,567
Arizona.....	7,109	Michigan.....	32,186	Rhode Island.....	6,977
California.....	48,882	Minnesota.....	46,919	South Dakota.....	8,099
Colorado.....	20,138	Missouri.....	46,974	Tennessee.....	25,771
Connecticut.....	10,894	Montana.....	19,402	Texas.....	52,147
Delaware.....	3,807	Nebraska.....	23,220	Utah.....	9,511
Hawaii.....	3,142	Nevada.....	3,761	Vermont.....	5,057
Idaho.....	7,598	New Hampshire.....	5,950	Virginia.....	32,593
Illinois.....	105,210	New Jersey.....	38,502	Washington.....	33,212
Indiana.....	43,644	New Mexico.....	7,625	West Virginia.....	22,835
Iowa.....	40,093	New York.....	103,850	Wisconsin.....	30,252
Kansas.....	38,601	North Dakota.....	9,809	Wyoming.....	12,841
Kentucky.....	24,429	Ohio.....	74,952		
Louisiana.....	19,872	Oklahoma.....	16,210	Total.....	1,282,090
Maine.....	10,909	Oregon.....	13,839		

TABLE 5.—ESTIMATES OF THE NUMBER AND PER CENT OF PERSONS AFFECTED BY COMPENSATION ACTS.

[The estimates of "employees covered by act" in this table are made on the assumption that all elections provided for by law have been made. Owing to lack of definite information, no estimates have been made of employees unprotected because of failure of employer to elect under elective acts.]

State	Total persons gainfully employed. ¹	Employers (includes farmers, independents, etc.).		Employees.				Per cent employees covered are of total employees.	Per cent employees not covered are of total employees.
		Number.	Per cent of total gainfully employed.	Covered by act.		Not covered by act.			
				Number.	Per cent of total gainfully employed.	Number.	Per cent of total gainfully employed.		
	1	2	3	4	5	6	7	8	9
Alabama.....	977,607	602,146	61.6	126,125	12.2	249,336	25.5	33.6	66.4
Alaska.....	38,848	5,300	13.6	10,461	27.0	23,067	59.4	31.2	68.8
Arizona.....	80,716	18,742	23.2	32,455	40.2	29,519	36.6	52.4	47.6
California.....	1,058,896	254,804	24.1	611,941	57.8	192,091	18.1	76.2	23.8
Colorado.....	318,586	101,214	31.8	137,157	43.0	80,215	25.2	63.1	36.9
Connecticut.....	479,598	85,985	17.9	322,211	67.2	71,402	14.9	81.9	18.1
Delaware.....	82,066	22,534	27.5	37,447	46.1	22,075	26.4	62.9	37.1
Hawaii.....	98,052	11,309	11.5	80,319	82.3	6,424	6.2	92.6	7.4
Idaho.....	123,490	59,587	41.0	50,119	40.6	22,784	18.4	68.7	31.3
Illinois.....	2,191,568	616,894	28.1	871,890	39.8	702,784	32.1	55.4	44.6
Indiana.....	983,066	360,244	36.3	502,729	50.6	130,098	13.1	79.4	20.6
Iowa.....	786,220	261,566	45.9	266,986	33.9	158,716	20.2	62.7	37.3
Kansas.....	582,732	289,690	49.7	108,388	18.6	184,654	31.7	36.9	63.1
Kentucky.....	842,551	422,144	50.1	253,281	30.1	167,126	19.8	60.2	39.8
Louisiana.....	639,311	261,019	39.6	140,239	21.3	258,053	39.1	35.2	64.8
Maine.....	294,548	88,535	30.1	150,305	51.0	55,708	18.9	72.9	27.1
Maryland.....	523,219	117,410	22.4	188,433	36.0	217,376	41.6	45.9	54.1
Massachusetts.....	1,497,634	235,283	15.7	1,109,134	74.1	153,237	10.2	87.8	12.2
Michigan.....	1,080,812	361,579	33.4	597,585	55.3	121,048	11.3	83.1	16.9
Minnesota.....	788,533	308,735	39.2	379,349	48.1	100,449	12.7	79.0	21.0
Missouri.....	1,241,362	439,047	39.4	497,632	40.1	254,688	20.5	66.1	33.9
Montana.....	153,345	47,883	30.0	56,826	35.7	54,636	34.3	50.9	49.1
Nebraska.....	417,884	210,559	50.4	146,034	34.9	61,301	14.7	70.4	29.6
Nevada.....	41,149	8,668	21.1	24,746	60.1	7,735	18.8	76.2	23.8
New Hampshire.....	185,733	43,551	23.4	79,680	42.9	62,522	33.7	56.0	44.0
New Jersey.....	1,035,858	171,895	16.6	861,963	83.2	2,000	.2	99.8	.2
New Mexico.....	113,872	48,519	42.6	20,073	17.6	45,289	39.3	30.7	69.3
New York.....	3,897,994	772,297	19.8	2,503,020	64.2	622,677	15.9	80.1	19.9
North Dakota.....	207,609	114,752	55.3	43,490	20.9	49,367	23.8	46.8	53.2
Ohio.....	1,844,103	522,448	28.3	1,008,813	54.7	312,842	17.0	76.3	23.7
Oklahoma.....	582,419	338,365	58.1	87,522	15.0	156,532	26.9	35.9	64.1
Oregon.....	286,334	87,444	30.5	96,910	33.8	101,960	35.6	48.7	51.3
Pennsylvania.....	2,996,363	577,178	19.3	2,149,867	71.7	269,318	9.0	88.8	11.2
Porto Rico.....	392,581	69,536	15.4	68,199	17.4	263,846	67.2	20.5	79.5
Rhode Island.....	244,924	36,405	14.9	172,915	70.6	35,604	14.5	82.9	17.1
South Dakota.....	210,978	118,097	56.0	53,997	25.6	38,384	18.4	58.0	42.0
Tennessee.....	829,775	438,301	52.8	145,619	17.6	245,855	29.6	37.2	62.8
Texas.....	1,504,719	864,699	57.5	306,777	20.4	338,248	22.1	47.9	52.1
Utah.....	122,029	40,844	33.5	60,396	49.5	20,789	17.0	74.4	25.6
Vermont.....	139,032	46,811	33.7	50,942	36.6	41,279	29.7	55.2	44.8
Virginia.....	762,975	304,391	39.9	209,058	27.4	240,526	32.7	45.6	54.4
Washington.....	488,289	116,746	23.9	191,458	39.2	186,085	38.9	51.5	48.5
West Virginia.....	425,654	160,064	37.6	212,812	50.0	52,778	12.4	80.1	19.9
Wisconsin.....	862,160	325,263	37.7	405,009	47.0	131,888	15.3	75.4	24.6
Wyoming.....	60,795	17,963	29.5	19,857	32.7	22,985	37.8	46.3	53.7
Total.....	32,551,969	10,537,449	32.4	15,450,139	47.5	4,564,381	20.2	70.2	29.8
Noncompensation States (7). U. S. civilian employees ²	4,710,000	2,901,360	61.6			1,308,640	28.4		
Interstate railroad employees ³	771,117			771,117	100.0			100.0	
Interstate railroad employees ⁴	1,406,000					1,406,000	100.0		100.0

¹ These figures, based upon the United States Census of 1910, do not include Federal employees and interstate railroad employees, on the ground that they are not subject to State laws. The total persons gainfully employed include employers as well as employees.

² The Alabama percentages have been applied to the noncompensation States.

³ Figures as of July 1, 1919, taken from United States register.

⁴ Does not include shop employees and others usually subject to State compensation acts.

As already stated, the absolute figures are based on the Federal Census of 1910, and therefore would not state the facts as they exist at present. They are given here primarily for the purpose of showing the relative numerical importance of the several States and of emphasizing the large number of persons (over 10,000,000) who can not possibly be covered under any existing compensation act. In the number of persons gainfully employed (column 1) Federal employees and interstate railroad employees have not been included, on the ground that they are not subject to State laws. The percentages employers, employees covered by the act, and employees not covered by the act are of the total gainfully employed (cols. 3, 5, and 7) are given chiefly to show to what extent the number of employees is affected by different industrial conditions. As would be expected, in agricultural States the percentage of employees is relatively small, while in industrial States it is large. The eight States in which over 50 per cent of persons gainfully employed belong to the employing class are agricultural States,⁷² while the four most intense industrial States have a small employing class.⁷³ The last two columns (8 and 9) show the percentage of employees theoretically covered and not covered by the acts. As already explained, it is assumed that all employers in elective States subject to the compensation act have accepted its provisions.

In computing the percentages of employees subject to the acts proper numerical deductions have been made for all the exclusions and exemptions except casual laborers, those not employed for the purpose of the employer's business, and employments not conducted for gain. For these no separate deductions were made, because a large proportion of such employments are automatically excluded through the domestic service, numerical, and nonhazardous exemptions. Furthermore, it would be difficult, if not impossible, to compute with any degree of accuracy the number engaged in such employments.

It will be noted that of the 32,551,969 persons gainfully employed in the 45 States and Territories having compensation laws, 10,537,449 or 32.4 per cent, belong to the employing or independent class, while 15,450,139, or 47.5 per cent, represent employees covered by compensation acts, and 6,564,381, or 20.2 per cent, are employees not covered. Approximately 80 to 85 per cent of the employing class are farmers or home-farm laborers. On the same basis the 7 non-compensation States⁷⁴ have approximately 1,808,640 employees.

⁷² Alabama, 61.6; Oklahoma, 58.1; Texas, 57.5; South Dakota, 56; North Dakota, 65.3; Tennessee, 52.8; Nebraska 50.4; Kentucky, 50.1.

⁷³ Rhode Island, 14.9; Massachusetts, 15.7; New Jersey, 16.6; Connecticut, 17.9. The small percentage of employers in the two agricultural Territories of Hawaii (11.5) and Porto Rico (15.4) is due to the large plantation system, employing many laborers.

⁷⁴ Including District of Columbia.

The total number of employees, therefore, in the 52 States and Territories deprived of the benefits of workmen's compensation legislation is over 8,000,000. In addition, there are about 1,400,000 interstate railroad employees not subject to State acts and for which no Federal compensation law has been enacted.

Table 6 shows the States arranged in the order of the percentage of employees covered:

TABLE 6.—COMPENSATION STATES ARRANGED IN DESCENDING ORDER OF PERCENTAGE OF EMPLOYEES COVERED.

[The estimates of "employees covered" used in this table are made on the assumption that all elections provided for by law have been made. Owing to lack of definite information no estimates have been made of employees unprotected because of failure of employers to elect under elective acts.]

State.	Per cent employees covered are of—		Per cent employees not covered are of—	
	Total employees. 1	Total gainfully employed. 2	Total employees. 3	Total gainfully employed. 4
New Jersey.....	99.8	83.2	0.2	0.2
Hawaii.....	92.6	82.3	7.4	6.2
Pennsylvania.....	88.8	71.7	11.2	9.0
Massachusetts.....	87.8	74.1	12.2	10.2
Michigan.....	83.1	55.3	16.9	11.3
Rhode Island.....	82.9	70.6	17.1	14.5
Connecticut.....	81.9	67.2	18.1	14.9
New York.....	80.1	64.2	19.9	15.9
West Virginia.....	80.1	50.0	19.9	12.4
Indiana.....	79.4	50.6	20.6	13.1
Minnesota.....	79.0	48.1	21.0	12.7
Ohio.....	76.3	54.7	23.7	17.0
Nevada.....	76.2	60.1	23.8	18.8
California.....	76.2	57.8	23.8	18.1
Wisconsin.....	75.4	47.0	24.6	15.3
Utah.....	74.4	49.5	25.6	17.0
Maine.....	72.9	51.0	27.1	18.9
Nebraska.....	70.4	34.9	29.3	14.7
Idaho.....	68.7	40.6	31.3	18.4
Missouri.....	66.1	40.1	33.9	20.5
Colorado.....	63.1	43.0	36.9	25.2
Delaware.....	62.9	46.1	37.1	26.4
Iowa.....	62.7	33.9	37.3	20.2
Kentucky.....	60.2	30.1	39.8	19.8
South Dakota.....	58.0	25.6	42.0	18.4
New Hampshire.....	56.0	42.9	44.0	33.7
Illinois.....	55.4	39.8	44.6	32.1
Vermont.....	55.2	36.6	44.8	29.7
Arizona.....	52.4	40.2	47.6	36.6
Washington.....	51.5	39.2	48.5	36.9
Montana.....	50.9	35.7	49.1	34.3
Oregon.....	48.7	33.8	51.3	35.6
Texas.....	47.9	20.4	52.1	22.1
North Dakota.....	46.8	20.9	53.2	23.8
Wyoming.....	46.3	32.7	53.7	37.8
Maryland.....	45.9	36.0	54.1	41.6
Virginia.....	45.6	27.4	54.4	32.7
Tennessee.....	37.2	17.6	62.8	29.6
Kansas.....	36.9	18.6	63.1	31.7
Oklahoma.....	35.9	15.0	64.1	26.9
Louisiana.....	35.2	21.3	64.8	39.1
Alabama.....	33.6	12.9	66.4	25.5
Alaska.....	31.2	27.0	68.8	59.4
New Mexico.....	30.7	17.6	69.3	39.8
Porto Rico.....	20.5	17.4	79.5	67.2
Average.....	70.2	47.5	29.8	20.2

Columns 2 and 4 show what proportion the number of employees covered and not covered is of the total gainfully employed in the State. By bringing the two classes of percentages into juxtaposition the effect of the industrial character of the States in determining the percentage of gainfully employed persons subject to an act is brought out; for example, Illinois (55.4 per cent) and South Dakota (58 per cent) have nearly the same percentage of employees covered, but in industrial Illinois these constitute 39.8 per cent of the total gainfully employed, whereas in agricultural South Dakota they constitute only 25.6 per cent.

New Jersey, with 99.8 per cent of its employees covered, heads the list of States, while Porto Rico, with 20.5 per cent, stands at the bottom. Nine States cover over 80 per cent, 18 over 70 per cent, 24 over 60 per cent, and 31 over 50 per cent. One covers only 20 per cent, 8 cover less than 40 per cent, and 14 less than 50 per cent. The States which include only hazardous employments stand lowest in the scale; next come the numerical-exemption States, and these are followed by those excluding agriculture and domestic service only. Naturally there are deviations from the group by individual States. Texas, for example, because of the exclusion of her dominant industry—agriculture—has fewer of her employees covered than most of the hazardous States. On the other hand, Rhode Island, which excludes all employers having less than 5 employees, has a higher percentage of employees covered than California, which excludes only agriculture and domestic service. Table 7 shows the effect of the three main exclusions upon the number of employees covered:

TABLE 7.—COMPENSATION STATES CLASSIFIED ACCORDING TO EMPLOYMENTS EXCLUDED AND PER CENT OF EMPLOYEES COVERED IN EACH.

[The estimates of employees excluded used in this table are made on the assumption that all elections provided for by law have been made. Owing to lack of definite information no estimates have been made of employees unprotected because of failure of employers to elect under elective acts.]

All employments covered.		Agriculture and domestic service excluded.		Numerical exclusions.		Nonhazardous exclusions.	
State.	Per cent of employees covered.	State.	Per cent of employees covered.	State.	Per cent of employees covered.	State.	Per cent of employees covered.
N. J.	99.8	Pa.	88.8	R. I.	82.9	N. H. ¹	56.0
Hawaii ²	92.6	Mass. ³	87.8	Conn. ⁴	81.9	Ill.	55.4
		Mich.	83.1	N. Y.	80.1	Ariz. ¹	52.4
		W. Va.	80.1	Ohio ⁴	76.3	Wash. ³	51.5
		Ind.	79.4	Wis.	75.4	Mont.	50.9
		Minn. ³	79.0	Utah.	74.4	Oreg.	48.7
		Nev.	76.2	Me.	72.9	Wyo. ³	46.3
		Calif.	76.2	Mo.	66.1	Md. ³	45.9
		Nebr.	70.4	Colo.	63.1	Kans. ³	36.9
		Idaho.	68.7	Del. ¹	62.9	Okl. ³	35.9
		Iowa ³	62.7	Ky. ³	60.2	La.	35.2
		S. Dak.	58.0	Vt. ³	55.2	Alaska ¹	31.2
		N. Dak.	46.8	Tex. ¹	47.9	N. Mex. ¹	30.7
				Va.	45.6		
				Tenn. ¹	37.2		
				Ala. ³	33.6		
				P. R.	20.5		

¹ All public employees exempted.

² Hawaii exempts employments not in the usual course of the employer's business and those not conducted for gain.

³ Public employees partially exempted.

⁴ Agriculture and domestic service not specifically exempted.

Taking the median in each group as a basis of comparison there is a difference of from 13 to 20 per cent between each two groups of States; 96.2 being the median for the two States including all employments; 76.2 per cent for the 13 States excluding agriculture and domestic service; 63.1 per cent for the 17 numerical-exemption States; and 46.3 for the 13 nonhazardous-exemption States.

The relative importance of the principal exclusions is shown more clearly in the following table, in which the exclusions for each State have been divided into their main constituent elements; i. e., agriculture, domestic service, and numerical and nonhazardous exemptions. The purpose of this subdivision is to show what relation each individual exemption bears to the total number of employees excluded and also to the total number of employees in the State. The agriculture and domestic service exclusions have been put in separate columns, irrespective of whether these employments were exempted specifically or through the numerical or nonhazardous exclusions.

TABLE 8.—ESTIMATED NUMBER OF EMPLOYEES EXCLUDED UNDER COMPENSATION ACTS AND PER CENT OF SUCH EXCLUDED EMPLOYEES WHO ARE EXCLUDED BECAUSE OF EMPLOYMENT IN AGRICULTURE, DOMESTIC SERVICE, NONHAZARDOUS EMPLOYMENTS, ETC.

[The estimates of employees excluded used in this table are made on the assumption that all elections provided for by law have been made. Owing to lack of definite information, no estimates have been made of employees unprotected because of failure of employers to elect under elective acts.]

State.	Total employees excluded.		Of total employees excluded, per cent excluded by—				Of total employees, per cent excluded by—			
	Number.	Per cent.	Agriculture.	Domestic service.	Numerical exemptions. ¹	Nonhazardous and other exemptions.	Agriculture.	Domestic service.	Numerical exemptions. ¹	Nonhazardous and other exemptions.
Ala.	249,336	66.4	47.1	26.8	21.0	5.1	31.3	17.8	13.9	3.4
Alaska	23,067	68.8	19.0	19.5	.2	61.3	13.0	13.4	.2	42.2
Ariz.	29,519	47.6	41.9	18.6	.....	39.5	20.0	8.9	.....	18.7
Calif.	192,091	23.8	62.5	37.5	.....	.....	14.9	8.9	.....	.....
Colo.	80,215	36.9	40.4	29.5	30.1	.....	14.9	10.9	11.1	.....
Conn.	71,402	18.1	30.6	49.5	19.9	.....	5.6	8.9	3.6	.....
Del.	22,075	37.1	41.0	36.5	22.5	.....	15.2	13.5	8.4	.....
Hawaii	6,424	7.4	.....	93.4	.....	6.6	.....	7.4	.....	.....
Idaho	22,784	31.3	83.7	16.3	.....	.....	25.5	5.8	.....	.....
Ill.	702,784	44.6	19.1	25.5	.....	55.4	8.5	11.4	.....	24.7
Ind.	130,093	20.6	68.5	31.5	.....	.....	14.1	6.5	.....	.....
Iowa	158,766	37.3	52.4	19.4	.....	28.2	19.5	9.4	.....	8.4
Kans.	184,664	63.1	25.0	17.3	9.0	48.6	15.8	10.9	5.3	31.1
Ky.	167,126	39.8	51.4	39.4	9.2	.....	20.4	15.7	3.7	.....
La.	258,053	64.8	48.7	27.4	.....	23.9	31.6	17.6	.....	15.6
Me.	55,708	27.1	41.8	37.4	20.8	.....	11.3	10.1	5.7	.....
Md.	217,376	54.1	26.9	31.5	.....	41.6	14.2	16.9	.....	23.0
Mass.	153,237	12.2	23.9	57.3	.....	18.8	2.9	6.9	.....	2.4
Mich.	121,648	16.9	64.6	35.4	.....	.....	10.9	6.0	.....	.....
Minn.	100,449	21.0	57.6	40.6	.....	1.8	12.1	8.3	.....	.6
Mo.	254,683	33.9	39.5	37.4	23.1	.....	13.4	12.7	7.8	.....
Mont.	54,636	49.1	41.7	22.2	.....	36.1	20.3	10.9	.....	17.9
Nebr.	61,301	29.6	61.2	38.8	.....	.....	18.1	11.5	.....	.....
Nev.	7,735	23.8	69.0	31.0	.....	.....	16.4	7.4	.....	.....
N. H.	62,522	44.0	22.7	22.1	3.4	51.8	10.0	9.7	1.5	22.8
N. J.	2,000	.2	.....	.....	.....	100.0	.....	.....	.....	.2
N. Mex.	45,289	69.3	58.5	15.4	22.0	4.1	40.5	10.6	2.9	15.3
N. Y.	622,677	19.9	24.1	63.2	12.8	.....	4.8	12.6	2.5	.....
N. Dak.	49,367	53.2	73.2	26.8	.....	.....	38.8	14.3	.....	.....
Ohio	312,842	23.7	34.6	41.7	23.7	.....	8.2	9.9	5.6	.....
Okla.	156,532	64.1	38.3	18.0	4.5	39.2	24.6	11.6	2.9	25.1
Oreg.	101,960	51.3	29.6	19.8	.....	50.6	15.2	10.2	.....	25.9
Pa.	269,318	11.2	42.7	57.3	.....	.....	4.8	6.4	.....	.....
P. R.	263,846	79.5	76.4	18.2	3.0	2.4	60.7	14.4	2.4	1.9
R. I.	35,604	17.1	18.7	50.4	30.9	.....	3.2	8.6	5.3	.....
S. Dak.	38,884	42.0	68.1	31.9	.....	.....	28.5	13.5	.....	.....
Tenn.	245,855	62.8	35.4	32.5	19.7	12.3	22.2	20.4	12.4	7.8
Tex.	333,243	52.1	55.1	28.9	9.5	6.5	28.7	15.0	4.9	3.4
Utah	20,789	25.6	50.8	35.7	13.5	.....	13.0	9.1	3.5	.....
Vt.	41,279	44.8	39.8	30.2	30.0	.....	17.8	13.5	13.4	.....
Va.	249,526	54.4	43.5	36.5	20.0	.....	23.7	19.8	10.9	.....
Wash.	180,085	48.5	28.5	20.3	.....	51.2	13.6	9.8	.....	24.9
W. Va.	52,778	19.9	65.6	31.8	.....	2.6	13.0	6.3	.....	.5
Wis.	131,888	24.6	48.0	42.4	9.6	.....	11.8	10.4	2.4	.....
Wyo.	22,985	53.7	53.0	18.6	.....	28.4	28.4	10.0	.....	15.2
Total.	6,564,381	29.8	40.6	35.2	8.2	16.0	12.1	10.5	2.5	4.8

¹ Does not include agriculture or domestic service.

It will be recalled that 6,564,381, or 29.8 per cent of the total employees, are not covered by compensation legislation in the 45 compensation States, and that these exclusions have been brought about

in several ways. It will be noted that of these, 40.6 per cent⁷⁵ have been excluded through the exemption of agriculture, 35.2 per cent⁷⁶ through the exemption of domestic service, 8.2 per cent⁷⁷ through the exemption of the small employer, and 16 per cent⁷⁸ through the exemption of nonhazardous and other employments. These exclusions constitute, respectively, 12.1, 10.5, 2.5, and 4.8 per cent of the total number of employees.

The per cent each exclusion is of the total exclusion in any given State depends upon the total number excluded in the State as well as upon the number of employees in the excluded group. To illustrate, agriculture might constitute 60 per cent of the total excluded if farm labor and domestic service only were excluded, but would constitute a much smaller percentage of the total if nonhazardous employments also were excluded.

It will be noted that the percentage of total exclusions due to agriculture alone ranges from 18.7 per cent in Rhode Island to 83.7 per cent in Idaho, while the exclusion due to domestic service ranges from 15.4 per cent in New Mexico to 93.4 per cent in Hawaii. The percentage of employees excluded by exempting the small employer is much less than either the agriculture or domestic service exclusions.

In the foregoing computations as to the number of employees covered by the compensation laws no distinction has been made between compulsory and elective acts. It has been assumed that all the employers in the elective States are under the law. As a matter of fact, however, this is not true. In some States practically all employers have accepted the act, while in others relatively few have done so. For this reason elective compensation acts have been severely criticized. It is maintained that the substitution of the compensation system for the old liability system has not been brought about and to this extent elective compensation laws have failed. A large number of employees must still resort to damage suits and be subject to expensive litigation in order to be indemnified for industrial injuries. In New Hampshire only 19 employers, employing 19,000 persons, were under the compensation law in 1916. These constituted less than 25 per cent of the employees potentially covered by the act and only 13 per cent of the total employees in the State. Very little reliable information as to the number of employees actually covered by compensation acts in the elective States is available. Table 9 gives the estimates furnished by the States themselves:

⁷⁵ 2,663,123 employees. ⁷⁶ 2,311,829 employees. ⁷⁷ 539,359 employees. ⁷⁸ 1,050,070 employees.

TABLE 9.—NUMBER OF EMPLOYEES WHO MAY BE BROUGHT UNDER COMPENSATION ACTS AND NUMBER ACTUALLY UNDER THE ACTS IN THE 31 ELECTIVE STATES.

Elective State.	Number of employees who may be brought under compensation acts as computed by United States Bureau of Labor Statistics, based upon the 1910 census.	Number of employees actually under acts through employers' election and number of employers rejecting the act, as estimated by the several States.
Alabama.....	128,125	7 employers rejected act (1915).
Alaska.....	10,481	
Colorado.....	137,157	
Connecticut.....	322,211	
Delaware.....	37,447	4,000 employers (mostly small) rejected act (1917). Over 25 per cent of employees, estimated at 30,000, subject to act not insured (1916). ¹
Indiana.....	502,729	
Iowa.....	266,936	
Kansas.....	108,388	152,000 (1917). 650,000 (1915). ² 739,496 (1916).
Kentucky.....	253,281	
Louisiana.....	140,239	
Maine.....	150,305	
Massachusetts.....	1,109,134	50,386 (1919). 37 employers rejected act (1915). 12,981 (1918). 19,000 (1916).
Michigan.....	597,585	
Minnesota.....	379,349	
Missouri.....	497,632	
Montana.....	56,826	80-85 per cent (1915). ³
Nebraska.....	146,034	
Nevada.....	24,746	
New Hampshire.....	79,680	
New Jersey.....	861,963	154,538 (1915).
New Mexico.....	20,073	
Oregon.....	96,910	
Pennsylvania.....	2,149,867	
Rhode Island.....	172,915	206,000 (1916). 55,000 (1916). Only one employer has rejected the act.
South Dakota.....	53,997	
Tennessee.....	145,619	
Texas.....	306,777	
Vermont.....	50,942	192,561 (1918). Over 250,000. 551 employers with 3,000 employees rejected act (1915).
Virginia.....	209,058	
West Virginia.....	212,812	
Wisconsin.....	405,009	

¹ Failure to insure supposed to be due to stringent insurance provisions.² Total subject to act estimated by industrial accident board at 800,000.³ Estimated by writer at 72,500.

HOW ELECTION IS MADE.

Under this head are indicated the methods required by the laws for their acceptance or rejection in the 31 States where the elective system is provided. In 21 States⁷⁹ the employer is presumed to accept the act in the absence of positive action rejecting it, while under the other 10 elective systems he must institute some action indicating his purpose to come under the law. In 7 of these States⁸⁰ he elects by filing acceptances with designated State authorities, while in 3 States⁸¹ election is made either by insuring in authorized casualty companies or by subscribing to the State fund. In the 21

⁷⁹ Alabama, Alaska, Colorado, Connecticut, Delaware, Indiana, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, New Jersey, New Mexico, Oregon, Pennsylvania, South Dakota, Tennessee, Vermont, Virginia, and Wisconsin.

⁸⁰ Kentucky, Maine, Michigan, Montana, Nevada, New Hampshire, and Rhode Island.

⁸¹ Massachusetts, Texas, and West Virginia.

States where the employer is presumed to accept the act the employee is subject to the same presumption in the absence of positive steps to reject, while in 9 of the 10 States where the employer must take positive action acceptance by the employee is presumed until the negative is shown; the other State, Kentucky, requires the employee to file written notice of acceptance with his employer. In the original Texas law no option was given the employee in case the employer elected, but this restriction was repealed in 1917. Such a provision invalidated the old Kentucky act, and the Texas provision was also questioned, but the Texas supreme court held the law constitutional on all points.

The extent to which employers have accepted the compensation laws has already been discussed. In most States very few employees have rejected the acts.

ABROGATION OF DEFENSES.

Under the elective system, as provided in 31 States, acceptance of the act is induced by the withdrawal or modification of the three customary common-law defenses of assumed risk, fellow service, and contributory negligence in cases where the employer refuses to accept the act. Employers accepting the compensation act are generally exempt from damage suits, while those rejecting the act are relieved of the duty of paying compensation but are subject to actions at law, with the usual defenses abrogated. In cases where an employee rejects the compensation system and sues an employer who has accepted it the employer usually retains his three defenses.

The defenses of assumed risk and fellow service are abrogated in each of the 31 elective States without restriction. The defense of contributory negligence, however, is abrogated unqualifiedly only in 17 ⁸² of the 31 States. In 13 States ⁸³ this defense is modified to the extent that injuries caused by the employee's intoxication, willful act, or reckless indifference are not actionable. In 1 State ⁸⁴ the defense remains, but the burden of proof is shifted to the employer.

SUITS FOR DAMAGES.

When both the employer and employee have accepted the compensation act the bringing of suits for damages under either the common or statute laws of liability is forbidden absolutely in 16 States.⁸⁵ In the other 29 States employees are permitted to sue upon certain con-

⁸² Connecticut, Delaware, Indiana, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Missouri, New Mexico, Rhode Island, South Dakota, Tennessee, Vermont, Virginia, and West Virginia.

⁸³ Alabama, Alaska, Colorado, Iowa, Minnesota, Montana, Nebraska, Nevada, New Jersey, Oregon, Pennsylvania, Texas, and Wisconsin.

⁸⁴ New Hampshire.

⁸⁵ Alabama, Alaska, Colorado, Hawaii, Idaho, Kansas, Louisiana, Maine, Massachusetts, Minnesota, New Jersey, New Mexico, Vermont, Virginia, Wisconsin, and Wyoming.

ditions, generally some neglect on the part of the employer. Table 10 shows in which States and upon what conditions employees are allowed to bring actions at law:

TABLE 10.—CONDITIONS UNDER WHICH SUITS FOR DAMAGES MAY BE BROUGHT WHEN BOTH PARTIES COME UNDER ACT.

Not permitted.	Permitted.	Conditions under which they are permitted.
Alabama.....		
Alaska.....		
Colorado.....	Arizona.....	After injury. Defense of contributory negligence alone remains.
	California.....	If employer fails to insure his risk. Defenses abrogated.
	Connecticut.....	If employer fails to insure his risk.
Hawaii.....	Delaware.....	If employer fails to insure his risk. Defenses abrogated.
Idaho.....		
	Illinois.....	If employer fails to insure his risk. Defenses abrogated.
	Indiana.....	If employer fails to insure his risk.
	Iowa.....	If employer fails to insure his risk.
Kansas.....	Kentucky.....	If injury is due to deliberate intention of employer, illegal employment of minors, or failure to insure.
Louisiana.....		
Maine.....	Maryland.....	If injury is due to deliberate intention of employer or failure to insure. Defenses abrogated.
Massachusetts.....	Michigan.....	If employer, insuring in State fund, is in default on insurance premiums.
Minnesota.....	Missouri.....	If employer fails to insure his risk.
	Montana.....	If employer, insuring in State fund, is in default on insurance premiums.
	Nebraska.....	If employer fails to insure his risk. Defenses abrogated.
	Nevada.....	If employer is in default on insurance premiums.
	New Hampshire.....	In lieu of compensation, after injury.
New Jersey.....		
New Mexico.....	New York.....	If employer fails to insure his risk. Defenses abrogated.
	North Dakota.....	If employer fails to insure his risk, or illegally employs minors.
	Ohio.....	If injury is due to willful act of employer, violation of safety law, or if employer is in default on insurance premiums. Defenses abrogated.
	Oklahoma.....	If employer fails to insure his risk. Defenses abrogated.
	Oregon.....	If injury is due to willful act of employer, or if employer is in default on insurance premiums. Defenses abrogated.
	Pennsylvania.....	If employer fails to insure his risk.
	Porto Rico.....	If injury is due to employer's willful or criminal negligence.
	Rhode Island.....	If employer fails to insure his risk.
	South Dakota.....	If employer fails to insure his risk.
	Tennessee.....	If employer fails to insure his risk.
	Texas.....	If employer's willful or gross negligence causes death, or if employer charges part of insurance premium against employee. ¹
	Utah.....	If employer fails to insure his risk when injury is caused by employer's negligence (defenses abrogated); if injury causes death (defenses remain and employer's negligence must be proved); if injury is due to employer's willful misconduct.
Vermont.....		
Virginia.....	Washington.....	If injury is due to employer's deliberate intention. ²
	West Virginia.....	If injury is due to employer's deliberate intention, ² or if employer is in default on insurance premiums.
Wisconsin.....		
Wyoming.....		

¹ In addition to compensation.

² Excess damages in addition to compensation.

It will be noted that 9 States ⁸⁶ permit suit if the injury was due to a willful act, willful misconduct, or gross negligence of the employer; 24 ⁸⁷ permit it in case the employer fails to insure his risk or is in default on insurance premiums; 1 ⁸⁸ if the employer has violated

⁸⁶ Kentucky, Maryland, Ohio, Oregon, Porto Rico, Texas, Utah, Washington, and West Virginia.

⁸⁷ California, Connecticut, Delaware, Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Missouri, Montana, Nebraska, Nevada, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Utah, and West Virginia.

⁸⁸ Ohio.

the safety laws; 2⁸⁹ if he has illegally employed minors; 1⁹⁰ if employer charges part of insurance premiums against his employees; and 1⁹¹ if the injury causes death. In most of the above cases the injured employee has the option of either accepting compensation or suing for damages, but he may not do both. In Washington and West Virginia, however, where the injury is due to the employer's deliberate intention, the employee may bring suit for excess damages in addition to receiving compensation, while in Texas the employee may sue for damages in addition to compensation if the employer has charged part of the insurance premium against the employee.

When employees accept a compensation act, they must do so before the injury, except in 2 States,⁹² where the law reserves the right to an injured employee to bring suit or accept compensation after the accident, and in both States the defense of contributory negligence alone remains available to the employer. Possibly this provision explains in part why only 19 employers have accepted the act in New Hampshire. There is little inducement for an employer to come under a compensation act if he is also to be subjected to damage suits. In Arizona the law is compulsory, and consequently employers have no option. The former Montana statute, which fixed upon the employer a double liability by compelling him to contribute to an insurance fund and leaving him still liable for damages, was declared unconstitutional by the court. The failure to enact a Federal compensation law for interstate railroad employees has been in part due to the unwillingness of the railroad brotherhoods to give up their right to sue for damages.

If the compensation system is accepted by the employer but rejected by the employee, the defenses remain available to the former in 29 States,⁹³ but in Alaska, Iowa, and Nevada the defense of assumed risk is abrogated if the employer has violated the safety laws and regulations; in Kansas all defenses are abrogated if the employer has been guilty of willful negligence; in Delaware damages can not be recovered if the injury is caused by the employee's willful intention to injure himself or another, intoxication, failure to use safeguards, violation of law, or reckless indifference to safety, while in West Virginia the employee surrenders his right of action if he remains in the service of his employer after the latter elects to come under the act.

⁸⁹ Kentucky and North Dakota.

⁹⁰ Texas.

⁹¹ Utah.

⁹² Arizona and New Hampshire.

⁹³ Alabama, Alaska, Colorado, Connecticut, Delaware, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, Oregon, Porto Rico, Rhode Island, South Dakota, Tennessee, Texas, Vermont, Virginia, and Wisconsin.

SPECIAL CONTRACTS.

In order to secure to the employee the benefits contemplated by the act, without loss by reason of ill-considered and inadequate settlements, the law usually provides that an employee can not waive his right to compensation benefits or otherwise contract with his employer for the purpose of modifying the latter's liability under the law. Such waivers are absolutely forbidden in 19 States,⁹⁴ except that in 4 of these States⁹⁵ the employer and employees may enter into a hospital contract. In 19 States⁹⁶ the employer is permitted to establish and maintain substitute insurance schemes or benefit funds, the benefits of which must equal those provided in the compensation act. In 3 States⁹⁷ only existing substitute insurance schemes are permitted. The laws of 3 States⁹⁸ make no provision in this regard, except that in New Mexico employers and employees may enter into an agreement to maintain a hospital. If the employee makes any contribution to the fund or substitute system, he must receive additional benefits corresponding to the amount of his contribution. This, of course, does not apply in Oregon, where the law places a part of the burden of cost upon the employee.

In four States⁹⁹ employees, under certain conditions, are permitted to waive their compensation rights. In Kansas and Ohio blind employees only are permitted to waive such rights, while in Connecticut all physically defective employees are permitted to do so. In Alabama, however, not only are settlements allowed if in "substantial" conformity with the law, but the courts are authorized to approve settlement agreements calling for less than the statutory benefits if they are "in the interest of the employee."

BURDEN OF COST.

With the single exception of Oregon, the burden of cost for compensation is entirely on the employer. In this State employees are required to contribute one cent for each day or part of day worked, the contributions being deducted from their wages. Such contributions have ranged from 6 to 10 per cent of the total premiums contributed by the employers. The remainder of the burden is borne by the employer, except that the State pays a subsidy of one-seventh of the amount contributed by both employers and employees. For-

⁹⁴ Alaska, California, Colorado, Hawaii, Louisiana, Maryland, Massachusetts, Montana, Nevada, New Jersey, New York, North Dakota, Oregon, Pennsylvania, Tennessee, Texas, Vermont, Washington, and Wyoming.

⁹⁵ Colorado, Montana, Nevada, and Washington.

⁹⁶ Alabama, Arizona, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Minnesota, Missouri, Oklahoma, Rhode Island, South Dakota, Utah, Virginia, West Virginia, and Wisconsin.

⁹⁷ Maine, Michigan, and Nebraska.

⁹⁸ New Hampshire, New Mexico, and Porto Rico.

⁹⁹ Alabama, Connecticut, Kansas, and Ohio.

merly Ohio and West Virginia, also, required the employees to bear a part of the compensation costs, 10 per cent being required in each case.

Also the laws of Idaho, Montana, Nevada, Utah, and Washington specifically authorize the withholding of sums from employees for medical and hospital services. In Montana employers and employees may enter into an agreement to maintain jointly a hospital fund, the charges for which amount to approximately \$1 a month; in Idaho employers may require employees to pay \$1 a month for medical services; in Nevada and Utah the charges against the employees are not to exceed the actual cost of maintenance, while in Washington employees are required to contribute one-half of the medical expenses. The laws of Colorado and New Mexico, also, provide that employers may contract with their employees for surgical and hospital facilities in lieu of the statutory medical benefits. In the foregoing far Western States the employers do not as a rule maintain their own hospitals, but enter into arrangements with contract hospitals whereby the latter agree to furnish medical and surgical attention to employees in case of accident. The terms of the contract usually require the employees to contribute from \$1 to \$1.50 a month, which is deducted from their wages and turned over to the hospital.

Under substitute insurance or benefit schemes, employees may be required to contribute to the fund; but since the laws do not allow the employer to reduce his liability, the compensation benefits received by injured employees must equal the compensation scale as provided in the act plus the employees' contributions, and consequently there is no real tax upon the employee for the statutory benefits.

In some States certain employers have made a practice of compelling their employees to share the cost of compensation. In the lumber industry in Texas and Louisiana, for example, a large proportion of the burden of cost was borne by the employees. To prevent this evil, Louisiana amended its law in 1916, making it a misdemeanor for employers to charge premiums against their employees; while Texas, with similar intent, also amended its law in 1917 by subjecting the employer to damage suits in addition to the payment of compensation. Similar protective provisions have recently been enacted by other States. At the present time 19 States¹ penalize the employer if he compels his employees to bear part of the compensation costs.

¹ California, Hawaii, Illinois, Iowa, Kentucky, Louisiana, Maryland, Minnesota, Montana, Nevada, New York, Ohio, Oklahoma, Porto Rico, Texas, Utah, Vermont, Washington, and Wisconsin.

SECURITY OF PAYMENTS.

Since it occasionally happens that employers become insolvent or meet with a catastrophe and consequently are unable to meet their pecuniary obligations, it is important that employees be safeguarded from such or similar contingencies by suitable legislation providing for security of compensation payments. In the 39 States having compulsory insurance laws, such security is reasonably assured, provided, of course, that the risk is actually and adequately insured. In most of the compulsory insurance States employers have the option of insuring either in private casualty companies or in the State fund or of providing self-insurance. In many States failure to insure penalizes the employer either by subjecting him to a fine or by permitting the employee to sue for damages. Usually, also, the law holds the employer and insurer individually liable for compensation.

However, a judgment awarding damages is of little service to an employee if the employer is insolvent. A recent investigation² in New York brought out the fact that more than 15,000 employers failed to give security, although required to insure under the compensation act. Unfortunately this deplorable situation obtains in most of the compulsory insurance States. Many of the employers were financially irresponsible, and awards by the commission arising from claims against them were often uncollectible. Most of these noninsured employers are small concerns—stores and the like. Some are extrahazardous employments whom the commercial carriers would not insure, such as window cleaners, fishermen, junk dealers, and so on. It has even been found necessary to permit such employers to carry their own risk. The State should provide facilities for insurance for every employer subject to the compensation act and then penalize heavily those employers who fail to insure. The usual penalty of allowing the employee to sue for damages with the employer's defenses removed is useless in case the employer is insolvent.

When employers are authorized to carry their own risk, they are usually required to furnish satisfactory proof of solvency and ability to meet present and future compensation payments, or to deposit adequate bonds or other security. In 16³ of the 31 States permitting self-insurance employers are required to furnish proof of solvency or to deposit such security as required by the compensation commission or insurance department; while in 15 States⁴ they must deposit security in addition to furnishing proof of financial respon-

² Report of investigation by J. F. Connor as commissioner under section 8 of the executive law, in relation to the management and affairs of the State Industrial Commission, Nov. 17, 1919.

³ Connecticut, Hawaii, Idaho, Illinois, Iowa, Michigan, New Hampshire, Missouri, New Jersey, New Mexico, Pennsylvania, Rhode Island, South Dakota, Tennessee, Vermont, and Virginia.

⁴ California, Colorado, Delaware, Indiana, Kentucky, Maine, Maryland, Montana, Nebraska, New York, Ohio, Oklahoma, Utah, West Virginia, and Wisconsin.

sibility. In four States⁵ they are also permitted to insure their risk in authorized guaranty companies.

Experience as to self-insurance has been reported to the Bureau of Labor Statistics by the compensation commissions of 21 States. In 15 of these States no self-insured employer has failed or gone into the hands of a receiver; three States reported one failure each and one State reported two failures, but in all cases the compensation claims were paid either by the receiver or through security which had been deposited. Only two States reported failures—one small concern in each State—which resulted in several claims being unpaid.

While the security record of self-insurers has been excellent this favorable experience may be due in part to good fortune or pure chance. It is also quite possible that compensation commissions are not always cognizant of every failure of self-insured employers, because such failures may not be reported to them. This was actually the case in Illinois. In such cases the injured claimant usually consults an attorney, who takes the matter before a bankruptcy court and the commission remains in ignorance of the facts.

Another form of security in most of the laws is the provision making compensation payments preferred claims against the property of the employer. In fact, this is practically the only security possessed by employees in the 6 noncompulsory insurance States.

In order to protect the injured employees from themselves and from creditors, nearly all of the States provide that compensation payments shall be nonassignable and exempt from attachment or execution.

INSURANCE RATES AND RESERVES.

The adequacy and reasonableness of insurance premiums are of vital importance to the employers of the compensation States, since the burden of cost depends largely upon the insurance rates. When compensation laws were first enacted there existed no satisfactory experience upon which to base premium rates. The old employers' liability experience was unsatisfactory and the experience of foreign countries was to some extent inapplicable. Called upon suddenly to produce a schedule of rates, with no reliable data as a basis, the insurance carriers were forced to rely upon their "underwriting judgment," and the rates thus formulated were generally too high. Since then, however, with the accumulation of experience and the entrance of the State into the insurance field as a competitor, rates have been established more nearly in accordance with the hazards of industry.

The security or solvency of insurance companies depends first, upon adequate rates and, second, upon adequate reserves. Both

⁵ Hawaii, Idaho, Oklahoma, and Vermont.

should be under the strict supervision and regulation of State insurance departments. No company can long maintain its solvency with inadequate rates. Under stress of cutthroat competition the temptation to reduce rates below the safety level generally becomes too great to resist. State regulation is necessary to maintain the solvency of the insurance carrier and to protect the compensation rights of the injured employees. Notwithstanding these obvious requirements 18⁶ of the 45 compensation States make no provision as to rate regulation. The remaining 27 States, including, of course, those having exclusive State funds, require the approval of rates, either as to adequacy or reasonableness, by the industrial commissions or insurance departments.

The absence of proper supervision over insurance rates and reserves has resulted in several disastrous failures of stock companies during the past two or three years. Whether the State should, as maintained by some, either guarantee the solvency of insurance companies authorized to do business or make good the losses directly out of the State treasury where such insolvency is due to lax insurance laws or their administration, may be questioned. By no means, however, should the injured employee be permitted to suffer. More stringent State regulation over insurance carriers has recently been in evidence. Idaho and Montana require every company to deposit bonds with the industrial accident board before it is allowed to issue an insurance policy. In five States⁷ the industrial commission or insurance department is authorized to revoke the license of the carrier if found guilty of unnecessary delay in settling compensation claims.

The provisions as to rates and reserves applicable to private companies should also apply to State funds. In some of the States the employer, when insured in the fund, is relieved of all further liability. The fund therefore becomes the employee's sole protection. Nor does any State having such a fund assume liability in case of the fund's insolvency. On the contrary, some of the States specifically disclaim liability beyond the amount of the fund. Since no State fund has as yet become insolvent the policy of the State as regards compensation claims in the event of the fund's insolvency can not be ascertained. However, its probable attitude may be seen from the experience in California where the legislature of the State appropriated over \$60,000 to pay claims resulting from the bankruptcy of a private stock insurance company.

There seems to be no legitimate reason, either, why self-insurers should not be subject to the same supervision and regulation as to

⁶ Alaska, Arizona, Connecticut, Delaware, Hawaii, Illinois, Indiana, Iowa, Kansas, Louisiana, Minnesota, Montana, Nebraska, New Hampshire, New Mexico, Rhode Island, South Dakota, and Vermont.

⁷ Colorado, Illinois, Minnesota, Missouri, and Vermont.

security and reserves as those imposed upon the regular insurance carriers. The filing of a mere financial statement showing assets and liabilities is an insufficient guaranty of ability to meet long-continuing payments or to withstand a catastrophe successfully. The financial statement of a Wisconsin self-insurer showed net assets of \$5,000,000, yet the concern shortly afterwards went into the hands of a receiver. Self-insured employers should also be required to deposit sufficient security to meet all reasonable compensation obligations. Such security may be furnished in various ways: Deposit of cash or bonds; surety bonds; reinsurance; requiring employers to set up reserves; purchase of annuities or trust funds in case of death or permanent disability awards. Reinsurance is frowned upon in some States. Wisconsin, for example, prohibits self-insurers from taking out "deductible average" insurance policies because there exists no reliable data upon which premium rates may be based. In Colorado, on the other hand, employers in the more hazardous industries are required to reinsure losses over \$25,000 to \$150,000. In Delaware self-insurers must deposit the full amount of the death award with a bank or trust company. Industrial commissions should have full authority to grant, refuse, or revoke permission to self-insure if satisfactory cause is shown. This discretionary power should include, in addition to questions of solvency, such matters as the employer's attitude toward safety, settlement of claims, discrimination against cripples, and so on.

MERIT RATING.

The determination of an adequate, just, and reasonable rate for each industrial risk or process in accordance with its hazard has been found exceedingly difficult, due to the limited experience or exposure. In order that the individual rates should reflect the hazard of the class to which it belongs, it has been found necessary to combine the loss experience of each industry classification of all the insurance carriers and of the several States. These losses when reduced to a common denominator by the application of reduction factors representing the relative benefits of the various compensation laws become the basic pure premium rates. From these basic pure premiums, which are continually modified in the light of additional experience, are computed the premium or final insurance rate for each classification and for each State. Such rates, while reflecting the hazard of the whole class, do not take into consideration the difference in the hazard of individual employers within the class. Therefore, in order to stimulate accident prevention work and to promote justice as between employers in the same risk or industry, various systems of merit rating have been devised, by which the

employer receives a credit or debit upon the basic rate in accordance with his loss experience or with the amount of safety work performed.

Merit rating is divided into "schedule" rating and "experience" rating. Under the former credits and debits are based upon the physical condition of the plant, i. e., upon the presence or absence of machine guards, fire escapes, safety organizations, and so on. Under the latter credits and debits are based upon the actual loss experience, which should reflect the moral as well as the physical hazard of the plant. The relative merits of experience versus schedule rating is a much controverted question. Some States have adopted one system, some the other, and some a combination of the two.

While the adoption of a merit-rating scheme may be necessary to stimulate and reward accident-prevention work, it also introduces an incentive to pare or deny compensation claims. This incentive depends largely on the directness of the relationship between the accident and the cost thereof, i. e., the incentive increases directly with individual liability and inversely with collective liability. In order to retain the benefits of merit rating while eliminating the incentive factor it may be desirable to adopt a merit-rating system, but to base the employer's credits and debits not on his cost experience but upon his accident experience. This would simultaneously promote safety work, insure equity as between individual employers, and remove the incentive to pare or deny compensation claims.

INJURIES COVERED.

