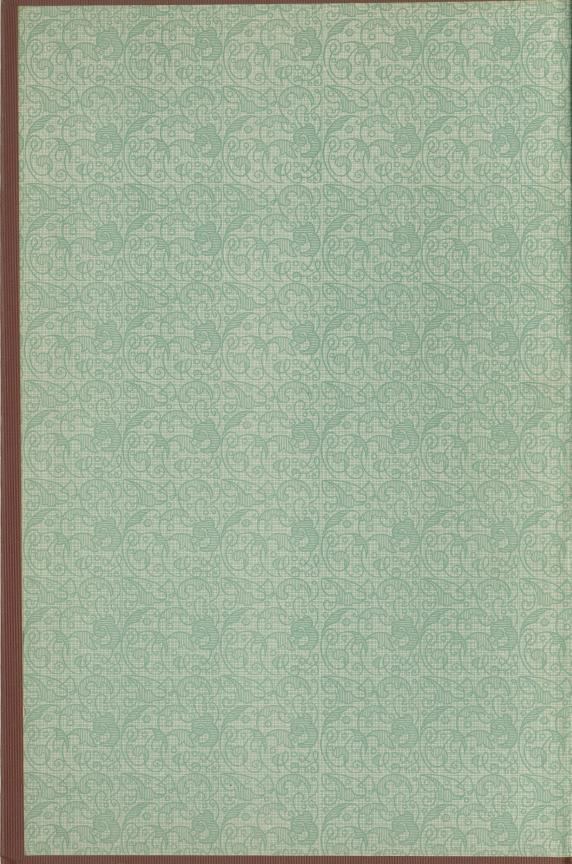
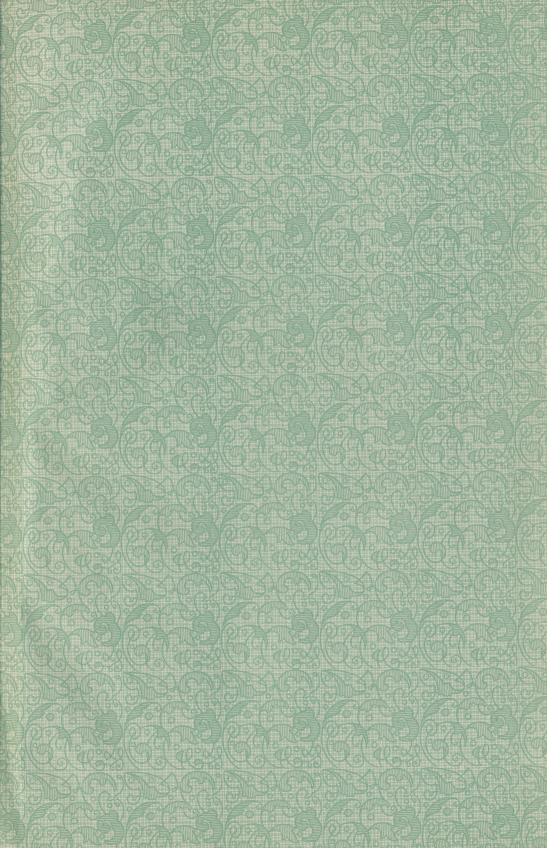
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STATE OF WASHINGTON

INDUSTRIAL INSURANCE DEPARTMENT

SECOND ANNUAL REPORT
1913





STATE OF WASHINGTON

SECOND ANNUAL REPORT

OF THE

Industrial Insurance Department

For the twelve months ending September 30th

1913

The Workmen's Compensation Act

Commissioners:

FLOYD L. DAGGETT, Chairman
JOHN H. WALLACE AMBROSE B, ERNST

"SAFETY FIRST"

OLYMPIA
FRANK M. LAMBORN PUBLIC PRINTER.
1913



 $\begin{array}{c} \textbf{COMMISSIONERS} \ \ \textbf{OF} \ \ \textbf{THE} \ \ \textbf{INDUSTRIAL} \ \ \textbf{INSURANCE} \ \ \textbf{DEPARTMENT} \\ \textbf{OF} \ \ \textbf{THE} \ \ \textbf{STATE} \ \ \textbf{OF} \ \ \textbf{WASHINGTON}. \end{array}$

SECOND ANNUAL REPORT.

OLYMPIA, WASH., Jan. 1, 1914.

To the Honorable Ernest Lister, Governor:

We are bringing to you and through you to the people of the State of Washington, the Second Annual Report of the Industrial Insurance Commission covering the operation of the Workmen's Compensation Act.

