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COMPARISON OF WORKMEN'S COM-
PENSATION LAWS OF THE UNITED
STATES UP TO DECEMBER 31, 1917

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BULLETIN OF THE U. S. BUREAU OF LABOR STATISTICS.

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

INTRODUCTION.

This bulletin, summarizing and comparing the principal features of the workmen's compensation laws of the several States and Territories, is a revision of a study made in 1916 and published as a part of Bulletin No. 203. It covers all laws enacted up to December 31, 1917. Since the publication of the former report 27 States have amended or supplemented their compensation laws, while 5 new States have been added to the list of those having such laws, making a total of 40 States, Territories, and insular possessions having workmen's compensation laws on their statute books at the present time. This bulletin was prepared in the latter part of 1917, and when the term "this year" is used it refers to the year 1917.

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 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 35 States and Territories having had workmen's compensation experience.¹ A large majority of these changes were enacted this year.

¹ The five States which enacted compensation laws in 1917 have not been taken into account in the following analysis.

Compensation and insurance systems.—There has been considerable dissatisfaction with the elective feature of compensation laws. A large proportion of employers in many of the 26 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 26 elective compensation States (Illinois) substituted the compulsory for the elective system. On the other hand, of the eight States in which employers were not required to insure, four¹ 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, domestic service, or nonhazardous industries has later included such employments, although several laws in which only enumerated hazardous employments were covered have added a few minor employments to enumerated statutory lists. The more important of these in 1917 were the inclusion in the New York law of hotels having 50 or more rooms and the repeal of the provision in Texas exempting cotton ginning. Two States² 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. Seventeen States originally exempted employers having less than a stipulated number of employees. Of these, 3 States³ have reduced the number of employees and 2 States⁴ have abolished the numerical exemption provision altogether. Many of the States originally exempted casual employments but there is a tendency to abolish this exemption. Of the 13,500,000 employees⁵ covered by the 35 State compensation laws approximately 200,000, or less than 2 per cent, have been added subsequent to the initial enactment of the laws.

Waiting period.—The waiting period has been changed in 13 States, 2⁶ of which have made two successive changes. Of these, 11 States⁷ reduced the waiting period; 1 State⁸ first increased its wait-

¹ California, Illinois, Nebraska, and New Jersey.

² Oregon and Rhode Island.

³ Texas, Wisconsin, and Wyoming.

⁴ Nebraska and Nevada.

⁵ These figures are computed from the United States Census of Occupations of 1910; for more detailed information see pp. 26-34.

⁶ California and Connecticut.

⁷ From two weeks to one week, Connecticut, Hawaii, Indiana, Kansas, Louisiana, Minnesota, Nebraska, Nevada, and Vermont; from two weeks to 10 days, Massachusetts; from three weeks to two weeks, Colorado. For the sake of simplicity, all jurisdictions are referred to as States.

⁸ California

ing period from 1 week to 2 weeks and then reduced it to 10 days; and 1 State¹ increased the period from 1½ days to 7 days. In addition several States have abolished the waiting period entirely in certain cases. Of these, 6 States² abolished the waiting period if the disability exceeds stated periods, while 1 State³ abolished the waiting time in partial disability injuries.

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 66⅔ per cent. Only 6 States⁴ have materially increased their original percentages. Of these Massachusetts and Nebraska increased the scale from 50 to 66⅔ per cent; Kansas and Minnesota from 50 to 60 per cent; and Illinois and Nevada made varying increases in certain cases. Eight States⁵ increased their weekly maximum compensation limits. Eight States also increased the period during which compensation shall be paid. Of these, 4⁶ increased the period in case of death; 6⁷ in case of total disability; and 2⁸ in case of partial disability. However, probably the most inelastic factor of the compensation scale is the schedule for permanent partial disability. Of the 28 States having such schedules only 2⁹ have materially increased the compensation periods or amounts; 1¹⁰ has slightly increased the amounts in individual cases; while 1¹¹ has reduced the periods considerably. Two States¹² have materially enlarged the list of injuries in the schedule without increasing the compensation periods, while 1¹³ 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 compensations 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 com-

¹ Washington.

² Louisiana, Nebraska, New York, Rhode Island, Washington, and Wyoming.

³ Hawaii.

⁴ Illinois, Kansas, Massachusetts, Minnesota, Nebraska, and Nevada.

⁵ Connecticut, Illinois, Iowa, Massachusetts, Minnesota, Nebraska, Nevada, and West Virginia.

⁶ Massachusetts, Nebraska, Nevada, and Ohio.

⁷ Maryland, Minnesota, Nebraska, Nevada, Texas, and Wisconsin.

⁸ Massachusetts and Nevada.

⁹ Washington and Wisconsin.

¹⁰ Wyoming.

¹¹ Nebraska.

¹² Hawaii and Nebraska.

¹³ Kansas.

pensation laws. Sixteen States¹ 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 States² the maximum limit has been abolished entirely and employers must provide medical attendance as long as reasonably necessary. Most of these increases were provided for this year. State legislatures and compensation commissions seem at last to realize the fact that adequate medical and hospital 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 this year authorized compensation commissions to approve or supervise hospitals and benefit funds maintained by employers. There is also a trend toward allowing the injured employee to select his own physician. For the first time in the history of the compensation legislation in this country employees have been specifically given the right to choose the physician when the cost of the medical service is paid by the employer. Three States³ amended their laws to that effect in 1917.

Administrative system.—Nebraska is the only State which has materially changed its system of administration since 1913, a compensation commissioner having been provided for this year, thus 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, the department of labor in New Jersey has been given limited administrative supervision over the act in that State, and Massachusetts has 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 the Southern States, North Dakota being the only one of the remaining 11⁴ noncompensation States not in this section of the country; 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 States⁵ which have established monopolistic State insurance systems are in the far West. Also, the only States⁶ which have

¹ California, Connecticut, Hawaii, Iowa, Kansas, Louisiana, Massachusetts, Nebraska, Nevada, Ohio, Porto Rico, Rhode Island, Texas, Vermont, Washington, and Wisconsin.

² California, Connecticut, and Porto Rico.

³ Massachusetts, Rhode Island, and Washington.

⁴ Not counting the District of Columbia.

⁵ Nevada, Oregon, Washington, and Wyoming. (Porto Rico also has a monopolistic State insurance fund.)

⁶ Oregon, Washington, and Wyoming.

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 employers' hospital benefit funds to which the employee is required to contribute his proportionate share have been enacted by far Western States.¹ And of the three States² in which the administrative commissions are authorized to and have formulated elaborate schedules for permanent partial disabilities based as far as possible upon the actual loss of earning power, two are in the far West.

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 five States enacting compensation laws in 1917 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.

- HISTORY OF COMPENSATION LEGISLATION.*

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, however, was the one enacted by Wisconsin May 3, 1911, which took effect immediately upon its passage. Since then compensation legislation has progressed rapidly, 37 States and 3 Territories having placed

¹ Idaho, Montana, Nevada, Utah, and Washington.

² California, Washington, and West Virginia.

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

such laws upon their statute books,¹ 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. 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 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 compul-

¹ The following States, etc., have enacted compensation laws:

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

sory, 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 Allegany 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. 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, 40 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 77 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 12 noncompensation States¹ remaining include 10 Southern States, North Dakota, and the District of Columbia. Practically all of these are primarily agricultural States, though in most of them manufacturing is of considerable and increasing importance.

SYSTEMS PROVIDED FOR.

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 in detail. 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 must also 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 compensa-

¹ Alabama, Arkansas, District of Columbia, Florida, Georgia, Mississippi, Missouri, North Carolina, North Dakota, South Carolina, Tennessee, and Virginia.

tion 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. The following table shows the compensation States grouped according to these two classifications:

Compensation compulsory, 12.		Compensation elective, 28.	
Insurance required, 11.	Insurance not required, 1.	Insurance required, 24.	Insurance not required, 4.
California. Hawaii. Idaho. Illinois. Maryland. New York. Ohio. Oklahoma. Utah. Washington. ¹ Wyoming. ¹	Arizona.	Colorado. Connecticut. Delaware. Indiana. Iowa. Kentucky. Maine. Massachusetts. Michigan. Montana. Nebraska. Nevada. ¹ New Hampshire. New Jersey. New Mexico. Oregon. ¹ Pennsylvania. Porto Rico. ¹ Rhode Island. South Dakota. Texas. Vermont. West Virginia. Wisconsin.	Alaska. Kansas. Louisiana. Minnesota.

¹ Monopolistic State insurance.

It will be noted that of the 40 compensation laws, 12 are compulsory and 28 elective as to the compensation provisions, and 35 are compulsory and 5 elective as to the insurance requirements. Of the 28 elective compensation laws, 24 provide for compulsory insurance in some form, while with the remaining 4 the question of insurance is left optional. Of the 12 compulsory compensation laws, 11 require insurance and 1 does not.

Very considerable differences appear in the methods provided by the laws of the 35 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.

The following table shows the groupings on the bases indicated:

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

State monopoly(5).	State fund (11).	Private insurance (27).	Self-insurance (28).
	California	California	California.
	Colorado	Colorado	Colorado.
		Connecticut	Connecticut.
		Delaware	Delaware.
		Hawaii	Hawaii.
	Idaho	Idaho	Idaho.
		Illinois	Illinois.
		Indiana	Indiana.
		Iowa	Iowa.
		Kentucky	Kentucky.
		Maine	Maine.
	Maryland	Maryland	Maryland.
		Massachusetts	
	Michigan	Michigan	Michigan.
	Montana	Montana	Montana.
		Nebraska	Nebraska.
Nevada		New Hampshire ¹	New Hampshire. ¹
		New Jersey	New Jersey.
		New Mexico	New Mexico.
	New York	New York	New York.
	Ohio ²	Ohio	Ohio. ²
		Oklahoma	Oklahoma.
Oregon			
	Pennsylvania	Pennsylvania	Pennsylvania.
Porto Rico		Rhode Island	Rhode Island.
		South Dakota	South Dakota.
		Texas	
	Utah	Utah	Utah.
		Vermont	Vermont.
Washington	West Virginia ³	West Virginia	West Virginia. ³
		Wisconsin	Wisconsin.
Wyoming			

¹ The New Hampshire law requires employers accepting the act to furnish proof of solvency or give bond but makes no other provisions for insurance.

² Ohio permits self-insurance, but all employers are required to contribute their proportionate share to the State insurance fund surplus.

³ West Virginia has practically a monopolistic State insurance system. Self-insurance is allowed but employers desiring to carry their own risk must bear the whole burden of the act and in addition contribute their proportionate share of the administrative expenses of the law, while employers insuring in the State fund may charge 10 per cent of the premiums against their employees.

Broadly speaking, the laws may be divided into four main groups or combination of groups, namely: (1) State monopoly, (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 monopolistic systems. In these cases no other form of insurance is permitted.

It will be noted that five States have such monopolistic systems. In three of these, Nevada, Oregon, and Porto Rico, 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 Washington and Wyoming both compensation and insurance are compulsory. In these five 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. Because the insurance feature plays such an important part, and because State insurance is a radical departure from past public policy, these laws are sometimes called State insurance laws.

In the other 30 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 eleven of these States¹ the laws provide for a State fund through which the State conducts a workmen's compensation insurance business in competition with private liability companies. However, the laws of three of these States, Idaho, Ohio, and West Virginia, differ quite materially from those of the other eight. Idaho does not permit private casualty companies to write workmen's compensation insurance, but allows employers to carry their own risk and also permits substitute insurance schemes if the benefits provided equal those of the act. Ohio also does not permit private stock companies to write workmen's compensation insurance, but 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 a monopolistic State insurance system. She permits no private insurance, but does allow self-insurance. The employers, however, who desire to carry their own risk must bear the whole burden of the act and in addition contribute their propor-

¹ California, Colorado, Idaho, Maryland, Michigan, Montana, New York, Ohio, Pennsylvania, Utah, and West Virginia.

tionate share to the administrative expenses of the law, while those insuring in the State fund may charge 10 per cent of the premiums against their employees. The other eight States allow both private and self insurance in addition to the State fund.

Three States¹ 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 company. The other two States merely copied the provisions of the Massachusetts law. Massachusetts and Texas do not permit self-insurance, while Kentucky does. The two former States are exceptional in that election of the act is made by insuring.

Of the 35 compulsory-insurance States, 27 permit private companies to operate, the only exceptions being the 5 monopolistic States of Nevada, Oregon, Porto Rico, Washington, and Wyoming, and the States of West Virginia, Ohio, and Idaho.

Twenty-eight States allow employers to self-insure or carry their own risk, the exceptions again being the monopolistic States and 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 has adopted New York's law quite generally. But taken as a whole the laws are distinguished more for their dissimilarities than for their likenesses.

¹ Kentucky, Massachusetts, and Texas.

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 extent¹ except in case of public employees,² and its effect in increasing the scope of an act is negligible.

The table following shows the inclusions and exclusions of the various States arranged according to the foregoing classifications:

SCOPE OF COMPENSATION LAWS.

Inclusions.		Exclusions.						Other exemptions.
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.	
Alaska	Alaska	Alaska ³					Alaska	Outworkers. Do. Private employees receiving over \$36 a week; public employees over \$1,800 a year. Outworkers; charitable institutions; employees receiving over \$2,400 a year. Railroad employees in train service. Clerks not subject to hazard of industry. Logging. Country blacksmiths; employees receiving over \$2,000 a year. Steam railroads. Outworkers. Only workmen engaged in manual or mechanical labor included. Public employees receiving over \$1,200 a year.
Ariz.	Ariz.						Ariz.	
Cal.		Cal.	Cal.	Cal.	Cal. ⁴			
Colo.		Colo. ⁵	Colo.	Colo.	Colo. ⁵	Colo.	(?)	
Conn.		Conn. ⁵			Conn. ⁵			
Del.		Del. ⁵	Del.	Del.	Del. ⁴		Del.	
Hawaii					Hawaii ⁶	Hawaii		
Idaho			Idaho	Idaho	Idaho ⁶	Idaho		
Ill.			Ill.		Ill. ⁹			
Ind.			Ind.	Ind.	Ind. ⁸			
Iowa			Iowa	Iowa	Iowa ⁶		Iowa ¹⁰	
Kans.	Kans.	Kans. ¹¹	Kans.		Kans. ⁹	Kans.	Kans. ¹²	
Ky.	Ky.	Ky. ¹¹	Ky.	Ky.			Ky. ¹³	
La.					La. ⁹			
Me.	Me.	Me. ¹⁴	Me.	Me.	Me. ⁶			
Md.			Md.	Md.	Md. ⁸	Md.	Md. ¹⁴	
Mass.			Mass.	Mass.	Mass. ⁹		Mass. ¹⁶	
Mich.			Mich.	Mich.	Mich. ⁶			
Minn.			Minn.	Minn.	Minn. ⁴		Minn. ¹⁷	
Mont.			Mont.	Mont.	Mont. ⁹			
Nebr.			Nebr.	Nebr.	Nebr. ⁶	Nebr.		
Nev.			Nev.	Nev.				
N. H.		N. H. ⁴					N. H.	
N. J.					N. J. ⁹			

¹ For example: In California, in 1916, only 10,397 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.

² In Massachusetts municipalities are not compelled to accept the compensation act, but practically all have accepted voluntarily.

³ Less than 5 excluded.

⁴ Casual and not for purpose of employer's business.

⁵ Less than 4 excluded.

⁶ Casual or not for purpose of employer's business.

⁷ Members of National Guard excluded.

⁸ Casual only.

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 State and municipalities having less than 5 employees.

¹⁴ Less than 6 excluded.

¹⁵ Except workmen.

¹⁶ Except State workmen.

¹⁷ State.

SCOPE OF COMPENSATION LAWS—Concluded.

Inclusions.		Exclusions.						Other exemptions.
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.	
.....	N. Mex.	N. Mex. ¹	N. Mex. ² ...	N. Mex.	N. Mex.	Retail stores; persons not engaged in manual or mechanical work. Outworkers. Clerical occupations; employees receiving over \$1,200 a year. Employees receiving over \$1,800 a year. Railways used as common carriers. Public employees receiving over \$2,400 a year. Employees receiving over \$2,000 a year. "Temporary" employments; traveling salesmen; corporation officers. Officials; clerks not subject to hazard of industry.
Ohio	N. Y.	Ohio ⁴	N. Y.	N. Y.	Ohio ³	N. Y.	N. Y. ⁸	
.....	Okla.	Okla. ⁵	Okla.	.....	.....	Okla.	Okla. ⁶
.....	Oreg.	.....	Oreg.	.....	.....	.....	.....
Pa.	.....	.....	Pa.	Pa.	Pa. ⁷	.....	.....
P. R.	.....	P. R. ⁴	P. R.	P. R.	.....	.....	P. R.
R. I.	.....	R. I. ⁷	R. I.	R. I.	R. I. ³	.....	.....
S. Dak.	.....	.....	S. Dak.	S. Dak.	S. Dak. ³	.....	.....
Tex.	.....	Tex. ⁵	Tex.	Tex.	Tex. ⁸	.....	Tex.
Utah.	.....	Utah ¹	Utah.	Utah.	Utah ³	.....	.....
Vt.	.....	Vt. ⁹	.....	Vt.	Vt. ²	Vt.	Vt. ³
W. Va.	Wash.	.....	W. Va.	W. Va.	W. Va. ¹⁰	W. Va.	Wash. ⁶ W. Va.
Wis.	.....	Wis. ⁵	Wis.	.....	Wis. ⁸	.....	.....
.....	Wyo.	Wyo. ¹¹	.....	.....	Wyo. ³	Wyo.	Wyo. ⁶

¹ Less than 4 excluded. Structural operations, 10 feet above ground, excepted from this provision.
² Casual or not for purpose of employer's business.
³ State.
⁴ Less than 5 excluded.
⁵ Less than 3 excluded.
⁶ Except workmen.
⁷ Less than 6 excluded.
⁸ Not for purpose of employer's business.
⁹ Less than 11 excluded.
¹⁰ Casual only.
¹¹ Less than 3 excluded. Public employments, employments where explosives are used, and structural operations 10 feet above ground are excepted from this provision.