Compensation laws are limited not only as to employments covered and persons compensated, but also as to injuries covered. No State holds the employer liable for every injury received by the employee. As a rule, the injury must have been received in the course of the employment and must have resulted as a natural consequence therefrom; usually, also, injuries due to the employee's intoxication, willful misconduct, or gross negligence are not compensable.

Table 11 shows the laws classified as to kind of injuries, i. e., what, and under what condition, injuries are compensable and non-compensable:

TABLE 11.—COMPENSATION STATES, CLASSIFIED ACCORDING TO INJURIES COVERED AND CONDITIONS UNDER WHICH COMPENSATION IS PAID OR DENIED.

Kind of disability.		Injuries arising out of and in course of employment. (39)	Injuries in course of employment only. (6)	Exclusions.					Occupational diseases.			
				Willful intention to injure self or another. (36)	Intoxication. (31)	Willful misconduct. (17)	Injuries intentionally inflicted by another. (10)	Violation of safety appliances or laws. (13)	Excluded—			Included. (6)
Accident. ¹ (34)	Injury. ² (11)								Specifically by law. (20)	By word "accident." (32)	By courts. (3)	
Ala.		Ala.		Ala.	Ala.	Ala.	Ala. ³ ..	Ala.	Ala.	Ala.		
Alaska.		Alaska.		Alaska.	Alaska.					Alaska.		
Ariz.	Calif.	Calif.		Calif.	Calif.					Ariz.		Calif.
Colo.	Conn.	Conn.		Colo.	Conn.	Conn. ⁴ ..	Colo.			Colo.		Conn.
Del.		Del.		Del.	Del.	Del. ⁵ ..	Del.	Del.	Del.	Del.		
Hawaii.		Hawaii.		Hawaii.	Hawaii.							Hawaii.
Idaho.		Idaho.		Idaho.	Idaho.				Idaho.	Idaho.		
Ill.		Ill.								Ill.		
Ind.	Iowa.	Iowa.		Ind. ⁶ ..	Iowa.	Ind.		Ind.	Ind.	Ind.		
Kans.		Kans. ⁷ ..		Kans.	Kans.	Kans. ⁸ ..		Kans. ⁸ ..		Kans.		
Ky.		Ky.		Ky.	Ky.	Ky.			Ky.	Ky.		
La.		La.		La.	La.			La.	La.	La.		
Me.		Me.		Me.	Me. ⁹ ..					Me.		
Md.		Md.		Md.	Md. ⁸ ..	Md.			Md. ¹⁰ ..	Md.		
	Mass.	Mass.				Mass. ⁴ ..						Mass. ¹¹ ..
	Mich.	Mich.				Mich.					Mich.	
Minn.		Minn.		Minn.	Minn.		Minn. ¹² ..		Minn. ¹⁰ ..	Minn.		
Mo.		Mo.		Mo.	Mo.	Mo.		Mo.		Mo.		
Mont.		Mont.							Mont.	Mont.		
Nebr.		Nebr.		Nebr.	Nebr.	Nebr. ⁵ ..			Nebr.	Nebr.		
Nev.		Nev.		Nev.	Nev.					Nev.		
N. H.	N. H.	N. H.		N. H.	N. H.	N. H.		N. H. ¹³ ..				
N. J.		N. J.		N. J.	N. J.					N. J.		
N. Mex.		N. Mex.		N. Mex.	N. Mex.		N. Mex.			N. Mex.		
N. Y.		N. Y.		N. Y.	N. Y. ⁸ ..					N. Y.		
	N. Dak.	N. Dak.	N. Dak.	N. Dak.	N. Dak.							N. Dak. ¹¹ ..
	Ohio.	Ohio. ¹⁴ ..		Ohio.	Ohio.						Ohio.	
Okla.		Okla.		Okla.	Okla.			Okla.		Okla.		
Oreg.		Oreg.		Oreg.	Oreg.				Oreg. ¹⁰ ..	Oreg.		
Pa.		Pa. ¹⁵ ..		Pa.	Pa.		Pa. ³ ..			Pa.		
P. R.		P. R.		P. R. ⁶ ..	P. R.	P. R. ¹⁶ ..	P. R.			P. R.		
R. I.		R. I.		R. I.	R. I.					R. I.		
S. Dak.		S. Dak.		S. Dak.	S. Dak.	S. Dak.		S. Dak.	S. Dak.	S. Dak.		
Tenn.	Tex.	Tenn.		Tenn.	Tenn.	Tenn.	Tex. ¹⁷ ..		Tenn.	Tenn.	Tex.	
Utah.		Utah. ¹⁸ ..		Utah.	Utah.				Utah.	Utah.		
Vt.		Vt.		Vt.	Vt.			Vt.	Vt.	Vt.		
Va.		Va.		Va.	Va.	Va.		Va.	Va.	Va.		
Wash.	W. Va.	W. Va. ²⁰ ..	Wash. ¹⁹ ..	Wash.	W. Va.	W. Va.		W. Va. ²¹ ..	Wash.	Wash.		
Wis.		Wis. ²² ..		Wis.	Wis.							Wis.
	Wyo.	Wyo. ²³ ..				Wyo. ²⁴ ..	Wyo.		Wyo.	Wyo.		

¹ Includes such expressions as: Personal injury by accident or accidentally sustained; accidental injuries; and injuries caused by a fortuitous event.

² The word "accident" does not appear in description of compensable injuries.

³ For reasons not connected with the employment.

⁴ Willful and serious misconduct.

⁵ Deliberate or reckless indifference to safety.

⁶ Also while willfully intending to commit a crime.

⁷ Except when going to and from work.

⁸ Solely.

⁹ Without employer's knowledge.

¹⁰ By implication.

¹¹ Included by decision of court or commission.

¹² By fellow employee for personal reasons.

¹³ Violation of law.

¹⁴ Court held that injuries must be caused by or incidental to employment.

¹⁵ While actually engaged in furtherance of employer's business.

¹⁶ Gross negligence of employee sole cause.

¹⁷ Also injuries caused by act of God.

¹⁸ Accidents arising either out of or in the course of employment are compensable.

¹⁹ Sustained on premises of plant or in course of employment away from plant.

²⁰ In course of or resulting from employment.

²¹ Disobedience to rules.

²² Growing out of or incidental to employment.

²³ Sustained as a result of employment and while at work.

²⁴ Culpable negligence of employee.

ACCIDENTS VERSUS INJURIES.

But what constitutes an injury? In most States an injury is limited to what is commonly known as an accident. There must be a sudden and tangible happening, producing an immediate or prompt result, and occurring from without. In other words, it must be of a traumatic nature. Industrial diseases, especially the slow-developing ones, would therefore be excluded by this definition, and such has been the position taken by the courts of the several States, with the exception of Massachusetts. Thirty-four States,⁸ in describing compensable injuries, use some variation of the word "accident," or words of similar import, such as personal injuries by accident, accidental injuries, or injuries caused by some fortuitous event. A few States restrict the meaning of an injury still further by definition. In Louisiana and Nebraska, for example, an accident means an unexpected or unforeseen event, happening suddenly or violently, with or without human fault, and producing at the time objective symptoms of an injury; while in Oregon a compensable injury must be caused by violent or external means. The courts, however, have been rather liberal in interpreting this phrase. Compensation has been granted for sunstroke,⁹ frostbite,¹⁰ neuritis from vibration of punch press,¹¹ gas poisoning,¹² acute arsenical poisoning from inhaling fumes from a furnace,¹¹ nervous shock,¹⁴ angina pectoris,¹⁵ pneumonia,¹⁶ typhoid,¹⁷ anthrax,¹⁸ arteriosclerosis,¹⁹ insanity,¹⁹ infection due to compulsory vaccination,¹⁹ tuberculosis,²² lead poisoning,¹⁹ facial paralysis,¹⁹ blindness due to inhalation of noxious gases,¹⁹ erysipelas,²⁶ ivy poisoning,²⁷ and aggravation of a preexisting disease.²⁸

Eleven States²⁹ do not employ the term "accident" in describing compensable injuries, limiting themselves simply to "injuries" or "personal injuries." The meaning of this broader term, as interpreted by the commissions and courts, is confusing and conflicting. Apparently it was the intent of the legislature in several of

⁸ Alabama, Alaska, Arizona, Colorado, Delaware, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, Oklahoma, Oregon, Pennsylvania, Porto Rico, Rhode Island, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, and Wisconsin.

⁹ California, Illinois, Iowa, Maine, Minnesota, Ohio, and Pennsylvania.

¹⁰ Connecticut, Massachusetts, Montana, New York, and Wisconsin.

¹¹ Illinois.

¹² Illinois, Massachusetts, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

¹⁴ California.

¹⁵ Massachusetts and New York.

¹⁶ Connecticut, Illinois, and Massachusetts.

¹⁷ Michigan and Wisconsin.

¹⁸ Massachusetts, New York, and Pennsylvania.

¹⁹ Massachusetts.

²² Massachusetts, New York, and Wisconsin.

²⁶ Connecticut.

²⁷ New York.

²⁸ California, Connecticut, Massachusetts, and Ohio.

²⁹ California, Connecticut, Iowa, Massachusetts, Michigan, New Hampshire, North Dakota, Ohio, Texas, West Virginia, and Wyoming.

the States to include occupational diseases when it substituted the word "injury" for the British term "injury by accident," but with the single exception of Massachusetts, the courts, where cases have come before them, have ruled against the inclusion of such diseases. Of the States employing the term "injuries," Iowa and Wyoming have specifically excluded occupational diseases by law; in Michigan, Ohio, and Texas such diseases have been excluded by the courts. In New Hampshire the law declares the employer liable "for any injury arising out of and in course of employment"; but as it also announces its purpose "to establish a new system of compensation for accidents to workmen," and repeatedly uses the term "accident" in prescribing the methods of administration, it is probable that occupational diseases are excluded. In West Virginia, although the phraseology of the law favors more strongly the inclusion of occupational diseases, such diseases are not compensated. In the other States using the word "injuries," occupational diseases are included either by law or interpretation of court or commission.

OCCUPATIONAL DISEASES.

Of the 46 workmen's compensation jurisdictions in the United States, only 7 (California, Connecticut, Hawaii, Massachusetts, North Dakota, Wisconsin, and the Federal Government) provide compensation for occupational diseases. In Massachusetts, North Dakota, and the United States this inclusion has been effected through the commissions and courts, whereas in the other States it has been brought about by statutory enactment. In all the other States, as already noted, occupational diseases are excluded, in theory at least, from the operation of the compensation acts. This exclusion has been brought about (1) by limiting the scope of the law to injuries by "accident," (2) by adverse rulings of the courts and commissions, and (3) by express provisions in the compensation acts themselves.

What constitutes an "occupational disease" under the various compensation laws? This is a question perennially confronting the courts and industrial commissions in the United States. In those States in which industrial diseases are supposed to be excluded, compensation benefits have been awarded for anthrax, dermatitis, arsenic poisoning, fume poisoning, occupational neuritis, housemaid's knee, and so on. In each case, however, the court or commission always took pains to point out that the particular injury in question was compensable because it was not an "occupational disease." Compensation was granted not because it was a disease but because it satisfied in other respects the requirements of a compensable injury as defined by the statute or as interpreted by the court. When, then, is an occupational disease not an occupational disease?

Occupational diseases may be classified according to cause and nature of injury, as follows:

1. Diseases due to gradual absorption of poisons (lead poisoning).
2. Diseases in which the poison or germ enters the system through a break in the skin (anthrax).
3. Skin affections from acids or other irritants (eczema, dermatitis).
4. Diseases due to fumes or dusts entering the system through respiratory organs (tuberculosis, gas poisoning).
5. Diseases due to vibrations or constant use of particular members (neuritis, telegrapher's cramp, housemaid's knee).
6. Miscellaneous diseases (caisson disease, miner's nystagmus).

There are, however, two additional classes of diseases, nonoccupational in character, for which compensation is usually granted: (1) Those diseases, such as typhoid fever, erysipelas, pneumonia, and ivy poisoning, which arise out of and are proximately caused by the employment. These diseases, to be compensable, however, must have had their origin in the employment and must be definitely traceable to it. (2) Those diseases which either result from an accident or are aggravated, accelerated, or developed by the accident. In these cases compensation is awarded not for the disease per se but for the results of the accident. Had the accident not occurred the disease would presumably never have developed; consequently the resulting disability is justly attributable to the accident. In this connection the Pennsylvania Workmen's Compensation Board said:

The workmen's compensation act does not prescribe any standard of health or physical condition to which the workman of the State must conform to qualify for compensation, nor does it imply a warranty on the employee's part that he is free from latent disease or physical defect which may develop into serious injury if excited into activity through his exertions in the course of his employment.³⁰

In theory, therefore, when an employer employs a workman he accepts him as he is, and becomes liable for injuries for which the employee's preexisting disease or defect was partly responsible.

Of the six classes of occupational diseases enumerated above compensation has been uniformly denied for the first class, i. e., for those diseases which have developed gradually and which are inherent in the employment. No State, except those which compensate for all occupational diseases, has awarded compensation for lead poisoning. As regards the other classes of diseases, there has been a lack of uniformity in the practices of the courts and commissions of the several States. Numerous diverse and contradictory rulings have been made in what appear to have been identical or similar cases. For example, compensation for occupational neuritis has been awarded in one State

³⁰ *Smith v. Pittsburgh Coal Co.* Pennsylvania Workmen's Compensation Board decisions for 1916, p. 63.

and denied in another; a workman contracting anthrax has been granted compensation in a third State and denied compensation in a fourth; and so on.

However, while the practices among the several State commissions and courts vary, the legal theories and principles upon which their decisions are based have been remarkably uniform. Compensation for occupational diseases has been usually granted if one or more or all of the following conditions were present: (1) If the disease resulted in violence to the physical structure of the body, i. e., if it was traumatic or produced a lesion; (2) if the injury occurred unexpectedly or not in the usual course of events; (3) if the injury can be traced to a definite time and place in the employment; and (4) if the injury was not due to a known and inherent risk of the occupation; or, even if inherent in the occupation, if the employer had neglected to provide reasonable safeguards which would presumably have prevented the injury.

The guiding principle adopted by most of the courts and commissions in occupational disease cases is stated by the Pennsylvania Workmen's Compensation Board in awarding compensation for dermatitis due to the fortuitous presence of poison in hides handled by the employee, as follows:

Where injuries received in the course of employment are of untraceable inception and gradual and insidious growth and can not be traced to having been received at some certain time, and in which there is no sudden or violent change in the condition of the physical structure of the body, they must be regarded as the results of an occupational disease. However, if the disease can be traced to some certain time when there was a sudden or violent change in the condition of the physical structure of the body, as, for instance, where poisonous gases were inhaled which damage the physical structure of the body, it is an accident within the workmen's compensation act of 1915, and is compensable.³¹

The following list shows the various classes of occupational diseases for which compensation has been awarded in the several States. This list is by no means complete nor are the States enumerated the only ones in which the specified occupational diseases have been compensated.

ANTHRAX.

Anthrax contracted through chaps or cracks on the back of the hands of a workman while handling hides (New York).

Anthrax contracted by a wool sorter through an abrasion on his neck (Pennsylvania).

ARSENIC POISONING.

Acute arsenical poisoning from inhaling fumes from spelter furnace (Illinois).

³¹ *Roller v. Drueding Bros.* Pennsylvania Workmen's Compensation Board decisions for 1916, p. 86.

GAS, FUMES, AND DUSTS.

Gas poisoning resulting in cerebral hemorrhage from close proximity to gas flame (Illinois).

Breathing of poisonous gases which had accumulated by reason of insufficient ventilation (New York).

Miliary tuberculosis following inhalation of gas fumes due to an explosion (Wisconsin).

Infection of throat due to inhalation of dust from dry hides by reason of poor ventilation (Michigan).

Involuntary inhalation of gas fumes caused by explosion (Pennsylvania).

Inhalation of gas fumes from salamanders used to heat work place (Minnesota).

Inhalation of poisonous fumes while heating bucket of paint in an insufficiently ventilated room (Ohio).

SKIN DISEASES.

Dermatitis due to fortuitous presence of poison in hides handled by workman (Pennsylvania).

Abrasion and irritation of skin from acids in handling hides in tannery (Wisconsin).

VIBRATIONS OR CONSTANT USE OF PARTICULAR MEMBERS.

Traumatic peripheral neuritis due to constant vibration of punch press (Illinois).

Housemaid's knee contracted by a plumber (Connecticut).

NONOCCUPATIONAL DISEASES.

Typhoid fever contracted from impure drinking water furnished by employer (Wisconsin).

Erysipelas contracted from frostbitten nose (Connecticut).

Pleurisy and pulmonary tuberculosis contracted from wetting received by jumping in river in course of employment (New York).

Nephritis and disability contracted by becoming wet from flushing hot pulp from basement of paper mill (Indiana).

Ivy poisoning of railroad employee while mowing grass on right of way (New York).

It is interesting to note the paradoxical position in which the courts and compensation commissions have placed themselves. Our workmen's compensation laws have been enacted in the vague belief that industrial accidents are inevitable and constitute a permanent and integral part of our industrial life. The one clinching argument constantly used by proponents of compensation laws has been that a large proportion of industrial accidents are due to the inherent risk of the industry, and consequently the employers' liability system based upon negligence is no longer applicable. These same reasons, formerly advanced for accident compensation laws, are now used by the courts and commissions against compensation for occupational diseases. In

accordance with their interpretation of the probable legislative intent of the statute, compensation for such diseases is denied if they are naturally inherent in or incidental to the employment and granted if their occurrence is sudden or accidental. In actual practice and as a matter of simple justice, however, commissions and courts undoubtedly feel that an employee who contracts an occupational disease is just as much entitled to compensation as one who sustains the loss of an arm. Consequently in their decisions under the law they have no doubt been influenced by their desire to remedy so far as possible the economic injustice of the statutes.

ARISING OUT OF AND IN THE COURSE OF EMPLOYMENT.

The next limitation of compensable injuries is the condition under which they occur. No State compensates for all injuries, irrespective of the time and place of their occurrence. In every State a compensable injury must happen in the course of the employment, and in all but six States ³² it must arise out of or result from the employment. A definition of this double clause has been stated by the Massachusetts Supreme Court, as follows: ³³

It is not easy nor necessary to the determination of the case at bar to give a comprehensive definition of these words which shall accurately include all cases embraced within the act and with precision exclude those outside its terms. It is sufficient to say that an injury is received "in the course of" the employment when it comes while the workman is doing the duty which he is employed to perform. It arises "out of" the employment when there is apparent to the rational mind, upon consideration of all the circumstances, a causal connection between the conditions under which the work is required to be performed and the resulting injury. Under this test, if the injury can be seen to have followed as a natural incident of the work, and to have been contemplated by a reasonable person familiar with the whole situation as a result of the exposure occasioned by the nature of the employment, then it arises "out of" the employment. But it excludes an injury which can not fairly be traced to the employment as a contributing proximate cause and which comes from a hazard to which the workman would have been equally exposed apart from the employment. The causative danger must be peculiar to the work and not common to the neighborhood; it must be incident to the character of the business and not independent of the relation of master and servant. It need not to have been foreseen or expected, but after the event it must appear to have had its origin in the risk connected with the employment and to have flowed from that source as a rational consequence.

In other words, the injury must result from a hazard of the *employment*, not merely one of the hazards of *existence*. The commissions and courts generally have been liberal in their interpretations of this

³² North Dakota, Ohio, Pennsylvania, Texas, Utah, and Washington.

³³ *McNichol v. Employers' Liability Assurance Association*, 215 Mass. 1497.

phrase. Granted a causal connection between injury and employment and compensation is usually allowed. Awards have even been granted in the case of a watchman who was shot by a burglar³⁴ and where an employee was killed by an intoxicated fellow worker.³⁵

Five States use merely the single phrase "in the course of employment," thus considerably increasing the scope of injuries covered, since such injuries need not result as a consequence of the employment. For example, a workman may be injured as a result of a prank played by a fellow employee. Such an injury does not "arise out of" the employment, but it does occur "in the course of" the employment and would be compensated if the provision of the law were limited simply to the latter phrase. In one of these four States,³⁶ however, the court has ruled that the injury must be *caused by, or incidental to, the employment*. The Utah law has a still wider scope, compensating both injuries which arise out of the employment and those which occur in the course of the employment.

EXEMPTIONS DUE TO EMPLOYEE'S FAULT.

Most of the States do not grant compensation for injuries occasioned in whole or in part through some gross fault of the employee. Three States,³⁷ however, have not accepted this principle and allow compensation regardless of the employee's negligence. Thirty-six States withhold compensation if the injury was caused by the willful intention of the employee to injure himself or another; 31 deny compensation if injury is due to intoxication; 17 if caused by willful misconduct; and 13 if employee is guilty of violation of safety laws or removal of safety appliances. Another limitation, though not directly connected with either the employee's or employer's negligence, is the exclusion of injuries which are intentionally inflicted by another. Ten States have exemptions of this character. For more detailed information see Table 11.

PENALTY FOR NEGLIGENCE.

Seven States,³⁸ while not denying compensation entirely in certain cases of the employee's negligence, nevertheless penalize him by decreasing the amount. Three States reduce the amount of compensation 50 per cent: California, if the injury is due to the employee's willful misconduct except in case the accident results in death or is due to employer's failure to comply with the safety provisions and in cases of minors; Colorado, if the injury is caused by the employee's willful failure to use safety devices or obey reasonable rules, or is the

³⁴ California.

³⁵ Massachusetts.

³⁶ Ohio.

³⁷ Arizona, Illinois, and Montana.

³⁸ California, Colorado, Kentucky, Nevada, New Mexico, Washington, and Wisconsin.

result of his intoxication; and New Mexico, if the injury is due to the employee's failure to use safeguards. Kentucky and Wisconsin reduce the amount 15 per cent if the injury is caused by the employee's willful failure to use safety devices or obey reasonable safety rules, and in the case of Wisconsin, if the injury is due to the employee's intoxication. Nevada reduces the amount 25 per cent and Washington 10 per cent, if the injury is caused by the removal of safeguards.

On the other hand, in six States³⁹ the employer is penalized if he has been guilty of negligence. In Kentucky and Wisconsin the employer must pay 15 per cent additional compensation if the injury is caused by his failure to obey safety laws or regulations, and in Wisconsin the amount of compensation is trebled in case of illegal employment of minors. New Mexico and Washington add 50 per cent if injury is caused by violation of safety statutes; in Washington 50 per cent is added in case of illegal employment of minors; in Illinois the commission may increase the award 50 per cent in case of intentional underpayment or unnecessary delay or appeal; while in Massachusetts the compensation is doubled if the injury is due to the serious or willful misconduct of the employer.

WAITING PERIOD.

As already noted, injuries in order to be compensable must, as a rule, arise out of and in the course of the employment and must not be occasioned by gross negligence on the part of the employee. Another factor restricting a compensable injury is the degree of severity of the injury or the duration of disability caused by it.

In most of the States an injury to be compensable must cause disability for a certain length of time, no compensation being paid during this time. This noncompensable preliminary period is known as the "waiting period." In two States (Oregon and Porto Rico) there is no such waiting time, compensation being paid for all injuries producing any disability. The most common provision is that disability must continue for more than one week, this being found in 22 States. Utah and the Federal Government require a waiting period of 3 days, 7 States of 10 days, and 13 of 2 weeks. Qualifications of the general provisions occur in 22 States. In Hawaii there is no waiting period in case of partial disability. In Maryland the waiting time is reduced from 2 weeks to 1 week if the disability is total and permanent. In the other 20 States the waiting period is abolished entirely if the disability continues longer than certain specified periods. In North Dakota no compensation is paid for the first week, but if disability continues for more than 1 week compensation begins from date of injury; in 2 States⁴⁰ there is no waiting

³⁹ Illinois, Kentucky, Massachusetts, New Mexico, Washington, and Wisconsin.

⁴⁰ Two weeks or more, Nevada; over 2 weeks, Arizona.

period if disability continues for 2 weeks or more; in one State ⁴¹ if disability continues for 3 weeks; in 6 States ⁴² if for 4 weeks or more; in 2 States ⁴³ if for more than 30 days; in 6 States ⁴⁴ if for 6 weeks or more; in 1 State ⁴⁵ if for more than 7 weeks; and in 1 State ⁴⁷ if for 8 weeks or more.

Table 12 classifies the States according to length of waiting period:

TABLE 12.—COMPENSATION STATES, CLASSIFIED BY LENGTH OF WAITING PERIOD.

No waiting period. (2)	3 days. (2)	1 week. (22)	10 days. (7)	2 weeks. (13)
Oregon. Puerto Rico.	Utah. United States.	California. Connecticut (none if disabled over 4 weeks). Hawaii (none if partially disabled). Idaho. Illinois (none if disabled 4 weeks). Indiana. Kansas. Kentucky. Louisiana (none if disabled 6 weeks). Michigan (none if disabled 6 weeks). Minnesota. Missouri (none if disabled over 6 weeks). Nebraska (none if disabled 6 weeks). Nevada (none if disabled 2 weeks). North Dakota (none if disabled over 1 week). Ohio. Oklahoma (none if disabled 3 weeks). Texas. Vermont. Washington (none if disabled over 30 days). West Virginia. Wisconsin (none if disabled over 4 weeks).	Colorado. Maine. Massachusetts. New Jersey. Pennsylvania. South Dakota (none if disabled 6 weeks). Wyoming (none if disabled over 30 days).	Alabama (none if disabled 4 weeks). Alaska (none if disabled 8 weeks). Arizona (none if disabled over 2 weeks). Delaware (none if disabled 4 weeks). Iowa. Maryland (1 if totally and permanently disabled). Montana. New Hampshire. New Mexico. New York (none if disabled over 7 weeks). Rhode Island (none if disabled over 4 weeks). Tennessee (none if disabled 6 weeks). Virginia.

Probably no other feature of compensation laws is considered and debated more than the waiting period. It is maintained, especially by organized labor, that the laws in this respect are by far inadequate, since the large majority of industrial injuries cause disability of less than two weeks. There is a general tendency toward reducing the waiting period, 18 States ⁴⁵ amending their laws to this effect during the past 2 years, and Utah reducing its period from 10 to 3 days.

⁴¹ Oklahoma.

⁴² Four weeks or more, Alabama, Delaware, and Illinois; over 4 weeks, Connecticut, Rhode Island, and Wisconsin.

⁴³ Washington, Wyoming.

⁴⁴ Six weeks or more, Louisiana, Michigan, Nebraska, South Dakota, and Tennessee; over 6 weeks, Missouri.

⁴⁵ New York.

⁴⁷ Alaska.

⁴⁶ California, Colorado, Connecticut, Hawaii, Indiana, Kansas, Kentucky, Maine, Michigan, Minnesota, Nebraska, New Jersey, New Mexico, Oklahoma, Pennsylvania, South Dakota, Utah, and Vermont.

The loss of even a week's wages to the average workman would create a hardship or at least cause inconvenience to his family. On the other hand, several objections are advanced against the abolition of the waiting period altogether. There is the supposed danger of increased malingering; another objection is the undue increase in administrative expenses. There is an irreducible minimum amount of expense involved in the settlement of every case, and a point may be reached where the cost of administering a case may exceed the compensation award. This difficulty will be obviated to some extent, however, by the fact that in many cases the injured employee will make no claim for compensation when the injury is slight and the award is small.

COMPENSATION BENEFITS.

The theory underlying the old employers' liability system is the payment of damages to an employee for an injury resulting from the employer's fault or negligence. It is recompense for a wrong. The new compensation system, with unimportant exceptions, abolishes the whole question of negligence and bases its justification upon economic necessity. Instead of the least able unit of industry assuming its risks, the consuming public, acting through the employer, furnishes relief to injured workers by fixed awards.

The question arises, however, as to the extent to which an employee should be compensated for his losses sustained as a result of the injury. On the one hand it is maintained that the entire cost of rehabilitation and restoration of earning capacity, including full wages, or more if necessary, and adequate medical treatment, should be borne by the industry; and if the employee is totally and permanently incapacitated he should receive an adequate life pension. On the other hand it is contended that only major injuries should be compensated for, and then only for a small part of the wage loss. In most of the States the compensation scale has been based, in theory at least, upon the loss of earning power of the injured workman, while a number of States, notably Oregon and Washington, in providing fixed pensions have based their awards upon the worker's need rather than his loss of earning capacity.

No 2 of the 45 States have identical compensation provisions, and few States seem to have followed any definite theory in this respect. Nevertheless, two factors have operated in determining the amount of compensation provided in various State laws: (1) Loss of earning capacity, and (2) social need. In general it may be said that State workmen's compensation schedules are based upon loss of earning power modified both by the employee's need and by the desire to limit the employer's burden. Thus, the expression of compensation bene-

fits in percentages of wages clearly shows that loss of wages was a determining factor, whereas the adoption of a sliding scale of benefits in accordance with the number of dependents shows the effect of the social need factor. On the other hand, the desire not to burden the employer unduly finds expression in the limitations upon the amount of medical service, the weekly compensation payments, the periods during which compensation is to be paid, and finally upon the percentages of wages themselves. The necessity for a workable law, therefore, not excessively burdensome to the employer and not conducive to malingering, while affording such reasonable benefits to the injured workman as to prevent hardship to himself and family, has led to a wide variety of attempts to determine the proper amounts to be awarded.

Every injured employee should receive adequate compensation, which should include unlimited medical service and full indemnity for loss of earnings resulting from the injury. This would also fulfill the requirements as to social needs, assuming, of course, that the workers' wages adequately meet their needs.

Compensation benefits may be classified according as they apply to death, total disability, and partial disability. The provisions for each class usually vary, and there may also be different provisions for permanent and temporary disability. In addition to these compensation provisions most of the laws provide for medical, surgical, and hospital treatment, and in most of the States for burial in case of fatal injuries as well.

SCALE.

The compensation scale is usually based upon the earnings of the injured employee, ranging from 50 to 66 $\frac{2}{3}$ per cent of his weekly or monthly wages at the time of injury or for a prescribed period preceding it. In the case of minors, however, an exception is sometimes made, the law recognizing the fact that the wage of a minor would naturally increase as he grows older. Twelve States⁴⁹ make provision upon this point.

The weekly benefits are, as a rule, also subject to a maximum and a minimum limit. The period during which compensation is paid varies also, the usual provision in case of death being from 5 to 8 years, and in case of disability payment during disability, with a maximum of 300 to 500 weeks, and frequently during life in case of permanent total disability. A further limitation may be prescribed stipulating that the total compensation shall not exceed a certain fixed amount. To compare accurately the compensation benefits

⁴⁹ California, Iowa, Kansas, Maryland, Massachusetts, New York, North Dakota, Ohio, Oklahoma, Texas, Utah, and Wisconsin.

awarded in the several States it is necessary to take into consideration the present value of those benefits—i. e., whether the compensation is paid outright as a lump sum or whether it is paid in periodical installments covering a long period of time. For example, a lump sum of \$4,000 considerably exceeds the present worth of payments of \$10 a week for 400 weeks. Similarly the present value of a payment of \$20 a week for 100 weeks exceeds that of a payment of \$10 a week for 200 weeks. However, experience has shown that, on the average, greater economic benefit will result from continuing payments.

Table 13 shows the provisions of each State as to (1) percentage of weekly wages, (2) maximum weekly payments, and (3) maximum period and amount of compensation in case of death, permanent total disability, and partial disability.

TABLE 13.—PER CENT OF WEEKLY WAGES PAID AS COMPENSATION, MAXIMUM WEEKLY PAYMENTS, AND MAXIMUM PERIOD AND AMOUNT OF COMPENSATION PAYABLE IN CASE OF DEATH, PERMANENT TOTAL DISABILITY, AND PARTIAL DISABILITY.

State.	Per cent of weekly wages.	Weekly maximum.	Maximum period (in weeks) and amount.					
			Death.		Permanent total disability.		Partial disability.	
			Weeks.	Amount.	Weeks.	Amount.	Weeks.	Amount.
Alabama.....	25 to 60 (death).....	\$12 to \$15.....	300.....	\$5,000	550.....	\$5,000	300.....	
Alaska.....	50 to 60 (disability).....							
Arizona.....	50 (temporary total).....	No provision.....		6,000		6,000		\$4,800
	50.....	No provision.....	400.....	4,000	Life.....	4,000	During disability.	4,000
California.....	65.....	\$20.83.....	240.....	5,000	Life.....		240.....	3 years' earnings.
Colorado.....	50.....	\$10.....	312.....	3,125	Life.....		During disability.	\$2,600
Connecticut.....	50.....	\$18 (death and partial disability).....						
		\$14 (total disability).....	312.....		520.....		520.....	
Delaware.....	15 to 60 (death).....	\$18 (death).....						
	50 (disability).....	\$15 (disability).....	285.....		475.....	4,000	285.....	
Hawaii.....	25 to 60 (death).....	\$21.60 (death).....						
	60 (total disability).....	\$18 (total disability).....	312.....	5,000	312.....	5,000	312.....	5,000
	50 (partial disability).....	\$12 (partial disability).....						
Idaho.....	20 to 55 (death).....	\$12.....	400.....		Life.....		150.....	
	55 (disability).....							
Illinois.....	50 to 65.....	\$12 to \$15.....	416.....	4,000	Life.....		416.....	
Indiana.....	55.....	\$13.20.....	300.....	5,000	500.....	5,000	300.....	
Iowa.....	60.....	\$15.....	300.....		400.....		225.....	
Kansas.....	60.....	\$15 (disability).....	260.....	3,800	416.....		416.....	
Kentucky.....	65.....	\$12.....	335.....	4,000	416.....	5,000	335.....	4,000
Louisiana.....	25 to 55 (death).....	\$15.....	300.....		400.....		300.....	
	55 (disability).....							
Maine.....	60.....	\$15.....	300.....	3,500	500.....	4,200	300.....	
Maryland.....	50.....	\$12.....	416.....	4,250	Life.....	5,000		3,500
Massachusetts.....	66½.....	\$10 (death and specified injuries).....	500.....	4,000	500.....	4,000	During disability.	4,000
		\$16 (others).....						
Michigan.....	60.....	\$14.....	300.....		500.....	6,000	500.....	
Minnesota.....	30 to 66½ (death).....	\$15.....	300.....		550.....		300.....	
	66½ (disability).....							
Missouri.....	66½.....	\$15.....	300.....		Life.....		490.....	
Montana.....	30 to 50 (death).....	\$12.50.....	400.....		Life.....		150.....	
	50 (disability).....							
Nebraska.....	66½.....	\$15.....	350.....		Life.....		300.....	

Nevada	15 to 66½ (death). 60 (total disability). 50 (permanent partial).	\$18.46 (death). \$6.93 to \$16.62 (disability).	Death or remarriage.	Life.	433.	
New Hampshire	50.	\$10.	300.	3,000	300.	
New Jersey	35 to 60 (death). 66½ (disability).	\$12.	300.	400.	300.	
New Mexico	15 to 60 (death). 50 (disability).	\$18 (death). \$12 (disability).	300.	520.		
New York	15 to 66½ (death). 66½ (disability).	\$15.38 (death). \$15 to \$20 (disability).	Death or remarriage.	Life.	(During disability.)	3,500
North Dakota	20 to 66½ (death). 66½ (disability).	\$20.	Death or remarriage.	Life.	(During disability.)	
Ohio	66½.	\$15 (death and temporary total). \$12 (others).	416.	5,000	Life.	(During disability.) 3,750
Oklahoma	50.	\$18.	Not covered.	500.	300.	
Oregon	Monthly pension.	\$45* (monthly pension).	Death or remarriage.	Life.	104.	
Pennsylvania	15 to 60 (death). 60 (disability).	\$12.	300.	500.	5,000	300.
Porto Rico	50 (temporary total).	\$7 (temporary total).		4,000	4,000	2,500
Rhode Island	50.	\$14 (total disability). \$10 (others).	300.	500.	5,000	300.
South Dakota	55.	\$12 (disability).	378.	3,000	Life.	3,000 312.
Tennessee	20 to 50 (death). 50 (disability).	\$11.	400.	550.	5,000	300.
Texas	60.	\$15.	380.		401.	300.
Utah	60.	\$16.	312.	5,000	Life.	312. 5,000
Vermont	15 to 45 (death). 50 (disability).	\$12.50 (total disability). \$10 (partial disability).	260.	3,500	260.	4,000 260.
Virginia	50.	\$10.	300.	4,000	500.	5,000 300.
Washington	Monthly pension.	\$50 (monthly pension).	Death or remarriage.	Life.		2,000
West Virginia	Monthly pension (death). 50 (disability).	\$12 (disability).	Death or remarriage.	Life.	340.	
Wisconsin	65.	\$14.63.	320.	4,500	780.	(During disability.) 4,500
Wyoming	Monthly pension (temporary total.) Fixed amounts (others).	\$60 (temporary total—monthly pension).		3,000	5,500	1,500
United States	10 to 66½ (death). 66½ (disability).	\$15.38.	Death or remarriage.	Life.	(During disability.)	

¹ Oregon by a 1920 amendment increased all compensation benefits 30 per cent, effective Dec. 1, 1919.

* Increased to 60 per cent of wages for first 6 months in case of temporary total disability.

PER CENT OF WAGES.

In all but three States (Oregon, Washington, and Wyoming) the amount of compensation is based upon wages. A number of States, however, provide fixed lump sums for certain injuries, but apply the percentage system to all others. In most of the States the prescribed percentage remains uniform for all injuries. A few States have varying percentages for different types of injuries, and in several States the percentage varies with conjugal condition and number of children.

It will be noted that in 18 States ⁵⁰ the amount of compensation is 50 per cent of the employee's wages; in 4 States, ⁵¹ 55 per cent; in 9 States, ⁵² 60 per cent; in 3 States, ⁵³ 65 per cent; and in 8 States ⁵⁴ and the Federal Government, 66 $\frac{2}{3}$ per cent. In the remaining three States, as already noted, different methods are provided. Oregon and Washington provide for monthly pensions in case of death or injury, while in Wyoming fixed absolute amounts are prescribed.

WEEKLY MAXIMUM AND MINIMUM.

The compensation benefits based upon percentage of wages are usually modified by weekly maximum and minimum limits which may materially affect the amounts, though to what extent depends, of course, upon the wage level. Under the present high wage level it is doubtful if in any State the compensation benefits equal 50 per cent of the employees' wages, while in some States and particularly in the higher paid occupations the ratio of compensation to wage loss does not exceed 25 to 30 per cent. Two States (Alaska and Arizona) have no maximum or minimum provisions; 4 States ⁵⁵ have a weekly maximum of \$10 or under; 1 ⁵⁶ has a maximum of \$11; 11 ⁵⁷ have a maximum of \$12; 7 ⁵⁸ of over \$12 and under \$15; 8 ⁵⁹ of \$15; 7 States ⁶⁰ and the Federal Government have a maximum of over \$15 to \$18; 2 States ⁶¹ have a maximum of \$20 or over; while 3 States ⁶² provide monthly pensions or fixed amounts.

⁵⁰ Alabama (increased to 60 per cent in certain cases), Alaska, Arizona, Colorado, Connecticut, Delaware, Illinois (increased to 65 per cent in certain cases), Maryland, Montana, New Hampshire, New Mexico, Oklahoma, Porto Rico, Rhode Island, Tennessee, Vermont, Virginia, and West Virginia.

⁵¹ Idaho, Indiana, Louisiana, and South Dakota.

⁵² Hawaii (total disability only; partial, 50 per cent; death, 25 to 60 per cent), Iowa, Kansas (specified injuries, 50 per cent), Maine, Michigan, Nevada (total disability only; partial, 50 per cent; death, 15 to 66 $\frac{2}{3}$ per cent), Pennsylvania, Texas, and Utah.

⁵³ California, Kentucky, and Wisconsin.

⁵⁴ Massachusetts, Minnesota, Missouri, Nebraska, New Jersey (death, 35 to 60 per cent), New York, North Dakota, and Ohio.

⁵⁵ Colorado, New Hampshire, and Virginia, \$10; Porto Rico, \$7.

⁵⁶ Tennessee.

⁵⁷ Alabama (increased to \$15 in certain cases), Idaho, Illinois (increased to \$15 in certain cases), Kentucky, Maryland, New Jersey, New Mexico, Ohio (death and temporary total disability, \$15), Pennsylvania, South Dakota, and West Virginia.

⁵⁸ Montana and Vermont, \$12.50; Indiana, \$13.20; Connecticut, death and partial disability, \$18, total disability, \$14; Michigan, \$14; Rhode Island, total disability, \$14, other disabilities, \$10; Wisconsin, \$14.63.

⁵⁹ Delaware, Iowa, Kansas, Maine, Minnesota, Missouri, Nebraska, and Texas.

⁶⁰ Utah, \$16; Hawaii, Louisiana, and Oklahoma, \$18; Massachusetts, death and specified injuries, \$10, other disabilities, \$16; Nevada, \$9.23 to \$16.62; New York, \$15 to \$20; Federal Government, \$15.38.

⁶¹ California, \$20.83; North Dakota, \$20.

⁶² Oregon, Washington, and Wyoming.

DEATH.

The benefits for death in most cases approximate three or four years' earnings of the deceased employee. The methods provided for determining compensation for death vary somewhat. Two States ⁶³ provide for fixed absolute amounts without reference to wages or length of time, and one State ⁶⁴ proportions the amount of compensation to the earning capacity and number and needs of dependents of deceased. Six States ⁶⁵ provide for amounts equal to annual earnings for three or four years. The large majority of States, however, apply a wage percentage for specified periods. Of these, 2 States ⁶⁶ pay death benefits for less than 300 weeks; 13 ⁶⁷ for 300 weeks; 7 ⁶⁸ for over 300 but under 400 weeks; 7 ⁶⁹ for 400 to 500 weeks; while 6 States ⁷⁰ and the Federal Government provide benefits until the death or remarriage of the widow. Twenty-two States also place a limit upon the maximum amount payable in any one case. These maximum amounts range from \$3,000 in New Hampshire, South Dakota, and Wyoming to \$6,000 in Alaska. The Oklahoma law does not cover fatal accidents.

While most of the States provide for a uniform rate in death cases, in 20 States ⁷¹ the compensation varies with conjugal conditions and number of children, the percentage ranging from 10 to 66½. The provisions as to children who are beneficiaries usually make the benefits payable in their behalf cease on their reaching the age of 16 or 18 years, but many of these state that the benefits shall not cease if, at the age named, the recipient is mentally or physically incapacitated for earning a living. In West Virginia benefits are paid to children until 15 years of age and in Missouri until 17 years. Eighteen States ⁷² pay benefits up to 16 years while 20 States ⁷³ pay up to 18 years. Five States ⁷⁴ have no provision as to age of children.

Table 14, compiled by Mr. F. W. Hinsdale, secretary of the Workmen's Compensation Board of British Columbia, shows the expec-

⁶³ Alaska and Wyoming.

⁶⁴ Porto Rico.

⁶⁵ California, Kansas, New Hampshire, 3 years; Illinois, South Dakota, and Wisconsin, 4 years.

⁶⁶ Vermont, 560 weeks; Delaware, 285 weeks.

⁶⁷ Alabama, Indiana, Iowa, Louisiana, Maine, Michigan, Minnesota, Missouri, New Jersey, New Mexico, Pennsylvania, Rhode Island, and Virginia.

⁶⁸ Colorado, Connecticut, Hawaii, and Utah, 312 weeks; Kentucky, 335 weeks; Nebraska, 350 weeks; Texas, 360 weeks.

⁶⁹ Arizona, Idaho, Montana, and Tennessee, 400 weeks; Maryland and Ohio, 416 weeks; Massachusetts, 00 weeks.

⁷⁰ Nevada, New York, North Dakota, Oregon, Washington, and West Virginia.

⁷¹ Alabama, Alaska, Delaware, Hawaii, Idaho, Illinois, Louisiana, Minnesota, Nevada, New Jersey, New Mexico, New York, North Dakota, Oregon, Pennsylvania, Tennessee, Vermont, Washington, West Virginia, and Wyoming.

⁷² Alabama, Alaska, Delaware, Hawaii, Illinois, Iowa, Kentucky, Maryland, Michigan, Minnesota, Montana, Nebraska, Ohio, Oregon, Pennsylvania, Tennessee, Washington, and Wyoming.

⁷³ Arizona, California, Colorado, Connecticut, Idaho, Indiana, Kansas, Louisiana, Maine, Massachusetts, Nevada, New Jersey, New Mexico, New York, North Dakota, Rhode Island, Utah (boys 16), Vermont, Virginia, and Wisconsin.

⁷⁴ New Hampshire, Oklahoma, Porto Rico, South Dakota, and Texas.

tancies of children as to attaining the age of 16 years, and the present value, at 5 per cent compound interest, of monthly pensions of \$5, payable until death or age 16.

TABLE 14.—EXPECTANCIES OF CHILDREN AS TO ATTAINING THE AGE OF 16 YEARS AND PRESENT VALUE, AT 5 PER CENT COMPOUND INTEREST, OF MONTHLY PENSION OF \$5, PAYABLE UNTIL DEATH OR AGE 16.

Age.	Expectancy years.	Present value of \$5 per month.	Difference.	One-twelfth of difference.
0.....	12.85	\$572.48	\$19.79	\$1.65
1.....	13.48	562.27		
2.....	12.97	576.39	15.88	1.32
3.....	12.26	553.25	23.14	1.93
4.....	11.45	525.95	27.30	2.275
5.....	10.60	496.17	29.78	2.48
6.....	9.70	463.29	32.88	2.74
7.....	8.79	428.36	34.73	2.89
8.....	7.85	391.02	37.54	3.13
9.....	6.89	350.84	40.18	3.35
10.....	5.92	308.30	42.54	3.545
11.....	4.95	263.70	44.80	3.72
12.....	3.97	216.43	47.27	3.94
13.....	2.98	166.32	50.11	4.18
14.....	1.99	113.73	52.59	4.38
15.....	.99	57.96	55.77	4.65

REMARRIAGE OF WIDOWS.

The statutory provisions relating to remarriage of widows vary considerably among the several States. In 19 States ⁷⁵ and the Federal Government compensation benefits of the widow terminate upon her remarriage, but the unpaid balance due her is paid to the children or other dependents. In 9 States ⁷⁶ the widow upon remarriage receives only a portion of the compensation benefits to which she would otherwise be entitled, but this amount is paid to her in a lump sum at the time of remarriage. Of these 9 States, Colorado and Minnesota provide a lump sum equal to one-half of the compensation remaining unpaid, in case there are no dependent children; Pennsylvania pays the widow the present value of the compensation for one-third the remaining period but for not over 100 weeks; Nevada and New York provide a lump sum equal to 2 years' compensation, and North Dakota a lump sum equal to 3 years' compensation; Oregon pays the widow a flat sum of \$300 and Washington \$240; while in West Virginia if the widow remarries within two years from the death of her husband she receives 20 per cent of the compensation benefits due for the period between the date of remarriage and the end of 10 years from the death of her husband. Fifteen States ⁷⁷ have no special provisions relative to remarriage of widows and presumably in these

⁷⁵ Alabama, Connecticut, Delaware, Hawaii, Idaho, Indiana, Iowa (if no children), Kansas, Kentucky, Louisiana, Maryland (if no children), Montana, New Jersey, New Mexico, South Dakota, Tennessee, Utah, Vermont, and Virginia.

⁷⁶ Colorado, Minnesota, Nevada, New York, North Dakota, Oregon, Pennsylvania, Washington, and West Virginia.

⁷⁷ Alaska, Arizona, California, Illinois, Maine, Massachusetts, Michigan, Missouri, New Hampshire, Ohio, Porto Rico, Rhode Island, Texas, Wisconsin, and Wyoming.

States the full statutory amounts are paid. In Nebraska the compensation rights of a widow without children are not affected upon remarriage, but in case she has children the unpaid benefits go to them. The Oklahoma law does not cover fatal accidents.

The probability of death or remarriage of widows is an essential factor in determining the cost of compensation and in setting up adequate reserves. The probability of death, however, increases, while the probability of remarriage decreases, with the passing years. This necessitates the computation of a table combining the two expectancies, i. e., of death and of remarriage, in order to arrive at any intelligent handling of the situation.⁷⁸ As a matter of reference for those interested a combined expectancy table (Table 15), also compiled by Mr. F. W. Hinsdale, secretary of the Workmen's Compensation Board of British Columbia, is reproduced herewith.

TABLE 15.—EXPECTANCIES OF WIDOWS AT AGE OF WIDOWHOOD TO DEATH OR REMARRIAGE (LIFE EXPECTANCY ONLY AFTER AGE 55), AND PRESENT VALUE, AT 5 PER CENT COMPOUND INTEREST, OF PENSION OF \$20 PER MONTH, PAYABLE UNTIL DEATH OR REMARRIAGE.^a

Age when widowed.	Expectancy to death or remarriage (years).	Present value of \$20 per month during expectancy.	Age when widowed.	Expectancy to death or remarriage (years).	Present value of \$20 per month during expectancy.
20.....	13.44	\$2,354.10	61.....	14.30	\$2,469.12
21.....	14.14	2,450.20	62.....	13.71	2,397.63
22.....	14.88	2,537.71	63.....	13.12	2,324.36
23.....	15.65	2,625.11	64.....	12.54	2,249.49
24.....	16.45	2,712.80	65.....	11.96	2,173.60
25.....	17.28	2,800.40	66.....	11.40	2,096.94
26.....	18.16	2,889.53	67.....	10.84	2,019.18
27.....	19.01	2,972.18	68.....	10.31	1,942.00
28.....	19.83	3,048.56	69.....	9.79	1,866.74
29.....	20.64	3,120.39	70.....	9.30	1,792.78
30.....	21.41	3,186.62	71.....	8.83	1,720.56
31.....	22.12	3,245.81	72.....	8.39	1,650.83
32.....	22.80	3,300.24	73.....	7.96	1,582.36
33.....	23.41	3,347.50	74.....	7.55	1,514.14
34.....	23.96	3,389.43	75.....	7.15	1,447.58
35.....	24.44	3,424.42	76.....	6.77	1,382.43
36.....	24.82	3,452.61	77.....	6.40	1,317.78
37.....	25.10	3,471.99	78.....	6.05	1,256.63
38.....	25.28	3,484.44	79.....	5.72	1,198.36
39.....	25.33	3,487.90	80.....	5.43	1,143.32
40.....	25.22	3,487.26	81.....	5.14	1,090.11
41.....	25.23	3,480.98	82.....	4.88	1,041.31
42.....	25.06	3,469.23	83.....	4.63	993.16
43.....	24.81	3,451.28	84.....	4.39	946.93
44.....	24.47	3,426.60	85.....	4.16	902.62
45.....	24.06	3,398.29	86.....	3.93	857.64
46.....	23.62	3,363.51	87.....	3.71	813.14
47.....	23.13	3,326.16	88.....	3.51	772.09
48.....	22.60	3,281.23	89.....	3.31	732.23
49.....	22.03	3,238.61	90.....	3.13	695.83
50.....	21.42	3,187.46	91.....	2.96	661.03
51.....	20.77	3,131.86	92.....	2.80	627.05
52.....	20.11	3,073.62	93.....	2.65	595.20
53.....	19.44	3,012.02	94.....	2.51	565.46
54.....	18.76	2,947.90	95.....	2.36	533.61
55.....	18.07	2,880.77	96.....	2.21	501.75
56.....	17.41	2,813.69	97.....	2.06	469.89
57.....	16.78	2,748.20	98.....	1.91	437.68
58.....	16.13	2,678.48	99.....	1.74	399.17
59.....	15.52	2,610.47	100.....	1.53	363.49
60.....	14.90	2,540.07			

^a Life expectancies after age 55 are as shown in table for widows prepared by registrar-general of births, deaths, and marriages in England and Wales, supplement to 75th annual report.