The operations of the second year will more clearly represent the usual operation of the law rather than the preceding or first year, because there was a certain part of the time that the law was being gotten into operation and the number of firms listed and operatives covered were fewer than the present year. The administration of a department of this character is extremely interesting and will engage the utmost interest and ability of anyone connected with the department on account of its humanitarian and economic phases. There are so many questions arising as to classification, many occupations being of such character that they can easily be classified in more than one class. The question arises frequently as to what is contemplated by the law under the term extra-hazardous. It is the interpretation of the Commissioners that it is the industry and not the individual employment that is contemplated by the law classes of general employment will govern. For instance, there will be hazardous occupations with some portion of the work nonhazardous; there will also be non-hazardous occupations where some portion of the work will be hazardous. There have been to date no judicial decisions covering this point, although we have a case tried in the superior court of Pierce county, which we have appealed to the Supreme Court in order to get a final decision upon this feature as to a problem that is confronting us almost daily.

The administration of the law is going along smoothly; we meet with practically no opposition or discontent. There is a question in the minds of some of the injured workmen as to the sufficiency of the award that can be made under the law. There is also some question by employers as to the classification of their particular employment, and also a discussion of the rat-

ing schedule for contributors. However, sir, we are endeavoring to administer the law to the best of our ability as it stands, believing it is not our province at this time to discuss contemplated recommendations as to amendments to the act to yourself or to the legislature, believing that in the light of an additional year's experience we will be much more fitted to make such recommendations than at the present time. Therefore, in this report no contemplated recommendations or discussions as to amendments to the law will be made.

WORKMEN'S COMPENSATION: Workmen's compensation under state supervision seems to be becoming generally popular, as evidenced by the fact that twenty-two states have now adopted a compensation act in some form. There has been a great deal of inquiry coming from different states to this department regarding the operations of our law, to which we have endeavored to reply to the best of our ability. During the past year we have had committees present representing the states of Oregon, Colorado, Missouri, and also a committee representing the national labor bodies, and had correspondence with Wisconsin, New Jersey, New York, Idaho, and several other states.

COMPULSORY FEATURE: In the opinion of your Commissioners, the compulsory feature is the backbone of our law. The Washington law stands unique as being the only one having the compulsory feature. In all other acts with which we are familiar, the elective feature is the dominant one. However, some of the states are taking away practically all the defenses of the employer if he does not come under the act, which is, in a measure, compulsory. The operation of the law convinces us that in order to have the harmonious, cohesive support of the employer and employe, all must come within its provisions. If part are in and part are out, it causes confusion, and discontent especially among the workingmen, and again it is apt to make the contributions in certain classes so small that it really resolves itself into the employer carrying his own insurance.

SAFETY REGULATIONS: Until the present law became operative, there was no data at hand upon which to base any conclusions as to the number of accidents and their extent, and the cost to the community in losses to injured laboring men. With the statistical methods employed by this department, we are able to clearly judge, and it is certainly surprising to a student along these lines, the number of accidents, the extent of time loss, the loss of earning power, and the fatalities incident to the operation of the hazardous industries of the state. As provided by this act, the employers of each class of industry must care for their own accidents. Therefore, there should be a strong incentive on their part to reduce the number of accidents to the minimum as an economic consideration in addition to the humanitarian phase.

As the humanitarian phase presents such an appalling loss to the injured workman and the community at large, it is deserving of the utmost consideration. In such a large number of injuries it is impossible to put the workman in the same condition as before the accident, he thereby suffering permanent loss, and this is also a permanent loss to the community. On the other hand, if the employers, by safety regulations or safety methods, can reduce the number of accidents, they thereby reduce the cost of the operation of this law to them. Some of the employers in the state have their plants well safeguarded, and also have their employes organized along safety lines. This should be encouraged not only for the safety of the workman, but also to save the cost to the employer.

INCREASED OPERATIONS: In the matter of listing of firms and in auditing the payrolls there is a marked increase over the preceding year. There have been added 2,103 firms, and the number of claims filed show an increase of 4,440 over the preceding year; also the number of claims adjusted and paid are 8,462 more than the first year. This has entailed a large increase in the work of administering this department, but there has been practically no increase in the cost. This increase of labor has been met to some extent by labor-saving methods,

also by getting the department more thoroughly organized as the law progresses, and the problems are met and solved.

APPROPRIATION: The appropriation made by the last legislature for the bi-ennium, in our opinion, is somewhat less than it should be to carry out the intent of the act, and administer it in the proper way, to its fullest extent. During the past year we have endeavored to list the small operators as they should be included, and their contributions received. These usually are in more or less inaccessible places, requiring more traveling expense and more auditors to find them. We could now use to great advantage a few more men in the field, but we wish to assure you that every energy will be used to cover the field, and also to assure you that we do not intend to present a deficit to the next legislature.