HAZARDOUS EMPLOYMENTS.

It will be noted that 14 of the 40 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 44 in New York. 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 four States¹ the term "hazardous" employment is used, in five² "extrahazardous," and in one³ "inherently hazardous"; one State⁴ employs the word "dangerous," while two⁵ 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, and in no State is agriculture, generally admitted to be a hazardous employment, included in terms, while in seven⁶ States it is specifically excluded. Six States⁷ 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 reduced 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. There are 18 States having such numerical exemptions. Four States⁸ exempt employers of less than 3 employees; three⁹ exempt employers of less than 4; eight,¹⁰ of less than 5; two,¹¹ of less than 6; and one,¹² of less than 11.

¹ Louisiana, New York, Oklahoma, and Oregon.

² Illinois, Maryland, New Mexico, Washington, and Wyoming.

³ Montana.

⁴ New Hampshire.

⁵ Arizona and Kansas.

⁶ Illinois, Kansas, Maryland, Montana, New York, Oklahoma, and Oregon.

⁷ Alaska, Kansas, New Hampshire, New Mexico, Oklahoma, and Wyoming.

⁸ Oklahoma, Texas, Wisconsin, and Wyoming.

⁹ Colorado, New Mexico, and Utah.

¹⁰ Alaska, Connecticut, Delaware, Kansas, Kentucky, New Hampshire, Ohio, and Porto Rico.

¹¹ Maine and Rhode Island.

¹² Vermont.

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 materially reduced 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 two¹ 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 28 States agriculture is excluded specifically in the law, while in 3 States² its exclusion is accomplished through the exemption of the small employer. In the other 7 States³ 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 38 States, of agricultural laborers from the benefits of compensation acts.

DOMESTIC SERVICE.

Domestic service is exempted in all but one State.⁴ In 24 States the exclusion is direct, while in 3⁵ it is brought about by exempting the small employers; in 1 State⁶ 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.

¹ Hawaii and New Jersey.

² Connecticut, Ohio, and Vermont.

³ Alaska, Arizona, Louisiana, New Hampshire, New Mexico, Washington, and Wyoming.

⁴ New Jersey.

⁵ Connecticut, Ohio, and Wisconsin.

⁶ Hawaii.

In some States again the inclusion is compulsory, in others it is optional, while in still others, no provision at all is made.

Twenty-two States¹ include both State and municipal employees, while eight States² include neither. In the other 10 States the inclusion of public employees is only partial. The status of each State is shown in the table on pages 18 and 19. Of the 32 States which include public employees, either in whole or in part, in all but 6³ such inclusions are compulsory. In these six 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. One State⁴ has interpreted the phrase as meaning employment for less than one week. Four States⁵ have recently eliminated this 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, 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.

Thirty States make exceptions of this kind, while 10 do not. Eight States⁶ exempt both casual laborers and those not employed in the

¹ California, Colorado, Connecticut, Hawaii, Idaho, Illinois, Indiana, Louisiana, Maine, Michigan, Montana, Nebraska, Nevada, New Jersey, New York, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, and Wisconsin.

² Alaska, Arizona, Delaware, New Hampshire, New Mexico, Porto Rico, Texas, and West Virginia.

³ Connecticut, Kansas, Kentucky, Minnesota, Oregon, and Vermont.

⁴ California.

⁵ Illinois, Massachusetts, Texas, and Wisconsin.

⁶ Colorado, Hawaii, Iowa, Maine, Michigan, Nebraska, Utah, and Vermont.

usual course of the employer's business; while in nine States¹ the employment must be both casual and not in the usual course of the employer's business, thus limiting the exclusions considerably. Six States² exempt only casual labor, while seven States³ exempt only persons not in the usual course of the employer's business. The West Virginia act provides also for the exclusion of "temporary employments."

EMPLOYMENTS NOT FOR GAIN.

As already noted, employments not conducted for gain refer primarily to businesses or institutions and not to employees as such. Twelve States exempt such employments not conducted for gain or profit. Charitable, educational, and religious institutions are included within this group. The court in New York held that even public employments, irrespective 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 amended⁴ 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 15 States⁵ the laws have extraterritorial effect; in 12 States⁶ injuries occurring without the State are not compensable; while in 13 States⁷ 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. Eight States⁸ have exemptions

¹ California, Delaware, Minnesota, New Mexico, Ohio, Pennsylvania, Rhode Island, South Dakota, and Wyoming.

² Connecticut, Idaho, Indiana, Maryland, New Jersey, and West Virginia.

³ Illinois, Kansas, Louisiana, Massachusetts, Montana, Texas, and Wisconsin.

⁴ Ch. 622, Laws of 1916.

⁵ Colorado, Connecticut, Hawaii, Idaho, Indiana, Maine, Nevada, New Jersey, New York, Ohio, South Dakota, Texas, Utah, Vermont, and West Virginia.

⁶ Alaska, California, Kansas, Kentucky (court decision), Maryland (exception as to miners), Massachusetts, Michigan, Minnesota, Pennsylvania, Rhode Island (court decision), Washington, and Wisconsin (commission ruling).

⁷ Arizona, Delaware, Illinois, Iowa, Louisiana, Montana, Nebraska, New Hampshire, New Mexico, Oklahoma, Oregon, Porto Rico, and Wyoming.

⁸ Hawaii, Idaho, Maryland, New Jersey, Porto Rico, Rhode Island, Utah, and Vermont.

of this character. Other exemptions are: Outworkers in Connecticut, Delaware, Idaho, Nebraska, and Pennsylvania; logging in Maine; all railways used as common carriers in Texas; country blacksmiths in Maryland; retail stores in Oklahoma; charitable institutions in Idaho; traveling salesmen in West Virginia; clerical occupations in Iowa, Porto Rico, and Wyoming; steam railroads in Minnesota, and railroad employees engaged in train service in Indiana.

INTERSTATE COMMERCE.

The exemptions of 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. 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 excludes 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 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,¹ however, has declared that when an employer engaged in interstate commerce was injured, his only right to recover arose from 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

¹ *New York Central R. R. Co. v. Winfield, and Erie R. R. Co. v. Winfield*, May, 1917.

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 is incorporated in a bill introduced in the Sixty-third Congress and again in the Sixty-fourth Congress (H. R. 3651) proposing 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 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 committee¹ appointed by the International Association of Industrial Accident Boards and Commissions in August, 1917, has been at work attempting to formulate an adequate plan acceptable to the brotherhoods, railroads, and the State compensation commissions. It has also been suggested that, since the control of the railroads has been taken over by the Federal Government, the President be authorized to make provision for a Federal compensation system applicable to all interstate railroads.

The foregoing proposals and discussions have to do solely with railroad employees. State jurisdiction over employees engaged in

¹ Composed of A. J. Pillsbury, chairman, California Industrial Accident Commission, John Mitchell, chairman, New York Industrial Commission, and Royal Meeker, United States Commissioner of Labor Statistics.

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 case¹ 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 had 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 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 law² giving States concurrent jurisdiction over maritime cases.

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 remain practically the same except in the case of such States as have

¹ Southern Pacific Co. v. Jensen, May, 1917.

² Public act No. 82, Oct. 6, 1917.

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.

The table on page 28 shows the number of persons gainfully employed;¹ 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.

¹ The figures in the table do not include Federal 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.

Alaska.....	1, 225	Maine.....	10, 909	Oregon.....	18, 830
Arizona.....	7, 109	Maryland.....	17, 945	Pennsylvania.....	134, 318
California.....	48, 832	Massachusetts....	33, 414	Porto Rico.....	1, 567
Colorado.....	20, 138	Michigan.....	32, 186	Rhode Island....	6, 977
Connecticut....	10, 864	Minnesota.....	46, 919	South Dakota....	8, 099
Delaware.....	3, 807	Montana.....	19, 402	Texas.....	52, 147
Hawaii.....	3, 142	Nebraska.....	23, 220	Utah.....	9, 511
Idaho.....	7, 598	Nevada.....	3, 761	Vermont.....	5, 057
Illinois.....	105, 210	New Hampshire....	5, 950	Washington.....	33, 212
Indiana.....	43, 644	New Jersey.....	38, 502	West Virginia...	22, 836
Iowa.....	40, 093	New Mexico.....	7, 625	Wisconsin.....	30, 252
Kansas.....	38, 601	New York.....	105, 850	Wyoming.....	12, 811
Kentucky.....	24, 429	Ohio.....	74, 952		
Louisiana.....	19, 872	Oklahoma.....	16, 210		
				Total.....	1, 147, 026

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

[The estimates of "employees covered by act" and "employees not 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 an inter elective act.]

State.	Total persons gainfully employed. ²	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. ¹		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	
Alaska.....	38,848	5,300	13.6	10,481	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.....	1,058,836	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.....	82,056	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	50,587	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.....	993,066	360,244	36.3	502,729	50.6	130,093	13.1	79.4	20.6
Iowa.....	786,220	360,568	45.9	266,936	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	230,135	27.3	190,272	22.6	54.7	45.3
Louisiana.....	659,311	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.....	1,497,654	235,288	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	121,648	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
Montana.....	159,345	47,833	30.0	56,826	35.7	54,636	34.3	50.9	49.1
Nebraska.....	417,894	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.....	185,753	43,551	23.4	79,680	42.9	62,522	33.7	56.0	44.0
New Jersey.....	1,035,853	171,895	16.6	861,963	83.2	2,000	.2	99.8	.2
New Mexico.....	113,872	48,510	42.6	20,073	17.6	45,289	39.8	30.7	69.3
New York.....	3,897,994	772,297	19.8	1,828,213	46.9	1,297,484	33.3	58.5	41.5
Ohio.....	1,844,103	522,448	28.3	1,008,813	54.7	312,842	17.0	77.3	22.7
Oklahoma.....	582,419	338,365	58.1	84,522	14.5	159,532	27.4	34.6	65.4
Oregon.....	286,334	87,464	30.5	96,910	33.8	101,960	35.7	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	60,536	15.4	61,207	15.6	270,838	69.0	18.4	81.6
Rhode Island.....	244,924	36,405	14.9	173,915	71.0	35,604	14.1	88.0	12.0
South Dakota.....	210,978	118,097	56.0	53,997	25.6	38,894	18.4	58.0	42.0
Texas.....	1,504,719	864,699	57.5	306,777	20.4	333,243	22.1	47.9	52.1
Utah.....	122,029	40,844	33.5	59,346	48.6	21,839	17.9	73.1	26.9
Vermont.....	139,032	46,811	33.7	50,942	36.6	41,279	29.7	55.2	44.8
Washington.....	488,289	116,746	23.9	191,458	39.2	180,085	36.9	51.5	48.5
West Virginia.....	425,654	160,064	37.6	203,139	47.7	62,451	14.7	74.7	25.3
Wisconsin.....	862,160	325,263	37.7	405,009	47.0	131,888	15.3	75.4	24.6
Wyoming.....	60,795	17,953	29.5	18,003	29.6	24,839	40.9	42.0	58.0
Total.....	28,532,641	8,588,812	30.1	13,707,693	48.0	6,236,136	21.9	68.7	31.3
Noncompensation States and Territories (12)	* 8,700,000	2,618,700	* 30.1	.....	.....	6,081,300	* 69.9	.....	.....
United States civilian employees.....	553,991	.....	.....	553,991	100.0	.....	.....	100.0	.....
Interstate railroad employees.....	* 1,300,000	.....	.....	.....	.....	* 1,300,000	100.0	.....	100.0

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

² 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.

The ratio as determined from the compensation States has been applied to the noncompensation States. The percentage of employers in the noncompensation States is probably greater than 30.1, due to the preponderance of agriculture in these States.

³ Figures as of July 1, 1917, taken from United States register. Probably 575,000 at present.

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 correspond with 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 8,500,000) who can not possibly be covered under any existing compensation act. From the number of persons gainfully employed (column 1) have been subtracted the Federal and interstate railroad employees, 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 five States in which over 50 per cent of persons gainfully employed belong to the employing class are agricultural States,¹ while the four most intense industrial States have a small employing class.² 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 28,532,641 persons gainfully employed in the 40 States and Territories having compensation laws, 8,588,812, or 30.1 per cent, belong to the employing or independent class, while 13,707,693, or 48 per cent, represent employees covered by compensation acts, and 6,236,136, or 21.9 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 12 remaining non-compensation States³ have approximately 6,081,300 employees. The total number of employees, therefore, in the 52 States and Territories

¹ Oklahoma, 58.1; Texas, 57.5; South Dakota, 56; Nebraska, 50.4; Kentucky, 50.1.

² 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.

³ Including District of Columbia.

deprived of the benefits of workmen's compensation legislation is over 12,000,000, or nearly one-half of the total number of employees in the United States. In addition, there are about 1,300,000 interstate railroad employees not subject to State acts and for which no Federal compensation law has been enacted.

The following table shows the States arranged in the order of the percentage of employees covered:

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.	Total gainfully employed.	Total employees.	Total gainfully employed
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.....	83.0	71.0	17.0	14.1
Connecticut.....	81.9	67.2	18.1	14.9
Indiana.....	79.4	50.6	20.6	13.1
Minnesota.....	79.0	48.1	21.0	12.7
Ohio.....	77.3	54.7	22.7	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
West Virginia.....	74.7	47.7	25.3	14.7
Utah.....	73.1	48.6	26.9	17.9
Maine.....	72.9	51.0	27.1	18.9
Nebraska.....	70.4	34.9	29.6	14.7
Idaho.....	68.7	40.6	18.4	31.3
Colorado.....	68.1	43.0	36.9	25.2
Delaware.....	62.9	46.1	37.1	26.4
Iowa.....	62.7	33.9	37.3	20.2
New York.....	58.5	46.9	41.5	33.3
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
Kentucky.....	54.7	27.3	45.3	22.6
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	35.7
Texas.....	47.9	20.4	52.1	22.1
Maryland.....	45.9	36.0	54.1	41.6
Wyoming.....	42.0	29.6	58.0	40.9
Kansas.....	36.9	18.6	63.1	31.7
Louisiana.....	35.2	21.3	64.8	39.1
Oklahoma.....	34.6	14.5	65.4	27.4
Alaska.....	31.2	27.0	68.6	59.4
New Mexico.....	30.7	17.6	69.3	39.8
Porto Rico.....	18.4	15.6	81.6	69.0
Average.....	68.7	48.0	31.3	21.9

The second and fourth columns 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 State in determining the percentage of gainfully employed persons subject to an act is brought out; for example, New York (58.5 per cent) and South Dakota (58 per cent) have nearly the same percentage of employees covered, but in industrial New York these constitute 46.9 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 18.4 per cent, stands at the bottom. Seven States cover over 80 per cent, 17 over 70 per cent, 21 over 60 per cent, and 30 over 50 per cent. One covers less than 20 per cent, 6 cover less than 40 per cent, and 10 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. The following table shows the effect of the three main exclusions upon the number of employees covered:

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	Conn. ¹	81.9	N. H. ³	56.9
Hawaii ²	92.6	Mass. ⁴	87.8	R. I.....	80.0	N. Y.....	55.9
		Mich.....	83.1	Ohio ¹	77.3	Ill.....	54.1
		Ind.....	79.4	Wis.....	74.7	Ariz. ²	52.4
		Minn. ⁴	79.0	Utah.....	73.1	Wash. ⁴	51.5
		Nev.....	76.2	Me.....	72.9	Mont.....	50.9
		Cal.....	76.2	Colo.....	63.1	Md. ⁴	45.9
		W. Va. ²	74.7	Del. ²	62.9	Oreg.....	44.4
		Nebr.....	70.4	Vt. ⁴	55.2	Wyo. ⁴	40.0
		Idaho.....	68.7	Ky. ⁴	54.7	Kans. ⁴	36.9
		Iowa ⁴	62.7	Tex. ²	42.5	La.....	35.2
		S. Dak.....	58.0	P. R. ²	18.4	Okla. ⁴	34.6
						Alaska ²	31.2
						New Mex. ²	30.7

¹ Agriculture and domestic service *not* specifically exempted.