⁷⁸ For a further discussion of "compensation periods of widows and children" see Monthly Labor Review for November, 1919, pp. 335-338.

ADDITIONAL PAYMENTS IN CASE OF DEATH.

In addition to the foregoing compensation benefits most of the States provide also for burial expenses, the maximum allowances ranging from \$50 to \$200. Thirty States ⁷⁹ and the Federal Government ⁸⁰ provide for such expenses in case the deceased leaves dependents, while 15 do not.⁸¹ All the States except two ⁸² make similar provision in case of no dependents. In the latter event the entire liability of the employer is limited to such burial expenses in every State except eight.⁸³ In California \$350 additional must be paid into the industrial rehabilitation fund; in Idaho \$1,000 additional must be paid into the administration fund; in Kentucky \$100 additional must be paid to the personal representative of the employee; in Massachusetts, Minnesota, and New York \$100 additional is required toward the creation of a special fund, from which are to be paid benefits to employees who sustain second injuries; in New Jersey \$400 additional must be paid into the State treasury toward defraying the administrative expenses of the bureau; and in Utah \$750 additional must be paid into the State treasury if the employer is not insured in the fund, from which second injuries shall be compensated. The original Connecticut act provided for the payment of \$750 into the State treasury in case the deceased employee left no dependents, but this provision of the law was never enforced because of doubt of its constitutionality, and was subsequently repealed.

PERMANENT TOTAL DISABILITY.

Most States recognize the fact that a permanently disabled workman is a greater economic loss to his family than if he were killed outright at the time of the accident, and, consequently, provide greater benefits than in case of fatal accidents. Eighteen States ⁸⁴ and the Federal Government provide that for permanent total disability compensation payments shall continue for the full period of the injured workman's life. Three States ⁸⁵ pay benefits for 312 weeks or less; 7 States ⁸⁶ for 400 but under 500 weeks; 13 States ⁸⁷ for 500 to 550

⁷⁹ \$50—Wyoming; \$75—Kentucky, Maryland, Montana, and New Mexico; \$100—Alabama, Connecticut, Delaware, Hawaii, Idaho, Indiana, Iowa, Louisiana, Minnesota, Missouri, New Jersey, New York, North Dakota, Oregon, Pennsylvania, Tennessee, Vermont, Virginia, Washington, and Wisconsin; \$125—Nevada; \$150—Nebraska, Ohio, Utah, and West Virginia.

⁸⁰ \$100.

⁸¹ Alaska, Arizona, California, Colorado, Illinois, Kansas, Maine, Massachusetts, Michigan, New Hampshire, Oklahoma (does not compensate fatal accidents), Porto Rico, Rhode Island, South Dakota, and Texas.

⁸² Porto Rico and Oklahoma, whose law does not cover fatal accidents.

⁸³ California, Idaho, Kentucky, Massachusetts, Minnesota, New Jersey, New York, and Utah.

⁸⁴ Arizona, California, Colorado, Idaho, Illinois, Maryland, Missouri, Montana, Nebraska, Nevada, New York, North Dakota, Ohio, Oregon, South Dakota, Utah, Washington, and West Virginia.

⁸⁵ Vermont, 260 weeks; New Hampshire, 300 weeks; Hawaii, 312 weeks.

⁸⁶ Iowa, Louisiana, and New Jersey, 400 weeks; Texas, 401 weeks; Kansas and Kentucky, 416 weeks; Delaware, 475 weeks.

⁸⁷ Indiana, Maine, Massachusetts, Michigan, Oklahoma, Pennsylvania, Rhode Island, and Virginia, 500 weeks; Connecticut and New Mexico, 520 weeks; Alabama, Minnesota, and Tennessee, 550 weeks.

weeks; and one State⁸⁸ for 9 to 15 years. Alaska and Wyoming provide fixed absolute amounts, while Porto Rico proportions the amount of compensation to the wage and age of the injured workman. Nineteen States also place a limit upon the maximum amount payable in any one case. These maximum amounts range from \$3,000 in South Dakota to \$6,000 in Alaska and Michigan.

PARTIAL DISABILITY.

The working out of a satisfactory basis of compensation benefits for injuries causing partial disability has been most difficult. Compensation for temporary total disability alone is inadequate, especially in view of the fact that while the employee may be able to return to work of some sort within a few weeks he is handicapped for life by reason of some maiming or other injury which interferes with his ability as a workman. To provide for such contingencies two methods have generally been adopted. One method, found in practically all of the States is the payment of an award based on the percentage of wage loss occasioned by such disability, payments continuing during incapacity but subject to maximum limits. The second method is the adoption of a specific schedule of injuries for which benefits are awarded for fixed periods, the payments being based upon a percentage of wages earned at the time of the injury. Usually both methods of payment are provided for. The practice in most States is to pay a percentage of the wage for fixed periods for certain enumerated injuries and for all other injuries a percentage of the wage loss during disability. The number of injuries specified in the schedule varies in the different States, but provision is generally made for loss of arm, hand, leg, foot, eye, fingers, and toes, and parts thereof. All but five States⁸⁹ provide by law for such schedules of specific injuries, and in two of these excepted States⁹⁰ the administrative commission has worked out a schedule for partial disability.

The advantages of the schedule-of-specific-injuries method of compensating partial disabilities are its simplicity and definiteness. For example, compensation for loss of a hand is ordinarily fixed at 50 per cent of the employee's wages for 150 weeks. The question arises, however, should such an employee also receive compensation for temporary total disability during the healing period? Some of the laws are silent upon the subject, but most of the States, either by law or administrative rulings, have made provision therefor. In 26 States⁹¹ compensation amounts provided in the partial disability schedules

⁸⁸ Wisconsin.

⁸⁹ Arizona, California, New Hampshire, North Dakota, and Porto Rico.

⁹⁰ California and North Dakota.

⁹¹ Alabama, Alaska, California, Colorado, Delaware, Hawaii, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Montana, Nebraska, New Mexico, New York, North Dakota, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

are in lieu of all other benefits except medical service; in 13 States ⁹² compensation is paid for temporary total disability during the healing period in addition to the schedule amounts; in Massachusetts and Rhode Island compensation is paid for total disability during the healing period and for partial disability thereafter, in addition to the schedule amounts; while the Maine law provides for continuing partial disability payments in addition to those provided in the schedule, but for not over 300 weeks in all.

The question is earnestly discussed as to whether the "percentage" or "schedule" method is the fairer method of compensation. The advocates of the percentage basis contend that the wage loss may develop with passing years and that the subject of the amount of compensation should be open to revision in accordance with the changing conditions; while on the other side it is claimed that there is an apparent fixed proportionate loss for which an equitable award can be made, and which should be made in every case at the time of the injury. This has the advantage at least of securing compensation to the workman on the basis of an actually proved injury without leaving the matter open to remote contingencies and the possibility of the disability arising at a time when there would be no fund available from which it could be compensated, or when by removal or other change of conditions it would be impossible to take any steps in the way of proof and the securing of the contemplated compensation.

DISFIGUREMENT.

Frequently injuries cause disfigurement which may not affect the injured employee's earning capacity, but may decrease his opportunities to obtain employment. Should compensation be awarded for such injuries? Twenty-one States ^a make specific statutory provisions for such contingencies. Most of these States limit compensation to disfigurement of the head or face, while some specify that the injury must result in diminished ability to obtain employment. In addition to these States the courts in three others ⁹³ have ruled upon the matter. Michigan and Minnesota have granted compensation for the loss of an ear, and the Iowa court has held that it might allow compensation if the injury affected the opportunity to secure employment.

⁹² Connecticut, Idaho, Illinois, Missouri, Nevada, New Jersey, Ohio, Oregon, South Dakota, Utah, Vermont, Washington, and Wyoming.

^a Alaska, California, Colorado, Hawaii, Idaho, Illinois, Indiana, Kentucky, Louisiana, Missouri, Nebraska, Nevada, New Mexico, New York, North Dakota, Oklahoma, South Dakota, Texas, Utah, Vermont, and Wisconsin.

⁹³ Iowa, Michigan, and Minnesota.

SECOND INJURIES.

One consequence of workmen's compensation laws, possibly unforeseen at the time of their enactment, is the adverse effect of such laws upon the employment of physically defective workers. When a one-eyed workman loses the second eye in an industrial accident, he is totally disabled for life. If the employer is required, under the law, to pay compensation for permanent total disability in such cases, he will feel considerable apprehension about employing such men. On the other hand, if the employee is to receive compensation for the loss of one eye only, regardless of the resulting disability and loss of earning capacity, he will be inadequately compensated and the purpose of the compensation act will be partially defeated.

Industrial discrimination against crippled workers presents a serious and complex problem, which has been accentuated by the return of disabled soldiers. Many factors contribute to this discrimination, one of which is the fear that the employment of crippled workers will greatly increase the cost of accident compensation. A few of the States have enacted remedial legislation on the subject, but most of the States have thus far done nothing to meet this problem. The statutory provisions relative to second injuries, as interpreted by the courts and commissions in the 45 States having workmen's compensation laws at the present time, are as follows:

In 14 States⁹⁴ compensation is granted only for the disability caused by that particular injury, without reference to previous injuries. In these States the factor of increased compensation costs as a contributory cause of discrimination has of course been eliminated, but, on the other hand, the employee receives grossly inadequate compensation. In this connection the experience of the Montana Industrial Accident Board is illuminating. The Montana law makes no specific provision covering second injuries. The board, however, held that an employer should not be penalized for his generosity in hiring a crippled workman. One of the principal employers of the State, having a hundred or more crippled workers on his pay roll, requested a ruling as to the extent of his liability in case of a subsequent accident to any of these crippled men, stating that if he was to be liable for the total disability he would immediately discharge them. The board promptly ruled that the employer would be liable only for the subsequent injury without reference to the resulting disability. It is stated that as a result of this ruling over 400 cripples in the State retained their positions as watchmen, doorkeepers, etc., whereas if the board had held the employer liable for the entire disability these crippled men would all have been dis-

⁹⁴ Alabama (except loss of eye, arm, or leg), California, Colorado, Delaware, Indiana, Michigan, Montana, Nebraska, New Jersey, Oklahoma, Pennsylvania, Tennessee, Texas, and Virginia.

charged and would of necessity in the majority of instances have become a charge upon society. The board does not defend its interpretation of the law but pleads necessity and expediency and its desire to protect the cripple. Similar to Montana's experience has been that of California. The California act at one time provided for full compensation, or life pension, in case of a worker who loses the sight of his second eye. The commission took into consideration the social need and unfortunate condition of such a man and deemed it wise to give him a life pension. However, the act was amended at the request of the disabled men themselves, who stated that they found it difficult to obtain employment.

In 15 States ⁹⁵ compensation is granted for the entire disability caused by the combined injuries. In case of the loss of a second eye, therefore, compensation would be awarded for permanent total disability. This places a heavy burden upon the employer, who under the circumstances feels himself justified in refusing to employ crippled men. New York early met the problem by relieving the employer of the extra liability. An amendment to the New York law, enacted in 1916, provides that in case of a second major disability the employer shall be held liable only for the second injury, but the injured employee shall be compensated for the disability resulting from the combined injuries. The additional compensation is paid out of a special fund. This fund is created by requiring the employer to contribute \$100 for each fatal accident in which there are no persons entitled to compensation. The States of Massachusetts, Minnesota, North Dakota, Ohio, Oregon, Utah, and Wisconsin have recently followed the example set by New York, and enacted similar provisions. Wisconsin, however, raises the special fund by requiring employers to pay an additional \$150 in case an employee sustains a major permanent disability. These plans of taking care of the extra compensation liability through a special fund insure substantial justice to both employer and employee and remove one potent factor of discrimination.

In six States ⁹⁶ compensation for second injuries is determined by subtracting the disability caused by the prior injury from the whole disability caused by the subsequent injury. The Virginia law also has this provision, which is limited, however, to cases in which both injuries occur within the same employment; while in Alabama, in case of the loss of a second eye, leg, or arm, the amount of compensation shall be three-fourths of the difference between the award for permanent total disability and the award for the second injury. In other cases the employer is liable only for the disability caused by the second injury.

⁹⁵ Idaho, Illinois, Maine, Maryland, Massachusetts, Minnesota, New York, North Dakota, Ohio, Oregon, Rhode Island, Utah, Washington, West Virginia, and Wisconsin.

⁹⁶ Kansas, Kentucky, Missouri, Nevada, South Dakota, and Wyoming.

Ten States ⁹⁷ make no specific provision regarding second injuries. It is probable that in some of these States the administrative commissions or courts have ruled upon the question in cases coming before them for adjudication, but no report of any of these rulings has come to the attention of the United States Bureau of Labor Statistics.

Three States ⁹⁸ grant a greater award for the loss of a second member than for the loss of a first. The objection to this plan is that it does not solve the problem of discrimination. On the contrary, increased compensation benefits for second injuries increase the probability of discrimination against crippled men.

Connecticut attempted to meet this problem of discrimination by permitting physically defective employees to enter into an employment contract whereby they might waive their right to compensation for injuries due directly to their physical defect. Kansas and Ohio also recognize this waiver principle, but only in case of blind employees. Undoubtedly under this scheme many defective workmen are given employment which would be denied them if the employer were to assume the liability resulting from a second injury. Such a plan, however, leaves the handicapped workman unprotected in case of a subsequent accident. As far as he is concerned, the compensation law is to a great extent a dead letter, and in case of injury he will be thrown upon public charity or the generosity of his employer. Some scheme should be adopted which would relieve the employer of the extrahazardous risk involved and at the same time compensate the crippled workman in proportion to his loss of earning capacity. The special-fund plan already in operation in the eight States specified answers this dual purpose.

Another method aiming at the prevention of industrial discrimination against cripples is to prohibit insurance companies from charging employers higher premiums in case they employ disabled men. Minnesota recently enacted a law embodying such a provision. The weakness of this scheme is that it does not cover self-insured employers, who, because of the direct relationship between accidents and compensation costs, would be more inclined to practice discrimination than insured employers.

It might be added that the total number of second injuries in proportion to the total number of all injuries would be infinitesimally small. A computation recently made by the United States Bureau of Labor Statistics shows that of all the employees under the compensation act in the State of Wisconsin who had lost a hand, an arm, a foot, a leg, or an eye, only one would sustain a second major permanent disability in any given year. Application of the Wisconsin

⁹⁷ Alaska, Arizona, Connecticut, Hawaii, Iowa, Louisiana, New Hampshire, New Mexico, Porto Rico, and Vermont.

⁹⁸ Colorado, Iowa, and Wisconsin.

rate to the 45 State compensation laws would give a grand total of 38 second major permanent disabilities for all industries covered by the compensation acts of these States. The increased cost of second injuries would therefore be negligible. Assuming that all second major permanent disabilities would result in permanent total disability, the increased compensation cost of such accidents would probably in the aggregate not exceed three-tenths of 1 per cent of the total compensation costs for all accidents under the compensation act.

It must be acknowledged, however, that an individual employer is not particularly concerned with the fact that "in the aggregate" the increased cost of second disabilities is insignificant. When a crippled workman in his employ sustains a second major disability the increased cost to him is much greater than the cost of a similar disability to a normal worker would be, and this notwithstanding the fact that the increased aggregate cost is negligible. But even acknowledging that for an individual employer the occurrence of a second injury would materially increase his compensation costs, the fact that there is little possibility of such an accident occurring at all, as already pointed out, would seem to prove that the widespread discrimination against the employment of crippled men is hardly justified.

REHABILITATION.

Until recently the welfare of workers permanently injured in industry has been criminally neglected. Disabled workers have been paid their compensation benefits, and then allowed to shift for themselves exactly as they would have done prior to the enactment of compensation laws. Fortunately the war focused attention upon the problem. In the attempt to restore the war cripple the plight of the industrial cripple was also brought into relief. Massachusetts, in 1918, was the first State to provide for a rehabilitation department; since then, California, Illinois, Minnesota, Nevada, New Jersey, North Dakota, Oregon, Pennsylvania, and Rhode Island have followed suit. It is to be hoped that every disabled workman will not only be paid the statutory compensation benefits but also be functionally restored as far as possible, retrained, and replaced in desirable employment.

COMPARISON OF PARTIAL DISABILITY SCHEDULES.

As already noted, the partial disability schedules adopted in the various States include generally the same items, and it is possible to tabulate many of them so as to afford a comparison of the awards allowed by different States for specified injuries. In 38 States the schedules for permanent partial disabilities, either by law or administrative decree, are stated in terms of weeks or months. In order to make the latter cases comparable with the majority, the number of months indicated has been multiplied by $4\frac{1}{3}$ to reduce them to weeks, the nearest whole number of weeks being used.

Table 16 shows the number of weeks for which compensation is payable for specified injuries in the several States. In this table has been included the schedule of severity rating formulated by the committee on statistics of the International Association of Industrial Accident Boards and Commissions.⁶⁹ The purpose of this schedule, however, was to obtain a more accurate measure of industrial hazards, the schedule not being intended as a basis for compensation awards.

TABLE 16.—NUMBER OF WEEKS FOR WHICH COMPENSATION IS PAYABLE FOR SPECIFIED INJURIES IN THE SEVERAL STATES.

State.	Perma- nent total dis- ability.	Loss of—													
		Major—							Leg (at hip).	Foot.	Great toe.	Oth- er toe.	Sight of one eye.	Hear- ing, one ear.	Hear- ing, both ears.
		Arm (at should- er).	Hand.	Thumb.	Index finger.	Mid- dle finger.	Ring finger.	Little finger.							
Commit- tee. ¹	1,000	750	500	100	50	50	50	50	750	500	50	0	300	100	500
Ala. ²	550	200	150	60	35	30	20	15	175	125	30	10	100		150
Colo. ²	Life.	208	104	35	18	13	7	9	208	104	18	4	104	35	139
Conn. ³	520	268	156	38	38	30	25	20	182	130	28	13	194	52	156
Del. ²	475	194	158						194	135			113		
Hawaii ²	312	312	244	60	46	30	25	15	288	205	38	16	128	60	312
Idaho ³	Life	200	150	30	20	15	12	9	180	125	15	6	100		
Ill. ²	Life	200	150	60	35	30	20	15	175	125	30	10	100		
Ind. ²	500	250	200	60	40	35	30	30	200	150	60	20	150		100
Iowa ²	400	225	150	40	20	25	20	15	200	125	25	15	100	50	150
Kans. ²	416	210	150	60	37	30	20	15	200	125	30	10	110	25	100
Ky. ²	416	200	150	60	45	30	20	15	200	125	30	10	100		
La. ²	400	200	150	50	30	20	20	10	175	125	20	10	100		
Maine ⁴	500	150	125	50	30	25	18	15	150	125	25	10	100		
Md. ²	Life	200	150	50	30	25	20	15	175	150	25	10	100		
Mass. ⁵	500	50	50	12	12	12	12	12	50	50	12	12	50		
Mich. ²	500	200	150	60	35	30	20	15	175	125	30	10	100		
Minn. ²	550	200	150	60	35	30	20	15	175	125	30	10	100		150
Mo. ²	Life	220	165	55	40	32	32	20	195	140	35	12	100	40	140
Mont. ²	Life	200	150	30	20	15	12	9	180	125	15	6	100		
Nebr. ²	Life	225	175	60	35	30	20	15	215	150	30	10	125	50	100
Nev. ³	Life	260	217	65	39	30	22	17	217	172	30	11	103	87	260
N. J. ³	400	200	150	60	35	30	20	15	175	125	30	10	100	40	160
N. Mex. ²	520	150	110	30	20	15	10	9	140	100	15	6	100	35	135
N. Y. ²	Life	312	244	60	46	30	25	15	288	205	38	16	128		
N. Dak. ²	Life	312	200	60	42	36	24	18	286	208	38	16	130		
Ohio ³	Life	200	150	60	35	30	20	15	175	125	30	10	100		
Okl. ²	500	250	200	60	35	30	20	15	175	150	20	10	100		
Oreg. ³	Life	416	329	104	60	39	35	26	381	277	43	17	173	156	416
Pa. ²	500	215	175						215	150			100		
R. I. ⁴	500	50	50	12	12	12	12	12	50	50	12	12	50		
S. Dak. ³	Life	200	150	50	35	30	20	15	160	125	30	10	100		
Tenn. ²	550	200	150	60	35	30	20	15	175	125	30	10	100		150
Tex. ²	401	200	150	60	45	30	21	15	200	125	30	10	100		150
Utah ³	Life	200	150	30	20	15	12	9	180	125	15	6	100		
Vt. ³	269	170	140	40	25	20	15	10	170	120	20	8	100	43	170
Va. ²	500	200	150	60	35	30	20	15	175	125	30	10	100		
W. Va. ²	Life	240	200	80	40	28	20	20	200	140	40	16	132		
Wis. ²	780	320	240	70	32	20	12	14	309	180	25	8	140	40	160

¹ Committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions.

² Payments under this schedule are exclusive of or in lieu of all other payments.

³ Payments under this schedule are in addition to payments for temporary total disability during the healing period.

⁴ Payments cover total disability. Partial disability may be compensated at end of periods given for not over 300 weeks in all.

⁵ Maximum, \$5,000.

⁶ Payments under this schedule are in addition to all other payments.

⁷ Maximum, \$3,000.

⁸ 0 to 15 years, depending upon the age of the employee at the time of injury.

⁹⁹ For a complete report of this committee see pp. 123 to 143 of the October, 1917, Monthly Review.

In comparing the laws of the several States as to the number of weeks for which compensation is payable for the specified injuries noted in the above table, care should be taken to see that the laws are actually comparable. In most of the States, as already noted, the benefits provided are in lieu of all other payments and are therefore comparable. In Massachusetts and Rhode Island, however, these benefits are in addition to all other payments, including compensation for total disability during the healing period and for partial disability if the injury has resulted in loss of earning power. A number of the other States also pay additional compensation during the healing period.

The laws of eight States¹ provide that compensation for permanent partial disabilities shall be based upon the nature of the injury, the occupation of the injured employee, and his age at the time of the injury. The North Dakota law provides for a compensation schedule based upon the percentage of disability, but authorizes the compensation commissioner to determine what the percentage of disability should be in case of individual injuries. The compensation bureau has formulated a partial disability schedule, stated in terms of weeks, which is shown in Table 16. The West Virginia commissioner, under a similar act, formulated a schedule of permanent partial disabilities which was incorporated in the law in modified form in 1919. The Washington law provides for maximum amounts in case of a few major injuries, leaving to the industrial insurance department the working out of a detailed schedule of payments based upon the statutory amounts. California, however, is the only State which has formulated an elaborate partial disability schedule based upon the nature of the injury and the occupation and age of the injured employee.

As already noted, most of our State laws compensate for certain specified partial disability injuries by providing benefits payable for fixed periods. European laws differ from American laws in this respect by basing compensation for such injuries upon the percentage of total disability caused by the injuries. Table 17 shows the percentage of disability for specified injuries, based on schedule of compensation for permanent total disability under the laws of the various American States. Inasmuch as certain American laws provide for payment during life, it would be impossible, without the introduction of the actuarial basis of expectancy, to compute percentages for the temporary awards made, and these are therefore omitted from this comparison. The schedule of the committee on statistics of the International Association of Industrial Accident Boards and Commissions is also included.

¹ California, Idaho, Kentucky, Nevada, North Dakota, Texas, Washington, and West Virginia.

TABLE 17.—COMPUTED PERCENTAGES OF DISABILITY FOR SPECIFIED INJURIES, BASED ON SCHEDULE OF COMPENSATION FOR PERMANENT TOTAL DISABILITY UNDER THE LAWS OF VARIOUS STATES.

State.	Loss of—													
	Arm (at should- er).	Hand.	Thumb.	Index fin- ger.	Mid- dle fin- ger.	Ring fin- ger.	Little fin- ger.	Leg (at hip).	Foot.	Great toe.	Other toe.	Sight of one eye.	Hear- ing, one ear.	Hear- ing, both ears.
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Commit- tee	75	50	10	5	5	5	5	75	40	5	.....	30	10	50
Ala.....	36	27	11	6	5	4	3	32	23	5	2	18	.....	27
Conn.....	40	30	7	7	6	5	4	35	25	7	3	20	10	30
Del.....	41	33	.....	.....	.....	.....	.....	41	28	.....	.....	24	.....	.....
Hawaii.....	100	78	19	15	10	8	5	92	66	12	5	41	19	100
Ind.....	50	40	12	8	7	6	5	40	30	12	4	30	.....	20
Iowa.....	56	38	10	8	6	5	4	50	31	6	4	25	.....	.....
Kans.....	50	36	14	9	7	5	4	48	30	7	2	26	6	24
Ky.....	48	36	14	11	7	5	4	48	30	7	2	24	.....	.....
La.....	50	38	13	8	5	5	5	44	31	5	3	25	.....	.....
Maine.....	30	25	10	6	5	4	3	30	25	5	2	20	.....	.....
Mich.....	40	30	12	7	6	4	3	35	25	6	2	20	.....	.....
Minn.....	36	27	11	6	5	4	3	32	23	5	2	18	.....	28
N. J.....	50	38	15	9	8	5	4	44	31	8	3	25	10	40
N. Mex.....	29	21	6	4	3	2	2	27	19	3	1	19	7	26
Okla.....	50	40	12	7	6	4	3	35	30	6	2	20	.....	.....
Pa.....	43	35	.....	.....	.....	.....	.....	43	30	.....	.....	25	.....	.....
Tenn.....	36	27	11	6	5	4	3	32	23	5	2	18	.....	27
Tex.....	50	37	15	11	7	5	4	50	31	7	2	25	.....	37
Vt.....	65	54	15	10	8	6	4	65	46	8	3	38	16	65
Va.....	40	30	12	7	6	4	3	35	25	6	2	20	.....	.....

¹ Schedule of severity ratings formulated by the committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions.

ADEQUACY OF PARTIAL DISABILITY SCHEDULES.

The value of the foregoing table for comparative purposes is impaired to some extent because the percentages are not comparable one with another, due to the lack of a common denominator. The schedules for permanent total disability which were used as the bases vary considerably and consequently the percentages, while showing the relationship between permanent partial and permanent total disabilities in a given State, are incomparable as between different States. This relationship is shown in Table 18, in which the scale of time losses as determined by the committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions is used as the base.

In formulating this schedule of severity ratings of injuries, permanent total disability, rated at 1,000 weeks, was used as the base and the partial disabilities computed therefrom. The purpose of the schedule, as already noted, was to obtain a more accurate measure of industrial hazards, the schedule not being intended as a basis of compensation awards. In fact, the committee disclaims any such intention. Assuming, however, that the schedule is a reasonable measure of adequacy for compensation payments, it is interesting to note the percentages of adequacy of payments for the more important injuries provided for by the several State compensation

laws. These percentages refer only to periods of time during which compensation is to be paid and do not take into account the per cent or rate of compensation. In computing the percentages given in the following table the committee's schedule is taken as 100 per cent.

TABLE 18.—PERCENTAGE OF ADEQUACY OF DURATION OF PAYMENTS FOR SPECIFIED INJURIES PROVIDED FOR IN THE SEVERAL STATES, USING THE I. A. I. A. B. C. COMMITTEE SCHEDULE AS 100 PER CENT.

State.	Total disa- bility.	Loss of—							
		Major—				Leg (at hip).	Foot.	Great toe.	Sight of one eye.
		Arm (at shoul- der).	Hand.	Thumb.	Index finger.				
Committee	100	100	100	100	100	100	100	100	100
Alabama.....	55	27	30	60	70	23	31	60	33
Colorado.....	100	28	21	35	36	28	26	36	35
Connecticut.....	52	28	31	38	76	24	33	76	35
Delaware.....	48	26	32		26	26	36		38
Hawaii.....	31	42	49	60	92	38	51	76	43
Idaho.....	100	27	30	30	40	24	31	30	33
Illinois.....	100	27	30	60	70	23	31	60	33
Indiana.....	50	33	40	60	80	27	38	120	50
Iowa.....	40	30	30	40	60	27	31	50	33
Kansas.....	42	28	30	60	74	27	31	60	37
Kentucky.....	42	27	30	60	90	27	31	60	33
Louisiana.....	40	27	30	50	60	23	31	40	33
Maine.....	50	20	25	50	60	20	31	50	33
Maryland.....		27	30	50	60	23	38	50	33
Michigan.....	50	27	30	60	70	23	31	60	33
Minnesota.....	55	27	30	60	70	23	31	60	33
Missouri.....	100	20	33	55	80	26	35	70	33
Montana.....	100	27	30	30	20	24	31	30	33
Nebraska.....	100	30	35	60	70	29	38	60	42
Nevada.....	100	35	43	65	78	29	43	60	36
New Jersey.....	40	27	30	60	70	23	31	50	33
New Mexico.....	52	20	22	30	40	19	25	30	33
New York.....	100	42	49	60	92	38	51	76	43
North Dakota.....	100	42	52	60	82	38	52	76	43
Ohio.....	100	27	30	60	70	23	31	60	33
Oklahoma.....	50	33	40	60	70	23	38	60	33
Oregon.....	100	55	66	104	133	51	69	86	58
Pennsylvania.....	50	29	35		29	38			33
South Dakota.....		27	30	50	70	21	31	60	33
Tennessee.....	55	27	30	60	70	23	31	60	33
Texas.....	40	27	30	60	90	27	31	60	33
Utah.....	100	27	30	30	20	24	31	30	33
Vermont.....	26	23	28	40	50	23	30	40	33
Virginia.....	50	27	30	60	70	23	31	60	33
West Virginia.....	100	32	40	80	80	27	35	80	44
Wisconsin.....		43	48	70	64	40	45	50	47
Average.....	67	30	34	55	69	27	35	59	26

In considering the above table it must again be borne in mind that several States pay compensation for total disability during the healing period in addition to the schedule of payments for partial disability. Two important facts stand out, however. One is the relatively greater awards for the minor injuries, and the other is the

small proportionate awards for all injuries. The average statutory compensation provided for the loss of an arm, a hand, or a foot is approximately one-third of the loss of earning capacity caused by such injuries. It will be noted also that the adequacy of compensation decreases directly with the severity of the injury. Moreover, this schedule, as already noted, refers only to time. When the statutory wage percentages are applied the percentages of adequacy are still further reduced. This can better be shown by way of a concrete illustration. For example, what compensation benefits would a man earning \$20 a week receive for various types of injuries under the committee's schedule and under the laws of New York and New Mexico? These two States are taken because they represent, respectively, the most liberal and least liberal of the compensation States.

TABLE 19.—COMPARISON OF BENEFITS UNDER I. A. I. A. B. C. COMMITTEE SCHEDULE AND UNDER COMPENSATION LAWS OF NEW YORK AND NEW MEXICO.

Type of injury.	Money benefits received.			Per cent New York benefits are of committee benefits.	Per cent New Mexico benefits are of committee benefits.
	Com- mittee.	New York.	New Mexico.		
Permanent total disability	\$20,000	\$13,333	85,200	67	26
Four weeks' disability	80	27	20	33	25
Thirteen weeks' disability	260	173	130	67	42
Loss of—					
Arm at shoulder	15,000	4,160	1,500	28	10
Hand	10,000	3,253	1,100	33	11
Thumb	2,000	600	300	40	15
Index finger	1,000	613	200	61	20
Leg at hip	15,000	2,840	1,400	26	9
Foot	8,000	2,733	1,000	34	13
Great toe	1,000	507	150	51	15
One eye	6,000	1,707	1,000	28	17

RELATIVE SEVERITY OF UPPER AND LOWER LIMB INJURIES.

It may be well to emphasize here that while from the medical and economic standpoint the loss of a foot or leg, under present industrial conditions, is more serious than the loss of a hand or arm, the compensation schedules of every State are based upon the theory that industrial workers who lose an upper limb suffer a greater economic loss than those who lose a foot or a leg. Even the committee on statistics of the International Association of Industrial Accident Boards and Commissions seems to have adopted this view in formulating its severity rating schedule. The common, and practically the only, argument in substantiation of this belief is that "it stands to reason." Yet an analysis of Table 20, giving the results of four independent investigations, shows the contrary to be true.

There are two main reasons for this. In the first place the economic severity of foot and leg injuries is accentuated by the fact

that a preponderant number occur in industries in which the loss of the member is a practical bar to employment. A one-legged man is effectively excluded from most of the operations in the transportation, construction, lumbering, and mining industries; and it is in employments of this character that three-fourths of the foot and leg injuries occur. In California 91 per cent of the permanent foot and leg injuries occurred in nonmanufacturing industries and 60 per cent occurred in transportation and construction. An analysis of the permanent disability accidents in Massachusetts during the first four years' operation of the compensation act shows that 75 per cent of the hand and arm injuries occurred in manufacturing industries and 25 per cent in nonmanufacturing industries, while the percentages as regards foot and leg injuries were exactly reversed, being 25 per cent in manufacturing and 75 in nonmanufacturing industries. Nearly all of the latter injuries occurred in the building trades, transportation, and construction.

Ordinarily, when one thinks of the relative industrial usefulness of an upper and a lower limb one has in mind factory operations. And, of course, in operating a machine a one-legged man is less handicapped than a one-armed man; but machine operators do not lose their legs; they lose their hands and arms. Moreover, in manufacturing industries, in which the majority of upper-limb injuries occur, the injured workman can often go back to the same employer or the same occupation. On the other hand, the industries dangerous to lower limbs are the industries in which the use of lower limbs is practically indispensable. A larger proportion of those who sustain foot and leg injuries, therefore, must seek a new employer, and this fact affects adversely their reemployability (see Table 20).

In the second place, the greatest industrial handicap heretofore suffered by a crippled worker has been not his inability to perform work, but his inability to get a job. Potential ability to perform work is of little use to a workman who by reason of his injury is prevented from seeking employment or is not employed even if he does find a prospective job.

Table 20 shows the relative severity of upper and lower limb injuries as shown by four independent investigations:

TABLE 20.—RELATIVE SEVERITY OF UPPER AND LOWER LIMB INJURIES, AS SHOWN BY VARIOUS INVESTIGATIONS.

Place of investigation,	Average period of total disability, in months.		Per cent of cases in which disability continued for 18 months or more.		Per cent unemployed.		Per cent reemployed by same employer or in same occupation.	
	Hand or arm.	Foot or leg.	Hand or arm.	Foot or leg.	Hand or arm.	Foot or leg.	Hand or arm.	Foot or leg.
Massachusetts.....	13.4	24.8	26	59	.....	.....	52	30
California.....	12.7	13.4	28	42	30	24	1 40	1 32
New York City.....	.....	.....	.....	.....	41	62	.....	.....
Denmark.....	.....	.....	19	55	8	17	2 27	2 16

¹ Per cent reemployed by same employer.² Per cent of persons reemployed in same occupations.

It will be noted that in practically every case the loss of a foot or a leg is more serious than the loss of a hand or an arm as regards length of total disability, per cent of persons reemployed by same employer or in same occupation, and per cent of persons remaining unemployed after the injury. In this connection see also discussion by Dr. Schnitzler given on pages 89 to 90.

FOREIGN SCHEDULES.

A strict comparison between American and European scales is not possible. Under the European systems payment is usually continuous during life, and the compensation payments begin only after expiration of a period during which, in many instances, benefits are derived from other funds.

The Bureau of Labor Statistics undertook some time ago to secure the official scales of disability (*Invaliditäts-Skala*) of the German associations (*Berufsgenossenschaften*), but obtained such a scale in only one of the threescore instances in which they were supposed to exist, this being the scale of the association managing the insurance in the Bavarian woodworking industries. A number of such associations stated that the matter was in the hands of the administrative bodies, and such tables were not used. There are available, however, several reports presenting the results of a number of studies of foreign compensation schedules, while the Twenty-fourth Annual Report of the Commissioner of Labor, Workmen's Insurance and Compensation Systems in Europe, contains some material along these lines, notably the official schedule used in administering the Russian workmen's insurance law, presented at pages 2107-2111 of the report. Such data as are at hand at this time are collected in Table 21, the list of injuries being one that was drawn up by the authors (Imbert, Oddo, and Chavernac) of a French work "Accidents du Travail:

Guide pour l'Évaluation des Incapacités." The data on which this classification and rating are based are cited as from official sources, the German, French, and Austrian material being official adjudications or ratings, while the Italian law itself furnishes the rates for that country. From these four sources, and some others which the authors consider as of commanding value, the scale presented in the column headed "Imbert, etc.," is derived; the four succeeding columns present the basic data contained in the work above mentioned. The West Virginia scale, given in the next column, is contained in the compensation act as amended in 1919.

Dr. Maximilian Miller published a work in 1908 on the subject of degrees of disability under the insurance legislation of Germany, "Die Erwerbsunfähigkeit und ihre Ursachen." This author presents a table based on the collective experience of a number of German insurance associations giving different rates for skilled and unskilled workmen. These rates are presented in the two columns headed "Miller" on page 84. The next column presents the data furnished by the Bavarian woodworkers' association mentioned above, while the column immediately following contains the Russian standard adopted in 1904, which was drawn up by the medical council of the Minister of the Interior for the guidance of the physicians concerned with the administration of the workmen's insurance law of that country.

This scale and the one presented in the column headed "Könen-Köln" present forms of disability not contained in the other scales, to which attention will be given in another place, the items here presented being such as correspond to the list of Imbert. The basis of the scale presented by Könen-Köln is the decisions of the German adjudicating officers. The next column, headed "Bähr," is the result of the consideration of the experience of important German, Swiss, and Austrian insurance associations by F. Bähr. The two last-named scales are presented in a volume, "Handbuch der Unfallerkankungen," by Dr. C. Thiem, 1909. Dr. Thiem undertakes to draw up from the above and other data a table of his own, systematizing the degrees of disability in accordance with the various facts at hand. The result of his labors is given in the last column of Table 21.

TABLE 21.—DEGREES OF DISABILITY FOR SPECIFIED INJURIES, ACCORDING TO VARIOUS STANDARDS AND AUTHORITIES, EXPRESSED IN PERCENTAGES OF TOTAL DISABILITY.

Nature of injury.	Imbert, etc.	German adjudica- tions.	French adjudica- tions.	Austrian Imperial Office ratings.	Italian law.	West Virginia law.
Loss of right or major:	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Arm.....	75	60-75	60-85	66-83	80	60
Forearm.....	70	66-75	70-80		70-80	55
Disarticulation at shoulder.....	85					
Hand.....	65	50-75	55-80	50-83	70	50
Thumb.....	30	30	14-60	25-33	30	20
Including metacarpal bone.....	35					
One phalanx only.....	15	10-20	6-30	16	15	12
Index finger.....	15	10-15	8-15		20	10
Two phalanges.....	10	10	7-20			
One phalanx only.....	6	0-10	2-12	10		6
Middle finger.....	10	20	6-16		8	7
Two phalanges.....	8	0-10	5-10			
One phalanx only.....	5	0-10	3-10	1-10	5	3
Ring finger.....	10	15	8-11		8	5
Two phalanges.....	8	0-10	5-10			
One phalanx only.....	5	0-10	0-8		5	3
Little finger.....	8	10	6-8		12	5
Two phalanges.....	6	0-10	3-8			
One phalanx only.....	3	0	0-6	8-10	5	3
Thumb and index finger.....	45	40				32
Index and middle finger.....	25	25-50	34-70			20
Middle and ring fingers.....	20	33-40	33-40			15
Ring and little fingers.....	20	20-33	10-20			15
Thumb, index, and middle fingers.....	55	50-60	30-50			40
Index, middle, and ring fingers.....	35	45-60	40-50			30
Middle, ring, and little fingers.....	30	33	50-60			20
Thumb and three fingers.....	65	50-60	60-65			
Four fingers.....	50		60			32
Loss of left or minor :						
Arm.....	65	60	60-80	66-83	75	60
Forearm.....	60	60-75	60	66-75	65-75	55
Disarticulation at shoulder.....	75					
Hand.....	55	50-60	50-55	50-83	65	50
Thumb.....	25	25	10-20	25-30	25	20
Including metacarpal bone.....	30					
One phalanx only.....	10	10	5-13		12	12
Index finger.....	10	10	11-13		15	10
Two phalanges.....	8	10	6-20			
One phalanx only.....	5	0-10	0-10			6
Middle finger.....	8	15	5-16		8	7
Two phalanges.....	6	0-10	8-13			
One phalanx only.....	2	0-10	3-10	1-10		3
Ring finger.....	8	0-10	8-10			5
Two phalanges.....	6	0-10	5-8			
One phalanx only.....	2	0-10	2-6			3
Little finger.....	6	0-10	3-10			5
Two phalanges.....	4	0-10	2-10			
One phalanx only.....	1	0	1-6	8-10		3
Thumb and index finger.....	35					32
Index and middle fingers.....	20		20-35			20
Middle and ring fingers.....	15					15
Ring and little fingers.....	12		13			10
Thumb, index, and middle fingers.....	45	33	30-40			40
Index, middle, and ring fingers.....	25	45				30
Middle, ring, and little fingers.....	20		20-35			20
Thumb and three fingers.....	50					
Four fingers.....	40					32
Loss of thigh:						
Disarticulation.....	85-90	85		50-83	70	60
Amputation.....	70-80	66	65-90	66	60	50
Loss of leg.....	60-65	50-70	43-65	45-65	50	45
Loss of foot.....	45-55	50-60	60-65		50	35
Fore part of foot only.....	20-30	35-50			7	30
Loss of great toe.....	12-16	10-15	5-8	10	7	10
Including metatarsal bone.....	15-20				15	
One phalanx only.....	4-5		2-8			5
Loss of other toe.....	3-5	5	7-20		5	4
Loss of all toes.....	20-25	20-25		30		25
Loss of sight, one eye.....	20-50	25	33		35	33
Loss of hearing, one ear:						
Partial.....	8-10	10-40				
Complete.....	10-15	15-30	4-22		10	
Loss of hearing, both ears:						
Partial.....	10-15	20-30				
Complete.....	50	15-50		45	40	

TABLE 21.—DEGREES OF DISABILITY FOR SPECIFIED INJURIES, ACCORDING TO VARIOUS STANDARDS AND AUTHORITIES, EXPRESSED IN PERCENTAGES OF TOTAL DISABILITY—Concluded.

Nature of injury.	Miller.		Bavarian woodworkers' association.	Russian standard, 1904.	Können-Köln.	Bähr.	Thiem.
	Skilled workmen.	Unskilled workmen.					
Loss of right or major:	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>
Arm.....	80	60	70-80	75	75	50-66½	66½-80
Forearm.....	70	60		75		50-66½	
Disarticulation at shoulder				75			
Hand.....	70	60	70-80	75	66½	50-66½	60-66½
Thumb.....	30	20	22-26	30	25-30	18-27	25-30
Including metacarpal bone	40	30		30			30-33½
One phalanx only.....			11-13	15			
Index finger.....	15	15	16-18	25	15-20	12-17½	15-18
Two phalanges.....				15			
One phalanx only.....			5½-6				
Middle finger.....	10	10	13-14	10	15	5-10	12
Two phalanges.....				5			
One phalanx only.....			4-5				
Ring finger.....	10	10	8-10	10	10	5-10	10
Two phalanges.....				5			
One phalanx only.....			3				
Little finger.....	10	10	11-12		10	10-17½	10-12
Two phalanges.....							
One phalanx only.....			3½-4				
Thumb and index finger.....				50			
Index and middle fingers.....				35			
Middle and ring fingers.....				20			
Ring and little fingers.....				20			
Thumb, index, and middle fingers.....				60			
Index, middle, and ring fingers.....				50			
Middle, ring, and little fingers.....				35			
Thumb and three fingers.....				70			
Four fingers.....				70	50		
Loss of left or minor:							
Arm.....	70	50	60-70	60	66½	40-50	60-70
Forearm.....	60	50		65		40-50	
Disarticulation at shoulder				60			
Hand.....	60	50	60-70	65	50-60	40-50	50-60
Thumb.....	20	20	19-22	25	20-25	12-17½	20-25
Including metacarpal bone.....	30	20		25			25-30
One phalanx only.....			9½-11	10			
Index finger only.....	15	15	14-16	15	15	8-12	12-15
Two phalanges.....				10			
One phalanx only.....			4½-5½				
Middle finger.....	10	10	11-13	5	10	5-10	10
Two phalanges.....							
One phalanx only.....			3½-4				
Ring finger.....	10	10	7-8	5	10	5-10	10
Two phalanges.....							
One phalanx only.....			2½-3				
Little finger.....	10	10	9-11		10	7½-10	10-12
Two phalanges.....							
One phalanx only.....			3-3½				
Thumb and index finger.....				40			
Index and middle fingers.....				25			
Middle and ring fingers.....				20			
Ring and little fingers.....				10			
Thumb, index, and middle fingers.....				50			
Index, middle, and ring fingers.....				40			
Middle, ring, and little fingers.....				20			
Thumb and three fingers.....				60			
Four fingers.....				55	40		
Loss of thigh:							
Disarticulation.....					85		
Amputation.....	80	70	50-70	75	75	40-50	75
Loss of leg.....	60	60		65	60	40-50	50-66½
Loss of foot.....	50	50	50-60	60	40	30-50	50
Fore part of foot only.....	30-40	30-40		50			
Loss of great toe.....	10	10	15-20	10	10	5-10	0-10
Including metatarsal bone.....							
One phalanx only.....							
Loss of other toe.....			5-6		5	3-5	
Loss of all toes.....			50-60	25			20-33½
Loss of sight, one eye.....	33	25	35-50	35		25-40	20-30
Loss of hearing, one ear:							
Partial.....	10	10					0-10
Complete.....	20	20		10		25	20
Loss of hearing, both ears:							
Partial.....	20	20					10-40
Complete.....	50	50		50		65	50-60

As mentioned in the introduction to the foregoing tables, certain forms of disability are provided for in some of these scales which are not mentioned in the American laws except by the provision in some cases that the loss of the use of a member is equivalent to the loss of that member. Because of their interest in the general field, even though not strictly comparable with any American material, some of these rates are given in Table 22:

TABLE 22.—DEGREES OF DISABILITY FOR SPECIFIED INJURIES OTHER THAN MAIMINGS, ACCORDING TO CERTAIN FOREIGN STANDARDS, EXPRESSED IN PERCENTAGES OF TOTAL DISABILITY.

Name of injury.	Russian standard, 1904.		Könen-Köln.	
	Right.	Left.	Right.	Left.
Stiff wrist joint.....	30	25	40	30
Stiff elbow joint at full extension or full flexion.....	50	40	60	50
Stiff elbow joint at right-angle flexion.....	35	25	40	30
Loose elbow joint.....	60	50	60-70	50-60
Stiffness of elbow and wrist joints.....	60	50	70	60
Stiffness of shoulder joint.....	60	50	60	40
Inability to raise arm above horizontal position.....	40	30	30	20
Habitual dislocation of shoulder.....	20	10	35	15
Stiffness of knee joint at extension.....	40		50	
Stiffness of knee joint strongly flexed or overextended.....	50		60-70	
Loose knee joint.....			50	
Fracture of patella, with injury to extension attachments.....	50		50	

EYE INJURY SCHEDULES.

Injuries to the eye have received comparatively little attention in American laws. The chief difficulty confronting compensation commissions in this connection is the translation of impairment of vision into percentage of disability. The International Association of Industrial Accident Boards and Commissions has recently given the matter some consideration and intends to make it a special subject for discussion at its next annual meeting.

The following compensation table for visual losses of one eye was officially adopted by the Chicago Ophthalmological Society at its meeting on November 10, 1919. This table represents, in the opinion of the society, a fair basis of settlement for visual losses in one eye resulting from industrial accidents. Most of the compensation commissions, however, have refused to adopt this table because they consider it inadequate.

TABLE 23.—CHICAGO OPHTHALMOLOGICAL SOCIETY'S COMPENSATION TABLE FOR VISUAL LOSSES OF ONE EYE.

Visual capacity.	Per cent of visual efficiency.	Per cent of loss of vision.	Visual capacity.	Per cent of visual efficiency.	Per cent of loss of vision.
20/20.....	100.0	0.0	20/120.....	41.0	59.0
20/30.....	94.5	5.5	20/130.....	36.5	63.5
20/40.....	89.0	11.0	20/140.....	32.0	68.0
20/50.....	83.5	16.5	20/150.....	28.5	71.5
20/60.....	78.0	22.0	20/160.....	23.0	77.0
20/70.....	72.5	27.5	20/170.....	18.5	81.5
20/80.....	67.0	33.0	20/180.....	14.0	86.0
20/90.....	61.5	38.5	20/190.....	12.0	88.0
20/100.....	56.0	44.0	20/200.....	10.0	90.0
20/110.....	50.0	50.0			

The subject has been given detailed attention in European practice, the medical council of the Imperial Russian Ministry of the Interior having adopted what is known as Josten's table for computing the degrees of disability due to the weakening of eyesight. The table is as follows:

TABLE 24.—JOSTEN'S TABLE FOR DETERMINING DEGREES OF DISABILITY RESULTING FROM WEAKENING OF VISION.

S.	0.50	0.40	0.30	0.20	0.10	0.00
0.50	0.00	6.50	13.50	20.00	26.50	33.50
.40	6.50	14.50	22.00	30.00	38.00	46.00
.30	13.50	22.00	31.50	41.00	50.50	60.00
.20	20.00	30.00	41.00	52.00	62.50	73.50
.10	26.50	38.00	50.50	62.50	75.00	87.00
.00	33.50	46.00	60.00	73.50	87.00	100.00

NOTE.—S. Stands for strength of vision; the first horizontal line of figures gives the remaining strength of one eye, and the first vertical line the remaining strength of vision of the other eye. The figure at the crossing of the two lines proceeding from the respective figures in the first horizontal and vertical lines give the degree of loss of vision. Thus, when the vision in one eye is 0.20, and the other 0.10, the disability is 62.50 per cent.

Besides the strength of central vision, other conditions, such as accommodation, muscular action of the eye, etc., as well as the nature of the employment of the injured, may be taken into consideration.

In a small volume by a German authority, Dr. Maschke, this subject is the sole matter of consideration. A French translation of this volume is entitled "Guide Pratique pour la Determination des Rentes en Cas d'Accidents Oculaires." The table presented by Dr. Maschke is said by him to be the rating actually employed in German practice in determining insurance benefits. It differs in detail from Josten's table used by the Russian authorities, making more refined distinctions as to degrees of disability.

The method is the same as in Josten's table, i. e., the left-hand column represents the visual power of one eye and the horizontal line of fractions represents the visual power of the other, while the figure in the body of the table found at the vertex of a right angle drawn from the two fractional quantities represents the percentage of a total disability that is allowed for the particular case. Thus if the left-hand figure, one-seventh, represents the visual capacity of

one eye, and the fraction, one-half, represents the visual capacity of the other, the amount of compensation allowed would be 20 per cent of a full allowance. It will be noted that in 8 cases an amount of compensation in excess of the standard full allowance is granted, the amounts ranging from 105 to 125 per cent. This is explained by the fact that it is considered that the person whose loss of vision is so extensive as to involve complete or practically complete blindness is entitled to a higher rate of compensation because he is not only incapable of following any trade but in addition requires personal care and attention.

TABLE 25.—GERMAN TABLE FOR DETERMINING DEGREES OF DISABILITY RESULTING FROM WEAKNESS OF VISION.

Visual capacity.	$1\text{ to } \frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{10}$	$\frac{1}{15}$	$\frac{1}{20}$	0
$1\text{ to } \frac{1}{2}$	0	0	5	10	10	15	15	20	20	25	25
$\frac{1}{2}$	0	5	10	10	15	20	25	25	30	35	35
$\frac{1}{3}$	5	10	25	25	30	35	40	45	55	60	55
$\frac{1}{4}$	10	10	25	40	40	45	50	55	60	65	65
$\frac{1}{5}$	10	15	30	40	55	60	65	70	75	80	80
$\frac{1}{6}$	15	20	30	45	60	70	75	80	85	90	90
$\frac{1}{8}$	15	25	35	50	65	75	85	90	95	105	105
$\frac{1}{10}$	20	25	40	55	70	80	90	95	100	115	115
$\frac{1}{15}$	20	30	45	60	75	85	95	100	110	125	125
0.....	25	35	55	65	80	90	105	115	125	125	125

With the foregoing tables may be compared a table prepared by the State compensation commissioner of West Virginia "from a combination of the tables used in Germany and Russia for compensation purposes." The table is self-explanatory, its method of use being identical with that of tables 24 and 25.

TABLE 26.—PERMANENT DISABILITIES OF EYE EXPRESSED IN PERCENTAGE OF TOTAL DISABILITY AS USED BY WEST VIRGINIA COMPENSATION COMMISSIONER.

Visual capacity.	20/20	19/20	18/20	17/20	16/20	15/20	14/20	13/20	12/20	11/20
20/20.....	0	1	3	5	6	8	10	11	13	15
19/20.....	1	3	5	7	9	10	12	13	15	17
18/20.....	3	5	7	9	11	12	14	15	17	19
17/20.....	5	7	9	11	13	15	16	18	20	21
16/20.....	6	9	11	13	14	16	18	20	22	24
15/20.....	8	10	12	15	16	18	20	22	24	26
14/20.....	10	12	14	16	18	20	22	24	26	28
13/20.....	11	13	15	18	20	22	24	27	29	31
12/20.....	13	15	17	20	22	24	26	29	31	34
11/20.....	15	17	19	21	23	26	28	31	34	36
10/20.....	16	19	21	23	26	28	30	33	36	38
9/20.....	18	21	23	25	28	30	32	35	38	40
8/20.....	20	23	25	27	30	32	35	38	41	43
7/20.....	21	24	26	28	32	34	37	40	43	46
6/20.....	23	26	28	30	34	36	39	42	46	48
5/20.....	25	27	30	32	36	38	41	44	48	50
4/20.....	26	29	32	35	38	41	44	47	50	53
3/20.....	28	31	33	36	40	43	46	49	53	56
2/20.....	30	33	35	38	42	45	48	51	55	57
1/20.....	31	35	37	40	44	47	50	53	57	60
0/0.....	33	37	40	43	46	49	54	57	60	63

TABLE 26.—PERMANENT DISABILITIES OF EYE EXPRESSED IN PERCENTAGE OF TOTAL DISABILITY AS USED BY WEST VIRGINIA COMPENSATION COMMISSIONER—Concluded.

Visual capacity.	10/20	9/20	8/20	7/20	6/20	5/20	4/20	3/20	2/20	1/20	0/0
20/20.....	16	18	20	21	23	25	26	28	30	31	33
19/20.....	19	21	23	24	26	27	29	31	33	35	37
18/20.....	21	23	25	26	28	30	32	33	35	37	40
17/20.....	23	25	27	28	30	32	35	36	38	40	43
16/20.....	26	28	30	32	34	36	38	40	42	44	46
15/20.....	28	30	32	34	36	38	41	43	45	47	49
14/20.....	30	32	35	37	39	41	44	46	48	50	54
13/20.....	33	35	38	40	42	44	47	49	51	53	57
12/20.....	36	38	41	43	46	48	50	53	55	57	60
11/20.....	38	40	43	46	48	50	53	56	57	60	63
10/20.....	41	43	46	48	50	53	56	58	60	63	66
9/20.....	43	46	49	52	54	56	59	61	64	67	70
8/20.....	46	49	52	55	57	60	62	65	68	71	73
7/20.....	48	52	55	57	59	62	65	67	70	73	77
6/20.....	50	54	57	59	62	66	68	71	74	77	80
5/20.....	53	56	60	62	65	68	71	74	77	80	83
4/20.....	56	59	62	65	66	71	75	78	81	84	87
3/20.....	58	61	65	67	71	74	78	81	84	87	90
2/20.....	60	64	68	70	74	77	81	84	87	90	94
1/20.....	63	67	71	73	77	80	84	87	90	94	97
0/0.....	66	70	73	77	80	83	87	90	94	97	100

Four weeks' compensation is allowed for each per cent of disability, amounting to 50 per cent of the average weekly earnings (maximum, \$12; minimum, \$5) for the time. For a disability of from 86 to 100 per cent, 50 per cent of the average weekly earnings is paid for the remainder of life.

PRESENT SCHEDULES LARGELY THEORETICAL.

It is evident that the disability schedules on pages 83 to 87 are much more extensive than those established by any American statute, while on the other hand the West Virginia table for injuries to the eyes presents greater refinements of gradation than appear in the foreign tables. But by far the most elaborate system is that developed under the California commission, which is still confessedly unequal to all contingencies that arise—as must of necessity be the case until the exhaustion of a practically limitless series of permutations and combinations. In the meantime much that has of necessity been done on a basis of theory and estimate will be brought into comparison with the results of observation and experience, with the result that authoritative data will be used in the place of opinion and the value of such aids to the determination of equitable awards correspondingly increased.

In this connection it will be of interest to notice the conclusions reached by an Austrian authority² with reference to the mode of making awards in cases of permanent partial disability. Austria differs from Germany in administrative methods in this field, local

² Ferdinand Schnitzler, director of the Workmen's Accident Insurance Institute for Moravia and Silesia, and professor in the Technical Institute at Brünn. Determination of the consequences of industrial accidents in Austria. Monthly Review of the U. S. Bureau of Labor Statistics, December, 1916, pp. 31-67.

insurance institutes having charge of the work in Austria, while in Germany there is a central body of last resort, the Imperial Insurance Office, through whose activities a uniform interpretation of the compensation law is secured as well as an effective continuous development. It is pointed out by Mr. Schnitzler that the Austrian institutes have in all cases established a more or less extensive expert medical service, by whose advice the determination of compensation is effected, though there is some variation as to the controlling influence of such advice as compared with that of the technical experts who are also consulted. With the introduction of accident insurance as a governmental undertaking, the Austrian institutes, lacking in original basic experience, adopted scales contained in the insurance contracts of private insurance companies, but quite generally increasing the rates of compensation. Of these company scales it is said also that they were not based on observation of actual conditions, but merely represent assumptions on which the two contracting parties have agreed, so that there is no justification for the conclusion that slight modifications of these scales will secure equitable and satisfactory awards. Even when there is more of a free hand given, as in the courts of arbitration, it is said that disproportionate weight is given to medical opinion, the laymen chosen as technical advisers being usually less familiar with the law than the medical and official members and not having experience in the great number of individual cases of which the latter are actually or presumably cognizant.

From the article by Ferdinand Schnitzler above referred to the following is quoted:³

With increasing frequency the admission is encountered in technical literature that the compensation scales now in use for specified visible injuries are based on very faulty principles. In inquiring into the origin of the scales in use, as, for instance, for loss of an eye, 25 to 33½ per cent; loss of the right arm, 75 per cent, etc., one will be surprised to find that none of them is based on systematic observation of facts, i. e., of the actual earnings made by persons who have suffered such injuries.

At the beginning of compulsory workmen's accident insurance the insurance institutes had merely adopted the compensation scales contained in the insurance contracts of private insurance companies, but quite generally increased the rates of compensation. Likewise the scales of the private insurance companies (so-called scales for injuries to members of the body, *Gliedertaxe*) were not based on observation of actual conditions, but represent merely assumptions on which the two contracting parties have agreed. One is, therefore, mistaken in assuming that the usual compensation scales represent averages deduced from actual conditions, and that by small increases or decreases of the rates of these scales full justice can be done to the individual conditions of injured persons. The medical experts, who as a rule

³ Monthly Review of the U. S. Bureau of Labor Statistics, December, 1916, pp. 38, 39.

have no knowledge of the actual earnings of a large number of persons afflicted with a certain infirmity, of course, uphold the traditional scales of compensation which are also adopted by the courts of arbitration. In the case of insurance institutes which also consider the earning possibilities of pensioners the officials charged with the determination of the amounts of compensation, supported by observations of their own, often have doubts as to the value of the usual compensation scales, but, on account of the pressure in favor of maintaining existing conditions brought to bear upon them by tradition and by medical experts, they are hardly able to achieve results. This would only be possible if a general systematic observation of the pensioners should be introduced and the results scientifically compiled. Neither in Austria nor in Germany has this so far been attempted.

At any rate, in the case of several insurance institutes, the valuation of consequences of accident is no longer left entirely to the medical experts. In addition to the medical opinions these institutes consider the earnings of the injured persons after the accident and the experiences of other persons similarly injured.

It might be supposed that in the courts of arbitration less weight is given to the medical opinion because the presiding judge is assisted by four associates taken from practical life. In fact, it has been shown that the courts of arbitration deviate only in exceptional instances from the medical opinion. As a rule the court of arbitration simply adopts the rate of compensation proposed by the physician, and in case the physician in his proposed rate has left open a certain range, as, for instance, 15 to 25 per cent, it generally awards the higher rate, and in some instances goes even beyond that.

The true bases of awards are discussed, the conclusion being reached that it is not the visible injury in itself that is the decisive factor, but that questions of recovery, adjustment, the opportunity for employment under changing industrial conditions, and other elements must be considered. The fact that an injured person has suffered no immediate wage loss is not conclusive, nor is disability to pursue one's original employment to be finally determinative. "The method of investigation of the earning capacity of insured persons must be adapted to the organization of the insurance and to special conditions in the individual territories of the insurance institutes."

As a result of systematic observation and the accumulation of experience, the prospect is held out of the establishment of more satisfactory guides for administration. In this connection see also the table on percentage of adequacy of duration of payments for specified injuries provided for by American laws, given on page 78.

MEDICAL AND SURGICAL SERVICE.

State legislatures at last seem to have awakened to the fact that adequate medical benefits are essential, if injured employees are to receive just and proper treatment under workmen's compensation laws. No less than 17 States increased their medical benefits in

1919. Although the functional restoration of industrial cripples and their adaptation to vocational pursuits require adequate medical and surgical treatment, only six⁴ compensation laws require the employer to furnish unlimited medical services. Several laws make no provision for medical treatment whatever, and in others the low maximum limits make adequate treatment impossible.

This failure to provide adequate medical service not only indicates the opposition of the employers but also reflects the inability of society to comprehend the great importance and social value of the speedy restoration of the earning capacity of injured workers. The benefits provided for in compensation laws, instead of being regarded as a means of effecting rehabilitation, have been considered as the end itself. The old idea of indemnity for negligence on the part of the employer toward his injured employees has been all too prevalent. Here and there men with broader vision have pointed out that the objective of compensation legislation should be nothing less than the rehabilitation of injured workers as completely and quickly as possible, and that the payment of compensation and medical benefits is simply a means of accomplishing this result. Compensation commissioners, however, have too often been satisfied with the performance of their duties if the benefits provided in the acts have been paid in accordance with the statutory requirements.

Furthermore, the hospitals have made no adequate provision for handling industrial accident cases, nor does the average hospital organization permit effective reconstruction work. This work of rehabilitation not only requires careful and daring surgery but also demands unremitting aftercare with special supporting apparatus, arrangements for massage, exercises, and electrical treatment, and construction of artificial appliances and education in their use, all of which must be done or supervised by specially trained and specially competent surgeons. Very little effective work along these lines has been done, since hospitals have never desired this sort of work particularly. Then, too, there has been a sad lack of cooperation between the hospital and the employer or his representative, the insurance company. The latter all too frequently regards medical expenses as pure losses. Even if all insurance companies were broad-minded enough to accept the principle of reconstruction, the very number of such separate units would make effective cooperation difficult.

Until recently very little has been attempted systematically in this country to secure suitable reemployment for permanently disabled workmen, many of whom, because of their injuries, are unable to continue their former occupations and must therefore seek new kinds

⁴ California, Connecticut, Idaho, North Dakota, Porto Rico, and the Federal Government.

of work. During the past two years, however, a number of States have made special provision for rehabilitating and reeducating industrial cripples (see p. 74). In some States compensation commissions have held that injured workmen were entitled to compensation benefits until suitable employment had been provided for them. This has led insurance companies to engage in employment work in haphazard fashion, but the results have been entirely inadequate and unsatisfactory. The greatest drawback has been the lack of definite and centralized responsibility to carry out and supervise this important work of economic rehabilitation.

The usual medical provision in the law is that the employer shall furnish reasonable or necessary medical, surgical, and hospital service during specified periods, in some cases limited as to maximum amounts. As already stated, only six States place no limitation except reasonableness upon the amount of medical service which the employer must furnish. All other States limit the employer's liability either as to length of time or amount, or both. The following table shows the States classified as to length of time and maximum amounts for which the employer is liable:

TABLE 27.—COMPENSATION STATES, CLASSIFIED BY LENGTH OF TIME DURING WHICH MEDICAL SERVICE IS FURNISHED, AND MAXIMUM AMOUNTS.

None. (3)	2 weeks. (6)	4 weeks. (3)	30 days. (5)	8 weeks. (3)	60 days. (4)	90 days. (6)	Unlimited as to time. (16)
Alaska. Ariz. N. H.	Del. (\$75). Mass. ¹ Mont. (\$50). N. Mex. Tex. ¹ Vt. (\$100).	Iowa ¹ (\$100). N. J. (\$50). R. I.	Ind. ¹ Me. ¹ (\$100). Pa. ¹ (\$100). Tenn. (\$100). Va.	Ill. ¹ (\$200). Kans. ² (\$150). Mo. (\$200).	Ala. (\$100). Colo. (\$200). N. Y. ¹ Okla. ¹ (\$100).	Ky. (\$100). Mich. Minn. ¹ (\$100). Nev. ¹ S. Dak. ³ (\$150). Wis. ¹	Calif. Conn. Hawaii (\$150). Idaho. La. (\$150). Md. (\$150). Nebr. (\$200). N. Dak. Ohio ¹ (\$200). Oreg. ¹ (\$250). P. R. Utah (\$500). Wash. ⁴ W. Va. (\$600). Wyo. (\$100). U. S.

¹ Additional service in special cases or at discretion of commission.

² 50 days.

³ 12 weeks.

⁴ Employees must pay one-half of medical cost.

It will be noted that 3 States ⁵ furnish no medical service, except that in fatal cases involving no dependents the medical expenses of the last sickness shall be paid by the employer. Six ⁶ compensation acts provide unlimited service. Nine laws place no limitation upon the period during which medical treatment shall be furnished, but do limit the amount; while nine limit the period, but do not limit

⁵ Alaska, Arizona, and New Hampshire.

⁶ California, Connecticut, Idaho, North Dakota, Porto Rico, and the Federal Government.

the amount. All of the other laws place limitations upon both period and amount.

Table 28 gives more in detail the amount of medical aid and the conditions under which it is furnished. It will be noted that many States, in addition to the time limitation, also limit the amount, ranging from \$50 in Montana and New Mexico to \$600 in West Virginia. Others allow additional service in certain cases, at the discretion of the commission or court.

TABLE 28.—AMOUNT OF AND CONDITIONS FOR MEDICAL SERVICE UNDER COMPENSATION LAWS IN THE UNITED STATES.

State.	Medical and surgical aid.	
	Period.	Maximum amount and other qualifications.
Alabama.....	60 days.....	Longer at option of employer; maximum \$100.
Alaska.....	.....	Only in death cases involving no dependents; maximum \$150 for medical expenses between injury and death.
Arizona.....	.....	Reasonable medical and burial expenses only in death cases involving no dependents.
California.....	Unlimited.....	Such service as reasonably required.
Colorado.....	60 days.....	Maximum \$200 unless there is a hospital fund. Special operating fee of \$50 in case of hernia; also additional for dental service, maximum \$100.
Connecticut.....	Unlimited.....	Such service as deemed reasonable by attending physician. Special provision for seamen on United States vessels.
Delaware.....	2 weeks.....	If requested by employee or ordered by board; maximum \$75.
Hawaii.....	Unlimited.....	Maximum \$150.
Idaho.....	.....do.....	Reasonable service for reasonable period. Hospital benefit fund permitted in lieu of statutory provision.
Illinois.....	8 weeks.....	Maximum \$200; full hospital service while compensation is payable; additional medical and surgical aid as long as hospital treatment is required.
Indiana.....	30 days.....	Such service as deemed necessary by attending physician or board, longer at option of employer. Employee must accept unless otherwise ordered by board; 30 days' additional treatment if necessary in opinion of board.
Iowa.....	4 weeks.....	If requested by employee, court, or commissioner; maximum \$100 additional in exceptional cases.
Kansas.....	50 days.....	If demanded by employee; maximum \$150.
Kentucky.....	90 days.....	Unless board fixes other period. Maximum \$100, or \$200 for hernia operations.
Louisiana.....	Unlimited.....	Reasonable services unless employee refuses to accept; maximum \$150.
Maine.....	30 days.....	Maximum \$100; additional service if nature of injury requires.
Maryland.....	Unlimited.....	Such service as may be required by commission; maximum \$150.
Massachusetts.....	2 weeks.....	Longer in unusual cases at discretion of board.
Michigan.....	90 days.....	.....
Minnesota.....	.....do.....	Maximum \$100; upon request of employee court may allow additional treatment, if need is shown.
Missouri.....	8 weeks.....	Maximum \$200.
Montana.....	2 weeks.....	Unless employee refuses; maximum \$50 unless there is a hospital fund; special operating fee of \$50 in case of hernia.
Nebraska.....	Unlimited.....	Unless employee refuses; maximum \$200; employer not liable for aggravation of injury if employee refuses to accept.
Nevada.....	90 days.....	Time may be extended to 1 year by commission; transportation furnished.
New Hampshire.....	.....	Medical service and burial expenses only in death cases involving no dependents; maximum \$100.
New Jersey.....	4 weeks.....	Unless employee refuses such treatment; maximum \$50; in cases requiring unusual treatment bureau may extend period to 17 weeks, but not over \$200; special operating fee of \$150 in case of hernia.
New Mexico.....	2 weeks.....	Maximum \$50, unless there is a hospital fund; special operating fee of \$75 in case of hernia.
New York.....	60 days.....	Such service as nature of injury requires, longer if necessary.
North Dakota.....	Unlimited.....	Such service as nature of injury may require.
Ohio.....	.....do.....	Such service as commission deems proper; maximum \$200 except in unusual cases.
Oklahoma.....	60 days.....	Maximum \$100. Period and amount may be increased in discretion of the commission.
Oregon.....	Unlimited.....	Includes transportation; maximum \$250; commission may allow additional service.
Pennsylvania.....	30 days.....	Unless employee refuses, in which case employer not liable for aggravation of injury; maximum \$100, except in hospital cases.

TABLE 28.—AMOUNT OF AND CONDITIONS FOR MEDICAL SERVICE UNDER COMPENSATION LAWS IN THE UNITED STATES—Concluded.

State.	Medical and surgical aid.	
	Period.	Maximum amount and other qualifications.
Porto Rico.....	Unlimited.....	Necessary medical service and sustenance as prescribed by commission.
Rhode Island.....	4 weeks.....	
South Dakota.....	12 weeks.....	Maximum \$150.
Tennessee.....	30 days.....	Longer at option of employer; employee must accept; maximum \$100.
Texas.....	2 weeks.....	Two weeks additional in hospital cases.
Utah.....	Unlimited.....	Maximum \$500; hospital benefit fund permitted in lieu of statutory provision.
Vermont.....	14 days.....	Maximum \$100.
Virginia.....	30 days.....	Such service as deemed necessary by attending physician or commission; longer at option of employer. Employee must accept unless otherwise ordered by commission.
Washington.....	Unlimited.....	Transportation included; employees must contribute one-half medical cost.
West Virginia.....	.....do.....	Maximum \$150; \$300 in severe cases; \$600 in permanent disability cases where disability can be materially reduced.
Wisconsin.....	90 days.....	Longer if disability period can be reduced; Christian Science treatment permitted unless employer refuses by filing written notice.
Wyoming.....	.....	Maximum \$100 unless there is a hospital fund.
United States.....	Unlimited.....	Commission shall furnish necessary medical service for reasonable period unless employee refuses; transportation furnished if necessary.

KIND OF SERVICE.

Most of the States provide that "reasonable or necessary medical, surgical, and hospital service" must be furnished, leaving the question of reasonableness or adequacy to the commissions or courts to determine.⁷ Twenty-six States include medicines within this provision; 4⁸ include artificial members; 14⁹ include crutches or other appliances; 12¹⁰ include nursing; while Nevada, Oregon, Washington, and the Federal Government include transportation. The medical service provisions of the California law are probably the most comprehensive of all the State compensation acts in this respect. For example, the provision, "such medical, surgical, and hospital treatment, including nursing, medicines, medical and surgical supplies, crutches and apparatus, including artificial members, as may reasonably be required to cure and relieve from the effects of the injury," is about as inclusive as it is possible to make it. The inclusiveness of a particular medical provision is dependent also upon the expressed purpose of this provision. Where the law provides for such medical, surgical, and hospital treatment as may reasonably be required "to cure and relieve from the effects of the injury" this has the effect of increasing the scope of the medical service. Five States¹¹ have this particular provision.

⁷ For a detailed discussion of this subject see article, "What the term 'medical service' in workmen's compensation laws includes," by M. C. Frinke, jr., in *Monthly Labor Review* for July, 1919, pp. 187 to 205.

⁸ California, Nevada, Oregon, and Wisconsin.

⁹ Alabama, California, Colorado, Idaho, Kansas, Kentucky, Maryland, Minnesota, Nevada, New Jersey, New York, Oklahoma, Tennessee, and Wisconsin.

¹⁰ California, Idaho, Indiana, Kansas, Kentucky, Maryland, Missouri, Nevada, New York, Ohio, Oklahoma, and Utah.

¹¹ California, Colorado, Illinois, Missouri, and Wisconsin.

It must not be understood, however, that the specific services just mentioned are not furnished in the States which do not specifically mention them in the law. The inclusiveness of the term depends upon the liberality of the administering body. Furthermore, employers and insurance carriers as a matter of policy often furnish additional service, including artificial limbs and other surgical appliances, in order to restore the earning capacity of the employees and thereby reduce their compensation costs.

ADEQUACY OF MEDICAL SERVICE.

Although adequate medical treatment is absolutely essential to complete rehabilitation and restoration of an injured employee's earning capacity, only six laws, as already noted, require the employer to furnish unlimited medical service. Several States make no provision whatever for medical treatment, while in others the low maximum limits make adequate treatment impossible. Reference to the preceding table shows that in 14 States providing medical service the employer is ordinarily not required to furnish such service beyond 30 days. Quite a number of States, in addition to the time limits, also place a limitation upon the amount or cost of service to be provided, thus increasing the inadequacy of the laws still further. Some idea of the inadequacy of the medical service provisions may be obtained from a study of the severity of industrial accidents. In what percentage of accident cases does the period of disability extend beyond the statutory medical periods of the workmen's compensation acts? Though the disability period is not necessarily coterminous with the medical period, the length of the disability periods will nevertheless throw considerable light upon the adequacy of the medical service furnished.

Table 29 shows, for certain States, the percentage distribution of nonfatal industrial accidents causing disability of more than one week, classified by periods of disability. Accidents which resulted in an incapacity of one week or less were eliminated for two reasons: First, the number of minor accidents reported varies enormously among the several States, thus impairing the comparability of the accident data. For example, in California the disability in more than one-half of the total accidents reported terminated within one week, whereas in Washington less than one-fourth of the cases terminated within this period. Second, the adequacy of the medical provisions of compensation laws can best be determined from the number or percentage of the serious accidents affected by the statutory limitations placed upon the medical service to be furnished. In other words, the adequacy of medical treatment provided is determined not by the percentage of total accidents covered but rather by the percentage of serious accidents adequately treated. An investigation made by the

Ohio Industrial Commission in 1914 showed that of 8,277 cases of minor accident (less than 1 week's disability), the medical expense in 82 per cent was under \$5 and in 97 per cent under \$10.

TABLE 29.—PERCENTAGE DISTRIBUTION OF NONFATAL INDUSTRIAL ACCIDENTS OF OVER ONE WEEK'S DISABILITY IN CERTAIN STATES, CLASSIFIED BY PERIOD OF DISABILITY.

Period of disability.	Washington, 1917 (13,941 temporary total cases).	Nevada, 1913-1916 (1,730 nonfatal cases).	Oregon, 1915 (1,808 temporary total cases).	California, 1917 (27,775 temporary total cases).	Wisconsin, 1916-17 (15,915 temporary total cases).	Massachusetts, 1917 (47,190 nonfatal cases).	Standard Accident Table (Rubinow) (56,968 temporary total cases).	American Table (50,462 temporary total cases). ¹
Over 1 to 2 weeks.....	32.3	29.9	37.8	38.8	37.4	30.1	42.2	35.1
Over 2 to 3 weeks.....	19.6	19.8	20.4	16.3	22.7	30.0	21.3	21.6
Over 3 to 4 weeks.....	11.7	14.7	12.7	11.4	12.9		12.3	12.4
Over 4 to 5 weeks.....	8.8	9.4	10.0	8.8	8.6	23.7	7.8	8.6
Over 5 to 6 weeks.....	5.2	5.5	4.6	6.3	5.1		4.7	5.3
Over 6 to 7 weeks.....	4.2	4.0	3.4	4.4	3.1		3.1	3.8
Over 7 to 8 weeks.....	2.9	2.5	1.8	3.0	2.4		2.1	2.6
Over 8 to 9 weeks.....	2.8	4.0	2.0	2.3	1.6	8.7	1.6	2.0
Over 9 to 10 weeks.....	1.4	2.1	1.1	1.6	1.1		1.0	1.6
Over 10 to 11 weeks.....	1.3	1.0	.9	1.1	.8		.8	1.0
Over 11 to 12 weeks.....	.9	.9	.6	1.1	.7		.6	.9
Over 12 to 13 weeks.....	1.4	.4	1.3	.8	.5	4.6	.5	.7
Over 13 to 25 weeks.....	5.1	3.6	2.8	3.3	2.3		1.6	3.1
Over 25 weeks.....	2.5	2.1	.7	.8	.8		.4	1.2
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ This is a revision of the Rubinow Standard Table as computed by the National Council on Workmen's Compensation Insurance.

² Over 13 to 25 weeks.

³ Over 25 weeks.

It will be noted that Nevada and Massachusetts include all nonfatal accidents of over one week's disability while the other States and the Standard Accident Table cover only temporary disabilities. This explains in part at least the smaller percentages of less serious accidents in Nevada and Massachusetts. The percentages are possibly affected also by the differences in the completeness with which accidents are reported in the several States. There is a close similarity between Washington, Nevada, and Massachusetts and also between Oregon, California, and Wisconsin, the former group having relatively fewer minor accidents and a greater number of long-term disabilities. It will be observed also that Dr. Rubinow's Standard Accident Table has a relatively greater number of accidents causing disability of 1 to 2 weeks and fewer causing disability of over 13 weeks. The new American Table formulated by the National Council on Workmen's Compensation Insurance parallels closely the Wisconsin and Oregon distribution.

The following tabulation of the above data shows the percentages of accidents in which disability did not terminate within certain specified periods:

TABLE 30.—PER CENT OF INDUSTRIAL ACCIDENTS, IN CERTAIN STATES, OF OVER ONE WEEK'S DISABILITY IN WHICH DISABILITY DID NOT TERMINATE WITHIN CERTAIN SPECIFIED PERIODS.

Disability did not terminate in—	Wash- ington.	Nevada.	Oregon.	Cali- fornia.	Wis- consin.	Massa- chusetts.	Standard Table.	American Table.
2 weeks.....	67.7	70.1	62.2	61.2	62.6	69.9	57.8	64.9
3 weeks.....	48.1	50.3	41.8	44.9	39.9	.....	33.5	43.3
4 weeks.....	36.4	35.6	29.1	33.5	27.0	39.9	24.2	30.9
8 weeks.....	15.3	14.2	10.3	11.0	7.8	16.2	6.5	10.6
9 weeks.....	12.5	10.2	8.3	8.7	6.2	.....	.....	8.6
13 weeks.....	7.5	5.8	4.4	4.1	3.1	7.5	2.0	4.3

Using the Washington statistics as the criterion, it will be seen that in those States which limit the medical service to two weeks about 68 per cent of the accidents are inadequately provided for; in those States having a four weeks' limit this inadequacy covers 36 per cent of the accidents; even in the 90-day States 7 per cent are insufficiently provided for. The relative inadequacy of the other limits may be obtained from the preceding tables.

The inadequacy of medical service due to the statutory time limits is still further increased in some States by limitations upon the amount or cost of treatment which employers are required to furnish. These maximum limitations range from \$50 in Montana and New Mexico to \$600 in West Virginia. The effect of such limitations may be seen from the following table which shows the medical costs of accidents in Ohio.

TABLE 31.—NUMBER AND PER CENT OF INDUSTRIAL ACCIDENT CASES IN OHIO FROM MAR. 1, 1912, TO DEC. 31, 1913, CLASSIFIED BY AMOUNT OF MEDICAL AWARD.¹

Amount of medical award.	Number.				Per cent.			
	Fatal.	Perma- nent dis- ability.	Tempo- rary disability of over 1 week.	Total.	Fatal.	Perma- nent dis- ability.	Tempo- rary disability of over 1 week.	Total.
Under \$25.....	14	161	3,858	4,033	46.7	60.5	91.9	89.8
\$25 to \$50.....	8	50	244	302	26.7	18.8	5.8	6.7
\$50 to \$100.....	4	32	67	103	13.3	12.0	1.6	2.3
\$100 to \$150.....	1	29	14	24	3.3	3.4	.3	.5
\$150 to \$200.....	1	7	10	18	3.3	2.6	.2	.4
\$200 and over.....	2	27	4	13	6.7	2.6	.1	.3
Total.....	30	266	4,197	4,493	100.0	100.0	100.0	100.0

¹ Ohio Industrial Commission, Department of Investigation and Statistics. Report No. 2, 1914, pp. 23-30.² One permanent total case.

It will be noted that a low maximum limitation upon the amount of medical service affects adversely cases of permanent disability in particular. In 40 per cent of such cases the medical costs were \$25 or more; in 21 per cent the costs were \$50 or more; and in 2.6 per cent the costs were \$200 or over. In 10 per cent of the total accident cases

the medical costs were \$25 or more. In several of the States the maximum limit is high enough to cover practically all except the more serious injuries, but it is in severe injury cases that the workman's needs are greatest.

It must be admitted, however, that in many cases employers and insurance companies furnish medical service in excess of the statutory requirements, especially if by so doing the period of disability can be materially shortened. Furthermore, it is a common practice of many of the larger employers, who have an organized establishment medical service and hospital, to provide full medical treatment irrespective of the statutory provisions of the compensation acts.

SELECTION OF PHYSICIANS.

Should the employer or the employee have the right to select the physician in industrial accident cases? And should this right or privilege be exclusive or restricted? These mooted questions have in recent years received a great deal of attention in the workmen's compensation field. The subject is particularly important because it directly affects the employee, the physician, and the employer. The employee is interested in his own speedy recovery and in having a physician in whom he has confidence; the employer is interested in reducing his compensation and medical costs; and the physician is interested both financially and professionally. The interplay of these various and sometimes conflicting interests constantly causes friction and creates innumerable difficulties.

The statutory provisions and actual practices as regards selection of physicians are as follows:

Selection by employee at employer's expense.—In eight States¹² an injured employee is granted the right to select his own physician at the employer's expense. In Massachusetts, Nebraska, Rhode Island, and Washington this right is granted specifically in the act, although in Nebraska the right is limited to cases of dismemberment or major surgical operations. In Nevada, Ohio, Oregon, and Vermont the employee is granted this privilege by virtue of rules or interpretations of the administrative commission. In addition, the Texas act allows the employee to select the physician if the employer, having engaged a contract physician, fails or refuses to file the contract agreement with the industrial accident board; and in Colorado an "employee may, upon the proper showing to the commission, procure its permission at any time to have a physician of his own selection attend him."

Selection by employee at employee's expense.—The laws in five States (California, Connecticut, Illinois, Missouri, and South Dakota)

¹² Massachusetts, Nebraska (dismemberments and major surgical operations only), Nevada, Ohio, Oregon, Rhode Island, Vermont, and Washington.

grant the employee the right to select his own physician—at the employee's expense, however.

Selection by employee if employer neglects or refuses to provide adequate service.—If the employer neglects or refuses to furnish competent medical service, or in case of an emergency, the employee is given the right to select the physician at the employer's expense in 20 States.¹³

Authority to order change of physicians.—If the physician furnished is incompetent or the medical service inimical to the injured employee, the laws of nine States¹⁴ provide that a change of physicians shall be made if requested by the administrative commission or by the employee. In Washington, also, the State medical aid board, by rule, reserves the right to transfer the treatment of an injured workman to a surgeon whenever it becomes evident that the man is not receiving the service that he should at the hands of the physician of his choice.

Selection of physician by employer.—In all of the other States which provide for medical service in case of injury the employer or his representative, the insurance carrier, has the right to select the physician. Most of these laws, however, make no specific provisions as to the selection of physicians, but the courts and commissions generally hold that the obligation of the employer to "furnish" or "provide" medical service carries with it the privilege of choosing the physician. This practice has been based on two theories: First, that the employer is more competent to judge of the efficiency of the doctor employed and to provide efficient medical and hospital treatment; and, second, that it is to the interest of the employer to furnish the very best medical and surgical treatment, so as to minimize the result of the injury and to secure as early a recovery as possible. As a matter of practice, however, in quite a large percentage of cases the employee is allowed to choose his own physician, but the extent of this practice depends upon the policy of the employers and insurance carriers. The large employers, especially those having an organized medical service within their establishments, generally insist upon their legal right to select the physician.

Panel system.—No State compensation law makes specific provision for a panel of physicians from which a choice is to be made. California, however, has an incipient panel system, as shown in the following statutory provision: "If the employee so requests, the employer shall tender him one change of physicians and shall nominate at least three practicing physicians competent to treat the particular

¹³ Colorado, Connecticut, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Minnesota, Nevada, New York, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas, Virginia, and Wisconsin.

¹⁴ California, Connecticut, Indiana, Kentucky, Missouri, Nevada, Oklahoma, Texas, and Virginia.

case, or as many as may be available if three can not be reasonably named, from which the employee may choose; the employee shall also be entitled, in any serious case, upon request, to the services of a consulting physician to be provided by the employer; all of said treatment to be at the expense of the employer. If the employee so requests, the employer must secure certification by the commission or a commissioner of the competency for the particular case of the consulting or additional physicians." The foregoing provision does not apply, however, to employers' establishment hospital funds approved by the commission.

A majority of the medical profession thus far seem to be opposed or at least apathetic toward the panel system. Quite a number of State commissioners and members of the medical profession, especially those who have been in close touch with the administration of compensation laws, have come to the conclusion that some check upon free choice, exercised either by the employee or employer, is necessary.

In a paper prepared for the 1918 meeting of the International Association of Industrial Accident Boards and Commissions, Dr. Raphael Lewy, chief medical adviser of the New York Industrial Commission, stated that the ideal plan would be to leave the choice to the medical department of the industrial commission. At the same conference Dr. Charles H. Lemon, of Milwaukee, Wis., stated that no man is justified in doing major surgical work who has not been trained under a competent surgeon; while Dr. J. W. Mowell, chairman of the Washington Medical Aid Board, believed that there should be free choice in ordinary cases, but that in serious cases it would be better for the employee to take the advice of an expert. In a letter to the Bureau, Dr. F. W. Sears, chairman of the committee on legislation of the Vermont State Medical Society, stated that physicians should be selected by mutual agreement; the employer might allow the employee a choice from a list of physicians. One of the recommendations of Mr. J. F. Connor, commissioned by the governor of New York to investigate the management of the State industrial commission, provided that "a panel of physicians be designated by the commission, utilizing the advice of recognized medical societies, among whom injured workmen may have free choice, with power conferred on the commission to add to, or to remove from, such panel at their discretion."

* The California Industrial Accident Commission found "by bitter experience that all physicians qualified by the laws of the State to practice surgery are not necessarily surgeons." The commission advocated a traveling medical inspector who will "be able greatly to diminish the abuse, now frequent, of overstay in hospitals, with the consequent overcharge against the State compensation insurance

fund."¹⁵ According to the commission unfit practitioners should be excluded either through the enforcement of the medical practice act or by the commission.

The Boston Medical and Surgical Journal of September 21, 1916, speaks editorially as follows: "It may be also that absolute free choice will eliminate competition between the present 27 insurance companies and bring about the concentration of all the compensation business under one insurance company, with whom all would be required to transact business under direct State supervision. There is a probability that the problem may be solved by the combination of free choice under a supervising consultant, agreeable to and appointed by the insurance companies."

Dr. William L. Estes, chairman of the committee on workmen's compensation of the Pennsylvania State Medical Society, in a paper read before a conference of industrial physicians in Pennsylvania,¹⁶ said:

Again, for injuries a surgeon should be called; few family practitioners have the requisite skill and experience to meet in the most modern way the emergencies of a serious surgical condition. The sufferings and disability of the injured man may be increased and greatly prolonged by the injudicious selection of a surgeon. * * *

Most of the best modern hospitals have a definite organized staff of surgeons to carry on the work of the institutions, and the management of the hospital not only expects but requires them to treat the cases sent to the institution. Many injured men must go to hospitals. It would therefore result in serious confusion and disorganization were it permitted the injured workman to demand that his family physician shall treat him in the hospital. Besides, as stated above, it might result in placing an inexperienced man in charge of him instead of a man whose qualifications had been proved before he was given the place on the hospital staff.

Furthermore, under the present system of selection by the employer, it is not an uncommon practice in some States to allow employees to choose a physician from a panel nominated by the employer or insurance carrier.

REASONS WHY EMPLOYER SHOULD SELECT PHYSICIAN.

Inasmuch as the burden of paying the medical costs rests upon the employer, it seems reasonable that he should have a voice in the selection of the physician. He is naturally interested in reducing his compensation costs. This reduction depends to some extent upon the speedy restoration of the injured employee's earning capacity, which in turn is dependent largely upon the adequacy of the medical and surgical treatment furnished. Competent medical treatment, however, is not always possible if the selection of the

¹⁵ Report of California Industrial Accident Commission, 1914-15, pp. 25, 26.

¹⁶ Monthly Bulletin of Pennsylvania Department of Labor and Industry for February, 1917, pp. 51, 52.

physician is beyond the control of the employer, who is, as a rule, far more competent than the injured employee to judge of the efficiency of the physician. The foreign, non-English speaking, and not infrequently illiterate workman naturally chooses a physician of his own nationality, who is often incompetent and sometimes disreputable. Some physicians attempt to mulct the employers by prolonging treatment, making unnecessary calls, padding their bills, and overcharging generally, and because of their incompetency are an actual menace to the patients themselves. Numerous cases are on record in which injuries which should have had the attention of highly skilled surgeons were treated by physicians without surgical practice and wholly incompetent. Such treatment is always costly to the employer and frequently harmful to the injured workman. As stated by Dr. J. W. Mowell, of the Washington Medical Aid Board, before the meeting of the International Association of Industrial Accident Boards and Commissions previously mentioned: ^a

While this plan [selection by employee] seems quite equitable and it appears to be the natural thing to do, it has a good many shortcomings. For instance, to the isolated workman who is employed in a locality where there are only one or two physicians, free choice means little, and the injured workman has to accept the services of the first physician he can obtain. However, in the larger cities where there is a great number of physicians we find that some of the workmen make a wise choice, while quite a large per cent of them, for some reason or other, select a physician who is not very well equipped for the work at hand. We often find that a workman who has received a serious fracture will select a physician who knows very little about fractures; also a man who receives an injury to his eyes may go to an ordinary practitioner for treatment until the serious nature of the case makes it necessary to transfer him to an eye specialist, whom he should have consulted in the first instance. This occurs more or less with reference to all kinds of injuries. * * *

To my mind the principal thing that can be said in favor of free choice of physician by the injured workman is the effect it has on his mind—that is, the feeling that he is getting what he wants.

Because of these conditions many employers and insurance carriers have insisted upon their legal right to select the physician. Most of the large manufacturing establishments, and even some of the insurance companies, have established hospitals in connection with their plants. It is maintained that more efficient medical service can thus be rendered at much less cost. Furthermore, it allows closer medical supervision. A common complaint made by employers is that workmen will not report minor injuries, many of which become septic and develop into serious cases. The prompt attention given to injuries and the close personal supervision made possible through

^a See Bulletin 264 of the Bureau of Labor Statistics, pp. 197, 198.

an establishment hospital minimize the danger of blood poisoning and result in earlier recoveries. It is also maintained that malin-gering can be better controlled and prevented when the employer has supervision over the medical service furnished.

REASONS WHY EMPLOYEE SHOULD SELECT PHYSICIAN.

On the other hand, during the last two or three years, there has been a widespread reaction against the present system of selection by employers, and it may well be asked, Why this reaction if the system is as beneficial as is maintained by its advocates? Three reasons are generally advanced in favor of free choice of physicians by employees.

In the first place, the free and unhampered choice of one's own physician has generally been considered as one of the inalienable rights of mankind. The relationship existing between a patient and his physician is private and personal. Furthermore, the therapeutic value of confidence and faith in one's physician is well recognized by the medical profession, and this confidence naturally is assured when the injured workman selects his own physician. Moreover, the injured man has most at stake. It is he, and not the employer or physician, who suffers; it is his life which hangs in the balance. A man desires a doctor whom he knows, with whom he can freely and unreservedly discuss his ailment, and in whom he has confidence.

Another factor which has influenced the movement for free choice has been the dissatisfaction with the kind of medical service frequently furnished by employers and insurance carriers. While it is true that many employers maintain excellent hospitals with highly skilled surgeons and trained nurses in charge and provide medical treatment even in excess of statutory requirements, this is by no means the general practice. The kind of service furnished by many employers, and particularly by insurance companies, is entirely inadequate. There has been a tendency to employ contract doctors (and this tendency is increasing), many of whom have not been especially competent. Furthermore, physicians employed on a contract basis frequently have more cases than they can take care of properly and in addition are not inclined to give them the same personal attention as would be given by physicians engaged directly by the employee. The evils and abuses of this contract system have been repeatedly pointed out and condemned by compensation commissions and the medical profession.

Another important problem is to determine when the injured workman has sufficiently recovered to be able to return to work. Obviously it is to the employer's interest to reduce the disability period as much as possible, and frequently this fact influences unduly the

decision of the employer's physician, especially if employed on a contract basis.

The third factor in the movement for free choice has been the opposition of the medical profession to the medical practices of the employers, and particularly of the insurance companies, which have developed under the compensation laws. Physicians have demanded their regular rates—those which they had charged before the advent of workmen's compensation laws. Insurance companies, on the other hand, have insisted that the increased security of payments under compensation and the economic and financial status of the injured employee should be taken into consideration in determining the reasonableness of fees for medical and hospital services. There has also been a tendency on the part of some physicians to pad their bills and to raise their rates. As might be expected, such a condition immediately resulted in numerous and acrimonious disputes, between the medical profession on the one hand and the employers and insurance carriers on the other, as to medical fees. The compensation commissioners were usually able to effect a working compromise, but such compromises have on the whole been unsatisfactory. Insurance companies have refused to pay medical bills unless they were satisfactory, and physicians in retaliation have threatened to refuse to treat industrial cases unless guaranteed their regular rates. As a counter measure employers and insurance carriers have begun to furnish their own medical service, establishing dispensaries and hospitals and engaging surgeons and trained nurses. Obviously a continued extension of the system of establishment hospitals and contract doctors would ultimately exclude a large majority of the medical profession from the field of industrial surgery. It is the evident extension of this practice that causes apprehension in the ranks of the profession and is the motive power behind their movement for free choice of physicians.

CONTRACT DOCTORS AND ESTABLISHMENT HOSPITALS.

When State compensation laws were first enacted many of the larger employers had in operation benefit schemes for the protection of their employees in case of accident or sickness. The compensation laws in about one-half of the States permitted these substitute schemes to continue, provided the benefits furnished equaled those provided in the compensation acts. Thus, many, if not most, of the larger employers in the United States at present, have their own organized medical service and establishment hospitals with surgeons and nurses in charge.

This is especially true of the far western States where the contract hospital system predominates. In fact, the compensation laws of

seven western States¹⁷ specifically authorize employers to make contracts with their employees for medical and hospital service.

One criticism against the contract system is that the cost of the medical benefits under the compensation law—a burden it was intended for the employer to assume—is shifted to the employees. Another criticism is the commercialization of the medical service by nonmedical men. In Washington, for example, the contract plan has given the State medical aid board considerable trouble because of such commercialization. These nonmedical men form a hospital association and then secure the services of a surgeon, pay a small part of the proceeds to him for the work and keep the remainder. This has brought about a lot of dissatisfaction among the workmen and physicians of the State, causing some agitation toward State hospitals for the care of workmen under the compensation act.

The most potent criticism against contract practice is that through it injured employees receive inferior service. As already stated, many employers furnish medical and surgical treatment of the highest character, but that is not the general custom and is especially not true in case of many insurance companies. The California Industrial Accident Commission in its 1916-17 annual report made the following observation regarding the contract system:¹⁸

Many poorly equipped medical men are not above accepting industrial cases which they can not handle. The commission feels keenly its responsibility in this matter, and, of course, desires that the very best services shall be accorded the injured workman.

There has been noted in the last fiscal year an ever-increasing tendency toward "contract practice" among the insurance companies. This is a most deplorable condition, since the contracts are frequently made with men of poor judgment and some whose only equipment appears to be a willingness to work for little money. One great failing in this contract work is that treatment and results of treatment are seldom subject to comparison or supervision. There is a tendency toward surgical "inbreeding," in that a man, secure in his exclusive care of the cases for an insurance company, may do pretty much as he pleases as long as he is acceptable to the company. The result is poor work.

Very often has contract practice brought to this office cases for inspection by our medical department. These injured men present themselves for the purpose of satisfying their doubts as to the results or character of treatment which they have received.

These examinations frequently result in change of doctors or exactions of satisfactory treatment by the insurance companies. * * *

Whether the control of the medical practice and the exclusion from the industrial accident field of the unfit practitioners shall come through an enforcement of the medical practice act, or whether through regulations of the industrial accident board specifying the character of physicians eligible for industrial work is not yet known.

¹⁷ Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Washington.

¹⁸ Report of California Industrial Accident Commission, 1916-17, pp. 21, 22.

The situation constitutes a distinct menace at the present time, and suggests possible failure of the good effects of a most excellent law.

"There are a great many good men," said Dr. B. P. Magnuson, medical director of the Illinois Industrial Commission, before the fifth I. A. I. A. B. C. conference,¹⁹ "who have started as contract surgeons, simply as a stepping stone to work up, but those men leave it, because they can't get adequate compensation for their work from the corporation. The contract surgeon, therefore, has fallen into disrepute, because, on the average, he doesn't measure up to men in civil practice who are doing the best kind of surgery. * * * The contract surgeon is often careless; he gets a biased view. The claim agent bothers the life out of him to get a man back to work."

MEDICAL AND HOSPITAL FEES.

Probably no one phase of workmen's compensation has caused more vexation to commissions or created more ill feeling among the medical profession than the question of medical and hospital fees.