² All public employees exempted.

³ Hawaii exempts employments not in the usual course of the employer's business and those not conducted for gain.

⁴ Public employees partially exempted.

Taking the median State in each group as a basis of comparison there is a difference of from 8 to 23 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 12 States excluding agriculture and domestic service; 68 per cent for the 12 numerical exemption States; and 45.1 for the 14 nonhazardous 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, 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.

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
Alaska.....	23,967	68.7	19.0	19.5	0.2	61.3	13.0	13.4	0.2
Ariz.....	29,519	47.6	41.9	18.6	.....	39.5	20.0	8.9	.....
Cal.....	192,791	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	.....	7.5	.....
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	.....
Ind.....	130,093	20.6	68.5	31.5	.....	.....	14.1	6.5	.....
Iowa.....	158,716	37.3	52.4	19.4	.....	28.2	19.5	9.4	.....
Kans.....	184,654	63.1	25.0	17.3	9.0	48.6	15.8	10.9	5.3
Ky.....	190,272	45.3	45.1	34.6	20.3	.....	20.5	15.7	9.1
La.....	238,053	64.8	48.7	27.4	.....	23.9	31.6	17.6	.....
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	.....
Mass.....	153,237	12.2	23.9	57.3	.....	18.8	2.9	6.9	.....
Mich.....	121,643	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	.....
Mont.....	54,636	49.1	41.7	22.2	.....	36.1	20.3	10.9	.....
Nebr.....	61,301	29.6	61.2	38.8	.....	.....	18.1	11.5	12.1
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
N. J.....	2,000	.2	.....	.....	.....	100.0	.....	.....	.....
N. Mex.....	45,289	69.3	58.5	15.4	22.0	4.1	40.5	10.6	2.9
N. Y.....	1,297,484	41.5	11.6	32.8	.....	55.6	4.8	13.6	.....
Ohio.....	312,842	22.7	34.6	41.7	23.7	.....	8.2	9.9	5.6
Okla.....	159,532	65.4	37.6	17.7	4.4	40.3	24.6	11.6	2.8
Oreg.....	101,960	51.3	29.6	19.8	.....	50.6	15.2	10.1	.....
Pa.....	269,318	11.2	42.7	57.3	.....	.....	4.8	6.4	.....

¹ Does not include agriculture or domestic service.

ESTIMATED NUMBER OF EMPLOYEES EXCLUDED, ETC—Concluded

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
P. R.....	270,838	81.6	74.5	17.9	6.0	0.7	60.8	14.9	5.0
R. I.....	35,604	17.0	18.7	50.4	30.9	.....	3.2	8.6	4.9
S. Dak.....	38,884	42.0	68.1	31.9	.....	.....	28.5	13.5	.....
Tex.....	333,243	52.1	55.1	28.9	9.5	6.5	28.7	15.0	10.4
Utah.....	21,839	26.9	48.3	34.0	17.7	.....	13.0	9.1	4.8
Vt.....	41,279	44.8	39.8	30.2	28.2	.....	17.8	13.5	12.6
Wash.....	180,085	48.5	28.5	20.3	.....	51.2	13.8	9.8	.....
W. Va.....	62,451	25.3	55.4	26.9	.....	17.7	13.0	6.3	.....
Wis.....	131,888	24.6	48.0	42.4	9.6	.....	11.8	10.4	3.1
Wyo.....	24,839	58.0	49.0	17.3	3.6	30.1	28.4	10.0	4.2
Total..	6,236,136	31.3	35.5	31.5	4.5	28.5	11.1	9.9	1.4

¹ Does not include agriculture or domestic service.

It will be recalled that 6,236,136, or 31.3 per cent of the total employees, are not covered by compensation legislation in the 40 compensation States, and that these exclusions have been brought about in several ways. It will be noted that of these 35.5 per cent¹ have been excluded through the exemption of agriculture, 31.5 per cent² through the exemption of domestic service, 4.5 per cent³ through the exemption of the small employer, and 28.5 per cent⁴ through the exemption of nonhazardous employments. These exclusions constitute, respectively, 11.1 per cent, 9.9 per cent, 1.4 per cent, and 8.9 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 may constitute 60 per cent of the total excluded if only farm labor and domestic service are excluded, but would constitute a much smaller percentage of the total if nonhazardous employments were also excluded.

It will be noted that the percentage of total exclusions due to agriculture alone ranges from 11.6 per cent in New York 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

¹ 2,213,250 employees.

² 1,965,600 employees.

³ 283,279 employees.

⁴ 1,773,998 employees.

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 constitute 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. The following table gives the estimates furnished by the States themselves:

NUMBER OF EMPLOYEES WHO MAY BE BROUGHT UNDER COMPENSATION ACTS AND NUMBER ACTUALLY UNDER THE ACTS IN THE 28 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 employers rejecting the act, and number of employees actually under acts through employers' election as estimated by the several States.
Alaska.....	10,481	
Colorado.....	137,157	
Connecticut.....	322,211	7 employers rejected act (1915).
Delaware.....	37,447	
Indiana.....	502,729	
Iowa.....	266,936	Over 25 per cent of employees, estimated at 30,000, subject to act not insured (1916). ¹
Kansas.....	108,388	
Kentucky.....	230,135	
Louisiana.....	140,239	
Maine.....	150,305	152,000 (1917).
Massachusetts.....	1,109,134	650,000 (1915). ²
Michigan.....	597,585	505,025 (1915).
Minnesota.....	379,349	
Montana.....	56,826	48,502 (1916). ³
Nebraska.....	146,034	37 employers rejected act (1915).
Nevada.....	24,746	11,306 (1916).
New Hampshire.....	79,680	19,000 (1916).
New Jersey.....	861,963	
New Mexico.....	20,073	
Oregon.....	96,910	80-85 per cent (1915). ⁴
Pennsylvania.....	2,149,867	
Porto Rico.....	61,207	
Rhode Island.....	173,915	154,538 (1915).
South Dakota.....	53,997	
Texas.....	306,777	206,000 (1916).
Vermont.....	50,942	55,000 (1916). Only one employer has rejected the act.
West Virginia.....	203,139	155,062 (1914).
Wisconsin.....	405,009	Over 250,000. 551 employers with 3,000 employees rejected act (1915).

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 Board reports that 97 per cent of the employees subject to act are covered at present (1917).

⁴ 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 28 States where the elective system is provided. In 18 States¹ 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 States² he elects by filing acceptances with designated State authorities, while in 3 States³ election is made either by insuring in authorized casualty companies or by subscribing to the State fund. In the 18 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. This provision invalidated the old Kentucky act, and was also questioned in Texas, but the supreme court of that State 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 28 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. In 2 States⁴ such abrogation is absolute, irrespective of whether the employer accepts or rejects the act, but in all the other States the defenses are abrogated only if the employer rejects 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.

¹ Alaska, Colorado, Connecticut, Delaware, Indiana, Iowa, Kansas, Louisiana, Minnesota, Nebraska, New Jersey, New Mexico, Oregon, Pennsylvania, Porto Rico, South Dakota, Vermont, and Wisconsin.

² Kentucky, Maine, Michigan, Montana, Nevada, New Hampshire, and Rhode Island.

³ Massachusetts, Texas, and West Virginia.

⁴ New Jersey and Pennsylvania.

The defenses of assumed risk and fellow service are abrogated in each of the 28 elective States without restriction. The defense of contributory negligence, however, is abrogated unqualifiedly only in 15¹ of the 28 States. In 12 States² 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 State³ 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 13 States.⁴ In the other 27 States employees are permitted to sue upon certain conditions, generally some neglect on the part of the employer. The following table shows in which States and upon what conditions employees are allowed to bring actions at law :

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

Not permitted.	Permitted.	Conditions under which they are permitted.
Alaska.....		
	Arizona.....	After injury. Defense of contributory negligence alone remains.
	California.....	If employer fails to insure his risk. Defenses abrogated.
	Colorado.....	If employer, insuring in State fund, is in arrears on premiums.
	Connecticut.....	If employer fails to insure his risk.
	Delaware.....	If employer fails to insure his risk. Defenses abrogated.
Hawaii.....		
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.....		
	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.
	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.

¹ Connecticut, Delaware, Indiana, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, New Mexico, Porto Rico, Rhode Island, South Dakota, Vermont, and West Virginia.

² Alaska, Colorado, Iowa, Minnesota, Montana, Nebraska, Nevada, New Jersey, Oregon, Pennsylvania, Texas, and Wisconsin.

³ New Hampshire.

⁴ Alaska, Hawaii, Idaho, Kansas, Louisiana, Maine, Massachusetts, Minnesota, New Jersey, New Mexico, Vermont, Wisconsin, and Wyoming.

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

Not permitted.	Permitted.	Conditions under which they are permitted.
	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.
	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		
	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 States¹ permit suit if the injury was due to a willful act, willful misconduct, or gross negligence of the employer; 22² permit it in case the employer fails to insure his risk or is in default on insurance premiums; 1³ if the employer has violated the safety laws; 1⁴ if he has illegally employed minors; 1⁵ if employer charges part of insurance premiums against his employees; and 1⁶ 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 2⁷ States, 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

¹ Kentucky, Maryland, Ohio, Oregon, Porto Rico, Texas, Utah, Washington, and West Virginia.

² California, Colorado, Connecticut, Delaware, Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Montana, Nebraska, Nevada, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, and West Virginia.

³ Ohio.

⁴ Kentucky.

⁵ Texas.

⁶ Utah.

⁷ Arizona and New Hampshire.

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 25 States,¹ 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.

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 18 States,² except that in 4 of these States³ the employer and employees may enter into an agreement to maintain a hospital fund. In 16 States⁴ the employer is permitted to establish and maintain substitute insurance schemes or benefit funds, but is not allowed to reduce his liability as fixed by law. In 3 States⁵ only existing substitute insurance schemes are permitted. The laws of 3 States⁶ make no provision in this regard, except that in New Mexico employer and employees may enter into an agreement to maintain a hospital fund. If the employee makes any contribution to the fund or substitute system, he must receive additional benefits corresponding to the amount

¹ Alaska, Colorado, Connecticut, Delaware, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Mexico, Oregon, Porto Rico, Rhode Island, South Dakota, Texas, Vermont, and Wisconsin.

² Alaska, California, Colorado, Hawaii, Louisiana, Maryland, Massachusetts, Montana, Nevada, New Jersey, New York, Ohio, Oregon, Pennsylvania, Texas, Vermont, Washington, and Wyoming.

³ Colorado, Montana, Nevada, and Washington.

⁴ Arizona, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Minnesota, Oklahoma, Rhode Island, South Dakota, Utah, West Virginia, and Wisconsin.

⁵ Maine, Michigan, and Nebraska.

⁶ New Hampshire, New Mexico, and Porto Rico.

of his contribution. This, of course, does not apply in those States in which the law places a part of the burden of cost upon the employee.

BURDEN OF COST.

With but two exceptions the burden of cost for compensation is entirely on the employer. Oregon and West Virginia alone require employees to bear part of the cost, the contributions being deducted from the employees' wages. In Oregon employees are required to contribute 1 cent for each day or part of day worked. 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. In West Virginia the employees must pay 10 per cent of the insurance premiums into the State fund, while the other 90 per cent is paid by the employer. Those employers, however, who elect to carry their own risk must bear the whole burden of cost and are not permitted to collect contributions from their employees; in addition, these employers must contribute their share to the administrative expenses of the State fund. 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 and Nevada employers may require employees to pay \$1 a month for medical services; in 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 latter State has established local medical boards for the administration of the medical and hospital service.¹ 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.

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 pre-

¹ For a further discussion of the Washington medical system, see section under Medical and Surgical Aid, pp. 76, 77.

vent 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.

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 35 States having compulsory insurance laws, such security is reasonably assured, provided, of course, that the risk is actually and adequately insured. A number of laws limit insurance to authorized companies, while a provision frequently found subjects the whole matter of insurance to the provisions of the compensation laws. In most 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 the insurer individually liable for compensation. Where monopolistic State insurance funds exist, such funds furnish the basis of the employee's protection in this regard. 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. Twenty-eight States permit self-insurance.

In 13 of these 28 States² 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 States³ they must deposit security in addition to furnishing proof of financial responsibility. In four States⁴ they are also permitted to insure their risk in authorized guaranty companies.

Another form of security in most of the laws is the provision making compensation payments preferred claims against the property of

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

² Connecticut, Hawaii, Idaho, Illinois, Iowa, Michigan, New Hampshire, New Jersey, New Mexico, Pennsylvania, Rhode Island, South Dakota, and Vermont.

³ California, Colorado, Delaware, Indiana, Kentucky, Maine, Maryland, Montana, Nebraska, New York, Ohio, Oklahoma, Utah, West Virginia, and Wisconsin.

⁴ Hawaii, Idaho, Oklahoma, and Vermont.

the employer. In fact, this is practically the only security possessed by employees in the five 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.

STATE SUPERVISION OVER INSURANCE AND REGULATION OF RATES.

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 regulation of insurance rates by the State is still far from satisfactory. Eighteen¹ of the 40 compensation States make no provision as to rate regulation. The remaining 22,² including, of course, those having State insurance monopolies, require the approval of rates, either as to adequacy or reasonableness, by the industrial commissions or insurance departments.

The determination of an adequate 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 certain industries and the absence of reliable accident statistics. For the purpose of combining all available experience the insurance companies organized a bureau³ to work out a schedule of basic rates, to which is applied the law differential for each State. This basic schedule is continually modified in the light of additional experience. In order to stimulate accident prevention work and to promote justice as between employers in the same risk or industry, a system of merit rating has

¹ Alaska, Arizona, Connecticut, Delaware, Hawaii, Illinois, Indiana, Iowa, Kansas, Louisiana, Minnesota, Montana, Nebraska, New Hampshire, New Mexico, Rhode Island, South Dakota, and Vermont.

² California, Colorado, Idaho, Kentucky, Maine, Maryland, Massachusetts, Michigan, Nevada, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Porto Rico, Texas, Utah, Washington, West Virginia, Wisconsin, and Wyoming.

³ National Workmen's Compensation Service Bureau, New York City.

been devised, in which the employer receives a credit or debit upon the basic rate in accordance with the physical condition of his plant. Some States have made use of these schedules, modified according to their own particular experience, and a few of the States¹ have established independent rate-making bureaus of their own.

It is apparent from the foregoing and other discussions that the insurance provisions of the compensation laws vary widely. It will be recalled that insurance in State funds is compulsory in Nevada, Oregon, Porto Rico, Washington, and Wyoming, while in Idaho, Ohio, and West Virginia State funds are the dominant method, with a strong effort, notably in Ohio, to secure State monopoly; that State funds in competition with other systems of insurance are maintained in California, Colorado, Maryland, Michigan, Montana, New York, Pennsylvania, and Utah; and that Kentucky, Massachusetts, and Texas provide for "employees' insurance associations" of a quasi-official character.

With the development of the foregoing variety of methods, it is inevitable that comparison should be made between them, this being in fact the avowed purpose in some States. In Michigan, for example, the different methods of insurance provided for under the act were for the purpose of developing experience which would enable a choice to be made therefrom. The discussion as to the feasibility and desirability of State monopoly, or even of State competition, has been conducted with vigor. Representatives of stock companies take the view that the entrance of the State into this field of enterprise is unwarranted and undesirable. The opposite view is that workmen's compensation insurance is primarily a matter of public welfare into which the question of profits of an intermediary agent should not be allowed to enter; that the public alone is concerned, and that it alone should act to secure the necessary adjustments and determinations in the simplest form and with the least possible expense.

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, those due to the employee's intoxication, willful misconduct, or gross negligence are not compensable.

The following table shows the laws classified as to kind of injuries, i. e., what and under what condition injuries are compensable and noncompensable:

¹ California, Colorado, Delaware, Massachusetts, New Jersey, New York, Pennsylvania, and Wisconsin.

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

⁴ Deliberate or reckless indifference to safety.

⁵ Except when going to and from work.

⁶ Solely.

⁷ Without employer's knowledge.

⁸ By implication.

⁹ Included by decision of court.

¹⁰ By fellow employee for personal reasons.

¹¹ Violation of law.

¹² Court held that injuries must be caused by or incidental to employment.

¹³ While actually engaged in furtherance of employer's business.

¹⁴ For reasons not connected with the employment.

¹⁵ Also while willfully intending to commit a crime.

¹⁶ Gross negligence of employee sole cause.

¹⁷ Also injuries caused by act of God.

¹⁸ Sustained on premises of plant or in course of employment away from plant.

¹⁹ In course of or resulting from employment.

²⁰ Disobedience to rules.

²¹ Growing out of or incidental to employment.

²² Sustained as a result of employment and while at work.

²³ Culpable negligence of employee.

ACCIDENTS.