Basis for medical fees.—Prior to the enactment of workmen's compensation laws there had been little distinction in the treatment of injuries which arose out of the employment and those which arose outside of the employment. In either case the person sustaining the injury was financially responsible for the medical and hospital treatment furnished, but since a large proportion of such persons were unable to pay for the treatment received the hospitals and physicians accepted them as charity patients, usually charging low rates and collecting fees only in cases where the patient could afford to pay. The compensation laws, however, definitely placed upon the employer the burden of furnishing medical services in industrial accident cases; but no provision was made as to medical fees, except that they should be reasonable, and, in 18 States,²⁰ that they should be limited to such charges as prevail in the same community for similar treatment of injured persons of a like standard of living when treatment is paid for by the injured persons. In view of these facts the medical profession as a whole maintained that medical services in industrial cases should be remunerated at full value and that such cut rates and charity as had been granted the sufferers by hospitals and doctors should be discontinued. They also believed it to be an injustice to expect the medical profession to adopt a sliding scale of fees, governed by their clients' ability to pay, when other institutions and businesses, including the very same employers and insurance companies, are not subjected to the same principles and practices.

¹⁹ Bulletin No. 264, Proceedings of the fifth annual meeting of the International Association of Industrial Accident Boards and Commissions, held at Madison, Wis., Sept. 24-27, 1918, pp. 142, 143.

²⁰ Alabama, Connecticut, Hawaii, Idaho, Indiana, Kentucky, Louisiana, Maryland, Minnesota, Missouri, Nevada, New York, Oklahoma, Pennsylvania, Tennessee, Texas, Vermont, and Virginia.

Obviously, the medical profession, in common with other professions and vocations, should receive a just and adequate remuneration for its services. The ordinary fee rates of physicians are probably determined in a general way with reference to the paying ability of the moderately well-to-do classes of society. Undoubtedly they are also influenced by the fact that much of the medical services rendered the poorer classes will never be paid for. In view of these facts what would be a just basis for determining reasonable and equitable fees for medical services? As already stated, 18 laws provide that the standards prevailing in the community for treatment of persons having the same standard of living should be taken into consideration. Three States (Idaho, Kentucky, and Texas) further provide that the increased security of payment guaranteed by a workmen's compensation law should also be taken into account. Practically all of the State commissions do consider these factors in determining the reasonableness of medical fees.

Fee schedules.—The ultimate determination of the reasonableness of medical fees in workmen's compensation cases lies with the administrative commissions and courts.

In 28 States ²¹ the compensation commissions or courts are specifically authorized to approve, regulate, or fix the amount of medical and hospital fees. The laws of two States (Colorado and Washington) authorize the commission to issue a table or schedule of fees which shall serve as a basis for compensating medical services rendered. Moreover, medical fee schedules have been put into effect, under general authority to regulate or approve medical fees, by the compensation commissions of the following States: California, Maryland, Nevada, Ohio, Oregon, Washington, and West Virginia. In passing, it may be noted that all of these States have either exclusive or competitive State insurance funds. Also, the Massachusetts and New York compensation commissions, in approving medical fees, have been governed by a medical and a hospital fee schedule formulated in cooperation with the medical profession, hospitals, and insurance companies of the State. In New York, however, the State medical society later repudiated the fee bill because the insurance companies interpreted it as "a maximum fee bill, not as a minimum fee bill."²²

In addition to the foregoing official schedules promulgated by the State compensation commissions, medical fee schedules have been adopted quite extensively by insurance companies, by many county medical societies, and by a few State medical societies. There is a fundamental difference, however, between the schedules adopted by

²¹ California, Colorado, Connecticut, Delaware, Hawaii, Kansas, Idaho, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nevada, New York, Ohio, Oklahoma, Rhode Island, South Dakota, Tennessee, Texas, Utah, Virginia, and Wisconsin.

²² Quoted from American Medical Association Bulletin of May 15, 1915, p. 338, by Dr. I. M. Rubinow in July, 1917, issue of the Journal of Political Economy, p. 717.

the medical societies and those adopted by the insurance companies. The former are generally minimum fee schedules, whereas the latter are maximum schedules. Moreover, the medical societies have difficulty in maintaining strict adherence to their schedules on the part of the members of the profession; on the other hand, relatively few of the experienced physicians and surgeons will sign the schedules of the insurance companies.

The rates contained in the fee schedules adopted by the several States enumerated above are somewhat lower than the regular rates of the profession. In many of the States the rates approved vary between different communities, depending upon the prevailing rates in the locality. In Massachusetts, for example, the guideposts by which the industrial accident board determined the reasonableness of fees were (1) the locality in which the doctor practices, (2) the nature of the complaint, (3) the ability of the man to pay, and (4) the standing of the practitioner in his profession.²³ In Ohio, however, the amount of medical fees was determined with a view to impartiality and uniformity. Said the Ohio Industrial Commission in this connection:

We can not consider and maintain this impartiality and uniformity, of which we speak, if, as has been suggested by some physicians, we consider that the same services demand different fees from different localities, in industrial accident work. It is to be remembered that this act contemplates the considering of this whole subject on an industrial accident basis. This is an industrial accident law, based on industrial conditions, and the lack of appreciation of this very fact is the one great reason why there is difficulty regarding the medical aid feature. The medical aid compensation is charged to the employer on an industrial accident basis. The act contemplates the payment of reasonable compensation to the injured and reasonable compensation for medical attention.²⁴

Because of the great variations in kind and amount of treatment required even for similar and apparently identical injuries, it is impossible to determine in advance what would be a reasonable fee for a particular injury. Consequently a medical fee schedule is commonly used merely as a guide or as a minimum fee table.

Because of the medical fee question, workmen's compensation laws have been the subject of considerable objection and adverse criticism by a part of the medical profession. Usually this criticism is of two kinds: (1) That directed against the law and its administration, and (2) that directed against the unfair and unreasonable practices of certain employers and insurance carriers. The first kind is heard most when a compensation law is first put into effect and is due

²³ First annual report of Massachusetts Industrial Accident Board, 1912-13, p. 56.

²⁴ Ohio Industrial Commission Bulletin, Oct. 1, 1914, pp. 14, 15.

primarily to the physicians' unfamiliarity with the law and with the duties and functions of the compensation commission. The loudest criticisms, too, generally come from those physicians who do not stand highest in the profession. The large majority of the profession have cheerfully cooperated with the commissions in the administration of the laws in the interest of the working classes for whose benefit such laws were enacted, and it is seldom, indeed, that a compensation commission has had difficulty with the higher class physician and surgeon. The second criticism is usually the result of certain practices on the part of employers and insurance carriers which are considered unfair to the medical profession and inimical to the best interest of the injured workmen.

The following extracts from a report made by the Massachusetts medical advisory committee to the physicians of the State probably epitomize the general experience under compensation laws in the United States:

A small proportion of these [insurance] companies have adjusters and other subordinates who are at times inclined to play cheaper games than proper. There has been a tendency on the part of some physicians, not many of them members of our societies, but still physicians ostensibly respectable, to pad their bills and raise their rates; in other words, to treat this law as an opportunity for medical graft. In many of these matters the medical advisory board has been able to help the industrial board toward a solution. * * *

It seems to us that the whole intent of the law is not charity, but rather to lift the injured workmen out of the pauper class and, at least for the fortnight following the injury, to furnish them with the best care, to give them the best possible chance for complete and early recovery and return to working power. Some of the insurance men regard the whole matter, seemingly, as a partially charitable service, and argue that as cut rates and charity were granted the sufferers by doctors and hospitals before this act went into effect, therefore this sort of thing should continue. * * *

Here and there insurance companies, usually the unimportant ones, have shown a desire to press the advantage given them by the phrase of the current law. In the main, however, the better companies * * * have shown themselves decent and reasonable, not inclined to overwork a technical advantage.²⁵

Hospital fees.—The problem of determining the reasonableness of medical fees is further complicated when the injured man is sent to the hospital. The added difficulty arises from the fact that hospitals are in part charitable institutions and supported by donations of public-spirited citizens. Hospitals usually have three classes of service—public wards, semiprivate rooms, and private rooms. The public wards are maintained, at nominal prices, frequently less than actual cost, for patients who have limited means, among whom are included most of the industrial workers. Moreover, in case of public ward

²⁵ Boston Medical and Surgical Journal, Sept. 18, 1913, p. 444.

patients, no charge is made for the attending physician or surgeon. For the other classes of service the rates are not only much higher, but fees for attending physicians and surgeons must be paid in addition. The question immediately arises, Should injured employees be placed in public wards, as they probably would have been before the enactment of compensation laws, or should they be placed in semiprivate or private rooms? If the former practice is followed the employers and insurance companies are benefited at the expense of the physicians and hospitals; whereas, if the latter plan is adopted, the remuneration received by the medical profession would not be in accord with the compensation acts, which provide that medical fees should "be limited to such charges as prevail in the same community for similar treatment of injured persons of a like standard of living when such treatment is paid for by the injured persons"; and consequently employers and insurance carriers would be required to pay more than was intended by the law. The insurance companies maintain that were the injured workman to pay for his own medical and hospital bills he would in most cases be sent to a public ward, and physicians would graduate their charges according to the patient's income and ability to pay.

On the other hand, the hospitals maintain that they should not be asked to treat compensation cases at a loss. The practice among hospitals varies. Some place compensation cases in public wards, some in semiprivate rooms, and others maintain a "compensation ward" at intermediate rates. The practice of doctors in sending patients to hospitals also varies. The majority, however, recommend that patients be placed in semiprivate wards, thus entitling them, according to the rules of the profession, to charge for their services in hospital cases.

EFFECT OF COMPENSATION LAWS UPON INCOME OF PHYSICIANS.

It is the consensus of compensation commissions and many physicians who have investigated the matter that workmen's compensation laws have increased rather than diminished the income of the medical profession, and this despite the fact that the rates in industrial accident cases have been somewhat reduced. Certainly the effect has not been detrimental in a pecuniary way. The lower schedule of fees has been counterbalanced by certainty of payments. "It is of great interest to physicians to remember," says the Ohio Industrial Commission, "that in the past, in from 50 to 75 per cent of the cases taken in aggregate, no pay was received for medical service rendered."²⁶ Several investigations of the effect of compensation laws upon the income of physicians have been made by members of the profession. Dr. F. T. Rogers, former editor of the Providence

²⁶ Bulletin of Ohio Industrial Commission, Oct. 1, 1914, p. 4.

Medical Journal, as a result of a questionnaire sent to the doctors of the State of Rhode Island, found that in about one-half of the cases in which replies were received there was no appreciable change in income; in about one-quarter there was an increase in the income; while in the other quarter there was a decrease in income. Summing up, Dr. Rogers said: "An act which affects but 13 per cent of the profession²⁷ unfavorably can not be a serious menace to our interests."²⁸ Dr. William L. Estes, as a result of a questionnaire sent to the physicians of Pennsylvania, said: "It is evident, therefore, that a majority of the physicians of the State believe the law a good one, and is working efficiently for the good of the workingman, and not to the detriment of the physicians."²⁹ Dr. Sears in a letter to the Bureau of Labor Statistics stated that in his judgment the Vermont compensation law has somewhat increased the remuneration of the medical profession. "It is probable," says the Wisconsin Industrial Commission,³⁰ "that the compensation act has very greatly increased the income of the medical profession as a whole." The medical advisory committee of Massachusetts stated as its opinion that the compensation law "has worked out well so far—for a new law—and that on the whole the medical profession has lost nothing by it."³¹

ADMINISTRATION—MEDICAL ADVISERS.

All except 11³² of the 45 workmen's compensation States have industrial accident boards or commissions to administer the compensation acts. The numerous technical medical questions involved and the constant need for medical advice have led to the appointment of medical advisers or directors in 13 States³³ and the Federal Government to assist the commissions in administering the medical provisions of the acts. The recent Missouri law also provides for the appointment of a medical adviser.

The duties and functions of these medical advisers generally include the following: (1) To examine claimants; (2) to be witness or give counsel at hearings; (3) to make medical reports on cases; (4) to be present at conferences of physicians examining claimants; (5) to make arrangements for specialists' examinations; (6) to select impartial physicians for examinations of claimants; (7) to pass upon the reasonableness of medical and hospital fees; and (8) to rate permanent disabilities.

²⁷ That is, 13 per cent of those to whom the questionnaire was sent.

²⁸ Providence Medical Journal for March, 1915.

²⁹ Monthly Bulletin of Pennsylvania Department of Labor and Industry for February, 1917, p. 48.

³⁰ Fourth annual report of the Wisconsin Industrial Commission, 1914-15, p. 4.

³¹ Boston Medical and Surgical Journal, Sept. 18, 1913, p. 444.

³² Alabama, Alaska, Arizona, Kansas, Louisiana, Minnesota, New Hampshire, New Mexico, Rhode Island, Tennessee, and Wyoming.

³³ California, Illinois, Iowa, Kentucky, Maryland, Massachusetts, Nevada, New York, Ohio, Oklahoma, Oregon, Washington, and West Virginia.

ADMINISTRATION BY LOCAL BOARDS IN WASHINGTON.

A notable experiment in the field of medical administration was put into effect in the State of Washington in 1917. The Washington act provides for a State medical aid board composed of the medical adviser of the industrial commission and one representative each of the employers and employees. This board is authorized to divide the industries of the State into five classes, according to hazard. Employers subject to the act are assessed from 1 to 3 cents for each working day of each employee, to be paid to the State medical fund once a month. Deductions from the employees' wages of one-half of the assessments are authorized by law. The State board is also authorized to promulgate rules, issue a maximum medical fee bill, approve physicians' and hospital bills, and approve contracts between employers and employees as to hospital benefit funds.

The act also provides for the establishment of local medical aid boards for the actual administration of the medical service. Each of these boards, composed of one representative each of the employers and employees, must provide care and treatment for the injured, report the beginning and termination of disability and the cause of the injury, and also certify the medical bills. In case of disagreement the local boards shall appeal to the State medical board.

One of the most difficult problems the State board was called upon to solve concerned the appointment and functioning of the local medical aid boards.³⁴ The framers of the law evidently intended that there should be a local board at each plant. Such local boards were workable in the larger plants but were utterly impracticable in the case of the smaller employers. The board, therefore, divided the State into districts and established a local board in each locality where a physician resides. The larger cities were divided on an industrial basis, six such districts being established in Seattle, and five each in Tacoma and Spokane. The State board experienced great difficulty in having the local boards appointed. The employers as a rule refused to serve on the board because they could not spare the time from their business and since the law allowed only \$3 a day the workmen did not want to give up good-paying jobs to attend to local board work.

This situation was remedied by a 1919 amendment (ch. 130) to the workmen's compensation law. The act now provides for the creation of three local aid districts (one each in Seattle, Tacoma, and Spokane). In each district there shall be a local aid board to consist of two members who are to be appointed by the newly created State safety board. Each member of a local aid board shall receive a salary of \$300 a month. Their duties are enlarged to include accident prevention work.

³⁴ Report of Washington State Industrial Insurance Department for 1917, pp. 54-56.

TIME FOR NOTICE AND CLAIM.

Limitations are placed on the time for giving notice and for making claims under the acts, notice usually being required within from 5 to 30 days, and a claim within from 3 months to 2 years. A number of laws contain the provision that no notice is necessary where the employer has other knowledge of the fact or where the accident was a fatal one. The time set may also be extended if it is shown that the employer was not prejudiced, but if prejudiced the liability will be reduced only to the extent of such prejudice. Many laws also provide that no defect in the notice shall be a bar to proceedings or recovery. As a matter of practice, the commissions construe this provision quite liberally; nor is the strict adherence to the technicality of the law always insisted upon by the employers and insurers if the injury actually occurred and their liability therefor is unquestioned. On the other hand, it is necessary to protect the employer from false claims made by employees a considerable period of time subsequent to the alleged injury. It would be difficult for an employer to disprove several weeks or months after the occurrence of an injury that it arose out of the employment if he had no knowledge of its occurrence and no report of it had been made. Then, too, the employer should have immediate knowledge of the injury in order that he may furnish competent medical and surgical treatment so as to minimize the result of the injury and to secure as early a recovery as possible. Several States have recently amended their compensation acts, requiring employees to report immediately all injuries to their employers.

Claims for compensation, as already noted, must be made within 3 months to 2 years. In 6 States ³⁵ claims must be made within 3 months; in 12 States ³⁶ within 6 months; in 20 States ³⁷ and the Federal Government within 1 year; and in 4 States ³⁸ within 2 years. The Wyoming law makes no provision in this respect, while in Utah the time is fixed by the commission. In New Mexico claim must be made within 2 months after the refusal of the employer to pay compensation except that in fatal cases the limit is 1 year. A short time limit for the presentation of claims works an injustice where the disability does not develop until a considerable period after the date of the accident.

³⁵ Hawaii, Iowa, Maryland, Nevada (1 year in case of death), Oregon (1 year in case of death), and Porto Rico.

³⁶ California (1 year in case of death), Illinois, Kansas, Massachusetts, Michigan, Missouri, Montana, New Hampshire, North Dakota (1 year if reasonable cause is shown), Texas, Vermont, and West Virginia.

³⁷ Alabama, Arizona, Colorado, Connecticut, Delaware, Idaho, Kentucky, Louisiana, Maine, Minnesota, Nebraska, New Jersey, New York, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Virginia, Tennessee, and Washington.

³⁸ Alaska, Indiana, Ohio, and Wisconsin.

ADMINISTRATIVE SYSTEMS.

The three most important factors in a compensation act are its scope, compensation benefits, and administrative system—in other words, *who* should receive compensation, *how much* should he receive, and *does* he actually receive it, and if so, when. The first two are fixed by law, subject, of course, to the interpretation of commission and court; but some responsible administrative body is necessary to insure to the injured workman his rights under the law, and to see that he receives the full amount of his compensation immediately and regularly. As to administration, there are two general types of compensation acts—the commission or board type, of which there are 34,³⁹ and the self-administrative or court type, of which there are 11.⁴⁰

In the commission type, a special board, usually of three or five members,⁴¹ is appointed to enforce the law, including usually the administration of the State insurance fund, if such a fund is created. The commission is granted extensive powers and quasi-judicial functions. It receives accident reports, investigates claims, settles disputes, hears cases, grants awards, issues decrees, and, in case of a State fund, classifies industries, fixes and collects premiums, and pays compensation. In some States it has the additional function of accident prevention, while in a few States⁴² it administers the entire body of labor laws. There seems to be a tendency among States to consolidate the separate agencies authorized to enforce the various labor laws into one body called an industrial commission. Several States⁴³ in recent years have created such commissions, thereby abolishing all existing agencies.

In the court type of law the amount of compensation and other questions at issue are settled directly by the employer or insurer and the injured employee. In cases of dispute the matter may be referred to an arbitration committee, and eventually taken to the courts. In some of these States, however, there exists a certain amount of loose supervision by one or more State agencies. For example, in Alabama the director of the department of archives and history, who is *ex officio* compensation commissioner, shall receive accident reports and settlements, prepare blank forms, and compile statistics on the

³⁹ California, Colorado, Connecticut, Delaware, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, Nevada, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Porto Rico, South Dakota, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

⁴⁰ Alabama, Alaska, Arizona, Kansas, Louisiana, Minnesota, New Hampshire, New Mexico, Rhode Island, Tennessee, and Wyoming.

⁴¹ A single commissioner in Iowa, Nebraska, South Dakota, Vermont, and West Virginia.

⁴² Indiana, New York, Ohio, Utah, Vermont, and Wisconsin.

⁴³ Indiana, New York, Ohio, Utah, and Wisconsin. Also of similar type are California, Colorado, and Montana.

operation of the act; in Alaska, rejections of the act are filed with the United States commissioner; in Arizona, in case the parties do not agree, reference may be had to the attorney general; in Kansas, disputes are settled by local committees or arbitrators selected either by the parties in interest or by the court; in Minnesota, notices and settlements are filed with the commissioner of labor, who shall advise the employee of his rights and assist in adjusting disputes; in New Hampshire, acceptances and proof of financial solvency are filed with the commissioner of labor; in Rhode Island, acceptances, accident reports, and proof of financial solvency are filed with the commissioner of industrial statistics; in Tennessee the bureau of workshops and factory inspection receives notices of rejection of the act, accident reports, settlements, and releases; while in Wyoming, the State treasurer supervises the State fund and county assessors are required to report lists of extrahazardous employments to the treasurer, who shall compile accident statistics.

Two variations from the standard compensation commission type of administration are (1) the system in Hawaii, which provides for an industrial accident board in each county, and (2) the district system of Connecticut. In the latter State the administration of the act is vested, not in a central board, but in five separate commissioners, each supreme in his own district, which coincides with a congressional district of the State. Each commissioner maintains an office at some central point, generally the largest industrial city in the district. The five commissioners, acting as a board, make rules, prescribe forms, issue bulletins, etc.; but as regards the interpretation and administration of the act, each commissioner is supreme and independent in his own district. Although conflicting decisions have been made, a satisfactory uniformity in rulings and practices seems to be maintained by means of frequent conferences and the use of each other's awards. This district system is defended on the ground that it permits closer supervision of compensation cases and expedites settlements, and that the close personal relationship between the commissioner and the parties in interest makes possible a feeling of mutual confidence. On the other hand, it is maintained that a single commissioner is more easily subject to undue influences and affected by personal considerations.

The great predominance of the commission type of law seems abundantly warranted from the experience that has developed under the various methods. The need of authoritative agencies to administer compensation laws is sufficiently demonstrated in those States which do not possess them. The average non-English-speaking foreign workman is generally unfamiliar with his rights under the law and does not know what action to take in case of injury. Complaint, too,

is frequent that the fear of discharge acts as an effective deterrent in demanding compensation.

The experience of New Jersey under court administration proved conclusively that thousands of compensable accidents are insufficiently compensated or not compensated at all. A comparison of accident statistics of New Jersey with those of Massachusetts is very illuminating. Both States require all employers to report their accidents. In Massachusetts during the year 1916 there were reported 28,060 accidents resulting in death or in disability of two weeks or longer, whereas in New Jersey, which has 78 per cent as many employees as Massachusetts, only 8,611 such accidents were reported. Inasmuch as the industries of New Jersey are fully as hazardous as those of Massachusetts they should produce proportionately the same number of accidents. The probable number of accidents in New Jersey in 1916, therefore, was 21,887, not 8,611, as reported. In other words, 13,276, or over 60 per cent, of New Jersey's compensable accidents were not reported and presumably were not compensated.

SETTLEMENT OF COMPENSATION CASES.

The settlement of disputes is one of the principal administrative functions of a compensation commission or board, and consumes most of its time and energy. The speedy settlement of cases and the immediate and regular payment of benefits depend in a great measure upon the efficiency of the commission, which in turn is affected by the method of organization. It is important, therefore, to examine the methods provided in the various laws for hearing and settling compensation cases and disputes. Much of the administrative routine, such as examining accident reports, investigating claims, and checking up voluntary agreements and settlements, may be delegated to subordinates. On the other hand, a large proportion of the work, such as hearing and deciding cases and granting commutations, is quasi judicial in character and can not ordinarily be so delegated; in fact, the hearing of cases by the commissioners, either individually or collectively, frequently takes up so much time that little opportunity is afforded for constructive work, such as accident prevention, restoring the maximum earning capacity of injured workmen, and fitting them to their new and changed economic environment. In fact, in many cases, compensation commissioners are merely highly paid claim agents. The settlement of compensation cases, in the first instance, therefore, by methods which insure both justice and expedition in the settlement of claims is of utmost importance.

The most common system devised for this purpose is the settlement of cases directly by the parties in interest through the medium of direct settlements or voluntary agreements. These voluntary agree-

ments are later reviewed by the commission and if found to conform with the provisions of the act are approved. Approximately 75 to 95 per cent of industrial accidents are settled in this way. In other States, especially those having State funds, the injured workman files a claim with the commission. This claim is examined and if found legitimate is approved and payment ordered. The principal argument in favor of direct settlements is that it expedites procedure and insures more prompt payments. It is held that a majority of injuries involve no dispute and substantial justice is insured through the direct settlement plan. The argument against direct settlements is predicated upon the claim that injured employees are not always familiar with their compensation rights, that they can not cope successfully with a trained insurance adjuster, and that in demanding compensation from their employer they are laboring under constraint. The fear of antagonizing their employer, it is held, effectively inhibits injured workers from insisting upon their rights. The recent investigation of the operation of the direct settlement system in New York⁴⁴ made by Mr. J. F. Connor showed that of 1,000 unselected cases 114 were underpaid. This underpayment amounted to \$52,279.84, or \$459 per case. The total underpayments, on the basis of the 1,000 cases, would amount to \$1,400,000 annually.

In case the parties can not agree the compensation claim may be settled in one or more of several ways. In the 11 noncommission States, disputed cases usually go to the inferior courts for adjudication, although Arizona and Kansas provide for arbitration committees appointed either by the interested parties or by the court; Arizona also provides for reference to the attorney general; and Minnesota authorizes the department of labor to attempt to settle the matter. In the 34 commission States disputed cases may go either directly to the commission for adjudication or they may be first heard before a subordinate tribunal, usually appointed, in part at least, by the commission. These preliminary tribunals may be either arbitration committees, referees, or individual members of the commission.

The findings of fact and decisions of all such preliminary tribunals are, of course, subject to review by the full commission. Right of appeal from the commission's rulings to the courts is generally provided for, but a number of States limit this right to questions of law only.

Another method of settling disputes, not originally provided for in law but developed through experience, is the informal conference. The parties in interest are requested to appear before a member or representative of the commission. The points in dis-

⁴⁴ Report of investigation by Jeremiah F. Connor, as commissioner under section 8 of the executive law, known as the Moreland Act, in relation to the management and affairs of the State industrial commission. Submitted to the governor, Nov. 17, 1919.

pute are considered and in a large proportion of cases the matter is satisfactorily settled. This method not only expedites procedure by eliminating the time and expense of formal hearings, but also promotes amicable relationships between the parties and helps to establish a feeling of confidence.

REVISION OF BENEFITS.

It frequently happens, after an agreement has been drawn up or an award has been made, that the incapacity of the injured workman or the measure of dependency has been changed, necessitating a modification of benefits in conformity with changed conditions. Practically all of the States provide for revision of benefits under certain circumstances if conditions warrant. As a rule a review may be had upon application of either party or upon the commission's own motion. Usually a time limit is set after which no review will be allowed, although a number of States provide that an award may be modified at any time if circumstances justify a change. In some States, however, lump-sum settlements, when once made, are final and not subject to review or modification.

NONRESIDENT ALIEN DEPENDENTS.

One of the matters of regret, and perhaps the only one, in changing from the old liability system, is the reopening of the question of the status of nonresident beneficiaries of aliens who lose their lives in employment in this country. After a long series of adjudications and legislative action the position had been reached of equal treatment before the law of the dependents and personal representatives of all persons employed, without reference to their citizenship status. Comparatively recent legislation in Pennsylvania and Wisconsin has made the liability acts of these States available for the benefit of nonresident alien claimants, thus reversing the adverse rulings of the courts on this subject in these two States, which were the principal remaining strongholds of the harsh doctrine excluding them.

The question of the rights of aliens to accident compensation became of especial importance when the United States declared war against Austria-Hungary and particularly after the enactment of the Trading with the Enemy Act. A large proportion of the workers in some of our basic industries, especially coal mining and iron and steel manufacturing, were subjects of Austria-Hungary, and therefore enemy aliens.

The provisions as to the status of nonresident alien beneficiaries in the 45 compensation laws can be seen from the following table:

TABLE 32.—PROVISIONS OF COMPENSATION LAWS AS TO NONRESIDENT ALIEN DEPENDENTS.

No provision. (⁶)	Excluded. (⁵)	Included. (³)	Limitations: Only enumerated dependents included.
	Alabama.....	Alaska ¹	
Arizona.....		California ¹	One-third benefits, not over \$1,041.66. One-half rates except as to residents of Canada or United States dependencies. One-half benefits to dependent widows and children.
		Colorado.....	
		Connecticut.....	
	Hawaii.....	Delaware.....	One-half benefits; other half paid into industrial administration fund.
		Idaho.....	
		Illinois ¹	
		Indiana ¹	\$750 maximum except to residents of Canada. Half benefits to widow or children under 16.
		Iowa.....	
		Kansas.....	
Louisiana.....		Kentucky.....	
		Maine.....	Half rates except to residents of Canada. Dependent widows, children, and parents. After one year commission may commute payments to three-fourths value, maximum \$2,400.
		Maryland.....	
		Massachusetts ¹	
		Michigan.....	Half benefits to widow or children under 16, unless treaty provides otherwise. Widow, children, and parents. Within one year employer may commute payments to two-thirds value. 60 per cent of benefits.
Missouri.....		Minnesota.....	
		Montana.....	
	New Hampshire.....	Nebraska.....	Wife, children, and dependent ascendants. Commission may commute payments to one-half present value.
	New Jersey.....	Nevada.....	
	New Mexico.....	New York.....	
North Dakota.....		Ohio.....	Widow, widower, children, and parents. Two-thirds benefits to widow and children.
Oklahoma ²		Oregon.....	
		Pennsylvania.....	
Porto Rico.....		Rhode Island ¹	Maximum, \$1,000, except to residents of Canada. Parents only, unless treaty provides otherwise. Widow, invalid widower, children under 15, or over if incapacitated.
		South Dakota ¹	
		Tennessee.....	
		Texas.....	One-third benefits to widow and children under 16.
		Utah ¹	
		Vermont ¹	
		Virginia.....	
		Washington.....	
		West Virginia.....	
		Wisconsin.....	
		Wyoming.....	

¹ Not specifically mentioned in law, but included by court or commission.² Fatal accidents not covered.

It will be noted that 6 States make no statutory provision for non-resident alien dependents, while in some of the States in the "included" column also such alien dependents are not specifically mentioned in the law but have been included by virtue of the rulings of the courts or commissions; 5 States exclude them from the benefits of the act; 16⁴⁵ include all beneficiaries and provide for full compensation; while 18 States⁴⁶ recognize them but establish limitations

⁴⁵ Alaska, California, Illinois, Indiana, Iowa, Massachusetts, Michigan, Minnesota, Ohio, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, and Wisconsin.⁴⁶ Colorado, Connecticut, Delaware, Idaho, Kansas, Kentucky, Maine, Maryland, Montana, Nebraska, Nevada, New York, Oregon, Pennsylvania, Virginia, Washington, West Virginia, and Wyoming.

either by reducing the amount of benefits payable in cases where the beneficiaries are nonresidents or by limiting the classes of beneficiaries to whom payment may be made, or by doing both. There may be a plausible justification for a proportionate reduction of benefits corresponding to the lower cost of living in foreign countries and possibly for a restriction of the groups of beneficiaries to immediate members of the injured employee's family; but even these restrictions open the door for injurious discriminations against American citizens by reason of the fact that injuries to aliens whose possible beneficiaries are nonresident entail less expense on the employer of such labor than do injuries to Americans. Several European countries have entered into reciprocal agreements guaranteeing mutual benefits to each other's nationals, but such a measure would be without practical benefit in this country. Because of its unfairness to citizen employees the discriminatory treatment of aliens, on the whole, lacks justification, even though the danger of burdening the State or municipality with dependent charges is absent.

LUMP-SUM SETTLEMENTS.

Compensation payments are supposed to be a substitute for wages, and accordingly every State except three⁴⁷ provides that such payments shall be made in weekly or monthly installments. The purpose of small regular payments is to prevent unwise and unnecessary expenditures which lump-sum settlements might facilitate. Injured workmen and especially dependent widows all too frequently squander the entire amount of compensation, and in a short time are left penniless and a burden upon the community. On the other hand, under certain circumstances the commutation of weekly payments into a lump sum would be beneficial and desirable. Especially is this true in case of a permanently disabled workman who wishes to start a small independent business or who desires to return to his native country, where cost of living is much cheaper.

The practice of granting commutations, however, unless properly restricted, opens the way for abuses and injustices. A lump sum looks large to a workman or his dependents, who are usually willing to compromise upon an amount much less than that to which they are legally entitled. Frequently the attorney receives a large portion of the lump-sum settlement. And, furthermore, the commissions, harassed by their many administrative duties, are at times inclined to grant lump sums without proper investigation in order that the case may be settled and closed. The laws of most States therefore provide that lump-sum payments must be approved by the commission or court and must be in the interest of the beneficiary or of

⁴⁷ Alaska, Porto Rico, and Wyoming.

both parties, leaving the question of necessity or justice to the discretion of the administrative body. Some States require that a certain time elapse, usually six months, before commutations may be granted at all, and in most cases the application for a lump sum must be made by either or both of the interested parties, although in a number of States the commission is authorized to grant such commutations on its own motion.

Table 33 shows when and under what conditions commutations may be granted in the several States:

TABLE 33.—CONDITIONS UNDER WHICH LUMP-SUM SETTLEMENTS ARE PERMITTED UNDER COMPENSATION LAWS.

State.	Conditions under which commutations may be made.		
	Application made by—	Lapse of time before commutation can be granted.	Other conditions.
Alabama.....	Mutual agreement.....	.....	Court approval necessary in death and severe injury cases.
Alaska.....	.....	.....	.....
Arizona.....	Motion of court.....	.....	Best interest of workman.
California.....	Either party or commission's motion.....	.....	Best interest of parties.
Colorado.....	Motion of commission.....	6 months.....	.....
Connecticut.....	Motion of commissioner.....	.....	Just or necessary.
Delaware.....	Either party.....	.....	Best interest of parties.
Hawaii.....	do.....	.....	Do.
Idaho.....	do.....	.....	Best interest of parties at board's discretion.
Illinois.....	do.....	6 months in total disability cases.	Interest of both parties; either party may reject board's award, except in death or dismemberment cases.
Indiana.....	Either party or board's motion in case of permanent disability of minors.....	6 months; any time in case of minors.	In unusual cases.
Iowa.....	Either party.....	.....	When period of compensation can be definitely determined. Granted by court upon approval of commissioner.
Kansas.....	Employee, if security is doubtful.....	6 months.....	Employer may redeem liability after 9 months' payment.
Kentucky.....	Either party.....	do.....	Best interest of parties.
Louisiana.....	Mutual agreement.....	.....	.....
Maine.....	Either party.....	6 months.....	Best interest of beneficiary.
Maryland.....	Motion of commission.....	.....	In every case except temporary disability.
Massachusetts.....	Mutual agreement; or board's motion, in case of permanent disability of minors.....	6 months; any time in case of minors.	In unusual cases.
Michigan.....	Mutual agreement; board may grant commutation.....	6 months.....	Board may grant commutations at any time if special circumstances require.
Minnesota.....	Mutual agreement.....	.....	Any case except death or permanent disability.
Missouri.....	Either party.....	.....	Best interest of beneficiaries.
Montana.....	Beneficiary.....	.....	.....
Nebraska.....	Mutual agreement.....	.....	Best interest of beneficiary. In death and permanent disability cases consent of court necessary.
Nevada.....	Motion of commission.....	.....	No commutations to wholly dependent beneficiaries.
New Hampshire.....	Employer.....	.....	.....
New Jersey.....	Either party.....	.....	In unusual cases.
New Mexico.....	Motion of court.....	.....	Court may authorize or approve compromise or settlements of claims for lump sum.
New York.....	Motion of commission.....	.....	In interest of justice.
North Dakota.....	Commission's motion.....	.....	Death and permanent disability cases only; best interest of beneficiary. Lump sum to widow limited to 416 weeks' compensation.
Ohio.....	Motion of commission.....	.....	Under special circumstances.

TABLE 33.—CONDITIONS UNDER WHICH LUMP-SUM SETTLEMENTS ARE PERMITTED UNDER COMPENSATION LAWS—Concluded.

State.	Conditions under which commutations may be made.		
	Application made by—	Lapse of time before commutation can be granted.	Other conditions.
Oklahoma.....	Motion of commission.....	.....	In interest of justice.
Oregon.....	do.....	.....	Commission may in any case commute one-fourth of value and thereafter reduce payments proportionately. Best interest of parties.
Pennsylvania..	Either party.....	.....	.....
Porto Rico.....	.....	.....	.....
Rhode Island..	Either party.....	6 months.....	Best interest of beneficiary or hardship upon employer. Best interest of parties.
South Dakota..	do.....	6 months in total disability cases.	.....
Tennessee.....	Mutual agreement.....	.....	Approval of court necessary.
Texas.....	do.....	.....	In death or permanent disability cases.
Utah.....	Motion of commission.....	.....	Under special circumstances if deemed advisable.
Vermont.....	Either party.....	.....	Best interest of parties.
Virginia.....	Mutual agreement; or commission's motion in case of permanently disabled minors.	6 months.....	In unusual cases and best interests of parties.
Washington.....	Beneficiary.....	.....	In death or permanent disability cases.
West Virginia..	Motion of commissioner.	.....	Under special circumstances and if advisable.
Wisconsin.....	Motion of commission.....	6 months.....	Best interest of parties. Consent of all parties in permanent total disability cases.
Wyoming.....	.....	.....	.....

ACCIDENT REPORTING AND ACCIDENT PREVENTION.

Coordinate with the movement for the enactment of workmen's compensation laws has been the growth of the movement for accident prevention. In fact, our workmen's compensation laws have been enacted in the vague belief that industrial accidents are inevitable and constitute a permanent and integral part of our industrial life. For a number of years prior to the enactment of the first compensation laws in 1911, a considerable amount of safety legislation had been on the statute books of many of the more advanced industrial States, but the extent and effectiveness of these laws as regards accident prevention were unsatisfactory. The methods of prevention were practically limited to the mechanical guarding of danger points, and as there appeared to be no diminution in the number of accidents it came to be felt that perhaps accidents, like the poor, were always to be with us. The enactment of workmen's compensation legislation, however, in which the financial burden placed upon the employer was in direct proportion to his accident rate, gave a fresh impetus to accident-prevention work. Better and more comprehensive safety laws were passed. Moreover, the casualty insurance companies entered upon a new era of active accident prevention, which was shared by many of the larger manufacturing establishments throughout the country.

Reports of accidents, also, have been incomplete and lacking in uniformity, so that little material of a reliable nature has been available. Here, too, the influence of compensation enactments has been felt, even in the brief period covered by their existence. Accurate reporting and analysis of accidents as to causes, nature of injury, and length of disability, are absolutely essential, not only for effective accident prevention work, but for the establishment of just and adequate insurance rates. Although considerable improvement has been accomplished since the enactment of compensation laws the problem of accident reporting and prevention has by no means been solved. Just what the quantitative effect of workmen's compensation laws upon accident reduction has been is still problematical, due to the absence of uniform and reliable statistics and the lack of a proper method of measuring industrial hazards. The committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions has recently issued a report ⁴⁸ in which it has formulated standard accident tables and recommended the adoption of a schedule of severity ratings to measure industrial hazards. Statistical reports issued by certain manufacturing establishments and State industrial accident commissions have shown marked decreases in accident frequency rates, especially after the adoption of safety organization methods, but a critical analysis of these reports shows that this reduction was limited largely to minor or short-time disability accidents.

That the increased safety activities have resulted in accident reduction would seem probable, but the extent and nature of reduction can only be surmised. There are relatively more accidents reported to-day than there were five years ago, but this does not mean necessarily that accident rates have increased. It may be simply that more accidents are reported than formerly.

The principal requirements of each State as to accident reporting and prevention are shown in the chart following page 130. Five of the compensation acts ⁴⁹ make no provision for accident reporting and nearly all make no provision for accident-prevention work.

ACCIDENT REPORTING.

It will be noted that the provisions as to accident reporting lack uniformity. Only 20 States ⁵⁰ require all accidents to be reported, while nine States ⁵¹ require only those of one day's disability or more;

⁴⁸ Published in the *Monthly Review*, U. S. Bureau of Labor Statistics, for October, 1917, pp. 123-143.

⁴⁹ Alaska, Arizona, Louisiana, New Mexico, and Tennessee.

⁵⁰ California (involving time loss or medical aid), Colorado, Delaware, Maine, Maryland, Massachusetts, Michigan, Montana, Nevada, New York, North Dakota, Ohio, Oklahoma, Oregon, Porto Rico, South Dakota, Utah, Washington, Wisconsin, and Wyoming.

⁵¹ One day's disability, Connecticut, Hawaii, Idaho, Minnesota, and Vermont (also injuries requiring medical aid); more than one day, Indiana, Iowa, Kentucky, and Texas.

one⁵² requires those of more than two days of disability; three⁵³ require those of more than one week; three⁵⁴ require those of over two weeks; and four⁵⁵ provide that such accidents be reported as are required by the commissioner or inspector. Five States,⁵⁶ as already noted, make no provision for accident reporting in the compensation act, but have such laws outside the act. Of these States, Alaska provides for the reporting of such mining accidents as the governor may require; Arizona requires only serious or fatal accidents in mines to be reported; Louisiana requires the reporting of accidents of two weeks' disability or more in establishments where women and children are employed; New Mexico requires the reporting of all fatal accidents in mines; and Tennessee requires all mine accidents to be reported immediately to the chief mine inspector and all serious accidents in mills and factories to the bureau of workshops and factory inspection.

Of the 40 States providing for accident reporting in the compensation law, in 25⁵⁷ all employers are required to report accidents; in 12⁵⁸ employers subject to the compensation act; in Wisconsin only employers having four or more employees; in Wyoming only those engaged in extrahazardous employments; while in Nebraska such reports of accidents shall be made as directed by the compensation commissioner.

In the 34 States having administrative commissions, accidents are required to be reported to such commissions, except in Pennsylvania, where the compensation act is administered jointly by the workmen's compensation board and the department of labor and industry. Several States have more than one accident-reporting law, due in some instances to the failure to repeal the existing law when the compensation act was passed. In such cases the old law is usually not enforced. Then again in those States in which the compensation act requires only employers subject to the act to report accidents there usually exist other accident-reporting laws providing that such employers as are included within its scope must report their accidents to other State departments. Such laws, in most States, however, are not enforced at all, or at least are enforced ineffectively.

⁵² Pennsylvania.

⁵³ Illinois, Missouri (also those requiring medical aid), and Virginia.

⁵⁴ Alabama, New Jersey, and Rhode Island.

⁵⁵ Kansas, Nebraska, New Hampshire, and West Virginia.

⁵⁶ Alaska, Arizona, Louisiana, New Mexico, and Tennessee.

⁵⁷ California, Colorado, Hawaii, Idaho, Indiana, Iowa, Maryland, Massachusetts, Michigan, Minnesota (employers engaged in industrial pursuits), Missouri, Montana, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania (except casual employments), Porto Rico, Texas, Utah, Virginia, Washington, and West Virginia.

⁵⁸ Alabama, Connecticut, Delaware, Illinois, Kansas, Kentucky, Maine, Nevada, New Hampshire, Rhode Island (except public utilities), South Dakota, and Vermont.

ACCIDENT PREVENTION.

Accident reporting and accident prevention are closely related. In fact, effective prevention of accidents depends largely upon a knowledge of their causes, frequency, and nature. A compensation commission, in the very nature of things, must receive reports of all compensable injuries, and that it is the only agency which does receive them is shown by experience. Furthermore, the problem of accident prevention is intimately connected with the whole theory and system of compensation. It would seem, therefore, that this important work might logically be undertaken by the same agency that administers the compensation provisions. As a matter of fact, however, the practice of a large majority of the States has been in the opposite direction, as is shown by an examination of the chart.

It will be noted that of the 34 States having the commission type of administration, 18⁵⁹ make no provision for accident-prevention work by the compensation commission. In 6 States⁶⁰ the commission is authorized to perform some safety work, but, with the exception of Colorado and Idaho, this power is very slight. In Colorado the commission has jurisdiction over all places of employment for the purpose of enforcing the safety statutes, but thus far the accident prevention work has been carried on by other agencies. This leaves only 10 States⁶¹ in which all the safety work is done by the industrial commission. In fact, in all but three of these States⁶² the entire body of labor laws is enforced by this one agency.

SUMMARY COMPARISON.

Thus far the principal features of the various compensation laws have been treated as individual units. In order to obtain a concise but comprehensive view of the relative importance or adequacy of the entire law in each of the several States it has been deemed advisable to bring together briefly in tabular form a summary of the most important features. These principal provisions include the percentage of employees covered, money benefits received, medical service, waiting period, percentage of wages, and weekly maximum and minimum compensation. It is impossible for the purpose of this study to work out an absolutely accurate comparison of the relative compensation benefits of the several States. However, as a fair indication of all of the compensation benefits, four typical items or injuries have been taken: (1) Death, (2) loss of major hand at the

⁵⁹ Connecticut, Delaware, Hawaii, Iowa, Kentucky, Illinois, Maine, Maryland, Massachusetts, Michigan, Missouri, Nevada, Oklahoma, Porto Rico, South Dakota, Texas, Virginia, and Washington.

⁶⁰ Colorado, Idaho, Iowa, Oregon, Pennsylvania, and West Virginia.

⁶¹ California, Indiana, Montana (except mines and boilers), New Jersey, New York, North Dakota, Ohio, Utah, Vermont, and Wisconsin.

⁶² California, Montana, and North Dakota.

wrist, (3) total disability for a period of 4 weeks, and (4) total disability for a period of 13 weeks. The waiting period was deducted in computing the benefits for both of the disability items and for the loss of the hand in case compensation for temporary total disability was provided by law.

The example taken was that of a married man, 35 years of age, receiving \$21 a week, and having a dependent wife, 30 years of age, and three normal dependent children, 3, 6, and 9 years of age. In computing the life expectancy of the injured man or his widow the American experience table of mortality was used.

The maximum benefits in each case have been given. The amounts computed for death include burial expenses where such are provided by law. It has been assumed that the loss of the hand resulted in a total disability of 26 weeks and a subsequent partial disability of 50 per cent for life. Several States have no schedules of specified injuries, and in such States the compensation for loss of the hand has been based upon the given percentage of wages for the given number of weeks limited by the maximum amounts. In such States, together with those States which provide for a continuing partial disability in addition to the specified scale, both compensations have been given; i. e., compensation for total disability only and compensation for total plus partial disability. Compensation for total disability during the healing period has been included in the amounts given for those States which provide for such benefits. For the total-disability accidents, as already noted, the waiting period in each case has been taken into consideration and deducted from the amount of the compensation.

It has been the purpose to take an example which would be most typical of all States and conditions. It is admittedly true that the specific example and the four items taken will result in a higher scale for some of the States than would have resulted had a different example been taken or had the whole scale of compensation benefits been considered. For example, compensation for the death of a married man with three children would result favorably for such States as Nevada, North Dakota, Oregon, Washington, New York, and West Virginia, which pay compensation until the death or remarriage of the widow. The medical benefits were not taken into consideration in computing the money benefits for the cases cited. This provision is considered separately. For Oregon 10 per cent has been deducted from each of the compensation amounts. This 10 per cent represents the employees' contributions, each employee being required by law to contribute 1 cent for each working day to the accident fund. As a matter of fact the employees' contributions have amounted to somewhat less than 10 per cent. Perhaps it would seem unfair to Oregon to deduct this 10 per cent, because for individual injuries the whole

amount of compensation is received. But, on the other hand, the employees must regularly contribute their share, and the resultant effect will be the same.

In computing the money benefits no account has been taken of the present value of such benefits. A fixed lump sum paid outright at the time of the injury of course exceeds the present worth of the same amount paid in weekly installments over a period of years. In comparing the computed benefits, therefore, it is necessary to take this fact into consideration.

In estimating the "per cent of employees subject to act" as given in the table, all employees in employments covered by the compensation law are included, assuming that all employers who may elect to come under the act have made such election. The figures, therefore, show the maximum possible inclusions under existing law.

TABLE 34.—COMPARISON OF BENEFITS PAID UNDER THE WORKMEN'S COMPENSATION LAWS OF THE SEVERAL STATES.

State.	Per cent of employees subject to act.	Money benefits in typical cases.				Medical service.		Waiting period.		Rate of money benefits.		
		Death.	Loss of hand. ¹	Total disability accident.		Maximum period.	Maximum amount.	Duration.	Period abolished if disability lasts.	Per cent of wages.	Weekly maximum.	Weekly minimum.
				4 weeks.	13 weeks.							
Alabama.....	33.6	\$3,250	\$1,890	\$50.40	\$163.80	60 days.....	\$100	2 weeks...	4 weeks.....	25-60	\$12.00-\$15.00	\$5.00
Alaska.....	31.2	4,800	2,400	21.00	136.50	.....	.....	.....	8 weeks.....	50	.....	.....
Arizona.....	52.4	4,000	273	42.00	136.50	.....	.....	.....	Over 2 weeks.....	50	.....	.....
California.....	76.2	3,276	2,853	40.95	163.80	Unlimited	Unlimited.	1 week.....	.....	65	20.83	4.17
Colorado.....	63.1	3,125	1,040	25.71	115.71	60 days.....	\$200	10 days.....	.....	50	10.00	5.00
Connecticut.....	81.9	3,376	1,311	31.50	136.50	Unlimited	Unlimited.	1 week.....	Over 4 weeks.....	50	14.00-18.00	5.00
Delaware.....	62.9	4,994	1,659	42.00	136.50	2 weeks.....	\$75	2 weeks.....	4 weeks.....	15-60	15.00-18.00	5.00
Hawaii.....	92.6	5,100	2,562	37.80	151.20	Unlimited	\$150	1 week.....	Partially disabled.	25-60	12.00-21.60	3.00
Idaho.....	68.7	7,345	2,021	34.65	138.60	.....	Unlimited.	.....	.....	20-55	12.00	6.00
Illinois.....	55.4	4,000	2,402	54.60	177.45	8 weeks ²	\$200	.....	4 weeks.....	50-65	12.00-15.00	\$7.00-10.00
Indiana.....	79.4	3,565	2,310	34.65	138.60	30 days ³	Unlimited.	.....	.....	55	13.20	5.50
Iowa.....	62.7	3,880	1,890	25.20	138.60	4 weeks.....	\$100	2 weeks.....	.....	60	15.00	6.00
Kansas.....	36.9	3,276	1,575	37.80	151.20	50 days.....	\$150	1 week.....	.....	60	15.00	6.00
Kentucky.....	60.2	4,075	1,800	36.00	144.00	90 days.....	\$100	.....	.....	65	12.00	5.00
Louisiana.....	35.2	3,565	1,733	34.65	150.15	Unlimited.	\$150	.....	6 weeks.....	25-55	18.00	3.00
Maine.....	72.9	3,500	1,575	32.40	145.80	30 days ³	\$100	10 days.....	.....	60	15.00	6.00
Maryland.....	45.9	4,325	1,575	21.00	115.50	Unlimited.	\$150	2 weeks.....	(4).....	50	12.00	5.00
Massachusetts.....	87.8	4,000	844	36.00	162.00	2 weeks ²	Unlimited.	10 days.....	.....	66½	10.00-16.00	4.00-7.00
Michigan.....	83.1	3,780	1,890	37.80	163.80	90 days.....	.....	1 week.....	6 weeks.....	60	14.00	7.00
Minnesota.....	79.0	3,880	2,100	42.00	168.00	.....²	\$100	.....	.....	30-66½	15.00	6.50
Missouri.....	66.1	4,300	2,674	42.00	182.00	8 weeks.....	\$200	.....	Over 6 weeks.....	66½	15.00	6.00
Montana.....	50.9	4,275	1,575	21.00	115.50	2 weeks.....	\$50	2 weeks.....	.....	30-50	12.50	6.00
Nebraska.....	70.4	5,050	2,450	42.00	182.00	Unlimited.	\$200	1 week.....	6 weeks.....	66½	15.00	6.00
Nevada.....	76.2	15,672	2,606	59.63	193.80	90 days ²	Unlimited.	.....	2 weeks.....	15-66½	9.23-18.46	6.92
New Hampshire.....	56.0	3,000	240	20.00	110.00	.....	.....	2 weeks.....	.....	50	10.00	.....
New Jersey.....	99.8	3,250	2,065	30.86	138.86	4 weeks ²	\$50	10 days.....	.....	35-66½	12.00	6.00
New Mexico.....	30.7	3,540	1,155	21.00	115.50	2 weeks.....	\$50	2 weeks.....	.....	15-60	12.00-18.00	6.00
New York.....	80.1	15,647	3,416	28.00	182.00	60 days ³	Unlimited.	.....	Over 7 weeks.....	15-66½	15.00-20.00	5.00
North Dakota.....	46.8	17,582	3,640	56.00	182.00	Unlimited	.....	1 week.....	Over 1 week.....	20-66½	20.00	6.00
Ohio.....	76.3	5,159	2,150	42.00	168.00	.....	\$200	.....	.....	66½	12.00-15.00	5.00
Oklahoma.....	35.9	(5)	2,100	42.00	136.50	60 days ³	\$100	.....	3 weeks.....	50	18.00	8.00
Oregon.....	48.7	\$13,837	\$2,005	\$45.36	\$147.42	Unlimited.....	\$250	None.....	.....	(7)	(7)	(7)
Pennsylvania.....	88.8	5,406	2,100	30.86	138.86	30 days.....	\$100	10 days.....	.....	15-60	12.00	6.00

Porto Rico.....	20.5			28.00	91.00	Unlimited.....	Unlimited.....	None.....		50	7.00	3.00
Rhode Island.....	82.9	3,000	{ 773 2,348 }	21.00	136.50	4 weeks.....	do.....	2 weeks.....	Over 4 weeks.....	50	10.00- 14.00	4.00- 7.00
South Dakota.....	58.0	3,000	2,033	29.70	150.15	12 weeks.....	\$150	10 days.....	6 weeks.....	55	12.00	6.50
Tennessee.....	37.2	4,300	1,575	21.00	136.50	30 days.....	\$100	2 weeks.....	do.....	20-50	11.00	5.00
Texas.....	47.9	4,536	1,890	37.80	151.20	2 weeks ²	Unlimited.....	1 week.....		60	15.00	5.00
Utah.....	74.4	4,094	2,212	45.00	158.40	Unlimited.....	\$500	3 days.....		60	16.00	7.00
Vermont.....	55.2	2,557	1,859	31.50	126.00	2 weeks.....	\$100	1 week.....		15-50	10.00- 12.50	3.00
Virginia.....	45.6	3,100	1,500	20.00	110.00	30 days.....	Unlimited.....	2 weeks.....		50	10.00	5.00
Washington.....	51.5	14,889	1,915	36.35	157.50	Unlimited ³	⁴ Unlimited.....	1 week.....	Over 30 days.....	(7)	(7)	(7)
West Virginia.....	80.1	10,249	2,100	31.50	126.00	do.....	\$600	do.....		50	12.00	5.00
Wisconsin.....	75.4	4,468	3,276	40.95	177.45	90 days ⁵	Unlimited.....	do.....	Over 4 weeks.....	65	14.63	6.83
Wyoming.....	46.3	3,050	1,348	38.88	174.00	Unlimited.....	\$100	10 days.....	Over 30 days.....	(9)	(9)	(9)
United States.....	100.0	17,582	{ 358 2,11,954 }	50.00	176.00	do.....	Unlimited.....	3 days.....		10-66 $\frac{2}{3}$	15.28	7.69

¹ It is assumed that loss of hand causes decrease of 50 per cent in earning capacity.

² Includes compensation for partial disability.

³ Additional service in special cases or in discretion of commission.

⁴ One week in case of permanent total disability.

⁵ Fatal accidents not covered.

⁶ 10 per cent deducted to cover employee's contributions.

⁷ Monthly pension; maximum, \$30; minimum, \$10 to \$30. Maximum increased to 60 per cent of wages for first 6 months in case of temporary total disability.

⁸ Employees must pay one-half of medical cost.

⁹ Monthly pension in case of temporary disability; maximum, \$60; minimum, \$35. Fixed amounts in other cases.

Table 35 shows the most advantageous and the least advantageous compensation provisions, from the viewpoint of the employee, in the various States:

TABLE 35.—EXTREMES OF LIBERALITY IN THE COMPENSATION PROVISIONS OF THE VARIOUS STATES.

Nature of provision.	Most advantageous provisions.		Least advantageous provisions.	
	State.	Amount or percentage.	State.	Amount or percentage.
Percentage of employees covered...	New Jersey.....	99.3 per cent.	Porto Rico.....	20.5 per cent.
Compensation for death.....	North Dakota.....	\$17,582.	Oklahoma.....	None.
	United States.....	\$3,640.	Vermont.....	\$2,557.
Compensation for loss of hand.....	North Dakota.....	\$59.63.	Colorado.....	\$4,040.
Compensation for 4 weeks' disability.	Nevada.....	\$193.80.	New Hampshire.....	\$20.
Compensation for 13 weeks' disability.			Virginia.....	\$91.
Medical service.....	(1)	Unlimited.	Porto Rico.....	\$110.
			New Hampshire.....	None.
Waiting period.....	Oregon.....	None.	Alaska.....	None.
	Porto Rico.....	\$20.83.	Arizona.....	None.
Weekly maximum compensation...	California.....	\$20.	New Hampshire.....	2 weeks.
	North Dakota.....	\$7-\$10.	(2)	
Weekly minimum compensation...	Illinois.....	\$8.	Porto Rico.....	\$7.
	Oklahoma.....		Hawaii.....	
			Louisiana.....	\$3.
			Porto Rico.....	
			Vermont.....	

¹ California, Connecticut, Idaho, North Dakota, Porto Rico, and the Federal Government.

² Alabama, Alaska, Arizona, Delaware, Iowa, Maryland, Montana, New Hampshire, New Mexico, New York, Rhode Island, Tennessee, and Virginia.

It is obvious that no fixed form of analysis or summary presentation can give in complete detail the provisions of the laws under consideration. They relate not only to the compensation of accidents, but to accident reporting, safety provisions, the enforcement of safety laws, the establishment of insurance systems, premium rates, investments, the scale of payments in cases of certain forms of negligence or their increase under certain conditions, procedure in arbitration, forms of appeal, and a great variety of subjects on which it would be impossible to generalize, and which can be discovered only by a reading of the individual statutes, though the use of the index to the laws will aid in this. The adoption by a few States of laws generally similar can be clearly recognized, but it is obvious that at the present time it can not be said that any one type of law is predominantly approved. Admitting that the question of State insurance is open to discussion, it can not be denied that some form of security of payments is desirable; and while constitutional limitations may appear to stand in the way of compulsory compensation systems, it is none the less certain that the welfare of both employer and employee, as well as the public interest generally, would be served by the general adoption of laws, just and certain in their operations, and not dependent for their acceptance on the personal views or interests of individuals or groups of individuals.

PRINCIPAL FEATURES OF LAWS OF THE UNITED STATES RELATING TO WORKMEN'S COMPENSATION AND INSURANCE.

[Chart Revised Jan. 1, 1920.]

State.	Employments covered.		Insurance.	How election is made.		Defenses abrogated if employer does not elect.	Suits for damages.		Special contracts.	Injuries covered.	Waiting period.	Compensation benefits.					Medical and surgical aid.	Time for notice and claim.	Administrative system.	How compensation claims are settled.	Accident reports required.	Accident-prevention work by—(a) Compensation commission. (b) Other agencies.	Per cent of employees subject to act. ¹	State.	
	Private.	Public.		By employer.	By employee.		If both employer and employee come under act.	If employer elects but employee rejects.				Per cent of wages.	Maximum and minimum weekly compensation payments.	Maximum period.	(a) Death. Dependents. (b) No dependents.	Total disability. (a) Permanent. (b) Temporary.									Partial disability.
Alabama. No. 245. Approved Aug. 23, 1919. In effect Jan. 1, 1920.	<i>Elective</i> , as to all employments except those having less than 16 employees, farm labor, domestic service, casual employments not in usual course of employer's business. <i>Voluntary</i> , as to employments having less than 16 employees.	<i>Elective</i> , as to employments of State. <i>Voluntary</i> , as to employments of county, city, town, village, or school district.	Not required.....	Presumed in absence of written notice filed with court and posted in establishment.	Presumed in absence of written notice to employer and filed with court.	Assumed risk, fellow service, and contributory negligence, unless employee is guilty of willful misconduct as defined.	Not permitted.....	Defenses remain.....	Approved substitute schemes permitted. Agreements for reduction of compensation benefits permitted if approved by court.	Personal injuries by accident arising out of and in course of employment unless due to intoxication, willful misconduct, intention to injure self or another, inflicted by third party for personal reasons, or willful failure to use safety appliances, or obey safety laws or rules. Occupational diseases specifically excluded.	2 weeks. None if disability continues for 4 weeks or more.	Death, 25 to 60 per cent. Disability, 50 to 60 per cent.	Maximum, \$12 to \$15. Minimum, \$5, or actual wages if less than \$5.	Death, 300 weeks. Permanent total disability, 550 weeks. Others, 300 weeks.	(a) Expenses of last sickness and burial, maximum, \$100; 25 to 60 per cent of wages for not over 300 weeks; weekly maximum, \$12 to \$15; minimum, \$5, or actual wages if less than \$5; total not over \$5,000. (b) Expenses of last sickness and burial, maximum, \$100.	(a) 50 to 60 per cent of wages for 400 weeks; weekly maximum, \$12 to \$15; minimum, \$5, or actual wages if less than \$5; not over \$5 thereafter for 150 weeks; in certain cases only; total not over \$5,000. (b) 50 to 60 per cent of wages during disability; maximum, 300 weeks; weekly maximum, \$12 to \$15; minimum, \$5, or actual wages if less than \$5.	50 to 60 per cent of wage loss during disability for not over 300 weeks; weekly maximum, \$12 to \$15. Specified injuries, 50 to 60 per cent of wages for fixed periods; weekly maximum, \$12 to \$15; minimum, \$5, or actual wages if less than \$5.	Reasonable medical, surgical, and hospital service for 60 days; longer at option of employer; maximum, \$100; charges limited to those prevailing in the community.	Notice to employer within 5 days; no compensation if after 90 days. Claim in 1 year.	Courts. Limited supervision by compensation commissioner.	Direct settlements between parties if in "substantial" conformity with law; court may approve a lesser amount if in interest of employee. Disputed cases settled by courts.	All electing employers must report all accidents over 2 weeks' disability to compensation commissioner within 15 days; supplementary report after 60 days or upon termination of disability.	(a) No provision. (b) Chief mine inspector. ²	33.6	Alabama.
Alaska. Ch. 71. Approved Apr. 29, 1915. In effect July 23, 1915. Amended 1917.	<i>Elective</i> , as to mining operations having 5 or more employees.	No provision.....	Not required.....	Presumed in absence of written notice filed with United States commissioner.	Presumed in absence of written notice served on employer and filed with United States commissioner.	Assumed risk, fellow service, and contributory negligence unless willful or due to intoxication.	Not permitted.....	Defenses remain, except assumed risk growing out of employer's violation of safety laws.	Waivers forbidden....	Personal injuries by accident arising out of and in the course of employment unless directly due to intoxication or willful intention to injure self or another.	2 weeks. None if disability continues for 8 weeks or more.	50 per cent for temporary total disability. Fixed lump sums in other cases.	No provision.....	Temporary total disability, 6 months.	(a) \$3,000 to widow or minor orphan; \$900 for each child under 16. If single, \$600 for each dependent parent; maximum, \$6,000. (b) \$150 maximum for burial expenses; \$150 for other expenses between accident and death.	Lump sums based upon schedule of payments for permanent total disability proportioned to loss of earning capacity; maximum, \$4,800. Specified injuries, fixed lump sums, varying with conjugal condition and number of children; disfigurement, \$240 for loss of ear, \$480 for loss of nose.	Only in fatal cases involving no dependents; maximum, \$150 for expenses between injury and death.	Notice in 120 days; claim in 2 years.	Courts.....	Voluntary agreement; disputed cases settled by courts.	No provision.....	(a) No commission. (b) Mine inspector (who is also ex officio labor commissioner). ²	31.2	Alaska.	
Arizona. Ch. 14 (extra session). Approved June 8, 1912. In effect Sept. 1, 1912. New act, ch. 7, 1913, amended, 1919.	<i>Compulsory</i> , as to "especially hazardous" employments enumerated. <i>Voluntary</i> , as to other employments.	No provision.....	Not required.....				After injury, employee has option of accepting compensation or suing for damages; if he sues, employer retains defense of contributory negligence.		Permitted if benefits equal those of act.	Personal injuries by accident arising out of and in the course of employment due wholly or partly to a necessary risk of the employment or to failure of employer or any employee to exercise due care or to comply with any law.	2 weeks. None if disability continues longer than 2 weeks.	50 per cent.....	No provision.....	Death, 200 weeks' earnings, payable as court may order. Disability, during its continuance.	(a) 2,400 times one-half average daily wages; maximum, \$4,000. (b) Reasonable medical and burial expenses.	(a) (b) 50 per cent of wages during disability; maximum, \$4,000.	50 per cent of wage loss during disability; maximum, \$4,000.	Reasonable medical and burial expenses only in fatal cases involving no dependents.	Notice in 2 weeks; none required in case of death or incompetence; action on claim within 1 year.	Courts.....	Voluntary agreement; disputed cases settled by arbitration, reference to attorney general, and eventually by courts.	No provision.....	(a) No commission. (b) Mine inspector. ²	52.4	Arizona.
California. Ch. 399. Approved Apr. 8, 1911. In effect Sept. 1, 1911. New act, ch. 170, 1913. Amended, 1915. New act, ch. 586, 1917. In effect Jan. 1, 1918. Amended, 1919.	<i>Compulsory</i> , as to all employments except farm labor, domestic service, and casual employees not in usual course of employer's business. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to all employees except deputy clerks, deputy sheriffs, and deputy constables serving without remuneration.	Employers must insure in the State fund or private companies, or provide self-insurance.				Permitted if employer fails to insure risk. Defenses abrogated.		Waivers forbidden....	Personal injuries arising out of and in the course of employment unless due to intoxication or intentionally self-inflicted; includes injuries to artificial limbs. Occupational diseases specifically included.	1 week.....	65 per cent.....	Maximum, \$20.83. Minimum, \$4.17.	Death, 240 weeks. Permanent total disability, life. Temporary disability, 240 weeks.	(a) 3 years' annual earnings; maximum, \$5,000; minimum, \$1,000. (b) 65 per cent of wages during disability; not over 240 weeks nor over 3 times annual earnings.	(a) 65 per cent of wages for 240 weeks, then 40 per cent for life. (b) 65 per cent of wages during disability; not over 240 weeks nor over 3 times annual earnings. Disfigurement compensable.	If permanent, 65 per cent of wage loss for fixed periods proportionate to disability; temporary, 65 per cent of wage loss during disability; not over 240 weeks nor over 3 times annual earnings. Disfigurement compensable.	Reasonable medical, surgical, and hospital treatment.	Notice in 30 days; claim in 6 months for disability, 1 year for death.	Industrial accident commission.	Voluntary agreement approved by commission; disputed cases referred to one or more referees appointed by commission and reviewed by commission; rehearing in certain cases; appeal to courts upon questions of law.	All employers, attending physicians, and insurers must report all injuries involving time loss or medical aid to industrial accident commission. Fatal injuries must be reported immediately.	(a) Industrial accident commission. (b) Bureau of labor statistics. ²	76.2	California.
Colorado. Ch. 179. Approved Apr. 10, 1915. In effect Aug. 1, 1915. Amended, 1917. New act, 1919.	<i>Elective</i> , as to all employments except those having regularly less than 4 employees, farm labor, domestic service, casual employees not in usual course of employer's business. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to all employees except elective officials and members of National Guard.	Electing employers must insure in State fund or private companies, or provide self-insurance.	Presumed in absence of written notice to commission; notice of acceptance or rejection to be posted.	Presumed in absence of written notice to employer.	Assumed risk due to employer's negligence, fellow service, and contributory negligence unless willful.	Not permitted.....	Defenses remain, including assumed risk.	Waivers forbidden, but approved hospital fund may be maintained.	Personal injuries accidentally sustained arising out of and in the course of employment unless intentionally inflicted by self or another.	10 days.....	50 per cent.....	Maximum, \$10. Minimum, \$5, or actual wages if less than \$5.	Death, 312 weeks. Permanent total disability, life. Temporary total and partial disability, during its continuance.	(a) 50 per cent of wages for 6 years; weekly maximum \$10, minimum \$5; total not over \$3,125. (b) Reasonable burial expenses; maximum, \$75.	(a) (b) 50 per cent of wages during disability; weekly maximum, \$10; minimum, \$5, or actual wages if less than \$5.	If permanent, 50 per cent of wages multiplied by percentage of total disability, but not over \$2,600; if temporary, 50 per cent of wage loss during disability; weekly maximum, \$10; total not over \$1,300. Specified injuries, 50 per cent of wages for fixed periods; weekly maximum, \$10. Facial disfigurement, maximum, \$500.	Reasonable medical, surgical, and hospital treatment for 60 days; maximum, \$200; special operating fee of \$50 in case of hernia; also additional for dental service; maximum, \$100.	Notice in 2 days; claim in 1 year; 18 months in case of minors or persons mentally incompetent.	Industrial commission.	Voluntary agreement approved by commission; disputed cases determined by commission, after hearing, upon application of either party; petition for rehearing; appeal to courts upon questions of law.	All employers must report all accidents within 10 days to industrial commission.	(a) Industrial commission. (b) Department of labor and factory inspection; inspectors of coal mines; bureau of mines. ²	63.1	Colorado.
Connecticut. Ch. 138. Approved May 29, 1913. In effect Jan. 1, 1914. Amended, 1915, 1917, 1919.	<i>Elective</i> , as to all employments except those having regularly less than 5 employees, outworkers, and casual employees. <i>Voluntary</i> , as to excepted employments.	<i>Elective</i> , as to the State and all public corporations having regularly 5 or more employees. <i>Voluntary</i> , as to others.	Electing employers must insure in private companies, or provide self-insurance.	Presumed in absence of written notice.	Presumed in absence of written notice.	Assumed risk, fellow service, and contributory negligence.	Permitted if employer fails to insure risk.	Defenses remain.....	Approved schemes may be substituted if benefits equal those of act. Physically defective employees may waive right to compensation.	Personal injuries arising out of and in the course of employment unless due to willful and serious misconduct or intoxication. Occupational diseases specifically included.	1 week. None if disability continues longer than 4 weeks.	50 per cent.....	Maximum: Death and partial disability, \$18; total disability, \$14. Minimum, \$5.	Death, 312 weeks. Disability, 520 weeks.	(a) Burial expenses, \$100; 50 per cent of wages for 312 weeks; weekly maximum, \$18; minimum, \$5. (b) Burial expenses, \$100.	(a) (b) 50 per cent of wages during disability, not over 520 weeks; weekly maximum, \$14; minimum, \$5.	50 per cent of wage loss during disability, not over 520 weeks; weekly maximum, \$18. Specified injuries, 50 per cent of wages for fixed periods; weekly maximum, \$18; minimum, \$5.	Such medical, surgical, or hospital treatment as deemed reasonable by attending physician; charges limited to those prevailing in the community. Special provision for seamen on United States vessels.	Notice at once; claim in 1 year.	Board of 5 compensation commissioners, each supreme in his own district.	Voluntary agreement approved by commission; disputed cases settled by commissioner after hearing upon application of either party; appeals to courts.	Assenting employers must report all accidents weekly to compensation commissioner.	(a) No provision. (b) Department of labor and factory inspection. ²	81.9	Connecticut.
Delaware. Ch. 233. Approved Apr. 2, 1917. In effect Jan. 1, 1918. Amended, 1919.	<i>Elective</i> , as to all employments except those having less than 5 employees, farm labor, domestic service, outworkers, and casual employees not in usual course of employer's business.	Excluded.....	Electing employers must insure in private companies, or provide self-insurance.	Presumed in absence of printed notice to employees and filed with board.	Presumed in absence of written notice to employer and filed with board.	Assumed risk, fellow service, and contributory negligence.	Permitted if employer fails to insure risk. Defenses abrogated.	Defenses remain.	Approved substitute schemes permitted if benefits equal those of act. Waivers forbidden.	Personal injuries by accident arising out of and in course of employment unless due to willful intention to injure self or another, intoxication, failure to use safeguards, violation of law, or reckless indifference to danger, or caused by third party for personal reasons. Occupational diseases specifically excluded.	2 weeks. None if disability continues for 4 weeks or more.	Death, 15 to 60 per cent. Disability, 50 per cent.	Death: Weekly basic wage, maximum, \$36; minimum, \$10. Disability: Maximum, \$15; minimum, \$5, or actual wages if less than \$5.	Permanent total disability, 285 weeks.	(a) Expenses of burial and last sickness, maximum, \$100; 50 per cent of wages to widow or dependent widow for 255 weeks; weekly basic wage, maximum, \$36; minimum, \$10. (b) Expenses of burial and last sickness, maximum, \$100.	(a) (b) 50 per cent of wages during disability, not over 255 weeks; weekly maximum, \$15; minimum, \$5, or actual wages if less than \$5; total not over \$1,000.	50 per cent of wage loss for not over 255 weeks; maximum, \$15. Specified injuries, 50 per cent of wages for fixed periods; weekly maximum, \$15; minimum, \$5, or actual wages if less than \$5.	Reasonable medical, surgical, and hospital treatment for 2 weeks, if requested by employee or ordered by board; maximum, \$75.	Notice in 14 days; if in 30 days, not barred except as to extent employer was prejudiced; bar absolute after 90 days. Claim in 1 year.	Industrial accident board.	Voluntary agreement approved by board; disputed cases settled by board after hearing; appeal to court.	All assenting employers must report all accidents to industrial accident board; supplementary report upon termination of disability.	(a) No provision. (b) No provision.	62.9	Delaware.
Hawaii. No. 221. Approved Apr. 28, 1915. In effect July 1, 1915. Amended, 1917.	<i>Compulsory</i> , as to all industrial employments carried on for gain, except casual employees, those not in usual course of employer's business, and those receiving more than \$36 a week from any one employer.	<i>Compulsory</i> , as to all employees except elective officials or employees receiving more than \$1,500 a year.	Employers must insure in private companies, or provide self-insurance.				Not permitted.....		Waivers forbidden....	Personal injuries by accident arising out of and in course of employment unless due to willful intention to injure self or another or to intoxication. Occupational diseases specifically included.	1 week. None in case of partial disability.	Death, 25 to 60 per cent. Total disability, 60 per cent. Partial disability, 50 per cent.	Death: Basic wage, maximum, \$36; minimum, \$5. Total disability: Maximum, \$18; minimum, \$3, or actual wages if less than \$3 in case of temporary disability. Partial disability: Maximum, \$12.	312 weeks.....	(a) Burial expenses, \$100; 25 to 60 per cent of wages for 312 weeks; basic weekly wage, maximum, \$36; minimum, \$3, or actual wages if less than \$3 in case of temporary disability; total not over \$5,000. (b) Burial expenses, \$100.	(a) (b) 60 per cent of wages during disability, not over 312 weeks; weekly maximum, \$18; minimum, \$3, or actual wages if less than \$3 in case of temporary disability; total not over \$5,000.	50 per cent of wage loss during disability, not over 312 weeks; weekly maximum, \$12; total not over \$5,000. Specified injuries, 50 per cent of wages for fixed periods. Facial or head disfigurement, maximum, \$5,000.	Reasonable medical, surgical, and hospital service; maximum \$150; charges limited to those prevailing in the community.	Notice as soon as practicable; claim in 3 months.	Industrial accident board for each county.	Voluntary agreement approved by board; disputed cases settled by board or by arbitration committee of 3 persons composed of representatives of each party and a member of board; review by full board; appeal to courts.	All employers must report all injuries of 1 day's disability or more as soon as practicable to industrial accident board; supplementary report at termination of disability or after 60 days; final report within 60 days after termination of disability.	(a) No provision. (b) No provision.	92.6	Hawaii.

¹ Including all employees in employments covered by the compensation law, whether or not the employers in elective States have accepted the act.

² Not provided for in compensation law.

State.	Employments covered.		Insurance.	How election is made.		Defenses abrogated if employer does not elect.	Suits for damages.		Special contracts.	Injuries covered.	Waiting period.	Compensation benefits.						Medical and surgical aid.	Time for notice and claim.	Administrative system.	How compensation claims are settled.	Accident reports required.	Accident-prevention work by—(a) Compensation commission. (b) Other agencies.	Per cent of employees subject to act. ¹	State.
	Private.	Public.		By employer.	By employee.		If both employer and employee come under act.	If employer elects but employee rejects.				Per cent of wages.	Maximum and minimum weekly compensation payments.	Maximum period.	Death. (a) Dependents. (b) No dependents.	Total disability. (a) Permanent. (b) Temporary.	Partial disability.								
Idaho. Ch. 81. Approved Mar. 16, 1917. In effect Jan. 1, 1918.	<i>Compulsory</i> , as to all employments conducted for gain except farm labor, domestic service, out-worker, casual employment, charitable institutions, and employees receiving over \$2,400 a year. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to all employees except officials, and those receiving a salary over \$2,400.	Employers must insure in State fund or provide self-insurance.				Not permitted.....		Approved substitute schemes permitted if benefits equal those of act. Waivers forbidden.	Personal injuries by accident arising out of and in course of employment, unless due to willful intoxication to injury of or another, or intoxication. Occupational diseases specifically excluded.	1 week.....	Death, 20 to 55 per cent. Disability, 55 per cent.	Death and temporary total disability: Maximum \$12, minimum \$6, or actual wages if less than \$6; others, maximum \$12, minimum \$6. Burial expenses, maximum \$100; also \$1,000 to be paid into industrial administration fund.	Death, 400 weeks. Permanent total disability, 400 weeks. Partial disability, 150 weeks.	(a) Burial expenses, maximum, \$100; 45 to 55 per cent of wages to widow or dependent widower for 400 weeks; weekly maximum \$12; minimum \$6, or actual wages if less than \$6. (b) Burial expenses, maximum \$100; also \$1,000 to be paid into industrial administration fund.	(a) 55 per cent of wages for 400 weeks; weekly maximum \$12; minimum \$6; thereafter \$6 a week for life. (b) 55 per cent of wages during disability; maximum, 400 weeks; weekly maximum \$12; minimum \$6, or actual wages if less than \$6.	55 per cent of wage loss, maximum 150 weeks; benefits and wages to be not less than \$6 a week. Specified injuries, 55 per cent of wages for fixed periods; weekly maximum, \$12. Disfigurement compensable if resulting in decreased ability to obtain employment.	Reasonable medical, surgical, and hospital service; hospital benefit funds permitted in lieu of above. Charges limited to those prevailing in the community.	Notice as soon as practicable; claim in 1 year.	Industrial board. accident	Voluntary agreement approved by board; disputed cases may be submitted to arbitration committee of 3 persons, appointed by board, composed of representatives of each party and member of board or deputy; review by full board; appeal to court upon questions of law.	All employers must report all accidents of 1 day's disability to industrial accident board within 48 hours; supplementary report after 60 days or upon termination of disability; final report within 60 days after termination of disability.	(a) Industrial accident board. (b) Inspector of mines. ²	68.7	Idaho.
Illinois. P. 314. Approved June 10, 1911. In effect May 1, 1912. New act, p. 335, 1913. Amended, 1915, 1917, 1919.	<i>Compulsory</i> , as to "extrahazardous" employments enumerated; farm labor, and persons not in usual course of employer's business excepted. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to all employees except officials.	Employers must insure in private companies, or provide self-insurance.				Permitted if employer fails to insure risk. Defenses abrogated.		Approved schemes permitted if benefits equal those of act. No waiver of provisions of act as to amount of compensation without approval of board.	Accidental injuries arising out of and in course of employment.	1 week. None if disability continues for 4 weeks or more.	Disability, 50 to 65 per cent.	Maximum, \$12 to \$15. Minimum, \$7 to \$10.	Death, 416 weeks. Permanent total disability, 8 years. Temporary disability, during its continuance.	(a) 4 years' earnings; maximum, \$4,000; minimum, \$1,850. (b) Burial expenses, maximum, \$150.	(a) 50 to 65 per cent of earnings for 8 years; weekly maximum \$12 to \$15; minimum \$7 to \$10; thereafter 8 per cent of death benefits for life, minimum \$10 a month. (b) 50 to 65 per cent of earnings during disability; weekly maximum, \$12 to \$15; minimum, \$7 to \$10; total not over \$4,000.	50 to 65 per cent of wage loss during disability, not over 8 years; weekly maximum \$12 to \$15. Specified injuries, 50 to 65 per cent of wages for fixed periods; weekly maximum, \$12 to \$15; minimum, \$7 to \$10; disfigurement of hand, head, or face, maximum one-fourth death benefits.	First aid, medical, surgical, and hospital service for 8 weeks; maximum, \$300; full hospital service while compensation is payable; additional medical and surgical aid as long as hospital treatment is required.	Notice as soon as practicable; not later than 30 days; claim in 6 months.	Industrial commission.	Voluntary agreement, 7 days after injury; disputed cases settled by arbitrator appointed by commission; in case of death or permanent disability, by arbitration committee of 3 persons composed of representatives of each party and a commissioner, upon application of either party; review by full commission; appeal to courts upon question of law.	All employers within provisions of act must report all injuries occurring within 1 week to industrial accident commission; fatal accidents at once; others once a month; supplementary report of permanent disability cases.	(a) No provision. (b) Department of labor; mine inspector. ²	55.4	Illinois.
Indiana. Ch. 106. Approved Mar. 8, 1915. In effect Sept. 1, 1915. Amended, 1917, 1919.	<i>Compulsory</i> , as to mining. <i>Elective</i> , as to all employments except farm labor, domestic service, casual employees not in usual course of employer's business, and railroad employees engaged in train service. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to all employees.	Electing employers must insure in private companies, or provide self-insurance.	Presumed in absence of written notice, posted or served, and filed with industrial board.	Presumed in absence of written notice served on employer and filed with industrial board.	Assumed risk, fellow service, and contributory negligence.	Permitted if employer fails to insure risk.	Defenses remain.....	Approved schemes permitted if benefits equal those of act. All other waivers forbidden.	Personal injuries by accident arising out of and in course of employment unless due to willful misconduct, intentional self-inflicted injury, intoxication, and willful failure to use safety appliances or to obey safety laws, or commission of a crime. Occupational diseases specifically excluded.	1 week.....	Death, total disability, and specified injuries, 55 per cent. Partial disability, 50 per cent.	Basic wage, maximum, \$24; minimum, \$10.	Death and partial disability, 300 weeks. Total disability, 500 weeks.	(a) Burial expenses, maximum, \$100; 65 per cent of wages for 300 weeks; weekly basic wage, maximum \$24; minimum \$10; total not to exceed \$5,000. (b) Burial expenses, maximum \$100.	(a) 55 per cent of wages during disability, not over 500 weeks; weekly basic wage, maximum \$24; minimum \$10; total not over \$5,000.	50 per cent of wage loss during disability; not over 300 weeks; basic wage, maximum \$24; minimum \$10. Specified injuries, 50 per cent of wages for fixed periods; basic wage, maximum \$24; minimum \$10; permanent disfigurement, not over 200 weeks.	Necessary medical, surgical, and hospital service for 30 days; longer at option of employer; employee must accept unless otherwise ordered by board; 30 days' additional treatment if necessary in opinion of board; charges limited to those prevailing in the community.	Notice in 30 days; claim in 2 years.	Industrial board.....	Voluntary agreement, 7 days after injury, approved by board; disputed cases settled by board or member thereof, after hearing, upon application of either party; review by full board; appeal to courts upon questions of law.	All employers must report all injuries of more than 1 day's disability within 1 week to industrial board; supplementary report after 60 days or upon termination of disability.	(a) Industrial board. (b) No provision.	79.4	Indiana.
Iowa. Ch. 147. Approved Mar. 8, 1915. In effect July 1, 1914. Amended, 1917, 1919.	<i>Elective</i> , as to all employments except farm labor, domestic service, casual employees, those not in course of employer's business, and clerks not subject to hazard of the industry.	<i>Compulsory</i> , as to all employees except firemen and policemen in pension funds (city school teachers excepted by ruling of commissioner).	Electing employers must insure in private companies, or provide self-insurance.	Presumed in absence of notice posted in establishment and filed with industrial commissioner.	Presumed in absence of written notice to employer and industrial commissioner.	Assumed risk, fellow service, and contributory negligence unless willful and with intent to cause injury, or due to intoxication.	Permitted if employer fails to insure risk.	Defenses remain except assumed risk if employer violates safety statutes; no presumption of employer's negligence.	Approved schemes permitted, but no reduction of liability allowed. All other waivers forbidden.	Personal injuries arising out of and in course of employment, unless due to willful intention to injure self or another, intoxication, or willful act of a third party. Occupational diseases specifically excluded.	2 weeks.....	60 per cent.....	Death: Maximum, \$15; minimum, \$6. Disability: Maximum, \$15; minimum \$6, or actual wages if less than \$6.	Death and temporary total disability, 300 weeks. Permanent total disability, 400 weeks.	(a) Burial expenses, maximum, \$100; 60 per cent of wages for 300 weeks; weekly maximum \$15; minimum \$6. (b) Last sickness and burial expenses, maximum \$100.	(a) 60 per cent of wages for 400 weeks; weekly maximum \$15; minimum \$6, or actual wages if less than \$6. (b) Same for not over 300 weeks. Compensation increased by two-thirds for 5th, 6th, and 7th weeks of disability.	Specified injuries, 60 per cent of wages for fixed periods; proportionate for others; weekly maximum \$15; minimum \$6, or actual wages if less than \$6.	Reasonable medical, surgical, and hospital service for 4 weeks, if requested by employee, court, or commissioner; maximum \$100; \$100 additional in exceptional cases.	Notice in 15 days; if in 30 days, not barred except as to extent employer was prejudiced; bar absolute after 90 days.	Industrial commissioner.	Voluntary agreement, 12 days after injury; disputed cases settled by arbitrator appointed by commission; in case of death or permanent disability, by arbitration committee of 3 persons composed of representatives of each party and the commissioner; review by commissioner.	All employers must report all accidents of more than 1 day's disability within 48 hours to industrial commissioner; supplementary report after 60 days or upon termination of disability.	(a) No provision. (b) Bureau of labor statistics; mine inspectors. ²	62.7	Iowa.
Kansas. Ch. 218. Approved Mar. 14, 1911. In effect Jan. 1, 1912. Amended, 1913, 1917, 1919.	<i>Elective</i> , as to "especially dangerous" employments enumerated conducted for gain except those having less than 5 employees, farm labor, and those not in usual course of employer's business; all mines covered. <i>Voluntary</i> , as to excepted employments.	<i>Elective</i> , as to workmen on county and municipal work.	Not required.....	Presumed in absence of notice posted in establishment and filed with secretary of state.	Presumed in absence of written notice filed with employer and secretary of state.	Assumed risk, fellow service, and contributory negligence.	Not permitted.....	Defenses remain unless injury is caused by willful negligence of employer.	Approved schemes permitted if benefits equal those of act. Blind employees may have right to compensation or damages.	Personal injuries by accident arising out of and in course of employment except when going to and from work, unless due to intoxication, deliberate intention to cause injury, or willful failure to use safeguards provided by statute or furnished by employer.	1 week.....	Disability, 60 per cent. Specified injuries, 50 per cent.	Disability: Maximum, \$15; minimum, \$6.	Death, 3 years' earnings, payable as court may order. Disability, 8 years.	(a) 3 years' earnings; maximum, \$3,600; minimum, \$1,400. (b) Burial expenses, maximum, \$150.	(a) 60 per cent of earnings during disability, not over 8 years; weekly maximum \$15; minimum \$6.	60 per cent of wage loss during disability, maximum 8 years; specified injuries, 50 per cent of wages for fixed periods; weekly maximum \$15; minimum \$6.	Reasonable medical, surgical, and hospital service for 60 days, if demanded by employee; maximum, \$150.	Notice in 10 days; claim in 6 months.	Courts.....	Voluntary agreement; disputed cases settled by local arbitration committee representing each party or by an arbitrator selected by committee, in case of failure, by an arbitrator appointed by court, or by court.	All employers affected by act must report annually to factory inspector "such reasonable particulars as to accidents as State factory inspector may require."	(a) No commission; (b) department of labor and industry. ²	36.9	Kansas.
Kentucky. Approved Mar. 23, 1916. In effect Aug. 1, 1916, 1918.	<i>Elective</i> , as to all employments except those having less than 3 employees, farm labor and domestic service. <i>Voluntary</i> , as to excepted employments.	<i>Elective</i> , as to all municipal corporations having 3 or more employees. <i>Voluntary</i> , as to others.	Electing employers must insure in Kentucky Employees' Insurance Association or other private companies, or provide self-insurance.	By writing filed with the commission and posted in the establishment.	By signed notice filed with employer.	Assumed risk, fellow service, and contributory negligence.	Permitted if injury is due to deliberate intention of employer, unlawful employment of minors, or failure to file evidence as to insurance.	Defenses remain.....	Approved schemes permitted if benefits equal those of act.	Personal injuries by accident arising out of and in course of employment, unless self-inflicted, due to willful misconduct or intoxication. Occupational diseases or injuries due to preexisting disease excluded.	1 week.....	65 per cent.....	Maximum, \$12. Minimum, \$5.	Death, 335 weeks. Total disability, 8 years. Partial disability, 335 weeks.	(a) Burial expenses, maximum \$75; 65 per cent of wages for 335 weeks; weekly maximum \$12; minimum \$5; total not over \$4,000. (b) Burial expenses, maximum \$75; and \$100 to representative of deceased.	(a) 65 per cent of wages during disability, not over 8 years; weekly maximum \$12; minimum \$5; total not over \$5,000.	If permanent, 65 per cent of wages multiplied by percentage of disability; if temporary, 65 per cent of wage loss; maximum period 335 weeks; weekly maximum \$12; minimum \$5. Compensation for disfigurement if it impairs future usefulness or occupational opportunities.	Reasonable medical, surgical, and hospital service for 90 days, unless board fixes other period; maximum \$100; maximum in case of operation for hernia, \$200; charges limited to those prevailing in the community.	Notice as soon as practicable; claim in 1 year.	Workmen's compensation board.	Voluntary agreement approved by board; disputed cases settled by board, a member of same, or referee appointed by it; review by full board; appeal to courts.	All employers subject to act must report all injuries of more than 1 day's disability to workmen's compensation board within 1 week; supplementary report after 60 days or upon termination of disability.	(a) No provision. (b) Mine inspectors; Kentucky Employees' Insurance Association.	60.2	Kentucky.
Louisiana. No. 20. Approved June 18, 1914. In effect Jan. 1, 1915. Amended, 1916, 1918.	<i>Elective</i> , as to "hazardous" employments enumerated, or as agreed upon or determined by court, except employments not conducted in pursuance of employer's business. <i>Voluntary</i> , as to other employments.	<i>Compulsory</i> , as to all employees except officials.	Not required.....	Presumed in absence of written notice to employee.	Presumed in absence of written notice to employer.	Assumed risk, fellow service, and contributory negligence.	Not permitted.....	Defenses remain.....	No contract may relieve employer from liability.	Personal injuries by accident arising out of and in course of employment, unless due to willful intention to injure self or another, intoxication, deliberate failure to use safeguards, or deliberate breach of safety laws. Occupational diseases specifically excluded.	1 week. None if disability continues for 6 weeks or more.	Death, 25 to 55 per cent. Disability, 55 per cent.	Maximum, \$18. Minimum \$3, or actual wages if less than \$3.	Death, 300 weeks. Permanent total disability, 400 weeks. Temporary total and partial disability, 300 weeks.	(a) Expenses of burial and last sickness, maximum \$100; 25 to 55 per cent of wages for 300 weeks; weekly maximum \$18; minimum \$3, or actual wages if less than \$3. (b) Expenses of burial and last sickness, maximum \$100.	(a) 55 per cent of wages for 400 weeks; weekly maximum, \$18; minimum \$3, or actual wages if less than \$3. (b) 50 per cent of wages during disability, not over 300 weeks; weekly maximum \$18; minimum \$3, or actual wages if less than \$3.	55 per cent of wage loss during disability, not over 300 weeks; weekly maximum \$18. Specified injuries, 55 per cent of wages for fixed maximum periods; weekly maximum \$18, minimum \$3, or actual wages if less than \$3. Facial or head disfigurement, not over 100 weeks.	Reasonable medical, surgical, and hospital service unless employee refuses to allow it to be furnished by employer; maximum, \$150; charges governed by workman's station.	Notice in 6 months; proceedings must be begun within 1 year.	Courts.....	Voluntary agreement approved by court; disputed cases settled by court after hearing.	No provision.....	(a) No commission. (b) New Orleans factory inspector. ²	35.2	Louisiana.
Maine. Ch. 295. Approved Apr. 1, 1915. In effect Jan. 1, 1916. Amended, 1917, 1919.	<i>Elective</i> , as to all employments, except those having regularly less than 6 employees, farm labor, and domestic service, and those not in usual course of employer's business. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to all employees of State, counties, and cities, except officials. <i>Voluntary</i> , as to towns.	Electing employers must insure in private companies or provide self-insurance.	Writing filed with commission and posted in establishment.	Presumed, if employer elects, in absence of written notice to employee filed with commission.	Assumed risk, fellow service, and contributory negligence.	Not permitted.....	Defenses remain.....	Existing approved schemes may be continued; waivers forbidden.	Personal injuries by accident arising out of and in course of employment unless due to willful intention to injure self or another, or intoxication without employer's knowledge.	10 days.....	60 per cent.....	Maximum, \$15. Minimum, \$6.	Death, 300 weeks. Total disability, 500 weeks. Partial disability, 300 weeks.	(a) 60 per cent of wages for 300 weeks, but not over \$5,500; weekly maximum, \$15; minimum \$6. (b) Expenses of burial and last sickness, maximum, \$200.	(a) 60 per cent of wages during disability, not over 500 weeks; weekly maximum, \$15; minimum \$6; total not over \$4,200.	60 per cent of wage loss during disability, weekly maximum, \$15 for not over 300 weeks. Specified injuries, 60 per cent of wages for fixed periods; thereafter 60 per cent of wage loss for not over 300 weeks; weekly maximum, \$15; minimum, \$6.	Reasonable medical and hospital service for 30 days, maximum, \$100; additional service if nature of injury requires.	Notice in 30 days; claim in 1 year.	Industrial accident commission.	Voluntary agreement approved by commission; disputed cases settled by commissioner after hearing upon application of either party; appeal to court upon questions of law.	All assenting employers must report all accidents promptly to industrial accident commission; insurers must furnish information requested by commission or insurance commissioner.	(a) No provision. (b) Department of labor and industry. ²	72.9	Maine.

¹ Including all employees in employments covered by the compensation law, whether or not the employers in elective States have accepted the act.

² Not provided for in compensation law.