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.¹ Thirty States,² 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 more liberal in interpreting this phrase. Compensation has been granted for sunstroke,³ frostbite,⁴ neuritis from vibration of punch press,⁵ cerebral hemorrhage caused by gas poisoning, acute arsenical poisoning from inhaling fumes from a furnace,⁶ nervous shock,⁶ angina pectoris,⁷ pneumonia,⁸ typhoid,⁹ anthrax,¹⁰ arteriosclerosis,¹¹ insanity,¹¹ infection due to compulsory vaccination,¹¹ tuberculosis,¹² lead poisoning,¹¹ facial paralysis,¹¹ blindness due to inhalation of noxious gases,¹¹ injury due to poisonous gases caused by defective ventilation,¹³ and aggravation of a preexisting disease.¹⁴

INJURIES.

Ten States¹⁵ do not employ the term "accident" in describing compensable injuries, limiting themselves simply to "injuries" or

¹ Except Massachusetts.

² Alaska, Arizona, Colorado, Delaware, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Minnesota, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, Oklahoma, Oregon, Pennsylvania, Porto Rico, Rhode Island, South Dakota, Utah, Vermont, Washington, and Wisconsin.

³ California, Illinois, Iowa, Maine, Minnesota, Ohio, and Pennsylvania.

⁴ Connecticut, Massachusetts, Montana, New York, and Wisconsin.

⁵ Illinois.

⁶ California.

⁷ Massachusetts and New York.

⁸ Connecticut, Illinois, and Massachusetts.

⁹ Michigan and Wisconsin.

¹⁰ Massachusetts and New York.

¹¹ Massachusetts.

¹² Massachusetts and Wisconsin.

¹³ New York.

¹⁴ California, Connecticut, Massachusetts, and Ohio.

¹⁵ California, Connecticut, Iowa, Massachusetts, Michigan, New Hampshire, Ohio, Texas, West Virginia, and Wyoming.

“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 the States to include occupational diseases when it substituted the word “injury” for the British term “injury by accident,” but with a single exception,¹ the courts, where cases have come before them, have ruled against the inclusion of such diseases. In two² of the 10 States mentioned occupational diseases have been specifically excluded by law; in four States³ they have been excluded by the courts. In excluding occupational diseases in Michigan the court relied upon the use of the word “accident” found in the title but not in the body of the act. 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 the phraseology of the law favors more strongly the inclusion of occupational diseases. The original law included two references to accidents, but the most significant of these was changed in 1915 from accident to injury. California amended its law in 1917, specifically including occupational diseases. In Massachusetts both the board and court have ruled that occupational diseases are included within the scope of the compensation act. Hawaii also amended its law in 1917, specifically including this class of injuries. Although the Federal law makes no reference to occupational diseases the commission has ruled that such diseases are within the field of compensable injuries and have awarded compensation accordingly. Of the 41 workmen’s compensation jurisdictions, therefore, only four (California, Hawaii, Massachusetts, and the Federal Government) provide compensation for occupational diseases. In Massachusetts and the United States this inclusion has been effected through the decisions of the commissions and court, while in California and Hawaii it has been brought about through statutory enactment.⁴

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

¹ Massachusetts.

² Iowa and Wyoming.

³ Connecticut, Michigan, Ohio, and Texas. (In Connecticut, Michigan, and Texas the courts overruled the administrative commissions, which had allowed compensation for such diseases.)

⁴ For further discussion of occupational diseases, see article “Disease as a compensable injury,” by L. D. Clark, *Monthly Review of U. S. Bureau of Labor Statistics for July, 1917*, pp. 81-96.

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 four States¹ 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:²

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 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 burglar³ and where an employee was killed by an intoxicated fellow worker.⁴

As already noted, four 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,⁵ however, the court has ruled that the injury must be *caused*

¹ Ohio, Pennsylvania, Texas, and Washington.

² *McNichol v. Employers' Liability Assurance Association*, 215 Mass. 497.

³ California.

⁴ Massachusetts.

⁵ Ohio.

by, or incidental to, the employment. It has been maintained that it is unfair to hold an employer liable for an injury which did not result from the employment. On the other hand, the comprehensiveness and comparative simplicity of this single phrase would decrease litigation to an appreciable extent, since a large number of disputed cases center around the question as to whether the injury arose out 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. Four States,¹ however, have not accepted this principle and allow compensation regardless of the employee's negligence. Thirty States withhold compensation if the injury was caused by the willful intention of the employee to injure himself or another; 27 deny compensation if injury is due to intoxication; 13 if caused by willful misconduct; and 9 if employee is guilty of violation of safety laws or removal of safety appliances. For more detailed information see table on page 43. Seven States,² 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 the employer's failure to comply with the safety provisions; Colorado, if the injury is caused by the employee's willful failure to use safety devices or obey reasonable rules, or is the 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 five States³ 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;

¹ Arizona, Illinois, Montana, and Utah.

² California, Colorado, Kentucky, Nevada, New Mexico, Washington, and Wisconsin.

³ Kentucky, Massachusetts, New Mexico, Washington, and Wisconsin.

while in Massachusetts the compensation is doubled if the injury is due to the serious or willful misconduct of the employer.

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. Nine States¹ have exemptions of this character.

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 States an injury, to be compensable, must cause disability for a certain length of time, generally two weeks, and no compensation is paid during this time. This noncompensable preliminary period is known as the "waiting period." In two States² 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 two weeks, this being found in 18 States.³ One State⁴ requires more than three weeks; four⁵ require more than 10 days; 13⁶ more than one week; one⁷ requires more than six working days, compensation beginning on the eighth day after the injury; and one⁸ requires seven days after the date of injury. Qualifications of the general provisions occur in 15 States. In Arizona no compensation is paid for the first two weeks, but if disability continues for more than two weeks compensation begins from the date of injury. In Nevada there is no waiting period if disability lasts three weeks or more; in Rhode Island and Wisconsin if disability continues for more than four weeks; in Washington and Wyoming if for more than 30 days; in Louisiana and Nebraska if for six weeks or more; in New York if for more than seven weeks; in Alaska, Michigan, and South Dakota if for eight weeks or more; in Illinois if disability is total and permanent, and in Hawaii if disability is partial. In Maryland the waiting period is reduced from two weeks to one week if the disability is total and permanent.

¹ Colorado, Delaware, Iowa, Minnesota, New Mexico, Pennsylvania, Porto Rico, Texas, and Wyoming. Texas also denies compensation if the injury is caused by an act of God.

² Oregon and Porto Rico.

³ Alaska, Arizona, Colorado, Delaware, Iowa, Kentucky, Maine, Maryland, Michigan, Montana, New Hampshire, New Jersey, New York, Oklahoma, Pennsylvania, Rhode Island, South Dakota, and Vermont. (In 1917 Vermont reduced its waiting period to one week, effective July 1, 1918.)

⁴ New Mexico.

⁵ California, Massachusetts, Utah, and Wyoming in case of temporary total disability only.

⁶ Connecticut, Hawaii, Idaho, Indiana, Kansas, Louisiana, Minnesota, Nebraska, Nevada, Ohio, Texas, West Virginia, and Wisconsin.

⁷ Illinois.

⁸ Washington.

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, nine States¹ amending their laws to this effect this year. One State,² however, increased the waiting time from one and one-half days to seven days, not counting the day of injury.

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. The argument that the abolishment of the waiting period entirely will throw too heavy a burden upon the employers is hardly valid because the industry eventually will shift this burden to society as a whole.

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.

¹ California, Colorado, Connecticut, Hawaii, Indiana, Kansas, Minnesota, Nebraska, and Vermont.

² Washington.

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, have based their awards upon the worker's need rather than his loss of earning capacity.

No two of the 40 States have identical compensation provisions, and few States seem to have followed any definite theory in this respect. The necessity for a workable law, not excessively burdensome to the employer and not conducive to malingering, yet affording such reasonable benefits to the injured workman as to prevent hardships of dependents due to the loss of income of the family wage earner, has led to a wide variety of attempts to determine the proper amounts to be awarded.

The compensation benefits are classified according as they apply to death, total disability, and partial disability, and the provisions for each class usually vary; moreover, 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 a number of 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. Eleven States¹ 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 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

¹ California, Iowa, Kansas, Maryland, Massachusetts, New York, Ohio, Oklahoma, Texas, Utah, and Wisconsin.

a week for 400 weeks. Similarly the present value of a weekly payment of \$20 a week for 100 weeks exceeds that of payments of \$10 a week for 200 weeks. However, experience has shown that, on the average, greater economic benefit will result from continuing payments.

The following table shows the provisions of each State as to (1) percentage of weekly wages, (2) maximum and minimum weekly payments, and (3) maximum period of compensation:

PER CENT OF WEEKLY WAGES PAID AS COMPENSATION, MAXIMUM AND MINIMUM WEEKLY PAYMENTS AND MAXIMUM PERIOD OF COMPENSATION, BY STATES.

State.	Per cent of weekly wages.	Maximum and minimum weekly payments.	Maximum period of compensation.
Alaska.....	Temporary total disability, 50 per cent; others, fixed lump sums.	No provision.....	Temporary total disability, 6 months.
Ariz.....	50 per cent.....	No provision.....	Death, 200 weeks' earnings, payable as court may order; disability, during its continuance.
Cal.....	65 per cent.....	Maximum, \$20.83; minimum, \$4.17....	Death, 240 weeks; permanent total disability, life; temporary disability, 240 weeks.
Colo.....	50 per cent.....	Maximum, \$8; minimum, \$5, or actual wages if less than \$5.	Death, 6 years; permanent total disability, life; temporary total and partial disability, during its continuance.
Conn.....	50 per cent.....	Maximum, \$14; minimum, \$5.....	Death, 312 weeks; total disability, 520 weeks; partial disability, 312 weeks.
Del.....	Death, 15 to 60 per cent; disability, 50 per cent.	Death, weekly basic wage, maximum, \$20, minimum, \$8; disability, maximum, \$10, minimum, \$4, or actual wages if less than \$4.	Permanent total disability, life; others, 270 weeks.
Hawaii.....	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.
Idaho.....	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.	Death, 400 weeks; permanent total disability, life; temporary total disability, 400 weeks; partial disability, 150 weeks.
Ill.....	Disability, 50 to 65 per cent.	Maximum, \$12 to \$15; minimum, \$6 to \$7.50.	Death, 8 years; permanent total disability, life; temporary disability, during its continuance; permanent partial disability, 8 years.
Ind.....	Total disability and specific injuries, 55 per cent; others, 50 per cent.	Death, maximum, \$12, minimum, \$5; total disability, maximum, \$13.20, minimum, \$5.50; partial disability, basic wage, maximum, \$24, minimum, \$10.	Death and partial disability, 300 weeks; total disability, 500 weeks.
Iowa.....	50 per cent.....	Death, maximum, \$10, minimum, \$5; disability, maximum, \$15, minimum, \$6, or actual wages if less than \$6.	Death and temporary total disability, 300 weeks; permanent total disability, 400 weeks.
Kans.....	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.
Ky.....	65 per cent.....	Maximum, \$12; minimum, \$5.....	Death, 335 weeks; total disability, 8 years; partial disability, 335 weeks.
La.....	Death, 25 to 50 per cent; disability, 50 per cent.	Death and permanent total disability, maximum, \$10, minimum, \$3; temporary total and specified injuries, maximum, \$10, minimum, \$3, or actual wages if less than \$3; partial disability, maximum, \$10.	Death, 300 weeks; permanent total disability, 400 weeks; others, 300 weeks.
Me.....	50 per cent.....	Maximum, \$10; minimum, \$4.....	Death, 300 weeks; total disability, 500 weeks; partial disability, 300 weeks.

PER CENT OF WEEKLY WAGES PAID AS COMPENSATION, MAXIMUM AND MINIMUM WEEKLY PAYMENTS, AND MAXIMUM PERIOD OF COMPENSATION, BY STATES—Continued.

State.	Per cent of weekly wages.	Maximum and minimum weekly payments.	Maximum period of compensation.
Md.....	50 per cent.....	Death, no weekly maximum; total disability, maximum, \$12, minimum, \$5 or actual wages if less than \$5; permanent partial disability, maximum, \$12.	Death, 8 years; permanent total disability, life; temporary total disability, 6 years.
Mass.....	66½ per cent.....	Total disability, maximum, \$14, minimum, \$4; others, maximum, \$10, minimum, \$4.	500 weeks.
Mich.....	50 per cent.....	Maximum, \$10; minimum, \$4.....	Death, 300 weeks; total disability, 500 weeks; partial disability, 300 weeks.
Minn.....	Death, 25 to 60 per cent; disability, 60 per cent.	Death, maximum, \$11, minimum, \$6.50, or actual wages if less than \$6.50; disability, maximum, \$12, minimum, \$6.50, or actual wages if less than \$6.50.	Death, 300 weeks; permanent total disability, 550 weeks; others, 300 weeks.
Mont.....	Death, 30 to 50 per cent; disability, 50 per cent.	Maximum, \$10; minimum, \$6, or actual wages if less than \$6.	Death, 400 weeks; permanent total disability, life; others, 300 weeks.
Nebr.....	66½ per cent.....	Maximum, \$12; minimum, \$6, or actual wages if less than \$6.	Death, 350 weeks; total disability, during disability; partial disability, 300 weeks.
Nev.....	Death, 10 to 66½ per cent; disability, 50 per cent.	Death, maximum basic wage \$120 a month; disability, monthly maximum, \$40 to \$70; minimum, \$20.	Death, during life of or until remarriage of widow or dependent widower; total disability, during its continuance; partial disability, 100 months.
N. H.....	50 per cent.....	Maximum, \$10; minimum, no provision.	Death, 150 times weekly earnings; disability, 300 weeks.
N. J.....	Death, 35 to 60 per cent; disability, 50 per cent.	Maximum, \$10; minimum, \$5, or actual wages if less than \$5.	Death, 300 weeks; permanent total disability, 400 weeks; temporary total and partial disability, 300 weeks.
N. Mex.....	Death, 15 to 60 per cent; disability, 50 per cent.	Death, weekly basic wage, maximum, \$30, minimum, \$10; disability, maximum \$10, minimum, \$5, or actual wages if less than \$5.	Death, 300 weeks; total disability, 520 weeks; partial disability, no provision.
N. Y.....	15 to 66½ per cent.....	Death, basic wage, maximum, \$100 a month; disability, maximum, \$15 (in certain cases, \$20), minimum, \$5.	Death, during life of or until remarriage of widow or dependent widower; permanent total disability, life; others, during disability.
Ohio.....	66½ per cent.....	Maximum, \$12; minimum, \$5, or actual wages if less than \$5.	Death, 8 years; permanent total disability, life; temporary total disability, 6 years; partial disability, during its continuance.
Okla.....	50 per cent.....	Maximum, \$10; minimum, \$6, or actual wages if less than \$6.	Fatal accidents not covered; permanent total disability, 500 weeks; others, 300 weeks.
Oreg.....	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 of or until remarriage of widow or invalid widower; total disability, during its continuance; temporary partial disability, 2 years.
Pa.....	Death, 15 to 60 per cent; disability, 50 per cent.	Death, basic wage, maximum, \$20, minimum, \$10; disability, maximum, \$10, minimum \$5, or actual wages if less than \$5.	Death, 300 weeks; total disability, 500 weeks; partial disability, 300 weeks.
Porto Rico	75 per cent.....	Maximum, \$7; minimum, \$3.....	Death and permanent total disability, 208 weeks; temporary total disability, 104 weeks.
R. I.....	50 per cent.....	Maximum, \$10; minimum, \$4.....	Death, 300 weeks; total disability, 500 weeks; partial disability, 300 weeks.
S. Dak.....	50 per cent.....	Death, no weekly maximum; total disability, maximum, \$12, minimum, \$6; partial disability, maximum, \$12.	Death, 8 years; total disability, during its continuance; partial disability, 6 years.
Tex.....	60 per cent.....	Maximum, \$15; minimum, \$5.....	Death, 360 weeks; total disability, 401 weeks; partial disability, 300 weeks.
Utah.....	55 per cent.....	Death, maximum, \$15; permanent total disability, maximum, \$15, minimum, \$5; temporary total disability, maximum, \$15, minimum, \$7; partial disability, maximum, \$12.	Permanent total disability, life; others, 6 years.

PER CENT OF WEEKLY WAGES PAID AS COMPENSATION, MAXIMUM AND MINIMUM WEEKLY PAYMENTS, AND MAXIMUM PERIOD OF COMPENSATION, BY STATES—
Concluded.