State.	Employments covered.		Insurance.	How election is made.		Defenses abrogated if employer does not elect.	Suits for damages.		Special contracts.	Injuries covered.	Waiting period.	Compensation benefits.					Medical and surgical aid.	Time for notice and claim.	Administrative system.	How compensation claims are settled.	Accident reports required.	Accident-prevention work by—(a) Compensation commission. (b) Other agencies.	Per cent of employees subject to act. ¹	State.	
	Private.	Public.		By employer.	By employee.		If both employer and employee come under act.	If employer elects but employee rejects.				Per cent of wages.	Maximum and minimum weekly compensation payments.	Maximum period.	Death. (a) Dependents. (b) No dependents.	Total disability. (a) Permanent. (b) Temporary.									Partial disability.
Maryland. Ch. 800. Approved Apr. 16, 1914. In effect Nov. 1, 1914. Amended, 1916.	Compulsory, as to "extrahazardous" employments enumerated for gain; act does not apply to farm labor, domestic service, country blacksmiths, wheelwrights, or similar rural employments, casual employees, and those receiving over \$2,000 a year. Voluntary, as to nonhazardous employments.	Compulsory, as to all workmen employed for wages and engaged in extrahazardous employments. Voluntary, as to other employments.	Employers must insure in State fund or private companies, or provide self-insurance.				Permitted in lieu of compensation if accident caused by deliberate intention of employer or failure to insure risk. Defenses abrogated.		Waivers forbidden.	Accidental personal injuries arising out of and in course of employment, unless due to willful intention to injure self or another, willful misconduct, or intoxication as the sole cause. Occupational diseases excluded by implication.	2 weeks; 1 week if disability is total and permanent.	50 per cent.	Death: No weekly maximum. Total disability: Maximum, \$12; minimum, \$5, or actual wages if less than \$5; total not over \$5,000. (b) Burial expenses, maximum, \$75, unless estate sufficient to defray same. Maximum, \$12.	Death, 416 weeks. Permanent total disability, 312 weeks.	(a) Burial expenses, maximum, \$75; 50 per cent of wages for 8 years; maximum, \$1,250; minimum, \$1,000. (b) Burial expenses, maximum, \$75, unless estate sufficient to defray same. Maximum, \$12.	(a) 50 per cent of wages for life; weekly maximum, \$12; minimum, \$5, or actual wages if less than \$5; total not over \$5,000. (b) 50 per cent of wages during disability, not over 6 years; weekly maximum, \$12; minimum, \$5, or actual wages if less than \$5; total not over \$3,750.	If permanent, 50 per cent of wage loss; weekly maximum, \$12; total not over \$3,000. If temporary, 50 per cent of wage loss, total not over \$3,500. Specified injuries, 50 per cent of wages for fixed periods; weekly maximum, \$12; total not over \$3,000.	Such medical, surgical, or hospital service as may be required by commission; maximum, \$150. Charges limited to those prevailing in the community.	Notice of accident in 10 days; of death in 30 days, unless sufficient reason; claim in 30 days.	Industrial accident commission.	Application by employee to commission who render award in accordance with facts, or commission may appoint arbitration committee of 3 persons composed of representatives of each party and a commissioner or deputy; appeal from committee to commission; appeal to courts.	All employers must report all accidents to industrial accident commission at once. Commission may require additional reports.	(a) No provision. (b) Board of labor and statistics; mine inspectors. ²	45.9	Maryland.
Massachusetts. Ch. 751. Approved July 28, 1911. In effect July 1, 1912. Amended, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919.	Elective, as to all employments, except farm labor, domestic service, and persons not in usual course of employer's business. Voluntary, as to excepted employments.	Compulsory, as to laborers, workmen, and mechanics of State. Elective, as to counties, cities, towns, or districts having power of taxation.	Electing employers must insure in Massachusetts Employees' Insurance Association or other private companies.	By subscribing to State association or insuring in other companies.	Presumed in absence of written notice, if employer insures.	Assumed risk, fellow service, and contributory negligence.	Not permitted.	Defenses remain.	Waivers forbidden; employers must insure.	Personal injuries arising out of and in course of employment, unless due to serious and willful misconduct. (Occupational diseases included by decision of court.)	10 days.	66 2/3 per cent.	Death and specified injuries: Maximum, \$10; minimum, \$4. Others: Maximum, \$16; minimum, \$7.	Death and total disability, 500 weeks; partial disability, none.	(a) 66 2/3 per cent of wages for 500 weeks; weekly maximum, \$10; minimum, \$4; total not over \$1,000. (b) Expenses of burial and last sickness, maximum, \$100; and \$100 additional to create special fund for second injuries.	(a) (b) 66 2/3 per cent of wages during disability, not over 500 weeks; weekly maximum, \$16; minimum, \$7; total not over \$4,000. Specified injuries, 66 2/3 per cent of wages for fixed periods in addition to all other compensation; weekly maximum, \$10; minimum, \$4.	Reasonable medical, surgical, and hospital service for 2 weeks, or longer in unusual cases, at discretion of board.	Notice as soon as practicable; claim in 6 months.	Industrial accident board.	Voluntary agreement approved by board; disputed cases settled by member of board; appeal to full board; certain cases taken direct to board; appeal to court upon questions of law.	All employers must report all injuries to industrial accident board within 48 hours; supplementary report after 60 days or termination of disability; insurer must report compensation paid within 60 days after termination of disability.	(a) No provision. (b) Board of labor and industries; district police, Massachusetts Employees' Insurance Association.	87.8	Massachusetts.	
Michigan. No. 10. Approved Mar. 20, 1912. In effect Sept. 1, 1912. Amended, 1913, 1915, 1917, 1919.	Elective, as to all employments, except farm labor, domestic service, and employees not in usual course of employer's business.	Compulsory, as to all employees, except officials.	Electing employers must insure in State fund or private companies, or provide self-insurance.	Writing filed with industrial accident board.	Presumed in absence of written notice, if employer elects.	Assumed risk, fellow service, and contributory negligence.	Permitted if employer is in default on insurance premiums.	Defenses remain.	Existing schemes may be continued, but no reduction in liability allowed; waivers forbidden.	Personal injuries arising out of and in course of employment, unless due to intentional and willful misconduct. (Occupational diseases excluded by court.)	1 week. None if disability continues 6 weeks or more.	60 per cent.	Maximum, \$14. Minimum, \$7.	Death, 300 weeks. Disability, 500 weeks.	(a) 60 per cent of wages for 300 weeks; weekly maximum, \$14; minimum, \$7. (b) Expenses of burial and last sickness, maximum, \$200.	(a) (b) 60 per cent of wages during disability, for not over 500 weeks; weekly maximum, \$14; minimum, \$7; total not over \$6,000.	Reasonable medical and hospital service, for 90 days.	Notice in 3 months; claim in 6 months; 2 years if disability develops 6 months after date of injury.	Industrial accident board.	Voluntary agreement approved by board; disputed cases settled by arbitration committee of 3 persons composed of representatives of each party and a member or deputy of board; appeal from committee to full board; certain cases taken direct to board; appeal to court upon questions of law.	All employers must report all injuries to industrial accident board on eighth day after occurrence; supplemental report of deaths within 14 days.	(a) No provision. (b) Department of labor. ²	83.1	Michigan.	
Minnesota. Ch. 467. Approved Apr. 24, 1913. In effect Oct. 1, 1913. Amended, 1915, 1917, 1919.	Elective, as to all employments, except farm labor, domestic service, steam railroads, casual employees not in usual course of employer's business.	Elective, as to employees of counties, cities, towns, villages, and school districts, except officials.	Not required.	Presumed in absence of written notice posted in establishment and filed with commissioner of labor.	Presumed in absence of written notice to employer and filed with commissioner of labor.	Assumed risk, fellow service, and contributory negligence unless willful.	Not permitted.	Defenses remain.	Employer may insure or maintain fund, but may not reduce liability fixed by law.	Personal injuries by accident arising out of and in course of employment, unless intentionally self-inflicted, due to intoxication, or caused by fellow employee for personal reason. (Occupational diseases excluded by implication.)	1 week.	Death, 30 to 66 2/3 per cent. Disability, 66 2/3 per cent.	Maximum, \$15. Minimum, \$6.50, or actual wages if less than \$6.50.	Death, 300 weeks. Permanent total disability, 550 weeks. Temporary total and partial disability, 300 weeks.	(a) Burial expenses, maximum, \$100; 30 to 66 2/3 per cent of wages for 300 weeks; weekly maximum, \$15; minimum, \$6.50, or actual wages if less than \$6.50. (b) Expenses of burial and last sickness, maximum, \$100; and \$100 additional to create special fund for second injuries.	(a) 66 2/3 per cent of wages for 400 weeks; weekly maximum, \$15; minimum, \$6.50, or actual wages if less than \$6.50; not over \$6.50 thereafter for 150 weeks. (b) 66 2/3 per cent of wages during disability, for not over 300 weeks; weekly maximum, \$15; minimum, \$6.50, or actual wages if less than \$6.50.	66 2/3 per cent of wage loss during disability, for not over 300 weeks; weekly maximum, \$15. Specified injuries, 66 2/3 per cent of wages for fixed periods; weekly maximum, \$15, minimum, \$6.50, or actual wages if less than \$6.50.	Reasonable medical and surgical treatment, for 90 days; maximum, \$100; upon request of employee, court may allow additional treatment, if need is shown. Charges limited to those prevailing in the community.	Notice in 14 days; if in 30 days not barred except as to extent employer was prejudiced; but absolute after 90 days. Action must be brought within 1 year.	Limited supervision by commissioner of labor; disputed cases settled by courts.	Voluntary agreement approved by court; commissioner of labor, upon request, shall advise employee and assist in adjusting differences; disputed cases settled by court; appeal to supreme court upon questions of law.	All industrial employers must report fatal and serious accidents, within 48 hours, other tabulated accidents within 14 days to commissioner of labor.	(a) No provision. (b) Department of labor and industries; county inspectors of mines. ²	79.0	Minnesota.
Missouri. Approved Apr. 28, 1919.	Elective, as to all employments except those having regularly less than 5 employees, farm labor, domestic service, including family chauffeurs, casual employees not incidental to employer's business, outworkers, and employees receiving over \$3,000 a year. Voluntary, as to excepted employments.	Compulsory, as to State and political subdivisions and corporations, but elective as to employees thereof. Officials and employees earning over \$3,000 a year excluded.	Electing employers must insure in private companies or provide self-insurance.	Presumed in absence of written notice, filed with the commission and posted in establishment.	Presumed in absence of written notice to employer and filed with board.	Assumed risk, fellow service, and contributory negligence.	Not permitted unless employer fails to insure risk.	Defenses remain.	Approved schemes permitted if benefits equal those of act. Waivers forbidden.	Personal injuries by accident arising out of and in course of employment unless due to willful misconduct including self-inflicted injury, intoxication, and willful failure to use safety appliances or to obey safety laws or rules. Occupational diseases specifically excluded.	1 week. None if disability continues for more than 6 weeks.	66 2/3 per cent.	Death: Maximum, \$15; minimum, \$6. Temporary total disability: Maximum, \$15; minimum, \$6, or actual wages if less than \$6. Permanent total disability and specified injuries: Maximum, \$15; minimum, \$6. Temporary partial disability: Maximum, \$12. Maximum, \$12.50. Minimum, \$6, or actual wages if less than \$6.	Death, 300 weeks. Permanent total disability, life. Temporary total and permanent total disability, 400 weeks. Temporary partial disability, 200 weeks.	(a) Burial expenses, maximum, \$100; 66 2/3 per cent of wages for 300 weeks; weekly maximum, \$15, minimum, \$6, or actual wages if less than \$6. (b) 66 2/3 per cent of wages during disability, for not over 400 weeks; weekly maximum, \$15; minimum, \$6, or actual wages if less than \$6.	If temporary, 66 2/3 per cent of wage loss for not over 200 weeks; weekly maximum, \$12. Specified injuries, 66 2/3 per cent of wages for fixed periods; others proportionate, but not over 400 weeks; weekly maximum, \$15; minimum, \$6. Disfigurement, maximum, \$750.	Reasonable medical, surgical, and hospital service for 8 weeks; maximum, \$200; charges limited to those prevailing in the community.	Notice as soon as practicable; claim in 6 months.	Workmen's compensation commission.	Voluntary agreement after 7 days approved by commission; disputed cases settled by commission or any member or referee thereof; review by full commission; appeal to courts on questions of law.	All employers must report all accidents involving compensation or medical aid within 10 days to commission; supplementary reports as required by commission.	(a) No provision. (b) Bureau of mines; department of factory inspection. ²	66.1	Missouri.	
Montana. Ch. 96. Approved Mar. 8, 1915. In effect July 1, 1915. Amended, 1919.	Elective, as to "inherently hazardous" employments enumerated, except farm labor, domestic service, and casual employees (defined as not in usual course of employer's business.) Voluntary, as to nonhazardous employments, but insurance in State fund necessary.	Compulsory, as to all employees, including those of public contractors.	Electing employers must insure in State fund or private contractors.	Writing filed with board and posted in establishment.	Presumed in absence of written notice to employer and filed with board.	Assumed risk, fellow service, and contributory negligence unless willful.	Permitted if employer in State fund is in default on insurance premiums.	Defenses remain.	Waivers forbidden; hospital fund may be maintained.	Injuries from fortuitous event arising out of and in course of employment. Occupational diseases specifically excluded.	2 weeks.	Death, 30 to 50 per cent. Disability, 50 per cent.	Maximum, \$6, or actual wages if less than \$6.	Death, 400 weeks. Permanent total disability, life. Temporary total disability, 300 weeks. Partial disability, 150 weeks.	(a) Burial expenses, maximum, \$75; 30 to 50 per cent of wages for 400 weeks; weekly maximum, \$12.50; minimum, \$6, or actual wages if less than \$6. (b) Burial expenses, maximum, \$75.	(a) 50 per cent of wages for 400 weeks; weekly maximum, \$12.50; minimum, \$6, or actual wages if less than \$6. (b) 50 per cent of wages during disability, for not over 300 weeks; weekly maximum, \$12.50; minimum, \$6, or actual wages if less than \$6.	50 per cent of wage loss, maximum, 150 weeks if permanent, 50 weeks if temporary; weekly benefits not over \$6.25. Specified injuries, 50 per cent of wages for fixed periods; weekly maximum, \$12.50; minimum, \$6, or actual wages if less than \$6.	Reasonable medical and hospital service for 2 weeks; maximum, \$50, unless there is a hospital fund; special operating fee of \$50 in case of hernia.	Notice in 60 days; claim in 6 months.	Industrial accident board.	Disputed cases determined by board subject to rehearing on certain specified grounds; limited appeal to courts.	All employers and insurers must report all accidents to industrial accident board; employers not in State fund must report monthly on compensation and medical aid paid.	(a) Industrial accident board. (b) Department of labor and industries (mines and boilers only). ²	50.9	Montana.
Nebraska. Ch. 193. Approved Apr. 21, 1913. In effect Dec. 1, 1914. Amended, 1917, 1919.	Elective, as to all employments except farm labor, domestic service, outworkers, casual employees, and those not employed for employer's business or profit. Voluntary, as to excepted employments.	Compulsory, as to all employees except officials.	Electing employers must insure in private companies, or provide self-insurance.	Presumed in absence of notice posted in establishment and filed with compensation commissioner.	Presumed in absence of notice to employer and filed with commissioner.	Assumed risk, fellow service, and contributory negligence unless willful or due to intoxication.	Permitted if employer fails to insure risk. Defenses abrogated.	Defenses remain.	Existing schemes may be continued if benefits equal those of act. Waivers forbidden.	Personal injuries by accident arising out of and in course of employment, unless due to willful negligence (deliberate and reckless indifference to safety or intoxication). Occupational diseases specifically excluded.	1 week. None if disability continues for 6 weeks or more.	66 2/3 per cent.	Maximum, \$15. Minimum, \$6, or actual wages if less than \$6.	Death, 350 weeks. Permanent total disability, life. Temporary total disability, during its continuance. Partial disability, 300 weeks.	(a) Expenses of burial, maximum, \$150; 66 2/3 per cent of wages for 350 weeks; weekly maximum, \$15; minimum, \$6, or actual wages if less than \$6. (b) Expenses of burial, maximum, \$150.	(a) (b) 66 2/3 per cent of wages for 300 weeks; weekly maximum, \$15; minimum, \$6, or actual wages if less than \$6; thereafter 45 per cent of wages during disability; weekly maximum, \$12; minimum, \$1.50, or actual wages if less than \$1.50.	66 2/3 per cent of wage loss for not over 300 weeks; weekly maximum, \$15. Specified injuries, 66 2/3 per cent of wages for fixed periods; weekly maximum, \$15; minimum, \$6, or actual wages if less than \$6. Disfigurement, 25 weeks for loss of ear, 50 weeks for loss of nose.	Reasonable medical and hospital service unless employee refuses such treatment; maximum, \$200; employer not liable for aggravation of injury for which he is not allowed to furnish medical service.	Notice as soon as practicable; claim in 6 months; bar absolute after 1 year.	Commissioner of labor who is also compensation commissioner.	Voluntary agreement filed with commissioner; disputed cases settled by commissioner; appeal to court.	Reports of accidents shall be made as directed by compensation commissioner.	(a) No provision. (b) Bureau of labor.	70.4	Nebraska.
Nevada. Ch. 183. Approved Mar. 24, 1911. In effect July 1, 1911. Amended, 1915, 1917, 1919.	Elective, as to all employments except farm labor, domestic service, and casual employees not in usual course of employer's business. Voluntary, as to excepted employments.	Compulsory, as to all employees, including those of public contractors.	Electing employers must insure in State fund.	Writing filed with commission; notice of rejection to be posted in establishment.	Presumed in absence of notice to employer and filed with commission.	Assumed risk, fellow service, and contributory negligence unless willful or due to intoxication.	Permitted if employer is in default on insurance premiums.	Defenses remain except assumed risk due to employer's violation of safety laws; no presumption of employer's negligence.	Waivers forbidden. Hospital fund may be maintained.	Personal injuries by accident arising out of and in course of employment, unless due to willful intention to injure self or another, or sustained while intoxicated.	1 week. None if disability continues for 2 weeks or more.	Death, 15 to 66 2/3 per cent. Total and temporary partial disability, 50 per cent; permanent partial and specified injuries, 50 per cent.	Death: Maximum basic wage, \$120 a month. Disability: Monthly maximum, \$10 to \$72; minimum, \$30.	Death, during life or until remarriage of widow or dependent widower. Total disability, during its continuance. Partial disability, 100 months.	(a) Burial expenses, maximum, \$125; widow or dependent widower, 30 per cent of wages until death or remarriage; 10 per cent additional for each child; total not over 66 2/3 per cent; monthly maximum basic wage, \$120. Also burial expenses, maximum, \$125, in case of death of dependent. (b) Burial expenses, maximum, \$125.	(a) 60 per cent of wages for life; monthly maximum, \$30; minimum, \$30. (b) 60 per cent of wages during disability; if dependents in United States: maximum, 100 months; total not over \$7,200; monthly maximum, \$40. Specified injuries 50 per cent of wages for fixed periods; monthly maximum, \$50; minimum, \$30. Facial disfigurement, not over 12 months.	If permanent, 50 per cent of wages for periods proportioned to disability, maximum, 100 months; if temporary, 60 per cent of wage loss, for not over 60 months; monthly maximum, \$40. Specified injuries 50 per cent of wages for fixed periods; monthly maximum, \$50; minimum, \$30. Facial disfigurement, not over 12 months.	Reasonable medical, surgical, or hospital treatment for 90 days, which may be extended to 1 year by commission. Transportation furnished. Charges limited to those prevailing in community.	Notice of injury in 30 days; death in 60 days; claim in 90 days for disability; 1 year for death.	Industrial commission.	By commission under rules adopted by it.	All electing employers and physicians must report all accidents to industrial commission.	(a) No provision. (b) Labor commissioner; inspectors of mines. ²	76.2	Nevada.

¹ Including all employees in employments covered by the compensation law, whether or not the employers in elective States have accepted the act.

² Not provided for in compensation law.

State.	Employments covered.		Insurance.	How election is made.		Defenses abrogated if employer does not elect.	Suits for damages.		Special contracts.	Injuries covered.	Waiting period.	Compensation benefits.						Medical and surgical aid.	Time for notice and claim.	Administrative system.	How compensation claims are settled.	Accident reports required.	Accident-prevention work by—(a) Compensation commission. (b) Other agencies.	Per cent of employees subject to act. ¹	State.
	Private.	Public.		By employer.	By employee.		If both employer and employee come under act.	If employer elects but employee rejects.				Per cent of wages.	Maximum and minimum weekly compensation payments.	Maximum period.	Death. (a) Dependents. (b) No dependents.	Total disability. (a) Permanent. (b) Temporary.	Partial disability.								
New Hampshire. Ch. 163. Approved Apr. 15, 1911. In effect Jan. 1, 1912.	<i>Elective</i> , as to "dangerous" employments enumerated, except factories or shops having less than 5 employees engaged in manual or mechanical labor; applies only to "workmen."	No provision.	Electing employers must give proof of financial ability or file a bond.	Writing filed with commissioner of labor.	By accepting compensation or beginning proceedings under act.	Fellow service; burden of proof of contributory negligence on employer; no assumption of risk due to negligence.	Permitted in lieu of compensation after injury.	Defenses remain.	No provision.	Injuries arising out of and in course of employment, unless due to willful misconduct, intoxication, or violation of law.	2 weeks.	50 per cent.	Maximum, \$10. Minimum, no provision.	Death, 150 times weekly earnings. Disability, 300 weeks.	(a) 150 times weekly earnings; total not over \$3,000. (b) Expenses of burial and medical attendance, maximum, \$100.	(a) (b) 50 per cent of wages during disability, for not over 300 weeks; weekly maximum, \$10.	50 per cent of wage loss during disability, for not over 300 weeks; weekly maximum, \$10.	Only in fatal cases involving no dependents, medical attendance and burial expenses; maximum, \$100.	Notice as soon as practicable and before leaving service; claim in 6 months.	Courts.	Voluntary agreement, or by action in equity before superior court.	All employers subject to act must make such reports to commissioner of labor as required by him.	(a) No commission. (b) Bureau of labor. ²	50.0	New Hampshire.
New Jersey. Ch. 95. Approved Apr. 4, 1911. In effect July 1, 1911. Amended, 1913, 1914, 1916, 1917, 1918, 1919.	<i>Elective</i> , as to all employments except casual employees.	<i>Compulsory</i> , as to all employees, except elective officials or those receiving a salary over \$1,200.	All employers must insure in private companies, or provide self-insurance. Employers of farm labor and domestic service exempted.	Presumed in absence of written notice to employees.	Presumed in absence of written notice to employer.	Assumed risk, fellow service, and contributory negligence unless willful (deliberate act or failure to act, reckless indifference to safety, or intoxication). Abrogation is absolute and does not depend upon rejection of act.	Not permitted.	Abrogation of defenses absolute.	No substitute agreements valid.	Personal injuries by accident arising out of and in course of employment, unless intentionally self-inflicted, or due to intoxication.	10 days.	Death, 35 to 60 per cent. Disability, 66 2/3 per cent.	Maximum, \$12. Minimum, \$6, or actual wages if less than \$6.	Death, 300 weeks. Permanent total disability, 400 weeks. Temporary total and partial disability, 300 weeks.	(a) Expenses of last sickness, maximum, \$200; also burial expenses, maximum, \$100; 35 to 60 per cent of wages for 300 weeks; weekly maximum, \$12; minimum \$6 or actual wages if less than \$6. (b) Burial expenses, maximum, \$100; \$400 additional to be paid into State treasury for defraying administrative expenses of bureau.	(a) 66 2/3 per cent of wages for 400 weeks; weekly maximum, \$12; minimum, \$6, or actual wages if less than \$6. (b) 66 2/3 per cent of wages during disability, for not over 300 weeks; weekly maximum, \$12; minimum, \$6, or actual wages if less than \$6.	66 2/3 per cent of wages for periods proportioned to disability; maximum, 300 weeks. Specified injuries, 66 2/3 per cent of wages for fixed periods; weekly maximum, \$12; minimum, \$6, or actual wages if less than \$6.	In nonfatal cases only, reasonable medical and hospital service for 4 weeks, unless employee refuses such treatment; maximum, \$50; in cases requiring unusual treatment bureau may extend period to 17 weeks, but not over \$200; special operating fee of \$150 in case of hernia.	Notice in 14 days; if in 30 days, not barred except as to extent employer was prejudiced; bar absolute after 90 days; claim in 1 year.	Department of labor.	Voluntary agreement approved by department; disputed cases settled by department or referee; appeal to courts of common pleas; appeal to supreme court upon questions of law.	All employers must report all accidents of more than 2 weeks' disability to department of labor within 4 weeks; fatal accidents within 2 weeks.	(a) Department of labor. (b) No provision.	99.8	New Jersey.
New Mexico. Ch. 83. Approved Mar. 13, 1917. In effect June 8, 1917. Amended, 1919.	<i>Elective</i> , as to "extrahazardous" employments conducted for gain except those having less than 4 employees, and casual employees not in usual course of employer's business; nautical exception does not apply to structural work 10 feet above ground. <i>Voluntary</i> , as to non-hazardous employments.	No provision.	Electing employers must insure in private companies or provide self-insurance.	Presumed in absence of written notice to employees.	Presumed in absence of written notice to employer.	Assumed risk, fellow service, and contributory negligence.	Not permitted.	Defenses remain if employer has complied with insurance provisions.	No provision except that employer may maintain hospital fund.	Injuries by accident arising out of and in course of employment, unless due to intoxication or intentionally inflicted by himself or another.	2 weeks.	Death, 15 to 60 per cent. Disability, 50 per cent.	Death: Weekly basic wage, maximum, \$30. Disability: Maximum, \$12; minimum, \$6, or actual wages if less than \$6.	Death, 300 weeks; total disability, 520 weeks; partial disability, no provision.	(a) Burial expenses, maximum, \$75; 40 to 60 per cent of wages to dependent widow or widower for 300 weeks; weekly basic wage, maximum, \$30. (b) Expenses of burial, maximum, \$75, and medical attendance, maximum, \$50.	(a) (b) 50 per cent of wages for not over 520 weeks; weekly maximum, \$12; minimum, \$6, or actual wages if less than \$6.	If permanent, compensation measured by extent of disability. Specified injuries, 50 per cent of wages for fixed periods; weekly maximum, \$12; minimum, \$6 or actual wages if less than \$6. Disfigurement of hand or face, maximum, \$500.	Reasonable medical, surgical, and hospital service for 2 weeks; maximum, \$50, unless there is a hospital fund; special operating fee of \$50 in case of hernia.	Notice in 14 days; if prevented, as soon as possible, not later than 60 days. Claim in 60 days after employer's refusal to pay compensation; 1 year in case of death.	Courts.	By interested parties; disputed cases settled by district court. Appeal to supreme court.	No provision.	(a) No provision. (b) Mine inspector. ²	30.7	New Mexico.
New York. Ch. 816. Approved Dec. 16, 1913. In effect July 1, 1914. Amended, 1914, 1915, 1916, 1917, 1918, 1919.	<i>Compulsory</i> , as to enumerated "hazardous" employments, and all other employments having 4 or more workmen or operatives, conducted for gain; farm labor and domestic services specifically excluded. <i>Voluntary</i> , as to other employments.	<i>Compulsory</i> , as to all employees.	Employers must insure in State fund or private companies, or provide self-insurance.				Permitted if employer fails to insure risk. Defenses abrogated.		Waivers forbidden.	Accidental personal injuries arising out of and in course of employment, unless due to willful intention to injure self or another, or intoxication.	2 weeks. None if disability continues for more than 7 weeks.	Death, 15 to 66 2/3 per cent. Disability, 66 2/3 per cent.	Death: Maximum basic wage, \$100 a month. Disability: Weekly maximum \$15 (\$20 for certain injuries); minimum, \$5.	Death, during life or until remarriage of widow or dependent widower. Permanent total disability, life. Others, during disability.	(a) Burial expenses, maximum, \$100; widow or dependent widower, 30 per cent of wages until death or remarriage; 10 per cent additional for each child under 18; total not over 66 2/3 per cent; maximum basic wage, \$100 a month. (b) Burial expenses, maximum, \$100; and \$100 to create special fund for paying for loss of second major members.	(a) 66 2/3 per cent of wages for life; weekly maximum, \$15; minimum, \$5. (b) 66 2/3 per cent of wages during disability; weekly maximum, \$15; minimum, \$5; total not over \$3,500.	66 2/3 per cent of wage loss during disability; total not over \$3,500 if temporary. Specified injuries, 66 2/3 per cent of wages for fixed periods; weekly maximum, \$15 (\$20 for certain injuries); minimum, \$5, or actual wages if less than \$5. Facial or head disfigurement, maximum, \$3,500.	Such medical, surgical, and hospital service as nature of injury requires for 60 days; longer if necessary. Charges limited to those prevailing in the community.	Notice of injury in 30 days, death in 30 days unless excused for cause; claim in 1 year.	Industrial commission.	Voluntary agreement, 14 days after injury, approved by commission; commission may settle cases direct after hearing; appeal to court upon questions of law.	All employers must report all accidents to industrial commission within 10 days; commission may require any information.	(a) Industrial commission. (b) No provision.	80.1	New York.
North Dakota. Ch. 162. Approved Mar. 15, 1919. In effect Mar. 5, 1919.	<i>Compulsory</i> , as to all employments except farm labor, domestic service, casual employees not in usual course of employer's business, and any common carrier by steam railroad. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to all employees.	Employers must insure in State fund.				Permitted if employer fails to insure risk or illegally employs minors. Defenses abrogated.		Waivers forbidden.	Injuries arising in course of employment unless caused by employee's willful intention to injure self or another. (Occupational diseases included by decision of bureau.)	1 week. None if disability continues for more than 1 week.	Death, 20 to 66 2/3 per cent. Disability, 66 2/3 per cent.	Death: Basic weekly wage, maximum, \$30, minimum, \$18, but compensation not more than wages. Disability: Weekly maximum, \$20, minimum, \$6, or actual wages if less than \$6.	Death, during life or until remarriage. Disability, during its continuance.	(a) Burial expenses, maximum, \$100; 35 per cent of weekly wages to widow or dependent widower until death or remarriage; 10 per cent additional for each child under 18, but not over 66 2/3 per cent; basic wage, maximum, \$30, minimum, \$18, but compensation not more than wages. (b) Burial expenses, maximum, \$100.	(a) (b) 66 2/3 per cent of weekly wages during disability; weekly maximum, \$20, minimum, \$6, or actual wages if less than \$6.	If temporary, 66 2/3 per cent of wage loss during disability; weekly maximum, \$20. If permanent, for fixed periods according to schedule of percentage of disability. Disfigurement compensated.	Such medical, surgical, and hospital service as the nature of the injury requires.	Claim in 6 months; 1 year if reasonable cause shown.	Workmen's compensation bureau.	Bureau has full power to determine all questions within its jurisdiction; appeal to courts.	All employers must report all accidents to bureau within 1 week.	(a) Workmen's compensation bureau. (b) No provision.	46.8	North Dakota.
Ohio. P. 524. Approved June 15, 1911. In effect Jan. 1, 1912. Amended, 1913, 1914, 1915, 1917, 1919.	<i>Compulsory</i> , as to all employments except those having less than 5 employees, and casual employees not in usual course of employer's business. <i>Voluntary</i> , as to employments having less than 5 employees.	<i>Compulsory</i> , as to all employees, except those of officials or firemen and policemen in cities having pension funds.	Employers must insure in State fund or provide self-insurance.				Permitted if injury is due to willful act of employer, violation of safety laws, or default on insurance premiums. Defenses abrogated.		Waivers forbidden except in case of blind employees.	Injuries sustained in course of employment, unless purposely self-inflicted. (Occupational diseases excluded by court.)	1 week.	66 2/3 per cent.	Death: Maximum, \$15. Temporary total disability: Maximum, \$15; minimum, \$5, or actual wages if less than \$5. Permanent total disability: Maximum, \$12; minimum, \$5, or actual wages if less than \$5. Partial disability: Maximum, \$12.	Death, 416 weeks. Permanent total disability, life. Temporary total disability, 312 weeks. Partial disability, during its continuance.	(a) Burial expenses, maximum, \$150; 66 2/3 per cent of wages for 8 years; weekly maximum, \$15; total not over \$5,000 or less than \$2,000. (b) Burial expenses, maximum, \$150.	(a) 66 2/3 per cent of wages for life; weekly maximum, \$12; minimum, \$5, or actual wages if less than \$5. (b) 66 2/3 per cent of wages during disability, for not over 6 years; weekly maximum, \$15; minimum, \$5, or actual wages if less than \$5; total not over \$3,750.	66 2/3 per cent of wage loss during disability; weekly maximum \$12; total not over \$3,750. Specified injuries, 66 2/3 per cent of wages for fixed periods; weekly maximum, \$12.	Such medical and hospital service as commission deems proper; maximum, \$200, except in unusual cases.	Claim in 2 years.	Industrial commission.	Commission determines all questions within its jurisdiction; appeal to court.	All employers must report all accidents to industrial commission within 1 week.	(a) Industrial commission. (b) No provision.	76.3	Ohio.
Oklahoma. Ch. 246. Approved Mar. 22, 1915. In effect Sept. 1, 1915. Amended, 1919.	<i>Compulsory</i> , as to "hazardous" employments (enumerated list and general clause) conducted for gain except those having less than 3 employees, farm labor, and employees not engaged in manual or mechanical work.	<i>Compulsory</i> , as to all workmen in hazardous employments employed for wages, except when equivalent schemes are in force.	Employers must insure in private companies or provide self-insurance.				Permitted if employer fails to insure risk. Defenses abrogated.		Approved schemes permitted. Waivers forbidden.	Accidental personal injuries arising out of and in course of employment, unless due to willful intention to injure self or another, intoxication, or willful failure to use statutory safeguards. Fatal accidents not included.	1 week. None if disability continues for 3 weeks or more.	50 per cent.	Maximum, \$18. Minimum, \$8, or actual wages if less than \$8.	Permanent total disability, 500 weeks. Temporary total and partial disability, 300 weeks.	Fatal accidents not covered.	(a) 50 per cent of wages for 500 weeks; weekly maximum, \$18; minimum \$8, or actual wages if less than \$8. (b) 50 per cent of wages during disability, for not over 300 weeks; weekly maximum, \$18; minimum, \$8, or actual wages if less than \$8.	50 per cent of wage loss during disability, for not over 300 weeks. Specified injuries, 50 per cent of wages for fixed periods; weekly maximum, \$18; minimum, \$8, or actual wages if less than \$8. Disfigurement of hand and face, maximum, \$3,000.	Necessary medical, surgical, and hospital service for 60 days; maximum, \$100; period and amount may be increased at discretion of commission; charges limited to those prevailing in the community.	Notice in 30 days; claim in 1 year.	Industrial commission.	Voluntary agreement, after 7 days, approved by commission; disputed cases may be submitted to arbitration committee of 3 persons, appointed by commission, composed of representatives of each party and a commissioner or deputy; or commission may settle cases direct after hearing; appeal to courts.	All employers must report all accidents to industrial commission within 10 days or reasonable time; commission may require any information.	(a) No provision. (b) Department of labor; inspectors of mines, oil, and gas. ²	35.9	Oklahoma.
Oregon. Ch. 112. Approved Feb. 25, 1913. In effect July 1, 1913. Compensation and insurance provisions effective July 1, 1914. Amended, 1915, 1917, 1919.	<i>Elective</i> , as to enumerated "hazardous" employments except farm labor. <i>Voluntary</i> , as to excepted employment.	<i>Elective</i> , as to all employees.	Electing employers must insure in State fund.	Presumed in hazardous employments in absence of notice posted in establishment and with commission.	Presumed in absence of written notice, if employer elects.	Assumed risk, fellow service, and contributory negligence except willful and due to deliberate intention to injure self. Occupational diseases excluded by implication.	Permitted if injury is due to willful act of employer or default on insurance premium. Defenses abrogated.	Defenses remain; prior law abrogated as assumed risk and fellow service; contributory negligence to be measured.	Waivers forbidden.	Personal injuries by accident caused by violent or external means arising out of and in course of employment, unless due to deliberate intention to injure self. Occupational diseases excluded by implication.	None.	Monthly pension; amounts not based on wages.	Monthly pension. Death \$15 to \$50. Permanent total disability, \$30 to \$50. Temporary total disability, \$30 to \$50, increased by 50 per cent for first 6 months, but not over 60 per cent of wages. Permanent partial disability, \$25.	Death, during life or until remarriage of widow or invalid widower. Total disability, during its continuance. Temporary partial disability, 104 weeks.	(a) Burial expenses, maximum, \$100; widow or invalid widower, \$30 a month until death or remarriage; \$8 for each child under 18; total not over \$200. (b) Burial expenses, maximum, \$100.	(a) (b) \$30 a month if single, 35¢ if dependent spouse, \$8 for each child under 16; monthly maximum \$50. If temporary, above schedule increases by 50 per cent for first 6 months, but not over 60 per cent of wages. Compensation in all cases to continue during disability.	If temporary, benefits proportionate to those for total disability for not over 2 years. Specified permanent injuries, \$25 a month until death or remarriage; others in proportion, but not over 96 months.	First aid, medical, surgical, and hospital service and transportation; maximum, \$250; commission may allow additional service.	Claim for disability in 3 months; death, 1 year.	Industrial accident commission.	Commission settles all questions; appeal to courts.	All employers must report all accidents to industrial accident commission at once.	(a) Industrial accident commission must investigate violation of safety laws and report same to prosecuting attorney. (b) Bureau of labor statistics. ²	48.7	Oregon.

¹ Including all employees in employments covered by the compensation law, whether or not the employers in elective States have accepted the act.

² Not provided for in compensation law.

State.	Employments covered.		Insurance.	How election is made.		Defenses abrogated if employer does not elect.	Suits for damages.		Special contracts.	Injuries covered.	Waiting period.	Compensation benefits.						Medical and surgical aid.	Time for notice and claim.	Administrative system.	How compensation claims are settled.	Accident reports required.	Accident-prevention work by—(a) Compensation commission. (b) Other agencies.	Per cent of employees subject to act. ¹	State.
	Private.	Public.		By employer.	By employee.		If both employer and employee come under act.	If employer elects but employee rejects.				Per cent of wages.	Maximum and minimum weekly compensation payments.	Maximum period.	Death. (a) Dependents. (b) No dependents.	Total disability. (a) Permanent. (b) Temporary.	Partial disability.								
Pennsylvania. No. 338. Approved June 2, 1915. In effect Jan. 1, 1916. Amended, 1917, 1919.	<i>Elective</i> , as to all employments except farm labor, domestic service, casual employees not in usual course of employer's business, and outworkers.	<i>Compulsory</i> , as to all employees, including public contractors.	Electing employers must insure in State fund or private companies or provide self-insurance.	Presumed in absence of notice posted in establishment, given employee, and filed with compensation bureau.	Presumed in absence of written notice to employer and filed with compensation bureau.	Assumed risk, fellow service, and contributory negligence unless due to intoxication or reckless indifference. Abrogation of defenses is absolute and does not depend upon rejection of act.	Permitted if employer fails to insure risk.	Abrogation of defenses absolute.	Waivers forbidden.	Personal injuries by accident in course of employment while actually engaged in furtherance of employer's business, unless intentionally self-inflicted, or due to intentional act of third party for reasons not connected with the employment.	10 days.	Death, 15 to 60 per cent. Disability, 60 per cent.	Death: Basic wage, maximum, \$20; minimum, \$10. Disability: Maximum, \$12; minimum, \$6, or actual wages if less than \$6.	Death, 300 weeks. Total disability, 500 weeks. Partial disability, 300 weeks.	(a) Expenses of burial and last sickness, maximum, \$100; 15 to 60 per cent of wages for 300 weeks; basic wage, maximum, \$20; minimum, \$10. (b) Expenses of burial and last sickness, maximum, \$100.	(a) (b) 60 per cent of wages during disability, maximum, 500 weeks; weekly maximum, \$12; minimum, \$6, or actual wages if less than \$6; total not over \$5,000.	60 per cent of wage loss during disability, for not over 300 weeks; weekly maximum, \$12. Specified injuries, 60 per cent of wages for fixed periods; weekly maximum, \$12; minimum, \$6, or actual wages if less than \$6.	Reasonable medical, surgical, and hospital service for 50 days, unless employee refuses; maximum, \$100, except in hospital cases; if employee refuses medical service, employer not liable for aggravation of injury. Charges limited to those prevailing in the community.	Notice in 14 days; claim in 1 year.	Workmen's compensation board and department of labor and industry.	Voluntary agreement, after 10 days, approved by board; disputed cases settled by board's referee after hearing, appeal to board; cases involving agreed facts settled by board direct; appeal to court upon questions of law.	All subscribers to State fund must report all accidents to workmen's insurance board within 7 days; commissioner of insurance may require insurers to file annual statement of loss experience. All employers (except casual employees) must report all accidents of 2 days' disability to department of labor and industry within 30 days. ¹	(a) Workmen's insurance board empowered to make safety regulations affecting subscribers to State fund. (b) Department of labor and industry. ² department of mines. ³	88.8	Pennsylvania.
Porto Rico. No. 19. Approved Apr. 13, 1915. In effect July 1, 1915. Amended, 1917. New act, No. 10, 1918; amended, 1919.	<i>Compulsory</i> , as to all employments except those having regularly less than 3 employees, farm labor not working with mechanical or animal power machinery or hazardous tools, domestic service, nonhazardous clerical occupations, and employees receiving more than \$1,500 a year.	<i>Compulsory</i> , as to employees engaged on public works performed by the administration.	Employers must insure in State fund.				Permitted if injury is caused by illegal act or gross negligence of employer.		No provision.	Personal injuries by accident arising out of and in course of employment, unless received while intending to commit a crime, when voluntarily self-inflicted or while trying to injure another, when due to intoxication, when willful criminal act of another, or where gross negligence was sole cause.	None.	Temporary total disability, 50 per cent.	Temporary total disability: Maximum, \$7; minimum, \$3.	Temporary total disability, 104 weeks.	(a) Compensation proportioned to earning capacity, number and needs of dependents of deceased; maximum, \$3,000 to \$4,000. (b) No provision.	(a) Compensation proportioned to age and rate of wages; maximum, \$4,000; minimum, \$2,000. (b) 50 per cent of wages during disability, for not over 104 weeks; weekly maximum, \$7; minimum, \$3.	If permanent, compensation proportioned to degree of disability and rate of wages; maximum, \$2,500.	Necessary medical attendance and sustenance as prescribed by commission.	Claim must be made in 90 days.	Workmen's relief commission.	Investigation by commission and department of agriculture and labor; claims settled by commission; appeal to court only upon question of whether injured employee is entitled to compensation.	All employers must report all accidents to workmen's relief commission within 5 days.	(a) No provision. (b) Department of agriculture and labor. ¹	20.5	Porto Rico.
Rhode Island. Ch. 831. Approved Apr. 29, 1912. In effect Oct. 1, 1912. Amended, 1913, 1915, 1917, 1919.	<i>Elective</i> , as to all employments except those having less than 6 employees, farm labor, domestic service, casual employees not in usual course of employer's business, and employees receiving over \$1,800 a year. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to employees of State; <i>elective</i> , as to employees of cities and towns, except fire and police departments.	Electing employers must insure in private companies or provide self-insurance.	Writing filed with commissioner of industrial statistics.	Presumed in absence of written notice, if employer elects.	Assumed risk, fellow service, and contributory negligence.	Permitted if employer fails to insure risk.	Defenses remain.	Approved schemes may be submitted if benefits equal those of act; waivers forbidden.	Personal injuries by accident arising out of and in course of employment unless due to willful intent to injure self or another, or intoxication.	2 weeks. None if disability continues for more than 4 weeks.	50 per cent.	Total disability: Maximum, \$14; minimum, \$7. Others: Maximum, \$10; minimum, \$4.	Death, 300 weeks. Total disability, 500 weeks. Partial disability, 300 weeks.	(a) 50 per cent of wages for 300 weeks; weekly maximum, \$10; minimum, \$4. (b) Expenses of burial and last sickness, maximum, \$200.	(a) (b) 50 per cent of wages during disability, for not over 300 weeks; total not over \$5,000; weekly maximum, \$14; minimum, \$7.	50 per cent of wage loss during disability, for not over 300 weeks; weekly maximum, \$10. Specified injuries, 50 per cent of wages for fixed periods in addition to all other compensation; weekly maximum, \$10; minimum, \$4.	Reasonable medical and hospital service for 4 weeks; maximum, \$200, including burial, in fatal cases involving no dependents.	Notice in 30 days; claim in 1 year.	Courts.	Voluntary agreement approved by court; disputed cases settled by court upon petition of either party; appeal to supreme court upon questions of law or equity.	All assenting employers (except public utilities) must report all injuries of 2 weeks' disability to bureau of labor within 3 weeks, fatal within 48 hours.	(a) No commission. (b) Factory inspector. ¹	82.9	Rhode Island.
South Dakota. Ch. 376. Approved Mar. 10, 1917. In effect June 1, 1917. Amended, 1919.	<i>Elective</i> , as to all employments except farm labor, domestic service, casual laborers not in usual course of employer's business. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to all employees.	Electing employers must insure in private companies or provide self-insurance.	Presumed in absence of written notice to employee and filed with commissioner.	Presumed in absence of written notice to employer and filed with commissioner.	Assumed risk, fellow service, and contributory negligence.	Permitted if employer fails to insure risk.	Defenses remain.	Approved substitute schemes permitted; waivers forbidden.	Personal injuries by accident arising out of and in course of employment, unless due to willful misconduct, intoxication, failure to use safeguards, violation of law, or intentionally self-inflicted. Occupational diseases specifically excluded.	10 days. None if disability continues for 6 weeks or more.	Total disability, 55 per cent. Partial disability, 50 per cent.	Death: No weekly maximum. Permanent total disability: Maximum, \$12; minimum, \$6.50. Others: Maximum, \$12; minimum, \$6.50, or actual wages if less than \$6.50.	Death, 378 weeks. Total disability, during its continuance. Partial disability, 312 weeks.	(a) 4 times annual earnings; maximum, \$3,000; minimum, \$1,650. (b) Burial expenses; maximum, \$150.	(a) 55 per cent of wages during disability; weekly maximum, \$12; minimum, \$6.50; total not more than death benefits. (b) 55 per cent of wages during disability for not over 6 years; weekly maximum, \$12; minimum, \$6.50, or actual wages if less than \$6.50. Disfigurement of head, face, or hand, maximum, one-fourth death benefits.	50 per cent of wage loss for not over 6 years; weekly maximum, \$12. Specified injuries, 55 per cent of wages for fixed periods; weekly maximum, \$12; minimum, \$6.50, or actual wages if less than \$6.50. Disfigurement of head, face, or hand, maximum, one-fourth death benefits.	Necessary medical, surgical, and hospital service for 12 weeks; maximum, \$150.	Notice in 30 days unless excused for cause; claim in 1 year.	Industrial commissioner.	Voluntary agreement approved by commission; disputed cases settled by arbitration committee of 3 persons composed of representatives of each party and commissioner; review by commissioner; appeal to court upon questions of law.	All assenting employees must report all accidents to industrial commissioner within 48 hours; supplementary report after 60 days, or upon termination of disability.	(a) No provision. (b) Inspector of mines. ¹	58.0	South Dakota.
Tennessee. Ch. 123. Approved Apr. 15, 1919. In effect July 1, 1919.	<i>Elective</i> , as to all employments except those employing less than 10 employees, farm labor, domestic service, coal mines, and casual employees (defined as not in usual course of employer's business). <i>Voluntary</i> , as to coal mines and employments having less than 10 employees.	State and subdivisions exempted, but may accept voluntarily.	Electing employers must insure in private companies or provide self-insurance.	Presumed in absence of written or printed notice posted in establishment and filed with bureau of workshop and factory inspection.	Presumed in absence of written or printed notice to employer and bureau of workshop and factory inspection.	Assumed risk, fellow service, and contributory negligence.	Permitted if employer fails to insure risk. Defenses abrogated.	Defenses remain.	Waivers forbidden.	Personal injuries by accident arising out of and in course of employment, unless due to willful misconduct, intentional self-inflicted injury, intoxication, or willful failure to use safety appliances, or perform statutory duties. Occupational diseases specifically excluded.	2 weeks. None if disability continues for 6 weeks or more.	Death, 20 to 50 per cent. Disability, 50 per cent.	Maximum, \$11; minimum, \$5, or actual wages if less than \$5.	Death, 400 weeks. Permanent total disability, 530 weeks. Others, 300 weeks.	(a) Burial expenses, maximum, \$100; 20 to 50 per cent of wages for not over 400 weeks; weekly maximum, \$11, minimum, \$5, or actual wages if less than \$5. (b) Burial expenses, maximum, \$100.	(a) 50 per cent of wages for 400 weeks; weekly maximum, \$11; minimum, \$5, or actual wages if less than \$5; not over \$5 thereafter for 150 weeks in certain cases; total not over \$5,000. (b) 50 per cent of wages during disability; maximum, 300 weeks; weekly maximum, \$11; minimum, \$5, or actual wages if less than \$5.	50 per cent of wage loss during disability for not over 300 weeks; weekly maximum, \$11. Specified injuries, 50 per cent of wages for fixed periods; others proportionate, but for not over 400 weeks; weekly maximum, \$11; minimum, \$5, or actual wages if less than \$5.	Reasonable medical, surgical, and hospital service for 30 days, longer at option of employer; maximum, \$100; charges limited to those prevailing in the community.	Notice as soon as practicable; barred after 30 days unless cause shown; claim in 1 year.	Courts.	Voluntary agreements approved by court; disputed cases settled by courts.	No provision.	(a) No provision. (b) Chief mine inspector, ² bureau of workshop and factory inspection. ³	37.2	Tennessee.
Texas. Ch. 179. Approved Apr. 18, 1913. In effect Sept. 1, 1913. Amended, 1917.	<i>Elective</i> , as to all employments except those having less than 3 employees, farm labor, domestic service, railroads used as common carriers, and employees not in usual course of employer's business.	No provision.	Electing employers must insure in Texas Employers' Insurance Association or other private companies.	By subscribing to State association or insuring in other company and notifying employees.	Presumed in absence of written notice to employer.	Assumed risk, fellow service, and contributory negligence, unless willful or due to intoxication.	Permitted against employer accepting insurance system if his willful or gross negligence causes death; damages, in addition to compensation, if employer charges part of insurance premium against employee.	Defenses remain.	Waivers forbidden.	Personal injuries sustained in course of employment unless due to willful intent to injure self or another, intoxication, act of God, or caused by act of third party for personal reasons. Occupational diseases excluded by court.	1 week.	60 per cent.	Maximum, \$15. Minimum, \$5.	Death, 360 weeks. Total disability, 401 weeks. Partial disability, 300 weeks.	(a) 60 per cent of wages for 360 weeks; weekly maximum, \$15; minimum, \$5. (b) Expenses of last sickness, and funeral benefit of \$100.	(a) (b) 60 per cent of wages during disability, for not over 401 weeks; weekly maximum, \$15; minimum, \$5.	60 per cent of wage loss during disability, for not over 300 weeks (401 weeks if partial follows total disability); weekly maximum, \$15. Specified injuries, 60 per cent of wages for fixed periods; proportionate for others, including disfigurement, if it impairs occupational opportunities; weekly maximum, \$15; minimum, \$5.	Reasonable medical and hospital service for 2 weeks. Two weeks additional in cases requiring hospital confinement. Charges limited to those prevailing in the community.	Notice in 30 days; claim in 6 months.	Industrial board. accident	Voluntary agreement or by board; appeal to court.	All employers must report all accidents of more than 1 day's disability to industrial accident board within 8 days; supplementary report after 60 days, or upon termination of disability.	(a) No provision. (b) Bureau of labor statistics; ² mine inspector; ³ Texas Employers' Insurance Association.	47.9	Texas.
Utah. Ch. 100. Approved Mar. 15, 1917. In effect July 1, 1917. Amended, 1919.	<i>Compulsory</i> , as to all employments except those having less than 3 employees, farm labor, domestic service, casual employees not in usual course of employer's business. <i>Voluntary</i> , as to excepted employments.	<i>Compulsory</i> , as to all employees, except elective officials or those receiving a salary over \$2,400.	Employers must insure in State fund or private companies or provide self-insurance.				Permitted: (1) If employer fails to insure risk when injury is caused by employer's negligence; defenses abrogated; (2) In case of death, defenses remain and employer's negligence must be proved; and (3) If injury is due to employer's willful misconduct.		Approved substitute schemes permitted if benefits equal those of act; waivers forbidden.	Personal injuries by accident arising out of or in course of employment, except those purposefully self-inflicted. Occupational diseases specifically excluded.	3 days.	60 per cent.	Death: Maximum, \$16. Disability: Maximum, \$16; minimum, \$7.	Permanent total disability, life. Others, 312 weeks.	(a) Burial expenses, maximum, \$150; 60 per cent of wages for 6 years; weekly maximum, \$16; total not over \$5,000 and not less than \$2,000. (b) Burial expenses, maximum, \$150; and \$750 to be paid into State treasury if employer is not insured in fund, from which second injuries shall be compensated.	(a) 60 per cent of wages for 5 years; thereafter, 45 per cent for life; weekly maximum, \$16; minimum, \$7. (b) 60 per cent of wages for not over 6 years; weekly maximum, \$16. Disfigurement: Maximum, 200 weeks.	60 per cent of wage loss for not over 6 years; weekly maximum, \$16; total not over \$5,000. Specified injuries, 60 per cent of wages for fixed periods; weekly maximum, \$16. Disfigurement: Maximum, 200 weeks.	Such medical and hospital service as employer or insurer may deem proper; maximum, \$500; hospital benefit fund permitted in lieu of above.	To be fixed by commission.	Industrial commission.	Commission has full power to determine all questions relating to compensation; limited appeal to court.	All employers must report all accidents to industrial commission within 1 week.	(a) Industrial commission. (b) No provision.	74.4	Utah.

¹ Including all employees in employments covered by the compensation law, whether or not the employers in elective States have accepted the act.

² Not provided for in compensation law.

State.	Employments covered.		Insurance.	How election is made.		Defenses abrogated if employer does not elect.	Suits for damages.		Special contracts.	Injuries covered.	Waiting period.	Compensation benefits.						Medical and surgical aid.	Time for notice and claim.	Administrative system.	How compensation claims are settled.	Accident reports required.	Accident-prevention work by—(a) Compensation commission. (b) Other agencies.	Per cent of employees subject to act. ¹	State.
	Private.	Public.		By employer.	By employee.		If both employer and employee come under act.	If employer elects but employee rejects.				Per cent of wages.	Maximum and minimum weekly compensation payments.	Maximum period.	Death. (a) Dependents. (b) No dependents.	Total disability. (a) Permanent. (b) Temporary.	Partial disability.								
Vermont. Ch. 164. Approved Apr. 1, 1915. In effect July 1, 1915. Amended, 1917, 1919.	Elective, as to all employments conducted for gain, except those having less than 11 employees, domestic service, casual employees, those not in usual course of employer's business and employees receiving over \$2,000 a year. Voluntary, as to other employments.	Elective, as to all employments of cities, towns, and incorporated villages, except officials elected or receiving more than \$2,000 a year.	Electing employers must insure in private companies or provide self-insurance.	Presumed in absence of written agreement or notice to employees and board; municipality's vote.	Presumed in absence of written agreement or notice to employer and board.	Assumed risk, fellow service, and contributory negligence.	Not permitted.	Defenses remain.	Waivers forbidden.	Personal injuries by accident arising out of and in course of employment, unless due to willful intention to injure self or another, intoxication, or failure to use safety devices. Occupational diseases specifically excluded.	1 week.	Death, 15 to 45 per cent. Disability, 50 per cent.	Death: Minimum, basic wage, \$5. Total disability: Maximum, \$10.	260 weeks.	(a) Burial expenses, maximum, \$100; 15 to 45 per cent of wages for 260 weeks; total not over \$3,500; minimum weekly basic wage, \$5. (b) Burial expenses, maximum, \$100.	(a) (b) 50 per cent of wages for 260 weeks; weekly maximum, \$12.50; minimum, \$3, or actual wages if less than \$3; total not over \$4,000.	50 per cent of wage loss during disability; maximum, 260 weeks; weekly maximum, \$10. Specified injuries, 50 per cent of wages for fixed periods; others proportionate; weekly maximum, \$10. Compensation for disfigurement if resulting in decreased ability to secure employment.	Reasonable medical, surgical, and hospital service, for 14 days; maximum, \$100. Charges limited to those prevailing in the community.	Notice as soon as practicable; claim in 6 months.	Commissioner of industries.	Voluntary agreement approved by commissioner; disputed cases settled by commissioner after hearing; appeal to courts.	All assenting employers must report all injuries within 72 hours; supplementary report after each 60 days or termination of disability; final report showing total payments made within 60 days after termination of disability.	(a) Commissioner of industries. (b) No provision.	55.2	Vermont.
Virginia. Ch. 400. Became law over governor's veto Mar. 21, 1918. In effect Jan. 1, 1919.	Elective, as to all employments except those employing less than 11 employees, farm labor, domestic service, steam railroads, casual employees, or those not in usual course of employer's business. Voluntary, as to excepted employments.	Compulsory, as to all employees.	Electing employers must insure in private companies or provide self-insurance.	Presumed in absence of written or printed notice to employees and commission.	Presumed in absence of written notice to employer and commission.	Assumed risk, fellow service, and contributory negligence.	Not permitted.	Defenses remain.	Approved schemes permitted. Waivers forbidden.	Personal injuries by accident arising out of and in course of employment, unless due to willful misconduct, intent to injure self or another, intoxication, or willful failure to use safety appliances or obey safety rules. Occupational diseases specifically excluded.	2 weeks.	50 per cent.	Maximum, \$10; minimum, \$5.	Death, 300 weeks. Total disability, 200 weeks.	(a) Burial expenses, maximum, \$100; 50 per cent of wages for 300 weeks; weekly maximum, \$10, minimum, \$5; total not over \$4,000. (b) Burial expenses, maximum, \$100.	(a) (b) 50 per cent of wages during disability; maximum, 500 weeks; weekly maximum, \$10. Specified injuries, 50 per cent of wages for fixed periods; weekly maximum, \$10, minimum, \$5.	50 per cent of wage loss during disability for not over 300 weeks; weekly maximum, \$10. Specified injuries, 50 per cent of wages for fixed periods; weekly maximum, \$10, minimum, \$5.	Necessary medical, surgical, and hospital service for 30 days; longer at option of employer; employee must accept unless otherwise ordered by commission; charges limited to those prevailing in the community.	Notice in 30 days. Claim in 1 year.	Industrial commission.	Voluntary agreement after 10 days approved by commission; disputed cases settled by commission or member thereof; review by full commission; appeal to courts.	All employers must report all injuries of over 1 week's disability to commission within 10 days; supplementary report after 60 days or upon termination of disability.	(a) No provision. (b) Bureau of labor and industrial statistics. ²	45.6	Virginia.
Washington. Ch. 74. Approved Mar. 14, 1911. In effect Oct. 1, 1911. Amended 1913, 1915, 1917, 1919.	Compulsory, as to "extrahazardous" employments, including enumerated list. Voluntary, as to employments not "extrahazardous."	Compulsory, as to all employees in "extrahazardous" work in which workmen are employed for wages. Voluntary, as to employments not "extrahazardous."	Employers must insure in State fund.				Suit for excess damages permitted, in addition to compensation, if injury resulted from deliberate intention of employer.		Waivers forbidden; hospital fund may be maintained.	Personal injuries sustained on premises of plant or in course of employment away from plant, unless deliberately self-inflicted. Occupational diseases specifically excluded.	1 week. None if disability continues for more than 30 days.	Monthly pension; amounts not based on wages.	Monthly pension: Death, \$10 to \$30. Permanent total disability, \$30 to \$50. Temporary total disability, permanent amounts increased for first 6 months.	Death, during life or until remarriage of widow or invalid widower. Total disability, during its continuance.	(a) Burial expenses, maximum, \$75 if single, \$100 if married; \$30 a month to widow or invalid widower until death or remarriage; \$5 to each child under 16; monthly maximum, \$50; \$250 additional which shall not be used for burial expenses. (b) Burial expenses, maximum, \$75 if single, \$100 if married.	(a) (b) \$30 a month; for each child under 16, \$5 a month; monthly maximum, \$50. If temporary, above schedule increased for first 6 months in certain cases. Compensation in all cases to continue during disability.	Proportionate amounts based upon loss of earning capacity; maximum, \$2,000. Fixed sums for certain specified injuries.	Necessary medical, surgical, and hospital service and transportation. Employees must bear one-half cost.	Claim in 1 year.	Industrial insurance department and medical aid board.	All questions relating to compensation determined by department; appeal to courts.	All employers must report all accidents to industrial insurance department at once.	(a) No provision; (b) State safety board; ² State mining board. ³	51.5	Washington.
West Virginia. Ch. 10. Approved Feb. 22, 1913. In effect Oct. 1, 1913. Amended 1915, 1919.	Elective, as to all "regular" employments except farm labor, domestic service, traveling salesmen, and officers of corporations. Voluntary, as to employees not regularly employed.	Elective, as to all employees except elective officials.	Electing employer must insure in State fund or provide self-insurance.	By paying premiums and posting notice.	Remaining in service with notice of employer's election.	Assumed risk, fellow service, contributory negligence, and negligence of persons "whose duties are prescribed by statute."	Suit for excess damages permitted, in addition to compensation if injury is due to employer's intent to injure, also permitted if employer is in default on insurance premiums.	Assenting employers relieved of liability for damages to employees who remain in service after notice of employer's election.	Benefit funds permitted provided employees do not contribute and benefits equal those of act. Waivers forbidden.	Personal injuries sustained in course of and resulting from employment, unless self-inflicted or due to willful misconduct, disobedience to rules, or intoxication.	1 week.	Death, monthly pension. Disability, 50 per cent.	Disability: Maximum, \$12; minimum, \$5.	Death, during life or until remarriage of widow or invalid widower. Permanent total disability, life. Temporary total disability, 78 weeks. Permanent partial disability, 340 weeks.	(a) Burial expenses, maximum, \$20 a month until death or remarriage; \$5 additional for each child under \$15. (b) Burial expenses, maximum, \$150.	(a) 50 per cent of wages for life; weekly maximum, \$12, minimum, \$5. (b) 50 per cent of wages during disability, for not over 52 weeks (78 weeks in special cases); weekly maximum, \$12, minimum, \$5.	If permanent, 50 per cent of wages for various periods (from 20 to 340 weeks); over 85 per cent of disability, 50 per cent of wages for life; weekly maximum, \$12; minimum, \$5.	Reasonable medical, surgical, and hospital treatment; maximum, \$150; maximum, \$300 in severe cases. \$600 in permanent disability cases where disability can be materially reduced.	Claim in 6 months; proof of dependency in 9 months.	Compensation commissioner.	Commissioner has full power to determine all questions relating to compensation; appeal to courts.	All employers must report any information required by compensation commission for purpose of act upon request.	(a) Commissioner may require employers to adopt and post safety rules; (b) Bureau of labor; (c) Department of mines. ²	80.1	West Virginia.
Wisconsin. Ch. 50. Approved Feb. 27, 1915. In effect same date. Amended 1913, 1915, 1917, 1919.	Elective, as to all employments except those having less than 3 employees, farm labor, and employees not in usual course of employer's business. Voluntary, as to steam railroads.	Compulsory, as to all employees except officials.	Electing employers must insure in private companies or provide self-insurance.	Presumed as to employers of 3 or more persons in absence of notice filed with commission.	Presumed in absence of written notice to employer, if employer elects.	Assumed risk, also fellow service, and contributory negligence unless willful, if 3 or more employees. (Does not apply to farm labor.)	Not permitted.	Defenses remain.	Insurance or other schemes permitted if benefits equal those of act. Waivers forbidden.	Personal injuries growing out of and incidental to employment, unless intentionally self-inflicted. Occupational diseases specifically included.	1 week. None if disability continues for more than 4 weeks.	Disability, 65 per cent.	Maximum, \$14.63; minimum, \$6.83.	Death, 320 weeks. Permanent total disability, 15 years. Others, during disability.	(a) Burial expenses, maximum, \$100; 4 years' earnings, but amount added to prior disability payments may not exceed 6 years' earnings; maximum annual earnings, \$1,125; minimum, \$25. (b) Burial expenses, maximum, \$100.	(a) 65 per cent of wages during disability; maximum, 9 to 15 years, depending on age of employee. Weekly maximum, \$14.63; minimum, \$6.83. (b) 65 per cent of wages during disability; maximum, 4 years' earnings. Weekly maximum, \$14.63; minimum, \$6.83.	65 per cent of wage loss during disability; maximum, 4 years' earnings. Weekly maximum, \$14.63. Specified injuries, 65 per cent of wages for fixed periods, subject to extension; others proportionate, based on 80 per cent of schedule. Weekly maximum, \$14.63; minimum, \$6.83. Disfigurement, resulting in loss of wages, maximum, \$750. An additional \$150 for loss of a major member shall be paid into State treasury to be used for compensating second injuries.	Reasonable medical, surgical, and hospital treatment for 60 days; longer if disability period can be decreased. Christian Science treatment permitted unless employer refuses by filing written notice.	Notice in 30 days; claim in 2 years.	Industrial commission.	Voluntary agreement approved by commission; disputed cases settled by commission after hearing; appeal to courts.	All employers of 4 or more persons and insurers must report all accidents to industrial commission within first 5 days of each month.	(a) Industrial commission. (b) No provision.	75.4	Wisconsin.
Wyoming. Ch. 124. Approved Feb. 27, 1915. In effect Apr. 1, 1915. Amended 1917, 1919.	Compulsory, as to "extrahazardous" employments enumerated conducted for gain, except casual employees not in usual course of employer's business, clerical employees not subject to hazard of employment, and officials.	Compulsory, as to all employees in "extrahazardous" work in which workmen are employed for wages, except employees who are otherwise provided for.	Employers must insure in State fund.				Not permitted.		Waivers forbidden.	Injuries sustained as a result of employment, unless due to culpable negligence of employee or willful act of third party. Occupational diseases specifically excluded.	10 days in case of total temporary disability only; none if disability continues for more than 30 days; lump-sum payments in all other cases.	Amounts not based on wages.	Temporary total disability: Monthly pension, \$25 to \$60. Fixed lump sums in other cases.	No provision.	(a) Burial expenses, maximum, \$300; lump sum of \$2,000 to widow or invalid widower, also \$100 a year for each child under 16; total not over \$3,000. (b) Burial expenses, maximum, \$50.	(a) Lump sum of \$2,500 plus \$100 a year for each child under 16; total not over \$5,500. (b) \$35 a month if single, \$40 if married; \$6 a month for each child under 16; monthly maximum, \$60; total not over \$5,500.	Fixed lump sums for specified injuries; others in proportion; maximum, \$1,500.	In nonfatal cases, medical and hospital service; maximum, \$100, unless there is a hospital fund.	No provision.	Courts.	Claims and disputed cases settled by district courts of county after hearing; appeal to supreme court.	All employers engaged in extrahazardous employments must report all accidents to district court within 20 days.	(a) No commission. (b) Inspector of mines. ²	46.3	Wyoming.
United States. 35 Stat. 556. Approved May 30, 1908. In effect Aug. 1, 1908. Amended 1911-12. New act, No. 267, approved Sept. 7, 1916. In effect same date. Amended 1919.	Compulsory, as to all employees of Panama Railroad.	Compulsory, as to all civil employees of the United States and of the Government of the District of Columbia, except police and firemen having pension funds.					Government can not be sued.		No provision.	Personal injuries sustained while in performance of duty unless due to willful misconduct, intention to injure self or another, or intoxication.	3 days. Compensation begins on fourth day after disability or exhaustion of sick and annual leave.	Death, 10 to 66 2/3 per cent. Disability, 66 2/3 per cent.	Death: Basic wage, monthly maximum, \$100; minimum, \$20. Total disability: Monthly maximum, \$66.67; minimum, \$33.33, or actual wages if less than \$33.33. Partial disability: Monthly maximum, \$66.67.	Death, during life or until remarriage of widow or widower; other dependents, 416 weeks. Disability, during its continuance.	(a) Burial expenses, maximum, \$100 and transportation; immediate family, 25 to 66 2/3 per cent until death; dependents, 18 years of age; other dependents, 10 to 40 per cent; maximum, 8 years; basic wage, maximum, \$100 a month; minimum, \$30 a month. (b) Burial expenses, maximum, \$100 and transportation.	(a) (b) 66 2/3 per cent of wages during disability; monthly maximum, \$66.67; minimum, \$33.33, or actual wages if less than \$33.33.	66 2/3 per cent of wage loss during disability; monthly maximum, \$66.67.	Reasonable medical, surgical, and hospital service, and transportation if necessary, for a reasonable period unless employee refuses.	Notice in 48 hours, 1 year for reasonable cause; claim for disability in 60 days, 1 year for reasonable cause; death, 1 year.	United States Employees' Compensation Commission.	Commission decides all questions arising under act.	Immediate superiors must report such information as required by commission immediately; supplementary reports as required by commission.	(a) No provision. (b) Bureau of Mines; (c) Bureau of Standards; (d) Interstate Commerce Commission. ²	100.0	United States.

PART II.—CANADA.¹

INTRODUCTION.

With the single exception of Prince Edward Island, all of the Provinces of Canada, including the Dominion Government, have enacted workmen's compensation legislation. The law of Saskatchewan, however, although designated in its title as a workmen's compensation law, is merely an employer's liability act, and is therefore not included in the following discussion. The Dominion act provides that if a Federal employee (Government railroads excepted) sustains an injury he shall receive the same compensation as any other person would, under similar circumstances, receive under the law of the Province in which the accident occurred. Administration of the Dominion act is placed in the hands of the provincial boards, and any compensation awarded may be paid by the Dominion Minister of Finance.

Chronologically, Canadian legislation practically parallels that of the United States. The first law was enacted by British Columbia in 1902, followed by Alberta in 1908, Quebec in 1909, and Manitoba and Nova Scotia in 1910.² These early laws were patterned after the British act and were really modified employers' liability laws. No administrative commissions were provided, and usually suits for damages were permitted. A radical departure from the British type of law, however, took place in 1914, when Ontario enacted the first of the collective-liability compensation acts prevailing in most of the Provinces at the present time. These laws were patterned upon the mutual liability idea of the German workmen's compensation system and upon the exclusive State fund plan of the Washington act. Nova Scotia enacted a similar law in 1915, followed by British Columbia in 1916 and by Alberta and New Brunswick in 1918.

CANADIAN AND AMERICAN LAWS COMPARED.

An analysis of the Canadian laws shows a number of striking characteristics and of deviations from the American type of compensation act. Some of the more important of these are the following:

1. In Canada there is a remarkable uniformity among the several compensation laws. This uniformity applies to the scope of the

¹ This comparison includes 1919 legislation.

² In the United States the Federal compensation act was passed in 1908, while Montana enacted a compensation law in 1909 and New York in 1910, though these early State laws were later declared unconstitutional.

acts, benefits, injuries covered, administration, and procedure. In the United States compensation acts are distinguished more for their dissimilarity than for their uniformity.

2. In Canada all of the laws are compulsory as to the employers coming within the scope of the act. In the United States only 14 are compulsory while 31 are elective.

3. In Canada the scope of the law in each Province (Yukon excepted) is limited to enumerated hazardous employments. There is some diversity in the number of such employments, but the principal hazardous industries are covered, including manufacturing, mining, construction, and transportation. In the United States only 13 States limit their scope to the so-called hazardous industries, while 32 States cover the "nonhazardous" as well as the "hazardous" industries.

4. In Canada occupational diseases are compensable in every Province except Quebec and Yukon. Such diseases, however, are limited to those enumerated in the statutory schedule. In the United States only 6 of the 45 State laws include occupational diseases, but in these 6 States all occupational diseases are covered.

5. In Canada all of the Provinces except Manitoba, Quebec, and Yukon have exclusive State insurance funds. In Ontario, however, employers under schedule 2 (municipalities, railroad, express, telephone, telegraph, and navigation) are permitted self-insurance. In the United States only 8 of the 45 States have exclusive State funds, while 9 have competitive State funds.

6. In Canada probably the most significant characteristic of compensation legislation is the assumption of liability on the part of the Province. Injured workmen are paid direct by the workmen's compensation board out of the accident fund. This is true, irrespective of whether or not the employer has contributed his premiums to the fund and even if the employer is insured or carries his own risk. Failure on the part of the employer to meet his compensation obligations does not deprive the injured workman or his dependents of compensation benefits. This obligation is assumed by the accident fund, which in turn has redress against the defaulting employer through an action at law. Under none of the laws in the United States does the State assume liability. In case of insolvency of the employer and insurance carrier the injured employee loses his compensation benefits.

7. In Canada the workmen's compensation boards have exclusive and final jurisdiction over all compensation matters, no appeal to the courts being permitted except in New Brunswick and Nova Scotia. In these two Provinces appeal may be had to the supreme court upon questions of law, but only with the permission of the judge of said court. In none of the States of America does the administrative commission have final jurisdiction. In every State

appeal may be had to the courts upon questions of law and in many of the States upon questions of fact.

8. In Canada members of the workmen's compensation boards hold office during good behavior, except that in British Columbia the term of office is 10 years. In most of the Provinces, however, they are subject to compulsory retirement at the age of 75. Each board is authorized to appoint its officers and employees and to fix their salaries. The term of office of such employees is subject to the pleasure of the board. In the United States the term of office of compensation commissioners is usually 3, 4, or 5 years.

9. As regards liberality, the benefits of the Canadian laws are about on a par with the more liberal of the American acts. The scale of benefits is considerably lower, but on the other hand the periods for which benefits are paid are much longer. In Canada compensation is usually paid during disability or until death or remarriage of the widow, while in most of the States the compensation periods terminate at the end of 300, 400, or 500 weeks. In none of the Provinces (Yukon excepted) is the waiting period over 1 week, and in most of the laws compensation when payable begins from the date of the injury, whereas in the United States 7 States have a waiting period of 10 days and 13 States of 2 weeks. In all of the Canadian laws the amount of compensation in case of disability is 55 per cent of the employee's earnings, except that in Quebec the percentage is 50; in the United States 20 States have a percentage of 60 or greater. The early Canadian laws did not provide for medical benefits, but some of the Provinces have recently made provision therefor; in the United States 42 of the 45 States provide medical service. All but five of these States, however, place some limitation upon the amount of the medical service which the employer is required to furnish.

COMPENSATION AND INSURANCE SYSTEMS.

All of the Canadian laws are compulsory as to employers coming within the scope of the act. In the five Provinces of Alberta, British Columbia, New Brunswick, Nova Scotia, and Ontario³ all employers must contribute to the accident fund. Quebec and Yukon Territory have no State fund nor are employers in these jurisdictions required to insure. Manitoba has a hybrid system. Employers are required to insure in private casualty companies or provide self-insurance. Such insurance companies or self-insurers, however, must contribute to the accident fund. They must also contribute 7½ per cent of their premiums to the administration fund.

³ Except employers enumerated in schedule 2, which includes municipalities, and railroad, express, telephone, telegraph, and navigation companies. Employers in these industries are individually liable, though they must deposit funds with the board, which pays the compensation direct to the injured employee.

Out of these accident funds, which are managed by the workmen's compensation boards, are paid all compensation claims. The board classifies the industries according to the hazard, fixes and collects premiums, receives and investigates claims, grants awards, and pays the compensation benefits. As already noted, the workmen's compensation board assumes liability. Injured workmen are always paid direct by the board from the accident fund irrespective of whether or not the employer is insured or carries his own risk. Failure on the part of the employer to meet his compensation obligations does not deprive the employee of his compensation benefits. This obligation is assumed by the accident fund, which in turn has redress against the defaulting employer through an action at law.

SCOPE OR COVERAGE.

The scope or coverage of the Canadian laws is more restricted than that of most of the American acts. In all of the Provinces (Yukon excepted) the employments covered are limited to enumerated hazardous industries. Agriculture and domestic service are universally excluded. Most of the laws also exclude outworkers, traveling salesmen, nonhazardous clerical occupations, nonhazardous public employments, and casual employees employed otherwise than for the purpose of the employer's business. Alberta also excludes railroads. Moreover, the workmen's compensation boards have been given discretionary power both to increase and to decrease the scope of the acts by adding to or subtracting from the industries enumerated in the statute. Under this authority the original statutory scope of the acts has been considerably changed. Many new classes of industries have been added; others have been excluded. In addition, the Ontario board has exempted certain classes of employers having less than a stipulated number of employees. The policy of the boards in including and excluding certain industries is apparently determined by the hazard of the particular industry and by the administrative difficulty of collecting premiums in the case of small employers. Exempted employments usually are given the privilege of coming under the act if either the employer or employee so desires.

Under all of the Canadian laws employees injured without the Province are entitled to compensation benefits if the place of business of the employer and the usual place of employment of the workmen are in the Province. The following provision found in the Alberta law is typical of that in the laws of practically all the Provinces:

(1) Where an accident happens while the workman is employed elsewhere than in the Province which would entitle him or his dependents to compensation under this act if it had happened in the Province, the workman or his dependents shall be entitled to compensation under this act—

(a) If the place or chief place of business of the employer is situate in the Province and the residence and the usual place of employment of the workman are in the

Province and his employment out of the Province has immediately followed his employment by the same employer within the Province and has lasted less than six months; or

(b) If an accident happens to a workman who is a resident of the Province and the nature of the employment is such that in the course of the work or service which the workman performs it is required to be performed both within and without the Province.

(2) Except as provided by subsection 1, no compensation shall be payable under this act where the accident to the workman happens elsewhere than in the Province.

Table 36 shows more in detail the scope of the several Canadian compensation acts:

TABLE 36.—SCOPE OF CANADIAN COMPENSATION LAWS.

Inclusions: Enumerated hazardous employ- ments.	Exclusions. ¹				
	Outworkers.	Traveling salesmen.	Nonhazard- ous clerical occupations.	Casual em- ployees not in usual course of employer's business.	Public and other employments.
Alberta.....	Alberta.....	Alberta.....	Alberta.....	Alberta.....	Alberta (nonhazardous municipal; railroads; itinerant employees).
British Columbia.....	British Columbia.....	British Columbia.....	British Columbia.....	British Columbia.....	British Columbia (nonhazardous public).
Manitoba.....	Manitoba.....	Manitoba.....	Manitoba.....	Manitoba.....	Manitoba (nonhazardous public).
New Brunswick.....	New Brunswick.....	New Brunswick.....	New Brunswick.....	New Brunswick.....	New Brunswick (provincial).
Nova Scotia.....	Nova Scotia.....	Nova Scotia.....	.....	Nova Scotia.....	Nova Scotia (nonhazardous public).
Ontario.....	Ontario.....	.....	.....	Ontario.....	Ontario (provincial and nonhazardous municipal).
Quebec.....	.....	.....	.....	.....	Quebec (public employees; sailing vessels; employees receiving over \$1,200 a year and those working alone).
.....	Yukon.....	.....	.....	Yukon.....	Yukon (employers having less than 5 employees).

¹ Agriculture and domestic service are universally excluded.

ACCIDENTS AND OCCUPATIONAL DISEASES.

Canadian compensation laws cover both accidents and occupational diseases. The provisions of the British act, both as to content and phraseology, have been adopted practically without change in nearly all of the Provinces. Every law except Quebec uses the phrase "personal injury by accident arising out of and in the course of the employment, unless it is attributable solely to the serious and willful misconduct of the workman." In four Provinces,⁴ however, injuries due to willful and serious misconduct are compensable if they result in death or serious disability. In addition, New Brunswick excludes injuries if intentionally self-inflicted, due to intoxication, or caused by a fortuitous event not connected with the industry. Quebec also excludes intentionally self-inflicted injuries, while Yukon excludes those caused by intoxication.

⁴ Alberta, British Columbia, Manitoba, and Nova Scotia.

As regards occupational diseases the Canadian Provinces followed the compensation law of Great Britain which originally included the following diseases and processes:

TABLE 37.—OCCUPATIONAL DISEASE SCHEDULE OF BRITISH WORKMEN'S COMPENSATION LAW OF 1906.

Disease.	Process.
Anthrax.....	Handling of wool, hair, bristles, hides, and skins.
Lead poisoning or its sequelae.....	Any process involving the use of lead or its preparations or compounds.
Mercury poisoning or its sequelae.....	Any process involving the use of mercury or its preparations or compounds.
Phosphorus poisoning or its sequelae.....	Any process involving the use of phosphorus or its preparations or compounds.
Arsenic poisoning or its sequelae.....	Any process involving the use of arsenic or its preparations or compounds.
Ankylostomiasis.....	Mining.

Manitoba and British Columbia adopted verbatim the British act of 1906; Alberta and Ontario added miners' phthisis to the original list; while Nova Scotia added the three following diseases: Subcutaneous cellulitis of the hand (miners' beat hand), subcutaneous cellulitis over the patella (miners' beat knee), and acute bursitis over the elbow (miners' beat elbow). New Brunswick did not adopt the British schedule, but grants compensation benefits for all occupational diseases, as determined by the board, contracted in industries within the scope of the act. Quebec and Yukon do not compensate for occupational diseases.

However, the foregoing diseases are compensable only if they are due to the nature of any employment in which the workman was employed at any time within one year previous to the date of disability. Compensation shall be payable in the first instance by the last employer. The latter, however, may recover from other employers whose employment had within the year contributed to the contraction of the disease.

WAITING PERIOD.

With the exception of Yukon Territory none of the Canadian compensation laws have a waiting period of over one week. In two Provinces the waiting time is only three days. Furthermore, in most of the Provinces compensation when payable begins from the date of the injury. Table 38 shows the waiting period for each Province:

TABLE 38.—WAITING PERIOD OF CANADIAN COMPENSATION LAWS.

Province.	Waiting period.
Alberta.....	3 days. None if disability lasts 10 days or more.
British Columbia.....	3 days.
Manitoba.....	6 days. None if disability is permanent or lasts over 6 days.
New Brunswick.....	1 week.
Nova Scotia.....	6 days. None if disability lasts over 6 days.
Ontario.....	6 days. None if disability lasts over 6 days.
Quebec.....	1 week. None if totally and permanently disabled.
Yukon.....	13 days. None if disability lasts over 13 days.

COMPENSATION BENEFITS.

The compensation benefits of the Canadian laws are about on a par with the more liberal American acts. The scale of benefits is considerably lower, but on the other hand, the periods for which benefits are paid are much longer, compensation usually being paid during disability or until death or remarriage of the widow. In case of death the usual provision is a fixed monthly pension of \$20 to the widow, with an additional \$5 a month for each child, but not over \$40 in all. In case of disability the usual compensation is 55 per cent of the employee's earnings, to be paid during disability. Table 39 shows the per cent of wages paid as compensation, maximum weekly or monthly payments, and maximum period and amount of compensation payable in case of death, permanent total disability, and partial disability.

TABLE 39.—PER CENT OF WAGES PAID AS COMPENSATION, MAXIMUM WEEKLY OR MONTHLY PAYMENTS, AND MAXIMUM PERIOD AND AMOUNT OF COMPENSATION PAYABLE IN CASE OF DEATH, PERMANENT TOTAL DISABILITY, AND PARTIAL DISABILITY.

Province.	Per cent of wages.	Monthly or weekly maximum.	Maximum period and amount of compensation.		
			Death.	Permanent total disability.	Partial disability.
Alberta.....	Not based on wages	\$40 monthly pension (death); \$16 weekly pension (total disability).	Until death or remarriage (\$2,500).	L i f e (\$2,500).	\$1,000.
British Columbia..	55 (disability).	\$40 monthly pension (death); \$22 weekly (total disability).	Until death or remarriage.	Life.....	During disability.
Manitoba.....	55 (disability).	\$40 monthly pension (death); \$22 weekly (total disability).	Until death or remarriage.	Life.....	During disability.
New Brunswick...	55 (disability).	\$40 monthly pension (death); \$15.86 weekly (disability).	Until death or remarriage (\$3,500).	L i f e (\$3,500).	During disability (\$1,500).
Nova Scotia.....	55 (disability).	\$40 monthly pension (death); \$13.20 weekly (total disability).	Until death or remarriage.	Life.....	During disability.
Ontario.....	55 (disability).	\$60 monthly pension (death); \$22 weekly (total disability).	Until death or remarriage.	Life.....	During disability.
Quebec.....	50 (disability).	.....	4 years' earnings (\$2,500).	L i f e (\$2,500).	During disability.
Yukon.....	50 (temporary total).	.....	\$2,500.....	\$3,000...	\$3,000.

WEEKLY OR MONTHLY MAXIMUM.

The provisions relative to weekly or monthly maximums differ widely as between death and disability. In case of death the monthly maximum is usually \$40 (Ontario, \$60) but not over 55 per cent of the employee's wages. In case of total disability the weekly maximum amounts range from \$13.20 in Nova Scotia to \$22 in British Columbia, Manitoba, and Ontario. The Quebec and Yukon laws make no provision in this regard.

DEATH.

Compensation benefits in case of death are not based upon wages. Instead, all of the Provinces except Quebec and Yukon provide a fixed monthly pension of \$20 for the widow (\$30 in Ontario) with an additional \$5 for each child (\$7.50 in Ontario). Payments to the children cease at 16 years and to the widow upon death or remarriage, except that in the latter event she is paid a lump sum equal to two years' compensation. Two of the above Provinces have a maximum limit; in Alberta this limit is \$2,500 and in New Brunswick \$3,500. Under the Quebec law the death benefits are four years' earnings of the deceased employee (maximum, \$2,500), while the Yukon law provides a flat sum of \$2,500. In addition to the compensation benefits most of the Provinces provide also for burial expenses, the maximum allowance usually being \$75.

TOTAL DISABILITY.

In all of the Provinces (except Yukon) compensation for total disability accidents continues during disability and in case of permanent disability during the life of the injured workman. Three Provinces, however, provide a maximum limit—Alberta and Quebec \$2,500 and New Brunswick \$3,500. In five Provinces (British Columbia, Manitoba, New Brunswick, Nova Scotia, and Ontario) the amount of compensation is 55 per cent of the employee's wages, subject to weekly maximum and minimum limits. In Quebec the percentage is 50, while in Alberta the amount is not based upon wages, a weekly pension (maximum \$16, minimum \$10) being provided instead.

PARTIAL DISABILITY.

The Canadian method of compensating partial disability accidents differs widely from the popular American method. Most of the laws in the United States contain a schedule of specified partial disabilities for which benefits are awarded for stated periods, the weekly payments being based upon a percentage of wages earned at the time of the injury. In Canada all of the Provinces except Alberta and Yukon base the amount of compensation upon the wage loss or impairment of earning capacity, payments continuing during disability. The workmen's compensation boards have authority to formulate partial disability schedules in which the loss of earning capacity of the various disabilities is expressed in percentages of total disability. The age and occupation of the injured workman are usually taken into consideration in determining his impairment of earning capacity. One of these Provinces, however, has a maximum limit—New Brunswick \$1,500. Alberta and Yukon have adopted the Washington method and provide fixed amounts for certain specified injuries.

MEDICAL SERVICE.

Although none of the early Canadian acts provided medical or surgical service in the present acceptance of the term, some of the Provinces have recently made provision therefor. Table 40 shows for each Province the amount of medical and surgical aid and the conditions under which it is furnished:

TABLE 40.—MEDICAL SERVICE PROVIDED UNDER CANADIAN COMPENSATION LAWS.

Province.	Maximum amount, and other qualifications.
Alberta.....	Reasonable expenses of last sickness in fatal cases involving no dependents; in other cases employees furnished medical aid from employer's hospital fund or State accident fund to which employees must contribute.
British Columbia.....	Such service as reasonably necessary; transportation included; special provision for seamen; employer's hospital fund permitted.
Manitoba.....	Such medical attendance as board deems reasonable; maximum \$100; additional special treatment in permanent disability cases if compensation costs can be reduced.
New Brunswick.....	Such special medical and surgical treatment as will conserve the accident fund and such first-aid and hospital treatment as the board may require.
Nova Scotia.....	Reasonable service for 30 days in compensable injury cases; additional treatment if necessary to reduce disability; special provision for seamen; approved establishment benefit schemes permitted.
Ontario.....	Necessary service in compensable injury cases; transportation included; approved establishment benefit schemes permitted.
Quebec.....	No provision.
Yukon.....	No provision.

NONRESIDENT ALIEN DEPENDENTS.

With the exception of Quebec all of the Provinces grant compensation to nonresident alien dependents but with certain qualifications and restrictions. In Alberta, the law provides that it shall be conclusively presumed that a workman, two years after his arrival in Canada, has no nonresident dependents other than his parents—one year after his arrival in case the workman is not of British nationality. In British Columbia nonresident alien dependents are entitled to compensation, but the board may award such lesser sum as will, according to the conditions and cost of living in the place of residence of such dependents, maintain them in a like degree of comfort as dependents of the same class, residing in Canada and receiving the full amount of compensation, would enjoy. In the other five Provinces (Manitoba, New Brunswick, Nova Scotia, Ontario, and Yukon) a nonresident alien dependent shall not be entitled to compensation unless by the law of the country in which he resides the dependents of a workman to whom an accident happens in such country, if resident in Canada, would be entitled to compensation. Moreover, the amount of compensation shall not be greater than that granted under the foreign law. Furthermore, in Manitoba and Ontario, nonresident enemy aliens are excluded entirely from the benefits of the act. Ontario also denies compensation to a resident of a country "voluntarily withdrawn from alliance with the British Empire during the Great War, or of a country in default of establish-

ing peaceful and harmonious relations with the British Empire." The Quebec law does not grant compensation to nonresident alien dependents.

ADMINISTRATION.

In all of the Provinces except Quebec and Yukon, which have the court type of law, the administration of the compensation acts is under workmen's compensation boards. The members of the boards are appointed by the lieutenant governor and hold office during good behavior, except that in British Columbia the term of office is 10 years. In four ⁵ of the Provinces, however, the commissioners are subject to compulsory retirement at the age of 75. Each board is authorized to appoint its officers and employees and to fix their salaries. The term of office of such employees is subject to the pleasure of the board.

The boards have final and exclusive jurisdiction over all compensation matters, no appeal to the courts being permitted except in New Brunswick and Nova Scotia. In these two Provinces appeal may be had to the supreme court upon questions of law, but only with the permission of the judge of said court.

ACCIDENT PREVENTION.

Of the six Canadian Provinces having administrative compensation boards, the British Columbia board is the only one which has statutory jurisdiction over accident-prevention work. In all of the other Provinces this function is performed by other State or private agencies. The Alberta and Manitoba compensation laws made no provision for accident prevention at all, while the laws of New Brunswick, Nova Scotia, and Ontario authorize employers' associations to undertake this work, with a rather loose supervision by the workmen's compensation board.

⁵ Manitoba, New Brunswick, Nova Scotia, and Ontario.

PRINCIPAL FEATURES OF LAWS OF CANADA RELATING TO WORKMEN'S COMPENSATION AND INSURANCE.

Province.	Employments covered.		Insurance.	Suits for damages.	Special contracts.	Injuries covered.	Waiting period.	Compensation benefits.					Medical and surgical aid.	Time for notice and claim.	Administrative system.	How compensation claims are settled.	Accident reports required.	Accident prevention work by— (a) Compensation commission. (b) Other agencies.	Province.	
	Private.	Public.						Per cent of wages.	Maximum and minimum weekly compensation payments.	Maximum period.	Death. (a) Dependents. (b) No dependents.	Total disability. (a) Permanent. (b) Temporary.								Partial disability.
Alberta. Approved Mar. 5, 1908; in effect, Jan. 1, 1909; amended, 1913. New act, Apr. 13, 1918; in effect, Jan. 1, 1919; amended, 1919.	Compulsory, as to enumerated hazardous employments. Exemptions: Railroads, traveling salesmen, nonhazardous clerical occupations, outworkers, casual employees not in usual course of employer's business, and itinerant employments.	Compulsory, as to all provincial employments and hazardous municipal employments.	Employers must contribute to State accident fund.	Not permitted.	Waivers forbidden, but approved hospital plans permitted.	Personal injuries by accident arising out of and in the course of the employment, unless due solely to serious and willful misconduct except in case of death or serious disability. Enumerated occupational diseases included.	3 days. None if disability continues for 10 days or more.	Not based on wages.	Death: Monthly pension, maximum \$100; minimum \$20. Total disability: Weekly pension, maximum \$16; minimum \$10.	Death, during life or until remarriage of widow. Disability, during its continuance.	(a) Burial expenses, maximum, \$100; widow or invalid widower, monthly; \$5 additional for each child; monthly maximum, \$40; total not over \$2,500. (b) Reasonable expenses of burial and last sickness.	(a) (b). \$10 a week; \$2 a week additional for first dependent, \$1 for each additional dependent; weekly maximum \$16; \$7.50 if employee is under 21 and has no dependents; total not over \$2,500.	If permanent, fixed amounts for specified injuries, others proportionate; maximum \$1,000. If temporary, 55 per cent of wage loss.	Reasonable expenses of last sickness in fatal cases involving no dependents; in other cases employees furnished medical aid from employer's hospital fund or State accident fund to which employees must contribute.	Notice before leaving employment; claim in 3 months not barred if just.	Workmen's compensation board.	Board has exclusive and final jurisdiction over all matters; no appeal to courts.	All employees under compensation act must report all disabling accidents within 24 hours to workmen's compensation board.	(a) No provision. (b) Factory inspector; mine inspector. ¹	Alberta.
British Columbia. Approved May 31, 1916; in effect Jan. 1917; supersedes act of 1902; amended, 1919.	Compulsory, as to enumerated hazardous employments. Exemptions: Farm labor, domestic service, traveling salesmen, nonhazardous clerical occupations, outworkers, and casual employees not in usual course of employer's business. Voluntary, as to exempted employments.	Compulsory, as to hazardous public employments.	Employers must contribute to State accident fund.	Permitted only in re employments not under compensation act, if injury due to employer's negligence; defenses abrogated.	Waivers forbidden, but approved hospital plans permitted.	Personal injuries by accident arising out of and in course of the employment, unless due solely to serious and willful misconduct, except in case of death or serious and permanent disability. Enumerated occupational diseases included.	3 days.	Disability, 55 per cent.	Death: Monthly pension, maximum \$40, minimum \$20. Disability: Weekly maximum \$22; minimum \$5, or actual wages if less than \$5.	Death, during life or until remarriage of widow. Disability, during its continuance.	(a) Burial expenses, maximum, \$75; widow or invalid widower, \$20 a month; \$5 additional for each child; monthly maximum, \$40. (b) Burial expenses, maximum, \$75.	(a) (b) 55 per cent of wages during disability; weekly maximum \$22, minimum \$5, or actual wages if less than \$5.	55 per cent of wage loss during disability. Compensation for disfigurement of head or face.	Such medical, surgical, and hospital service as reasonably necessary; transportation included; special provision for seamen; employer's hospital fund permitted.	Notice as soon as practicable; claim in 1 year.	Workmen's compensation board.	Board has exclusive and final jurisdiction over all matters; no appeal to courts.	All employers must report all accidents within 3 days to workmen's compensation board.	(a) Workmen's compensation board. (b) Department of labor; department of mines. ¹	British Columbia.
Manitoba. Approved Mar. 16, 1910; in effect, Jan. 1, 1911. New act, Mar. 10, 1916; in effect, Mar. 1, 1917; amended 1917, 1919.	Compulsory, as to enumerated hazardous employments. Exemptions: Farm labor, domestic service, outworkers, nonhazardous clerical occupations, and casual employees not in usual course of employer's business. Voluntary, as to exempted employments.	Compulsory, as to hazardous public employments.	Employers must insure in private companies or provide self-insurance; insurance companies and self-insurers must contribute to State "accident fund" out of which claims are paid.	Permitted only in re employments not under compensation act, if injury due to employer's negligence; defenses abrogated.	Waivers forbidden.	Personal injuries by accident arising out of and in course of the employment, unless due solely to serious and willful misconduct except in case of death or serious disability. Enumerated occupational diseases included.	6 days. None if permanently disabled or if disability continues for more than 6 days.	Disability 55 per cent.	Death: Monthly pension, maximum \$40, but not over 55 per cent of wages; minimum \$20. Disability: Weekly maximum \$22, minimum \$6, or actual wages if less than \$6.	Death, during life or until remarriage of widow. Disability, during its continuance.	(a) Burial expenses; maximum, \$75; widow or invalid widower, \$20 a month; \$5 additional for each child; monthly maximum \$40, but not over 55 per cent of wages. (b) Reasonable expenses of burial and last sickness.	(a) (b) 55 per cent of wages during disability; weekly maximum \$22, minimum \$6, or actual wages if less than \$6.	55 per cent of wage loss during disability.	Such medical attendance as board deems reasonable; maximum, \$100; additional special treatment in permanent disability cases if compensation costs can be reduced.	Notice as soon as practicable and before leaving employment; claim in 6 months.	Workmen's compensation board.	Board has exclusive and final jurisdiction over all matters; no appeal to courts.	All employers must report all disabling accidents within 3 days to workmen's compensation board.	(a) No provision. (b) Bureau of labor; mine inspector. ¹	Manitoba.
New Brunswick. Approved, April, 1918; amended, 1919.	Compulsory, as to enumerated hazardous employments. Exemptions: Farm labor, domestic service, outworkers, traveling salesmen, nonhazardous clerical occupations, and casual employees not in usual course of employer's business. Voluntary, as to exempted employments.	Compulsory, as to municipal employees, except members of police and fire departments. Voluntary, as to provincial and crown employees.	Employers must contribute to State accident fund, but board may sanction insurance in private companies.	Permitted only in re employments not under compensation act, if injury due to employer's negligence; defenses abrogated.	Waivers forbidden.	Personal injuries by accident arising out of and in course of the employment, unless intentionally self-inflicted, due to intoxication, serious and willful misconduct, or to a fortuitous event unconnected with the industry. Occupational diseases included.	1 week.	Disability, 55 per cent.	Death: Monthly pension, maximum 55 per cent of wages; minimum \$20. Disability: Weekly maximum \$15.86, minimum \$3.30.	Death, during life or until remarriage of widow. Disability, during its continuance.	(a) Burial expenses, maximum, \$75; widow or invalid widower, \$20 a month; \$5 additional for each child; monthly maximum not over 55 per cent of wages; total not over \$3,500. (b) Burial expenses, maximum, \$75.	(a) (b) 55 per cent of wages during disability; weekly maximum \$15.86, minimum \$3.30; total not over \$3,500.	If temporary, 55 per cent of wage loss during disability; weekly maximum \$15.86. If permanent, amounts proportioned to disability according to scale to be established by board; total not over \$1,500.	Such special medical and surgical treatment as will conserve the accident fund and such first-aid and hospital treatment as the board may require.	Notice in 14 days; claim in 1 year.	Workmen's compensation board.	Board has jurisdiction over all matters; appeal to supreme court upon questions of law, but only by permission of such court.	All employers under compensation act must report all disabling accidents within 3 days to workmen's compensation board.	(a) No provision. (b) Employers' associations; factory inspector. ¹	New Brunswick.
Nova Scotia. Approved, Apr. 23, 1915; supersedes act of 1910; amended, 1916, 1917, 1918, 1919.	Compulsory, as to enumerated hazardous employments. Exemptions: Farm labor, domestic service, outworkers, traveling salesmen, casual employees not in usual course of employer's business. Voluntary, as to exempted employments.	Compulsory, as to hazardous public employments, except members of municipal police and fire departments.	Employers must contribute to State accident fund.	Permitted only in re employments not under compensation act, if injury due to employer's negligence; defenses abrogated.	Waivers forbidden.	Personal injuries by accident arising out of and in course of the employment unless due solely to serious and willful misconduct except in case of death or serious and permanent disability. Enumerated occupational diseases included.	6 days. None if disability continues for more than 6 days.	Disability, 55 per cent.	Death: Monthly pension, maximum \$40, but not over 55 per cent of wages; minimum \$20. Disability: Weekly maximum \$13.20; minimum \$5, or actual wages if less than \$5.	Death, during life or until remarriage of widow. Disability, during its continuance.	(a) Burial expenses, maximum, \$75; widow or invalid widower, \$20 a month; \$5 additional for each child; monthly maximum \$40, but not over 55 per cent of wages. (b) Burial expenses, maximum \$75.	(a) (b) 55 per cent of wages during disability; weekly maximum \$13.20, minimum \$5, or actual wages if less than \$5.	55 per cent of impairment of earning capacity during disability.	Reasonable medical, surgical, and hospital service for 30 days in compensable injury cases; additional treatment if necessary to reduce disability; approved establishment benefit schemes permitted; special provision for seamen.	Claim in 1 year.	Workmen's compensation board.	Board has jurisdiction over all matters; appeal to supreme court upon questions of law, but only by permission of such court.	All employers under compensation act must report all disabling accidents within 3 days to workmen's compensation board.	(a) No provision. (b) Employers' associations; department of public works and mines. ¹	Nova Scotia.
Ontario. Approved, May 1, 1914; in effect, Jan. 1, 1915; amended, 1915, 1916, 1917, 1919.	Compulsory, as to enumerated hazardous employments. Exemptions: Farm labor, domestic service, outworkers, and casual employees not in usual course of employer's business. Voluntary, as to exempted employment.	Compulsory, as to hazardous municipal employments.	Employers under schedule 1 must contribute to State accident fund; employers under schedule 2 (cities, railroad, express, telephone, telegraph, and navigation) are individually liable, but board may require them to insure.	Permitted only in re employments under compensation acts, if injury due to employer's negligence; defenses abrogated.	Waivers forbidden.	Personal injuries by accident arising out of and in course of the employment, unless due solely to serious and willful misconduct. Enumerated occupational diseases included.	6 days. None if disability continues for more than 6 days.	Disability, 55 per cent.	Death: Monthly pension, \$60, but not over 55 per cent of wages; minimum \$20. Disability, maximum \$22.	Death, during life or until remarriage of widow. Disability, during its continuance.	(a) Burial expenses, maximum, \$75; widow or invalid widower, \$30 a month; \$7.50 additional for each child; monthly maximum \$60, but not over 55 per cent of wages; minimum \$20 for widow, \$5 for child, \$40 in all. (b) Reasonable expenses of burial and last sickness.	(a) (b) 55 per cent of wages during disability; weekly maximum \$22.	55 per cent of impairment of earning capacity during disability.	Necessary medical, surgical, and hospital service in compensable injury cases; transportation included; approved establishment benefit schemes permitted.	Notice as soon as practicable and before leaving employment; claim in 6 months.	Workmen's compensation board.	Board has exclusive and final jurisdiction over all matters; employers individually liable may make direct settlements with employers with approval of board; no appeal to courts.	All employers must report all accidents which cause disability or necessitate medical aid within 3 days to workmen's compensation board.	(a) No provision. (b) Employers' associations; department of public works; bureau of mines. ¹	Ontario.
Quebec. Approved, May 29, 1909; in effect, Jan. 1, 1910; amended, 1914, 1915, 1918.	Compulsory, as to enumerated hazardous employments. Exemptions: Farm labor, sailing vessels, employees receiving over \$1,200 a year, employees who usually work alone.	No provision.	Not required.	Not permitted.	Waivers forbidden.	Accidents by reason of or in the course of their work, unless intentionally self-inflicted.	1 week. None if totally and permanently disabled.	Disability, 50 per cent.			(a) Expenses of burial and last sickness, maximum \$25; 4 years' earnings; but only one-fourth of annual earnings in excess of \$800 shall be taken into account; total not over \$2,500 or under \$1,000.	(a) (b) 50 per cent of wages during disability; weekly minimum \$4 in case of temporary disability; total not over \$2,500.	50 per cent of wage loss.	No provision.	Claim in 1 year.	Courts.	Voluntary agreement between parties; disputed cases settled by courts.	No provision.	(a) No commission. (b) Department of public works and labor; mine inspector. ¹	Quebec.
Saskatchewan. Ch. 9, 1911; amended, 1913, 1915, 1916, 1917.	Compulsory, as to enumerated hazardous employments. Exemptions: Farm labor, employees not engaged in manual labor, and those receiving over \$1,800 a year.	Compulsory, as to hazardous municipal employments.	Not required.	Permitted in lieu of compensation after injury.	Waivers forbidden.	Personal injuries by accident arising out of and in course of the employment.	6 days.				Amount recoverable shall not exceed 3 years' earnings or \$1,800, whichever is larger, and shall never exceed \$2,000.	Amount recoverable shall not exceed 3 years' earnings or \$1,800, whichever is larger, and shall never exceed \$2,000.	Amount recoverable shall not exceed 3 years' earnings or \$1,800, whichever is larger, and shall never exceed \$2,000.	No provision.	Claim in 6 months.	Courts.	By courts.	No provision.	(a) No commission. (b) Bureau of labor. ¹	Saskatchewan.
Yukon Territory. Approved, Apr. 24, 1917.	Compulsory, as to all employments except those having less than 5 employees, outworkers and casual employees not in usual course of employer's business.	Compulsory, as to all municipal employees and hazardous territorial employments.	Not required.	Permitted in lieu of compensation after injury, if employer was negligent; defenses abrogated.	Waivers forbidden.	Personal injuries by accident arising out of and in course of the employment, unless due to intoxication, or serious and willful misconduct.	13 days. None if disability continues for more than 13 days.	Temporary total disability, 50 per cent.		Temporary total disability, 6 months.	(a) \$2,500. (b) Expenses of burial and last sickness, maximum, \$500.	(a) \$3,000. (b) 50 per cent of wages during disability but for not over 6 months.	For specified injuries, fixed amounts ranging from \$150 to \$2,000, others proportioned to degree of total disability; maximum \$3,000.	No provision.	Notice as soon as practicable; claim in 6 months.	Courts.	Voluntary agreement between parties; disputed cases settled by courts.	No provision.	(a) No commission. (b) Mine inspector. ¹	Yukon.

¹ Not provided for in compensation law.

¹ The Saskatchewan workmen's compensation law is practically an employer's liability act.