State.	Per cent of weekly wages.	Maximum and minimum weekly payments.	Maximum period of compensation.
Vt.....	Death, 15 to 45 per cent; disability, 50 per cent.	Death, minimum basic wage, \$5; total disability, maximum, \$12.50, minimum, \$3, or actual wages if less than \$3; partial disability, maximum, \$10.	280 weeks.
Wash.....	Monthly pension; amounts not based on wages.	Monthly pension: death, \$10 to \$35; permanent total disability, \$20 to \$35; temporary total disability, \$20 to \$35, increased by 50 per cent for first 6 months, but not over 60 per cent of wages.	Death, during life of or until remarriage of widow or invalid widower; total disability, during its continuance.
W. Va.....	Death, \$10 to \$35 a month pension; disability, 50 per cent.	Permanent disability, maximum, \$8, minimum, \$4; temporary disability, maximum, \$10, minimum, \$5.	Death, during life of or until remarriage of widow or invalid widower; permanent total disability, life; temporary disability, 52 weeks; permanent partial disability, 210 weeks.
Wis.....	Disability, 65 per cent.	Maximum, \$15; minimum, \$7.50.....	Death, 320 weeks; permanent total disability, 15 years; others, 320 weeks.
Wyo.....	Amounts not based on wages.	Temporary total disability, \$18 to \$40 a month pension; fixed lump sums in other cases.	No provision.
U. S.....	Death, 10 to 66½ per cent; disability, 66½ per cent.	Death, basic wage, monthly maximum, \$100, minimum, \$50; 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 of or until remarriage of widow or widower; other dependents, 8 years; disability, during its continuance.

PER CENT OF WAGES.

In all but three States ¹ compensation is based upon wages. A number of States, however, provide for fixed lump sums for certain injuries, but apply the percentage system to all others. Alaska, for example, provides absolute amounts in case of death and permanent disability, and 50 per cent of wages for injuries causing temporary disability. In most of the States the prescribed percentage remains uniform for all injuries, but in several it varies with conjugal condition and number of children. This variation is on the increase.

It will be noted that in 22 States ² compensation is 50 per cent of the employee's wages, in three States ³ 55 per cent, in four States ⁴ 60 per cent, in three States ⁵ 65 per cent, in four States ⁶ 66½ per cent, and in Porto Rico 75 per cent. In the three remaining States ¹ different methods are provided. Oregon and Washington provide for

¹ Oregon, Washington, and Wyoming.

² Alaska, Arizona, Colorado, Connecticut, Delaware, Illinois (increased up to 65 per cent in certain cases), Iowa, Louisiana, Maine, Maryland, Michigan, Montana, Nevada, New Jersey, New Hampshire, New Mexico, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Vermont, and West Virginia.

³ Idaho, Indiana (total disability and specific injuries only; others 50 per cent), and Utah.

⁴ Hawaii (total disability only; partial, 50 per cent; death, 25 to 60 per cent), Kansas (50 per cent specified injuries), Minnesota, and Texas.

⁵ California, Kentucky, and Wisconsin.

⁶ Massachusetts, Nebraska, New York, and Ohio.

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, on the wage scale. Five States¹ have no maximum or minimum limits; all these are far Western States, where wages are presumably relatively high. Seven States² have a maximum of \$15 or over, two States³ have a maximum of \$14, three States⁴ have a maximum of over \$12 and under \$14, nine States⁵ have a maximum of \$12, twelve⁶ of \$10, one⁷ has a maximum of \$8, and one⁸ of \$7.

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 considerably. Two States⁹ provide for fixed absolute amounts without reference to wages or length of time. One State¹⁰ provides for a fixed sum of \$1,500, plus 75 per cent of wages for 208 weeks. Five States¹¹ provide for annual earnings for three or four years. The large majority of States, however, apply a wage percentage for specified periods. Of these one¹² pays compensation for 260 weeks; one¹³ for 270 weeks; ten¹⁴ pay for 300 weeks; four,¹⁵ 312 weeks; one¹⁶ pays for 335 weeks; one,¹⁷ 350 weeks; one,¹⁸ 360 weeks; three¹⁹ pay for 400 weeks; three,²⁰ 416

¹ Alaska, Arizona, Oregon, Washington, and Wyoming.

² California, \$20.83; Hawaii, \$18; Iowa (disability only), Kansas, New York, Texas, and Wisconsin, \$15.

³ Connecticut and Massachusetts (total disability only; others \$10).

⁴ Nevada, \$11.54 to \$16.15; Indiana, \$13.20; Vermont, \$12.50.

⁵ Idaho, Illinois (increased to \$15 in certain cases), Kentucky, Maryland, Minnesota (disability only), Nebraska, Ohio, South Dakota, and Utah (death and permanent total disability \$15).

⁶ Delaware, Louisiana, Maine, Michigan, Montana, New Hampshire, New Mexico, New Jersey, Oklahoma, Pennsylvania, Rhode Island, and West Virginia.

⁷ Colorado.

⁸ Porto Rico.

⁹ Alaska and Wyoming.

¹⁰ Porto Rico.

¹¹ California, Kansas, and New Hampshire, three years; Illinois and Wisconsin, four years.

¹² Vermont.

¹³ Delaware.

¹⁴ Indiana, Iowa, Louisiana, Maine, Michigan, Minnesota, New Jersey, New Mexico, Pennsylvania, and Rhode Island.

¹⁵ Colorado, Connecticut, Hawaii, and Utah.

¹⁶ Kentucky.

¹⁷ Nebraska.

¹⁸ Texas.

¹⁹ Arizona, Idaho, and Montana.

²⁰ Maryland, Ohio, and South Dakota.

weeks, and one¹ pays for 500 weeks. Five States² provide for benefits until the death or remarriage of widow or dependent or invalid widower. The Oklahoma law does not cover fatal accidents.

While most of the States provide for a uniform rate in death cases, in 18³ States the compensation varies with conjugal conditions and number of children, the percentage ranging from 10 to 66 $\frac{2}{3}$. 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 provide that the benefits shall not cease if, at the ages named, the recipient is mentally or physically incapacitated for earning a living.

The remarriage of a widow is made to terminate benefits in a number of cases, though in a few instances a lump sum is payable on such remarriage, either a fixed amount or representing a fixed number of months of benefit payments. If the beneficiary is a widower no provision is made for a similar allowance in case of his remarriage. In most cases the dependency of the widow is presumed, although in several States proof of dependency must be shown.

In addition to the foregoing compensation benefits most of the States provide also for burial expenses, the maximum allowances ranging from \$40 to \$200. Twenty-six States⁴ provide for such expenses in case the deceased leaves dependents, and all the States except two⁵ 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 four.⁶ In Idaho \$1,000 additional must be paid into the industrial administration fund; in Kentucky \$100 additional must be paid to the personal representative of the employee; in New York \$100 additional is required for the creation of a special fund, from which are to be paid benefits to employees who sustain successive major injuries; and in Utah \$750 additional must be paid into the State insurance fund if the employer is not insured in the fund. 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.

¹ Massachusetts.

² Nevada, New York, Oregon, Washington, and West Virginia.

³ Alaska, Delaware, Hawaii, Idaho, Illinois, Louisiana, Minnesota, Montana, Nevada, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Vermont, Washington, West Virginia, and Wyoming.

⁴ Connecticut, Delaware, Hawaii, Idaho, Indiana, Iowa, Kentucky, Louisiana, Maryland, Minnesota, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, Ohio, Oregon, Pennsylvania, Porto Rico, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming.

⁵ Porto Rico and Oklahoma, whose law does not cover fatal accidents.

⁶ Idaho, Kentucky, New York, and Utah.

TOTAL DISABILITY.

A few 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 allow in case of permanent total disability a larger amount of compensation than in case of fatal accident. Seventeen States¹ provide that for permanent total disability compensation payments shall continue for the full period of the injured workman's life, while in cases of death only five States² make provision for payments during the life of the beneficiary. A few also allow a higher percentage than for death. For the most part, however, payments are limited to 400 or 500 weeks, and are at the same rate as for death.

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 the 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 States³ provide by law for such schedules of specific injuries, and in two of these excepted States⁴ the administrative commission has worked out a schedule for partial disability.

¹ Arizona, California, Colorado, Delaware, Idaho, Illinois, Maryland, Montana, Nebraska, Nevada, New York, Ohio, Oregon, South Dakota, Utah, Washington, and West Virginia.

² Nevada, New York, Oregon, Washington, and West Virginia.

³ Arizona, California, New Hampshire, Porto Rico, and West Virginia.

⁴ California and West Virginia.

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 total disability during the healing period and for partial disability if the injury results in loss of earning capacity? Some of the laws are silent upon the subject, but most of the States, either by law or administrative ruling, have made provision therefor. In 25 States¹ compensation according to the schedule of specific injuries is *in lieu of all other benefits* except medical service; in seven² States such compensation is *in addition to benefits for temporary total disability only* during the healing period; in two States³ it is *in addition to all other benefits*. One State⁴ provides for continuing partial disability payments in addition to those provided by the schedule.⁵

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 hand, 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.

COMPENSATION FOR DISFIGUREMENT.

Frequently injuries cause disfigurement which may not affect the injured employee's earning capacity but may decrease his opportuni-

¹ Alaska, Colorado, Connecticut, Delaware, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Montana, Nebraska, New Mexico, New York, Oklahoma, Oregon, Pennsylvania, Texas, Utah, Washington, and Wisconsin.

² Illinois, Nevada, New Jersey, Ohio, South Dakota, Vermont, and Wyoming.

³ Massachusetts and Rhode Island.

⁴ Maine.

⁵ For a discussion of the State laws relating to compensation for second or successive disabling injuries, see article on "The problem of the handicapped man in industry" in the *Monthly Review of the Bureau of Labor Statistics* for March, 1918, pp. 87 to 92.

ties to obtain employment. Should compensation be awarded for such injuries? Seventeen States¹ make specific statutory provisions for such contingencies. Most of these States limit compensation to disfigurement of the head or face, while five States² specify that the injury must result in diminished ability to obtain employment. In addition to these States the courts in three others³ 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.

COMPARISON OF SCHEDULES.

As already noted, the schedules of periods of compensation 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 most cases compensation is to continue for a fixed number of weeks, though in a few instances the term is measured by 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. Several of the laws provide for the loss of one phalanx of a finger or toe by allowing one-half the compensation that is fixed for the whole member, and the term of compensation has been computed in these cases, which accounts for the appearance of a number of fractions in the tables which are not evident on the face of the schedules as enacted by law.

The following table 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. 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.

¹ Alaska, California, Colorado, Hawaii, Idaho, Illinois, Indiana, Kentucky, Louisiana, Nebraska, Nevada, New Mexico, New York, South Dakota, Texas, Vermont, and Wisconsin.

² Hawaii, Idaho, Kentucky, Texas, and Vermont.

³ Iowa, Michigan, and Minnesota.

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

State.	Total disability.	Loss of—														
		Arm.	Hand.	Thumb.	Index finger.	Middle finger.	Ring finger.	Little finger.	Leg.	Foot.	Great toe.	Other toe.	Sight of eye.	Hearing, 1 ear.	Hearing, both ears.	
Committee ¹	1,000	600-750	500	100	50	50	50	50	500-750	400	50	0	300	100	500	
Colo. ²	(³)	208	104	35	18	13	7	9	139	104	18	4	104	35	139	
Conn. ²	520	208	156	38	38	30	25	20	182	130	38	13	104	52	151	
Del. ²	4270	194	158	-----		-----		-----		194	135	-----		113	-----	
Hawaii ²	312	312	244	60	46	30	25	15	288	205	38	16	128	60	312	
Idaho ²	4400	200	150	30	20	15	12	9	150	125	15	6	100	-----		
Ill. ⁵	4416	200	150	60	35	30	20	15	175	125	30	10	100	-----		
Ind. ²	500	200	150	60	30	30	30	30	175	125	30	30	100	-----		
Iowa ²	400	200	150	40	30	25	20	15	175	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	20	175	125	20	10	100	-----		
Me. ⁶	500	150	125	50	30	25	18	15	150	125	25	10	100	-----		
Md. ²	(⁷)	200	150	50	30	25	20	15	175	150	25	10	100	-----		
Mass. ⁸	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	-----		
Mont. ²	4400	200	150	30	20	15	12	9	180	125	15	6	100	-----		
Nebr. ²	4300	200	150	60	35	30	20	15	175	125	30	10	100	-----		
Nev. ⁹	(⁴)	217	173	65	39	30	22	17	195	152	30	11	108	87	260	
N. J. ⁵	400	200	150	60	35	30	20	15	175	125	30	10	100	-----		
N. Mex. ²	520	150	110	30	20	15	10	9	120	100	15	6	100	35	135	
N. Y. ²	(³)	312	244	60	46	30	25	15	288	208	38	16	128	-----		
Ohio ⁵	(³)	200	150	60	35	30	20	15	175	125	30	10	100	-----		
Okla. ²	500	250	200	60	35	30	20	15	175	150	30	10	100	-----		
Oreg. ⁹	(³)	416	329	104	69	39	35	26	381	277	43	17	173	208	416	
Pa. ²	500	215	175	-----		-----		-----		215	150	-----		100	-----	
R. I. ⁸	500	50	50	12	12	12	12	12	50	50	12	12	50	-----		
S. Dak. ²	(¹⁰)	200	150	40	30	25	20	15	150	125	30	10	100	-----		
Tex. ²	401	200	150	60	45	30	21	15	200	125	30	10	100	-----		
Utah ²	4312	200	150	30	20	15	12	9	150	125	15	6	100	-----		
Vt. ⁵	260	170	140	40	25	20	15	10	170	120	20	8	100	43	170	
Wis. ²	(¹¹)	320	240	70	32	20	12	14	220	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 or in lieu of all other payments.

³ Payments during life.

⁴ Thereafter a pension for life. (In Delaware total compensation not to exceed \$4,000.)

⁵ Payments under this schedule are in addition to payments for temporary total disability during the healing period.

⁶ Payments cover total disability; partial disability may be compensated at end of periods given for not over 300 weeks in all.

⁷ During its continuance, total not to exceed \$5,000.

⁸ Payments under this schedule are in addition to all other payments.

⁹ Payments under this schedule are to be reduced by any time for which payments on account of temporary total disability have been made.

¹⁰ During its continuance, total not to exceed \$3,000.

¹¹ 9 to 15 years, depending upon age of employee at time of injury.

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 the benefits provided are in lieu of all other payments and are therefore comparable. In Massachusetts and Rhode Island, however, these benefits are in addi-

tion 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. Several other States also pay additional compensation during the healing period.

The laws of seven 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 West Virginia law² 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 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. The following table 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 included, however.

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 the expiration of a period during which, in many instances, benefits are derived from other funds. A general idea of the comparative standards can, nevertheless, be obtained by considering the tables giving the American and European scales.

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

² For the West Virginia disability schedule, see p. 62.

The computed table, based on the American laws, is as follows:

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

Nature of injury.	Com- mit- tee. ¹	Conn.	Ha- vail.	Ind.	Iowa.	Kans.	Ky.	La.	Me.
Loss of—	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>
Arm	60-75	40	100	40	50	50	48	50	30
Hand	50	30	78	30	38	36	36	38	25
Thumb	10	7	19	12	10	14	14	13	10
One phalanx		4	10	3	5	7	7		5
Index finger	5	7	15	6	8	9	11	8	6
One phalanx		3	7	3	4	4	4		3
Middle finger	5	6	10	6	6	7	7	5	5
One phalanx		2	5	3	3	4	2		3
Ring finger	5	5	8	6	5	5	5	5	4
One phalanx		2	4	3	3	3	2		2
Little finger	5	4	6	3	4	4	4	5	2
One phalanx		1	2	3	2	2	1		3
Leg	50-75	35	92	35	44	48	48	44	30
Foot	40	25	66	25	31	30	30	31	25
Great toe	5	7	12	6	6	7	7	5	3
One phalanx			6		3	4	4		3
Other toe		3	5	6	4	2	2	3	2
One phalanx			3		2	1	1	1	1
Sight of one eye	30	20	41	20	25	26	24	25	20
Hearing, one ear	10	10	19			6			
Hearing, both ears	50	30	100	15		24			

Nature of injury.	Com- mit- tee. ¹	Mich.	Minn.	N. J.	N. Mex.	Okla.	Pa.	Tex.	Vt.
Loss of—									
Arm	60-75	40	36	50	29	50	43	50	65
Hand	50	30	27	38	21	40	35	37	54
Thumb	10	12	11	15	6	12		15	15
One phalanx		6	5	8	4	6		7	8
Index finger	5	7	6	9	4	7		11	10
One phalanx		4	3	4	2	4		4	5
Middle finger	5	6	5	8	3	6		7	8
One phalanx		3	3	4	1	3		2	4
Ring finger	5	4	4	5	2	4		5	6
One phalanx		2	2	3	1	2		2	3
Little finger	5	3	3	4	2	3		4	4
One phalanx		2	1	2	1	2		1	2
Leg	50-75	35	32	44	23	35	43	50	65
Foot	40	25	23	31	19	30	30	31	46
Great toe	5	6	5	8	3	6		7	8
One phalanx		3	3	4	2	3		4	4
Other toe		2	2	3	1	2		2	3
One phalanx		1	1	1	1	1		1	1
Sight of one eye	30	20	18	25	19	20	25	25	35
Hearing, one ear	10				7				16
Hearing, both ears	50		28		26			37	65

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.

As already stated, the compensation commissioner of West Virginia has established on his own motion a table covering permanent disabilities of various parts of the body. This is more flexible than the statutory schedules, in that it establishes minimum and maximum rates, between which awards may be made on the basis of the merits of the case as seen by the administrative official, all awards being made by the central office. The law of this State authorizes consideration of age and occupation in the determination of awards, and it is probable that these factors are involved in reaching any conclusion, the maximum and minimum rates being the bounds for

listed injuries. In other cases the award is made on a comparative basis, measuring unlisted injuries "with the nearest average fixed loss that is listed in the table." West Virginia, therefore, approximates European experience in this respect.

The table referred to follows, with an explanatory note which is in effect a part of the same. A table showing ratings for injuries to the eyes, prepared by the same commissioner, is reproduced on a later page in connection with similar tables.

PARTIAL LIST OF PERMANENT DISABILITIES EXPRESSED IN PERCENTAGE OF TOTAL DISABILITY, AS USED BY WEST VIRGINIA COMPENSATION COMMISSIONER.

[The loss of an arm at or above elbow is considered a 50 per cent to 65 per cent disability, as set out in paragraph (g) of section 31 of the amended compensation act of 1915, three weeks' time being allowed for each per centum disability; 50 per cent of average weekly earnings paid (maximum \$8, minimum \$4 per week). Disability of 71 per cent to 85 per cent—40 per cent of average weekly earnings for remainder of life; disability of from 86 per cent to 100 per cent—50 per cent of average weekly earnings for remainder of life.]

Loss of—	Per cent.		
	Minimum.	Maximum.	Average.
1. Arm.....	50	65	57
2. Forearm.....	45	60	52½
3. Hand.....	45	60	52½
4. Thumb.....	15	25	20
5. Thumb including metacarpal bone.....	15	25	20
6. Thumb, one phalanx only.....	10	13	11½
7. Index finger.....	10	15	12½
8. Index finger, two phalanges.....	8	10	9
9. Middle finger.....	5	10	7½
10. Middle finger, two phalanges.....	3	5	4
11. Ring finger.....	5	10	7½
12. Ring finger, two phalanges.....	3	5	4
13. Little finger.....	5	8	6½
14. Little finger, two phalanges.....	3	5	4
15. Thumb and index finger, one hand.....	25	40	32½
16. Index and middle fingers, one hand.....	15	25	20
17. Middle and ring fingers, one hand.....	10	20	15
18. Ring and little fingers, one hand.....	10	18	14
19. Thumb, index and middle fingers, one hand.....	30	45	37½
20. Index, middle, and ring fingers, one hand.....	20	35	27½
21. Middle, ring, and little fingers, one hand.....	15	28	21½
22. Four fingers, one hand.....	25	40	32½
23. Thigh.....	40	50	45
24. Thigh, disarticulation at hip joint.....	50	60	55
25. Leg.....	30	40	35
26. Foot.....	30	40	35
27. Fore part of foot only.....	25	35	30
28. All toes.....	15	25	20
29. Great toe.....	5	10	7½
30. Other toes.....	3	5	4

The committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions has recently formulated a schedule of severity ratings of injuries computed on the basis of time lost.¹ Death and permanent total disability, each rated at 1,000 weeks, are used as the base and the partial disabilities computed therefrom. The purpose of the schedule of severity ratings 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 in-

¹ For a complete report of this committee see pp. 123 to 143 of the October, 1917, Monthly Review.

tention. 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 used as 100 per cent.

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 disability.	Loss of—							
		Arm.	Hand.	Thumb.	Index finger.	Leg.	Foot.	Great toe.	Sight of one eye.
Committee.....	100	100	100	100	100	100	100	100	100
Colorado.....	100	28	21	35	36	28	26	36	35
Connecticut.....	52	28	31	38	76	36	33	76	35
Delaware.....	26	32	39	36	39	36	36	36	38
Hawaii.....	31	42	49	60	92	58	51	76	43
Idaho.....	100	27	30	30	30	30	31	30	33
Illinois.....	100	27	30	60	70	35	31	60	33
Indiana.....	50	27	30	60	60	35	31	60	33
Iowa.....	40	27	30	40	60	35	31	50	33
Kansas.....	42	28	30	60	74	40	31	60	37
Kentucky.....	42	27	30	60	90	40	31	60	33
Louisiana.....	40	27	30	50	60	35	31	40	33
Maine.....	50	20	25	50	60	30	31	50	33
Maryland.....	27	30	50	60	35	38	50	33	
Massachusetts.....	50	7	10	12	24	10	13	24	17
Michigan.....	50	27	30	60	70	35	31	60	33
Minnesota.....	55	27	30	60	70	35	31	60	33
Montana.....	100	27	30	30	20	36	31	30	33
Nebraska.....	100	27	30	60	70	35	31	60	33
Nevada.....	100	29	35	65	78	39	38	60	36
New Jersey.....	40	27	30	60	70	35	31	60	33
New Mexico.....	52	20	22	30	40	24	25	30	33
New York.....	100	42	49	60	92	58	51	76	43
Ohio.....	100	27	30	60	70	35	31	60	33
Oklahoma.....	50	33	40	60	70	35	38	60	33
Oregon.....	100	55	66	104	138	76	69	86	58
Pennsylvania.....	50	29	35	10	24	43	38	33	
Rhode Island.....	50	7	10	12	24	10	13	24	17
South Dakota.....	27	30	40	60	30	31	60	33	
Texas.....	40	27	30	60	90	40	31	60	33
Utah.....	100	27	30	30	20	30	31	30	33
Vermont.....	26	23	28	40	50	34	30	40	33
Wisconsin.....	43	48	70	64	44	45	50	47	
Average.....	65	28	32	50	63	36	33	53	34

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, in the library of the Bureau of Labor Statistics and the Library

of Congress books 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 a table presented below, 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 first column, headed "Imbert, etc.," is derived; the four succeeding columns present the basic data contained in the work above mentioned.

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 66. 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 "Köner-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 Köner-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 the table which follows:

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

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

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

Nature of injury.	Miller.		Bavarian wood-workers association.	Russian standard, 1904.	Könen-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	75	66½	50-66½	60-66½
Disarticulation at shoulder.....				75		18-27	25-30
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.....				25			
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 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. On account of their interest in the general field, some of these rates are given in the following table, though not strictly comparable with any American material:

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	50	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	

Injuries to the eye have received comparatively little attention in American laws, degrees of visual capacity being noted in perhaps but one statute. The subject has been given detailed attention in European practice, the medical council of the 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:

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 gives 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 Détermination 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 eight 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.

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

Visual capacity.	1 to $\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{8}$	$\frac{1}{9}$	0
1 to $\frac{3}{4}$	0	0	5	10	10	15	15	20	20	25
$\frac{3}{4}$	0	5	10	10	15	20	25	25	30	35
$\frac{2}{3}$	5	10	25	25	30	30	35	40	45	55
$\frac{1}{2}$	10	10	25	40	40	45	50	55	60	65
$\frac{1}{3}$	10	15	30	40	55	60	65	70	75	80
$\frac{1}{4}$	15	20	30	45	60	70	75	80	85	90
$\frac{1}{5}$	15	25	35	50	65	75	85	90	95	105
$\frac{1}{6}$	20	25	40	55	70	80	90	95	100	115
$\frac{1}{7}$	20	30	45	60	75	85	95	100	110	125
0.....	25	35	55	65	80	90	105	115	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 to those already reproduced.

PERMANENT DIABILITIES 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	24	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	55
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

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

Three weeks' compensation is allowed for each per cent of disability, amounting to 50 per cent of the average weekly earnings (maximum, \$8; minimum, \$4) for the time. For a disability of from 71 to 85 per cent, 40 per cent of the average weekly earnings is paid for the remainder of life; and for a disability of from 86 to 100 per cent, 50 per cent of the average weekly earnings.

It is evident that the disability schedules on pages 65 to 68 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 authority¹ 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 insurance institutes having charge of the work in Austria, while in Germany there is a central body of last resort, the Imperial Insurance Office, by 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 of 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 and not having experience in the great number of individual cases of which the medical and official members are actually or presumably cognizant.

From the article by Ferdinand Schnitzler above referred to the following is quoted:²

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 sur-

¹ 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.

² Monthly Review of the U. S. Bureau of Labor Statistics, December, 1916, pp. 33, 39.

prised 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 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 of 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 63.

MEDICAL AND SURGICAL AID.

The functional and professional reeducation of industrial cripples and their readaptation to vocational pursuits has, after six years of workmen's compensation experience, hardly been thought of, much less provided for, by our State legislatures or the administrative authorities responsible for the enforcement of the compensation laws. This rehabilitation and adaptation requires, successively, necessary medical and surgical attention to relieve physical disability as far as possible, proper fitting and instruction in the use of artificial appliances to overcome bodily disadvantage, reeducation to hasten and encourage social and economic rehabilitation, compensation during the period of treatment and reeducation, and Government aid to insure employment consonant with disability. Although adequate medical treatment is absolutely essential to complete rehabilitation, only four State compensation laws¹ 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 indicates not merely the opposition of the employers but 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 an end in 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 was simply a means of accomplishing this result. Compensation commissioners, however, have generally been satisfied with the performance of their duties if the benefits provided in the acts have been paid in accordance with the statutory requirements.

¹ California (1917), Connecticut (1915), Idaho (1917), and Porto Rico (1917).

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 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 very 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 of work. Usually it has been the practice to let these unfortunates shift for themselves as best they can. These wrecks thus set adrift speedily gravitate to the almshouses, or, in exceptional cases, employers take them on as flagmen, watchmen, and the like, and sometimes exhibit them with no little pride and self-gratulation as evidence of the generous treatment accorded their men. In some cases compensation commissions have held that injured workmen were entitled to compensation benefits until suitable employment had been provided for them. This has led some 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 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 four 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:

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

None.	2 weeks.	3 weeks.	4 weeks.	30 days.	8 weeks.	60 days.	90 days.	Unlimited as to time.
Alaska	Del. (\$25)	Mich.....	Iowa (\$100)	Colo. (\$100)	Ill. (\$200)	N. Y.	Ky. (\$100)	Cal.
Ariz...	Me. (\$30)	Nebr. (\$200) ¹	R. I.....	Ind.....	Kans. ² (\$150)	.....	Minn. (\$100)	Conn.
N. H.	Mass. ¹	N. Mex. (\$50)	S. Dak. (\$100)	.....	.....	.....	Nev. ¹	H a w a i i
Wyo...	Mont. (\$50)	.....	.....	.....	.....	.....	Wis. ¹	(\$150).
.....	N. J. (\$50)	.....	.....	.....	.....	.....	.....	Idaho.
.....	Okla. ³	.....	.....	.....	.....	.....	.....	La. (\$150).
.....	Pa. (\$25)	.....	.....	.....	.....	.....	.....	Md. (\$150).
.....	Tex. ⁴	.....	.....	.....	.....	.....	.....	Ohio (\$200). ⁵
.....	Vt. (\$100)	.....	.....	.....	.....	.....	.....	Oreg. (\$250).
.....	.....	.....	.....	.....	.....	.....	.....	P. R. ⁶
.....	.....	.....	.....	.....	.....	.....	.....	Utah (\$200) ⁷
.....	.....	.....	.....	.....	.....	.....	.....	Wash. ⁸
.....	.....	.....	.....	.....	.....	.....	.....	W. Va. (\$150)

¹ Longer period under certain conditions.
² 50 days.
³ 15 days.
⁴ 2 weeks additional in hospital cases.
⁵ Except in unusual cases.
⁶ Necessary medical attendance as prescribed by commission.
⁷ Such medical service as employer or insurer may deem proper.
⁸ Medical service furnished during disability. Employees must contribute one-half.

It will be noted that 4 States¹ do not provide for medical service in the real acceptance of the term. Three of these 4 States² provide that in fatal cases involving no dependents the medical expenses of last sickness shall be paid by the employer.

The following table gives in more detail the amount of medical aid and 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 \$25 in Delaware and Pennsylvania to \$250 in Oregon. Others allow additional medical service in certain cases, at the discretion of the commission or court.

AMOUNT OF AND CONDITIONS FOR MEDICAL SERVICE UNDER COMPENSATION LAWS.

State.	Medical and surgical aid.		Employer's liability limited to prevailing charges.	Employee may choose physician if employer neglects or refuses.
	Period.	Maximum amount and other qualifications.		
Alaska.....	.....	Only in death cases involving no dependents; maximum \$150 for medical expenses between injury and death.	.....	.....
Ariz.....	.....	Reasonable medical and burial expenses in death cases involving no dependents.	.....	.....
Cal.....	Unlimited.....	Such service as reasonably required	.....	Yes. ¹
Colo.....	30 days.....	Maximum \$100 unless there is a hospital fund. Special operating fee of \$50 in case of hernia.	.....	.....
Conn.....	Unlimited.....	Such service as deemed reasonable by attending physician. Special provision for seamen on United States vessels.	Yes.....	Yes.
Del.....	2 weeks.....	If requested by employee or ordered by board; maximum \$25.	.....	.....
Hawaii.....	.....	Maximum \$150.	Yes.....	Yes.

¹ Alaska, Arizona, New Hampshire, and Wyoming.
² Alaska, Arizona, and New Hampshire.
³ Employer must change physicians if requested by employee or ordered by commission.

AMOUNT OF AND CONDITIONS FOR MEDICAL SERVICE UNDER COMPENSATION LAWS—Concluded.

State.	Medical and surgical aid.		Employer's liability limited to pre- vailing charges.	Employee may choose physician if employer neglects or refuses.
	Period.	Maximum amount and other qualifications.		
Idaho.....	Unlimited.....	Reasonable service for reasonable period. Hospital benefit fund may be permitted in lieu of statutory provision.	Yes.....	Yes.
Ill.....	8 weeks.....	Maximum \$200.	.....	Yes.
Ind.....	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.	Yes.....	Yes.
Iowa.....	4 weeks.....	Maximum \$100. If requested by employee, court, or commissioner.	.....	.....
Kans.....	50 days.....	If demanded by employee; maximum, \$150.	.....	Yes.
Ky.....	90 days.....	Unless board fixes other period. Maximum \$100, or \$200 for hernia operations.	Yes.....	Yes. ¹
La.....	.....	Reasonable services unless employee refuses to accept; maximum \$150.	Yes.....	.....
Me.....	2 weeks.....	Maximum \$30, except for major surgical operations.	.....	.....
Md.....	.....	Such service as may be required by commission; maximum, \$150.	Yes.....	Yes.
Mass.....	2 weeks.....	Longer in unusual cases at discretion of board.	.....	Yes. ²
Mich.....	3 weeks.....	.....	.....	.....
Minn.....	90 days.....	Maximum \$100; court may allow additional treatment, not over \$200, if need is shown within 100 days of injury.	Yes.....	Yes.
Mont.....	2 weeks.....	Unless employee refuses; maximum \$50 unless there is a hospital fund; special operating fee of \$50 in case of hernia.	.....	.....
Nebr.....	21 days.....	Unless employee refuses; maximum \$200; no time limit in case of major operations; employer not liable for aggravation of injury if employee refuses to accept.	.....	.....
Nev.....	90 days.....	Time may be extended to 1 year by commission; transportation furnished.	Yes.....	Yes. ¹
N. H.....	.....	Medical service and burial expenses in death cases involving no dependents; maximum \$100.	.....	.....
N. J.....	2 weeks.....	Unless employee refuses such treatment; maximum \$50.	.....	.....
N. Mex.....	3 weeks.....	Maximum \$50, unless there is a hospital fund; special operating fee of \$50 in case of hernia.	.....	.....
N. Y.....	60 days.....	Such service as may be required or requested by employee.	Yes.....	Yes.
Ohio.....	.....	Such service as commission deems proper; maximum \$200, except in unusual cases.	.....	.....
Okla.....	15 days.....	Includes transportation; maximum \$250.	Yes.....	Yes.
Oreg.....	.....	.....	.....	.....
Pa.....	14 days.....	Unless employee refuses; maximum \$25, or \$75 when a major surgical operation is necessary. Employer not responsible for aggravation of injury if employee refuses.	.....	Yes.
P. R.....	Unlimited.....	Necessary medical service as prescribed by commission.	.....	.....
R. I.....	4 weeks.....	.....	.....	Yes. ²
S. Dak.....	4 weeks.....	Maximum \$100.	.....	Yes.
Tex.....	2 weeks.....	Two weeks additional in hospital cases.	Yes.....	Yes. ¹
Utah.....	.....	Such medical and hospital services as employer or insurer may deem proper; maximum \$200; hospital benefit fund permitted in lieu of statutory provision.	.....	.....
Vt.....	14 days.....	Maximum \$100.	Yes.....	.....
Wash.....	During disability.	Transportation included; employees must contribute one-half medical cost.	.....	Yes. ²
W. Va.....	.....	Maximum \$150; \$300 in special cases where disability can be reduced.	.....	.....
Wis.....	90 days.....	Longer if disability period can be reduced.	.....	Yes.
Wyo.....	None.....	.....	.....	.....
U. S.....	Unlimited.....	Commission shall furnish necessary medical service for reasonable period, unless employee refuses; transportation furnished if necessary.	.....	.....

¹ Employer must change physicians if requested by employee or ordered by commission.
² Employee may choose own physician at employer's expense.

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. Twenty-seven States include medicines within this provision; 15¹ include surgical appliances and supplies; 9² include nursing; while Nevada, Oregon, Washington, and the Federal Government include transportation. In Utah, oddly enough, such medical service shall be furnished as the *employer* or *insurer* deems proper. 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 artificial limbs and other surgical appliances in order to restore the earning capacity of the employees and thereby reduce their compensation costs.

A notable experiment in the field of medical administration has just been adopted by the State of Washington. This State, which had heretofore not required employers to furnish any medical service whatever, provided this year for practically unlimited medical and hospital service, one-half of the cost to be borne by the employees. The act provides for a State medical aid board composed of the medical adviser of the industrial insurance department 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 every working day of each employee, and contributions to the State medical fund are required once a month. Deductions from the employee's wages for one-half of the contributions are authorized by the 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. In case a hospital benefit fund is maintained by an industrial establishment the employer and employees must each bear one-half of the cost, and in addition the employer must contribute 10 per cent of his share to the State medical fund, of which the employees are again required to pay one-half.

The act also provides for the establishment of local medical aid boards for the actual administration of the medical service.

¹ California, Colorado, Idaho, Indiana, Iowa, Kansas, Kentucky, Maryland, Minnesota, Nevada, New York, Oklahoma, Pennsylvania, Vermont, and Wisconsin.

² California, Idaho, Kansas, Kentucky, Maryland, Nevada, New York, Ohio, and Utah.

Each of these boards, composed of one representative each of the employer 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.

SELECTION OF PHYSICIANS.

Probably no one phase of workman's compensation has created more administrative difficulties or caused more ill feeling than the question of free choice of physicians. 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.

Most of the compensation laws, as already noted, provide that the employer shall furnish reasonable medical and hospital services to injured employees, usually for specified periods, and in some cases limited as to maximum amounts.

Three States¹ specifically grant the injured employee the right to select his own physician at the employer's expense; while three States² specifically grant the injured employee the right to furnish his own medical service—at his own expense, however; and 16 States³ provide that, in case of the employer's neglect, inability, or refusal to furnish adequate treatment, the employee may provide it at the expense of the employer. In three States⁴ the board is authorized to order a change of physicians if it finds such action necessary, while in California the employer must change physicians if requested by the employee.

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 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

¹ Massachusetts, Rhode Island, and Washington.

² Connecticut, Idaho, and Illinois.

³ California, Connecticut, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Maryland, Minnesota, Nevada, New York, Oklahoma, Pennsylvania, Texas, and Wisconsin.

⁴ Kentucky, Nevada, and Texas.

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, the employee in some of the States is allowed to choose his own physician, but the extent of this practice depends upon the policy of the employers and insurance carriers.

Recently, however, there has developed a widespread movement for free choice of physicians, which, as already noted, has found expression in the enactment of amendments to the compensation laws in three¹ States during the present year, specifically granting the injured employee the right to choose his own physician. This movement, backed by practically the entire medical profession and a large majority of the wage earners, is undoubtedly a reaction against the practices developed under the system of allowing the selection of physicians to be made by the employer. Since each system has certain advantages and disadvantages, a discussion of the two systems may be advisable.

SELECTION BY EMPLOYER.

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 physician is beyond the control of the employer, who is, as a rule, more competent to judge the efficiency of the physician than the injured employee. 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 of these physicians not only attempt to mulct the employers by prolonging treatment, making unnecessary calls, padding their bills, and overcharging generally, but 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.

Because of these conditions many employers and insurance carriers have insisted upon their legal right to select the physicians, and the tendency to exercise this right seems to be on the increase. Most of the large manufacturing establishments, and even some of the insur-

¹ Massachusetts, Rhode Island, and Washington.

ance 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 an establishment hospital minimizes the danger of blood poisoning and results in earlier recoveries. It is also maintained that malingering can be better controlled and prevented when the employer has supervision over the medical service furnished.

SELECTION BY EMPLOYEE.

On the other hand, it may well be asked, Why this widespread reaction against the present system of selection by employers if it is as beneficial as 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, yet this is by no means the general practice. The kind of service furnished by many employers is entirely inadequate. There has been a tendency to employ contract doctors, 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 adequately 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 theory that it is cheaper for the employer to furnish unlimited medical and hospital service on the ground that it reduces compensation costs by an early restoration of earning power has

not been universally accepted by employers or insurers. Only four of the 40 States provide for unlimited medical service.

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 unduly influences 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 developed under the compensation laws. Prior to the enactment of these laws there had been no distinction in the treatment of injuries which arose out of the employment and those which arose outside of the employment. In each 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 13 States¹ 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 such 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. There was also a tendency on the part of some physicians to pad their bills and 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 commissions 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

¹ Connecticut, Hawaii, Idaho, Indiana, Kentucky, Louisiana, Maryland, Minnesota, Nevada, New York, Oklahoma, Texas, and Vermont.

to refuse to treat industrial cases unless guaranteed their regular rates. As a counter measure employers and insurance carriers are beginning 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.

As a solution of this problem it has been suggested that the employee be allowed to select the physician, but that the choice be limited to such members of the profession as are competent and experienced in the practice of industrial surgery. Qualifications for membership in such a panel may be determined by the legislature and ultimate approval given by compensation commissions, State medical associations, or such other bodies as may be deemed advisable. This is not merely an academic view, since under the present system of selection by the employer it has been the practice in some States to allow employees to choose a physician from a panel nominated by the employer or insurance carrier. It is urged that this system of having special panels would eliminate incompetent physicians from the practice of industrial surgery and at the same time retain the beneficial results obtained through free choice.

Administrative commissions find the successful solution of this medical problem a most difficult one. The laws of several States provide a medical adviser to aid and advise the commission in medical matters. Some States have appointed medical committees composed of representatives of the medical profession and insurance companies to study the whole subject and advise the administrative boards. The Massachusetts Industrial Accident Board appointed such a committee, which has apparently been of great assistance to the board. Its findings have generally been approved and adopted by the board.

A good indication of the views of the medical profession generally, the medical problems arising out of the administration of a compensation act, and the attempts at solution can perhaps be obtained from a report¹ made by the Massachusetts medical advisory committee to the physicians of the State:

A certain 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

¹ Boston Medical and Surgical Journal, Sept. 18, 1913, p. 444.

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. * * *

There is no agreement as to what the word "furnish" really means. When no service is offered, or when the injured person does not accept the service offered and calls on his family doctor, disputes over bills arise. Disputed bills go to the board, and hearings may be held, but even then the board seems to lack power to enforce its decrees in the matter of medical or hospital fees. In fact, however, the board reached, before we came into the matter at all, a sort of working agreement with the insurance men that the companies should pay reasonable charges for work actually rendered. Lately there have been two conferences between the board, the advisory committee, and the insurance men, which have helped toward a reasonable cooperation on the part of the companies.

It has been necessary, to keep peace under this agreement, to adopt an "industrial rate" as to bills, not a fixed rate, but an understanding that services paid for under this act shall be at a rate not less than the average minimum rate in the locality where such services were rendered.

It seems to us that the whole intent of the law is not charity, but rather to lift the injured workman out of the pauper class and, at least for the fortnight following the injury, to furnish him with the best care, to give him 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.

This committee believes that the law has worked out well so far—for a new law—and that, on the whole, the medical profession has lost nothing by it. In certain communities medical men previously retained by the employers to care for injured employees have received less than their due consideration (often, in fact, not a particle of consideration) from the insurance companies that have assumed the employer's liability. 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.

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 10 to 30 days, and a claim within from 6 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. The time for presenting the claim or bringing action thereon appears usually to be fixed absolutely. As a matter of practice, the commissions construe this provision very liberally; nor is the strict adherence to the technicality of the law 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 its occurrence that an injury 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. Two States¹ amended the compensation acts this year, requiring employees immediately to report all injuries to their employers.

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 30,² and the self-administrative or court type, of which there are 10.³

In the commission type, a special board, usually of three or five members,⁴ is appointed to enforce the law, including 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 compensa-

¹ Colorado and Nevada.

² California, Colorado, Connecticut, Delaware, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Montana, Nebraska, Nevada, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Porto Rico, South Dakota, Texas, Utah, Vermont, Washington, West Virginia, and Wisconsin.

³ Alaska, Arizona, Kansas, Louisiana, Minnesota, New Hampshire, New Jersey, New Mexico, Rhode Island, and Wyoming.

⁴ A single commissioner in Iowa, Nebraska, South Dakota, Vermont, and West Virginia.

tion. In some States it has the additional function of accident prevention, while in a few States¹ 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 States² have recently 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 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 New Jersey, supervisory power over the act was increased in 1916 and this State now approximates more closely the commission type of law. The workmen's compensation aid bureau of the department of labor receives and approves agreements and is authorized to attempt to settle disputed cases. The bureau, however, can not make awards, its power being limited merely to furnishing information and advice. In Rhode Island, acceptances, accident reports, and proof of financial solvency are filed with the commissioner of industrial statistics; 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

¹ Indiana, New York, Ohio, Utah, Vermont, and Wisconsin.

² Indiana, New York, Ohio, Utah, and Wisconsin. Also of similar type are California, Colorado, and Montana.

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, and with three exceptions¹ the States passing laws since 1914 provided for this method of administration. 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. In one of the self-administrative States² the secretary of the employers' liability commission, which had limited power "to observe the working of the act," informed an injured employee of his rights under the law. The secretary was told by the employer, however, that the commission was exceeding its powers and that he objected to its meddling and interference. There seems to be no question that some employers make no effort to pay compensation until their employees request it.

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,

¹ Alaska, New Mexico, and Wyoming.

² New Jersey.

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 require the minimum personal attention of the commissioners 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 voluntary agreements subject to the approval of the commission. If the terms of the agreement conform to the provisions of the law as shown by the accident report, it is approved. This work is usually done by the clerical force and requires little or no personal supervision by the commission. Of the 40 compensation States, 30 have this voluntary-agreement provision. Of the remaining 10¹ States, seven are the State monopoly insurance States in which the State is the insurer and pays compensation direct to the employee upon application, and the other three States² have State funds. In case the parties can not agree the matter may be settled in one or more of several ways. In the 10 noncommission States, disputed cases usually go to the inferior courts for adjudication, although two of these States³ provide for arbitration committees appointed either by the interested parties or by the court, one⁴ provides for reference to the attorney general, and two⁵ authorize the department of labor to attempt to settle the matter. In the 30 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. Nine States⁶ provide for arbitration committees representing the parties in interest with a member of the commission, or deputy⁷ appointed by it, acting as chairman. Two States⁸ provide for the appointment of referees to hear cases subject to review by the commission; in one State⁹ disputes in the first instance may be heard either by a referee or by a commission member,

¹ Maryland, Montana, Nevada, Ohio, Oregon, Porto Rico, Utah, Washington, West Virginia, and Wyoming.

² Maryland, Montana, and Utah.

³ Arizona and Kansas.

⁴ Arizona.

⁵ Minnesota and New Jersey.

⁶ Hawaii, Idaho, Illinois, Iowa, Maryland, Michigan, New York, Oklahoma, and South Dakota.

⁷ Idaho, Maryland, New York, and Oklahoma authorize the appointment of deputies; in the other five States a member of the commission must sit on the committee.

⁸ California and Pennsylvania.

⁹ Kentucky.

while two States¹ authorize an individual commissioner to hear such cases. The findings of fact and decisions of all such preliminary tribunals are, of course, subject to review by the full commission. It does not follow, however, that the States enumerated above are the only ones having such preliminary tribunals. The commissions in some of the States have very wide powers and may establish methods of procedure providing for such tribunals. 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 dispute 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. All but 4 States² 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,³ however, lump-sum settlements when once made are final and not subject to review or modification.

NONRESIDENT ALIEN BENEFICIARIES.

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

¹ Indiana and Massachusetts.

² Arizona, New Hampshire, Wyoming, and Nebraska (if payments continue for more than six months).

³ California, Delaware, Hawaii, Idaho, Iowa, Kansas, Maine, Massachusetts, Michigan, Nebraska, and Vermont.

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 has become of especial importance since our declaration of war against Austria-Hungary and particularly since 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, are subjects of Austria, and therefore enemy aliens. The War Trade Board, in rendering a decision on the matter, distinguished between resident and nonresident aliens. The former are not "enemies" in the technical sense and their rights to compensation are not impaired. The status of nonresident alien beneficiaries has not yet been definitely determined.

The provisions as to the status of nonresident alien beneficiaries in the 40 compensation laws can be seen from the following table:

PROVISIONS OF COMPENSATION LAWS AS TO NONRESIDENT ALIEN BENEFICIARIES.

No provision.	Excluded.	Included.	Limitations: Only enumerated dependents included.
Alaska			
Arizona		California ¹	One-third benefits, not over \$1,000.
		Colorado	
		Connecticut	One-half rates except as to residents of Canada or United States dependencies.
		Delaware	Dependent widows and children. Within one year employer may commute payments to two-thirds value.
	Hawaii	Idaho	One-half benefits; other half paid into industrial administration fund.
		Illinois ¹	
Indiana		Iowa	\$750 maximum except to residents of Canada.
		Kansas	
		Kentucky	Half benefits to widow or children under 16.
Louisiana		Maine	Half rates except to residents of Canada.
		Maryland	
		Massachusetts ¹	Dependent widows, children, and parents. After 1 year commission may commute payments to three-fourths value, maximum \$2,400.
		Michigan	
		Minnesota	Half benefits to widow or children under 16, unless treaty provides otherwise.
		Montana	
		Nebraska	Widow, children, and parents. Within one year employer may commute payments to two-thirds value.
		Nevada	60 per cent of benefits
	New Hampshire		
	New Jersey		
	New Mexico		
		New York	Wife, children, and dependent ascendants. Commission may commute payments to one-half present value.
		Ohio	

¹ Not specifically mentioned in law, but included by court or commission.

PROVISIONS OF COMPENSATION LAWS AS TO NONRESIDENT ALIEN BENEFICIARIES—Concluded.

No. provision.	Excluded.	Included.	Limitations: Only enumerated dependents included.
Oklahoma ¹		Oregon..... Pennsylvania.....	Widow, widower, children, and parents. Two-thirds benefits to widow and children.
Porto Rico.....			
Rhode Island.....			
South Dakota.....		Texas.....	
Utah.....		Vermont ² Washington..... West Virginia.....	Parents only, unless treaty provides otherwise. Widow, invalid widower, children under 16, or over if incapacitated.
		Wisconsin..... Wyoming.....	One-third benefits to widow and children under 16.

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

It will be noted that 13 States¹ make no statutory provision for nonresident alien dependents, although in four of these States (California, Illinois, Massachusetts, and Vermont) such dependents have been included by the courts or commissions; four States² exclude them from the benefits of the act; ten³ include all beneficiaries and provide for full compensation; while 17 States⁴ recognize them but establish limitations 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 establishing both limitations. 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. 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 and as a matter of simple justice 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.

¹ Alaska, Arizona, California, Illinois, Indiana, Louisiana, Massachusetts, Oklahoma, Porto Rico, Rhode Island, South Dakota, Utah, and Vermont.

² Hawaii, New Hampshire, New Jersey, and New Mexico.

³ California, Illinois, Iowa, Massachusetts, Michigan, Minnesota, Ohio, Texas, Vermont, and Wisconsin.

⁴ Colorado, Connecticut, Delaware, Idaho, Kansas, Kentucky, Maine, Maryland, Montana, Nebraska, Nevada, New York, Oregon, Pennsylvania, Washington, West Virginia, and Wyoming.

LUMP-SUM SETTLEMENTS.

Compensation payments are supposed to be a substitute for wages, and accordingly every State except three¹ 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 would 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 widow or 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. 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 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.

The following table shows when and under what conditions commutations may be granted in the several States:

¹ Alaska, Porto Rico, and Wyoming.

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.
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. Employer may redeem liability after 9 months' payment.
Kansas.....	Employee, if security is doubtful.....	6 months.....	Best interest of parties.
Kentucky.....	Either party.....	do.....	
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.
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.....		In unusual cases.
New Jersey.....	Either party.....		Court may authorize or approve compromise or settlements of claims for lump sum.
New Mexico.....	Motion of court.....		
New York.....	Motion of commission.....		In interest of justice.
Ohio.....	do.....		Under special circumstances.
Oklahoma.....	do.....		In interest of justice.
Oregon.....	do.....		Commission may in any case commute one-fourth of value and thereafter reduce payments proportionately.
Pennsylvania.....	Either party.....		Best interest of parties.
Porto Rico.....			
Rhode Island.....	Either party.....	6 months.....	Best interest of beneficiary or hardship upon employer.
South Dakota.....	do.....	6 months in total disability cases.....	Best interest of parties.
Texas.....	Mutual agreement.....		In death or permanent disability cases.
Utah.....	Motion of commission.....		Under special circumstances if deemed advisable.
Vermont.....	Either party.....		Best interest 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.....			

It will be noted that in 11 States¹ a lapse of six months' time is necessary before commutations can be made. In 15 States² the commission or court may grant lump sums on its own motion, and in two additional States³ this power is granted in case of minors permanently disabled. In three States⁴ commutations may be granted only upon application of the employee or beneficiary, and in one State⁵ upon request of employer; while in 20 States⁶ lump sums may be granted upon application of either or both parties in interest. Three States⁷ make no provision for lump-sum settlements.

ACCIDENT REPORTING AND 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 were inevitable and constituted 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 avail-

¹ Colorado, Illinois, Indiana, Kansas, Kentucky, Maine, Massachusetts, Michigan, Rhode Island, South Dakota, and Wisconsin.

² Arizona, California, Colorado, Connecticut, Maryland, Michigan, Nevada, New Mexico, New York, Ohio, Oklahoma, Oregon, Utah, West Virginia, and Wisconsin.

³ Indiana and Massachusetts.

⁴ Kansas, Montana, and Washington. In Kansas the employer may redeem his liability after six months' payment.

⁵ New Hampshire

⁶ California, Delaware, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, Pennsylvania, Rhode Island, South Dakota, Texas, and Vermont.

⁷ Alaska, Porto Rico, and Wyoming.

able. 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 report¹ 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 at the end of this report. Five of the compensation acts² 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 19 States³ require all accidents to be reported, while eight States⁴ require only those of one day's disability or

¹ Published in the Monthly Review, U. S. Bureau of Labor Statistics, for October, 1917, pp. 123-143.

² Alaska, Arizona, Louisiana, Minnesota, and New Mexico.

³ California, Colorado, Delaware, Maine, Maryland, Massachusetts, Michigan, Montana, Nevada, New York, Ohio, Oklahoma, Oregon, Porto Rico, South Dakota, Utah, Washington, Wisconsin, and Wyoming.

⁴ One day's disability, Connecticut, Hawaii, Idaho, and Vermont (also injuries requiring medical attendance); more than one day, Indiana, Iowa, Kentucky, and Texas.

more; one¹ requires those of more than two days of disability; one² those of more than one week; two³ require those of two weeks or more; and four States⁴ provide that such accidents be reported as are required by the commissioner or inspector. Five States⁵ 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; Louisiana requires accidents of two weeks' disability or more in establishments where women and children are employed; Minnesota requires employers engaged in industrial pursuits to report all accidents of more than one week's disability, and mine operators to report fatal or serious accidents; and New Mexico requires the reporting of all fatal accidents in mines.

In 21 States⁶ all employers are required to report accidents; in 11 States⁷ 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. Five States, as already noted, have no provisions in the compensation law.

In the 30 States having administrative commissions, accidents are required to be reported to such commissions except in two States,⁸ and in these two States the compensation act is administered jointly by the compensation commission and the department of labor. 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 acts require only employers subject to the acts 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.

ACCIDENT PREVENTION.

Accident reporting and accident prevention are closely related. In fact, effective prevention of accidents depends largely upon a

¹ Pennsylvania.

² Illinois.

³ More than two weeks, New Jersey; two weeks or more, Rhode Island.

⁴ Kansas, Nebraska, New Hampshire, and West Virginia.

⁵ Alaska, Arizona, Louisiana, Minnesota, and New Mexico.

⁶ California, Colorado, Hawaii, Idaho, Indiana, Iowa, Maryland, Massachusetts, Michigan, Montana, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania (except casual employments), Porto Rico, Texas, Utah, Washington, and West Virginia.

⁷ Connecticut, Delaware, Illinois, Kansas, Kentucky, Maine, Nevada, New Hampshire, Rhode Island (except public utilities), South Dakota, and Vermont.

⁸ Pennsylvania and Porto Rico.

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 30 States having the commission type of administration, 16¹ make no provision for accident prevention work by the compensation commission. In 6 States² 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 (1917) the accident prevention work has been carried on by other agencies. This leaves only 8 States³ in which all the safety work is done by the industrial commission. In fact, in all but two of these States⁴ the entire body of labor laws is enforced by this one agency. Which system is best adapted for effective accident-prevention work is undetermined. On the one hand Wisconsin, with a highly centralized commission, has done effective safety work, but, on the other hand, so also has New Jersey, a noncommission State.

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

¹ Connecticut, Delaware, Hawaii, Iowa, Kentucky, Illinois, Maine, Maryland, Massachusetts, Michigan, Nevada, Oklahoma, Porto Rico, South Dakota, Texas, and Washington.

² Colorado, Idaho, Iowa, Oregon, Pennsylvania, and West Virginia.

³ California, Indiana, Montana (except mines and boilers), New York, Ohio, Utah, Vermont, and Wisconsin.

⁴ California and Montana.

injuries have been taken: (1) Death, (2) loss of major hand at the 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 \$15 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 15 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 is 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, Oregon, Washington, New York, and West Virginia, which pay compensation not only until the death or remarriage of the widow but increase the death benefits in proportion to the number of children. The medical benefits were not taken into consideration in computing the money benefits for the cases cited. This provision is taken care of in another column. In two States—Oregon and West Virginia—10 per cent has been deducted from each of the compensation amounts. This 10 per cent represents the employees' contributions. In West Virginia this is the per cent provided for by law; in Oregon each employee is required to contribute 1 cent for each working day. What

percentage of the total amount this 1 cent a day constitutes is not exactly known, but 10 per cent is undoubtedly a maximum estimate. Perhaps it would seem unfair to the two States mentioned 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 10 per cent, and the resultant effect will be the same.

Again, a weekly wage of \$15 results more favorably for States having a low wage level and less favorably for States having a high weekly maximum limit. However, until the recent war wage increases \$15 would probably most nearly typify the average wage throughout the country as a whole.

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 column 2 of 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.

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

State.	Per cent of employees subject to act.	Money benefits received in typical cases.				Medical services.		Waiting period.	Rate of money benefits.	
		Death.	Loss of hand. ¹	Total disability accident.		Maximum period.	Maximum amt.		Per cent of wages.	Weekly maximum and minimum.
				4 weeks.	13 weeks.					
Alaska.....	31.2	\$4,800.00	\$2,640.00	\$15.00	\$97.50	None ²		2 weeks; none if disability lasts 8 weeks.....	50	(³)
Arizona.....	52.4	3,000.00	112.50	30.00	97.50	None ²		2 weeks; none if disability lasts over 2 weeks.....	50	(³)
California.....	76.2	2,340.00	2,232.75	25.07	112.82	Unlimited.....		10 days.....	65	\$20.83-\$4.17
Colorado.....	63.1	2,347.50	780.00	15.00	82.50	30 days.....	\$100	2 weeks.....	50	8.00-5.00
Connecticut.....	81.9	2,440.00	1,170.00	22.50	90.00	Unlimited.....		1 week.....	50	14.00-5.00
Delaware.....	62.9	2,125.00	1,185.00	15.00	82.50	2 weeks.....	25	2 weeks.....	15-60	10.00-4.00
Hawaii.....	92.6	2,908.00	1,830.00	27.00	108.00	2 weeks.....	150	1 week; none in case of partial disability.....	25-60	18.00-2.50
Idaho.....	68.7	3,400.00	1,237.50	24.75	99.00	Unlimited.....		1 week.....	20-55	12.00-6.00
Illinois.....	55.4	3,135.00	1,599.00	29.25	117.00	8 weeks.....	200	6 working days; none if disability is total and permanent.....	50-65	12.00-6.00
Indiana.....	79.4	2,350.00	1,237.50	24.75	99.00	30 days.....	100	1 week.....	50-55	13.20-5.50
Iowa.....	62.7	2,350.00	1,125.00	15.00	97.50	4 weeks.....	100	2 weeks.....	50	15.00-8.00
Kansas.....	36.9	2,340.00	1,125.00	27.00	108.00	50 days.....	150	1 week.....	50-60	15.00-8.00
Kentucky.....	54.7	3,341.25	1,462.50	19.50	107.25	90 days.....	100	2 weeks.....	65	12.00-5.00
Louisiana.....	35.2	2,350.00	1,125.00	22.50	97.50	2 weeks.....	150	1 week; none if disability lasts 6 weeks.....	20-50	10.00-3.00
Maine.....	72.9	2,250.00	937.50	15.00	82.50	2 weeks.....	30	2 weeks.....	50	10.00-4.00
Maryland.....	45.9	3,202.50	1,125.00	15.00	82.50	2 weeks.....	150	2 weeks; 1 if disability is permanent.....	50	12.00-5.00
Massachusetts.....	87.8	4,000.00	635.71	25.71	115.71	2 weeks ⁶		10 days.....	66½	14.00-4.00
Michigan.....	83.1	2,250.00	1,125.00	15.00	97.50	3 weeks.....		2 weeks; none if disability lasts 8 weeks.....	50	10.00-4.00
Minnesota.....	79.0	2,575.00	1,350.00	27.00	108.00	90 days.....	100	1 week.....	25-60	12.00-6.50
Montana.....	50.9	3,075.00	1,125.00	15.00	82.50	2 weeks.....	50	2 weeks.....	30-50	10.00-6.00
Nebraska.....	70.4	3,600.00	1,500.00	30.00	130.00	3 weeks ⁶	200	1 week; none if disability lasts 6 weeks.....	66½	12.00-6.00
Nevada.....	76.2	11,230.22	1,412.50	30.00	97.50	90 days ⁶		1 week; none if disability lasts 3 weeks.....	10-66½	16.15-4.62
New Hampshire.....	56.0	2,250.00	97.50	15.00	82.50	None ²		2 weeks.....	50	10.00
New Jersey.....	99.8	2,350.00	1,222.50	15.00	82.50	2 weeks.....	50	2 weeks.....	35-60	10.00-5.00
New Mexico.....	30.7	2,525.00	825.00	7.50	75.00	3 weeks.....	50	3 weeks.....	15-60	10.00-5.00
New York.....	58.5	11,205.22	2,440.00	20.00	130.00	60 days.....		2 weeks; none if disability lasts over 49 days.....	15-66½	15.00-5.00
Ohio.....	77.3	4,320.00	1,640.00	30.00	120.00	2 weeks.....	200	1 week.....	66½	12.00-5.00
Oklahoma.....	34.6	(³)	1,600.00	15.00	82.50	15 days.....		2 weeks.....	50	10.00-6.00

Oregon	48.7	\$ 13,483.92	\$ 1,787.89	\$ 41.54	\$ 135.00	250	None	(9)	(7)
Pennsylvania	88.8	2,375.00	1,912.50	15.00	82.50	2 weeks	2 weeks	15-60	10.00- 5.00
Porto Rico	18.4	2,996.00	1,478.00	28.00	91.00	Unlimited	None	75	7.00- 3.00
Rhode Island	83.0	2,250.00	472.50	15.00	97.50	4 weeks	2 weeks; none if disability lasts over 4 weeks	50	10.00- 4.00
South Dakota	58.0	3,000.00	1,612.50	22.50	97.50	do	2 weeks; none if disability lasts for 8 weeks	50	12.00- 6.00
Texas	47.9	3,240.00	1,237.50	27.00	108.00	2 weeks ⁶	1 week	60	15.00- 5.00
Utah	73.1	2,782.25	1,237.50	21.21	95.46	2 weeks	10 days	55	12.00- 5.00
Vermont ¹⁰	55.2	1,555.00	1,162.50	15.00	82.50	2 weeks	2 weeks	15-50	12.50- 3.00
Washington	51.5	10,354.20	1,385.00	35.00	117.00	Unlimited ¹¹	7 days; none if disability lasts over 30 days	(12)	(8)
West Virginia	74.7	\$ 9,156.78	\$ 1,012.50	\$ 20.25	\$ 81.00	2 weeks	1 week	13 50	14 10.00- 5.00
Wisconsin	75.4	3,235.00	2,340.00	29.25	126.75	90 days ⁶	1 week; none if disability lasts over 4 weeks	65	15.00- 7.50
Wyoming	42.0	3,000.00	965.20	23.40	117.00	None	10 days; none if disability lasts over 30 days	(15)	(9)
United States	100.0	12,486.84	8,433.51	35.71	125.71	Unlimited	8 days	10-66 ¹	(14)

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

² Employer liable for expenses of last sickness in fatal cases involving no dependents.

³ No provision.

⁴ Includes compensation for partial disability.

⁵ Maximum and minimum increased in certain cases.

⁶ Longer in certain cases.

⁷ Maximum \$20 for certain injuries, death basic wage \$100 a month.

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

⁹ \$15 to \$50 a month. If temporary disability, amounts increased by 50 per cent; maximum 60 per cent of wages.

¹⁰ Based on 1 week's waiting period.

¹¹ Medical service furnished during disability. Employees must contribute one-half cost.

¹² \$10 to \$35 a month. If temporary disability, amounts increased by 50 per cent; maximum 60 per cent of wages.

¹³ Death, \$20 to \$35 a month.

¹⁴ If permanently disabled, maximum \$8, minimum \$4.

¹⁵ Lump sum: \$15 to \$35 a month if temporarily disabled.

¹⁶ \$66.67-\$33.33 monthly.

The following table shows the most advantageous and the least advantageous compensation provisions, from the viewpoint of the employee, in the various States:

EXTREMES OF LIBERALITY IN THE COMPENSATION PROVISIONS OF THE VARIOUS STATES.

Nature of provisions.	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.....	18.4 per cent.
Compensation for death.....	Oregon.....	\$13,480.92.....	(Oklahoma.....	None.
Compensation for loss of hand.....	Alaska.....	\$2,640.....	Vermont.....	\$1,855.
Compensation for 4 weeks' disability.	Oregon.....	\$41.54.....	Colorado.....	\$780.
Compensation for 13 weeks' disability.	do.....	\$135.....	New Mexico.....	\$7.50.
Medical service.....	California.....	Unlimited.....	do.....	\$75.
Waiting period.....	Connecticut.....	do.....	Wyoming.....	None.
Per cent of wages ¹	Idaho.....	do.....	New Mexico.....	3 weeks.
Weekly maximum compensation ¹	Oregon.....	None.....	do.....	15 to 50 per cent.
Weekly minimum compensation.....	Porto Rico.....	75 per cent.....	Vermont.....	25 to 50 per cent.
	do.....	do.....	Louisiana.....	\$8.
	California.....	\$20.83.....	Colorado.....	\$7.
	Illinois.....	\$6-\$7.50.....	Porto Rico.....	\$2.50.
	Minnesota.....	\$6.50.....	Hawaii.....	
	Utah.....	\$5-\$7.....		

¹ Oregon and Washington pay a stipulated monthly pension which may be increased to 60 per cent of employee's wages.

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 uniform 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.

The following State law differentials were computed by the actuarial committee of the National Workmen's Compensation Service Bureau for 28 compensation laws, as amended down to and including January 1, 1918.¹ These differentials show the relative value of the combined benefits for each of the several compensation laws. The original Massachusetts law of 1912 is used as a standard, the cost of compensation under this act being taken as unity. The last column in the table shows the percentage of employees covered by the act in each State, as computed by the United States Bureau of Labor Statistics.

STATE LAW DIFFERENTIAL AND PERCENTAGE OF EMPLOYEES COVERED BY VARIOUS COMPENSATION LAWS.

State.	Law differential.	Per cent of employees covered.
California.....	1.70	76.2
Colorado.....	1.09	63.1
Connecticut.....	1.35	81.9
Delaware.....	.90	62.9
Idaho.....	1.38	68.7
Illinois.....	1.49	55.4
Indiana.....	1.36	79.4
Iowa.....	1.29	62.7
Kansas.....	1.43	36.9
Kentucky.....	1.44	54.7
Louisiana.....	1.13	35.2
Maine.....	1.02	72.9
Maryland.....	1.33	45.9
Michigan.....	1.04	83.1
Minnesota.....	1.35	79.0
Montana.....	1.01	50.9
Nebraska.....	1.48	70.4
New Jersey.....	.97	99.8
New Mexico.....	.95	30.7
New York.....	1.91	58.5
Oklahoma.....	1.20	34.6
Pennsylvania.....	1.05	88.8
Rhode Island.....	1.25	83.0
South Dakota.....	1.18	58.0
Texas.....	1.50	47.9
Utah.....	1.30	73.1
Vermont.....	.94	55.2
Wisconsin.....	1.69	75.4

¹ Report of the work of the augmented standing committee on workmen's compensation insurance rates 1917; together with a brief account of the history and theory of the making of workmen's compensation insurance rates. Issued by the National Workmen's Compensation Service Bureau, March, 1918.

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

(Chart Revised Dec. 31, 1937)

Main table with 23 columns: State, Employment covered, Insurance, How election is made, By whom, Diseases alleged to be covered, Special contracts, Injuries covered, Waiting period, Percent of wages, Maximum and minimum amounts, Maximum period, Compensation benefits (Death, Disability, Partial disability, Medical and hospital aid, Time for making claim, Administrative system, How compensation is established, Accident reports required, Actions available to workmen, and Penalties imposed on employers).

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

2. Not provided for by act.

3. Not provided for by act.

4. Not provided for by act.

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