DEFAULTING EMPLOYERS: It is quite necessary that employers should fully understand the provisions of the law covering defaulting employers. From the requests coming in for extensions of time in which to pay demands that have been made upon them for contributions to the accident fund, it would appear that this provision of the law is not fully understood. If the demand is made and a time stated for its payment, any interim between that time and the date the payment is really made by the employer, he is automatically in default; the Commissioners are powerless to grant any further extension of time, or to remove said employer from being in default. There is no discretion upon our part whatsoever. During the period of default the injured workman has the right to elect whether he will accept compensation provided by this act or ask for redress from his employer under the old liability laws. It is a practice of this department to notify workmen presenting claims when their employer is in default of such fact and the provisions of the law just explained. Several times we have been criticised by an employer for giving this information to the injured workman, but he is entitled to this information, and it is not right to ask him to go to some attorney and pay for information regarding his rights under this act. We,

however, always refuse to advise the workman as to what action he should take in a matter of this kind.

CONTRIBUTORS — ADJUSTMENT COST OF CLAIMS: Generally speaking, the cost to contributors to the accident fund, for the fiscal year ending September 30th, 1913, has been greater than that for the first fiscal year ending September 30th, 1912. This is due partly to a much larger number of workmen covered, also it must be remembered that there were no overlapping previous year claims filed and unpaid. We found that from the preceding fiscal year there were a large number of claims for injuries occurring during that year that came up for adjustment and final payment in this fiscal year, said claims in many instances requiring large payments for permanent partial disability or total permanent disability requiring pensions for which reserves must be set aside. Your Commissioners have endeavored to adjust and settle all claims that were ready for settlement during this current year, believing that it is the intent of the law so far as possible or practicable for each year's business to care for itself. The theory upon which your Commissioners are working in the adjustment of claims requiring payment for permanent partial disability or permanent total disability is that when the injury reaches a fixed condition that is the time to adjust and pay the claim. If a man is entitled to the payment of a lump sum for an injury he should have his money at the time that becomes an established fact. For instance, if a man has lost his arm, that is just as much a fact when the amputation has been made, as at some future time, and as soon as the wound is surgically healed he is entitled to his settlement in payment for that arm. In following out this theory we are more nearly able to adjust and pay each year's claims within the current year and not have so much overlapping into the following year. The contributors to the class can thus more clearly ascertain the cost to them for each year's operation.

Respectfully,

FLOYD L. DAGGETT. JOHN H. WALLACE. AMBROSE B. ERNST.



SECRETARY'S DIVISION

INTRODUCTORY.

A resume of the second year's operation, of the Workmen's Compensation Act, which drew to a close September 30th, 1913, shows that many changes in the methods employed have been inaugurated, such changes being the result of past experience, a close study being made to eliminate all lost motion and to accomplish the results without unnecessary work. The enormous mail of the Commission, averaging over 800 pieces per day, both in and out, and occasionally reaching the 1,200 mark, is all handled through the Secretary's office. The incoming mail being opened, stamped and distributed to the various departments. The outgoing mail all centralizing on the Secretary's desk, where it is glanced over to avoid contradictory or conflicting statements.

Owing to the different character of work the office is naturally divided into Departments.

The Secretary's office consisting of the Secretary, Minute Clerk, stenographer and statistician.

The Audit Department consisting of a Chief Auditor, assistant auditor, cashier, two bookkeepers, three stenographers and a file clerk.

The Medical Department consisting of a Chief Medical Advisor, a chief clerk and one stenographer.

The Claim Department consists of a Claim Agent, assistant claim agent, and ten clerks.

Report from each Department will follow in the order named. The state is divided into districts known as the Seattle, Tacoma, Spokane, Bellingham and Vancouver Districts, comprised of the different counties as follows:

SEATTLE: Clallam, Jefferson, Kitsap, Island, Snohomish and King counties, including East portal of Cascade tunnel, part of Mason county, tributary to Hood's Canal. This District is covered by an Assistant Commissioner and five auditors, one claim adjuster and one stenographer.

TACOMA: Pierce, Thurston, Lewis and Chehalis counties. Kittitas county up to but not including Ellensburg, on N. P. and Milwaukee Railway, part of Pacific county on Willapa Harbor branch; also Mason county, exclusive of Hoods Canal country. This District is covered by an Assistant Commissioner, two auditors, one claim adjuster and one stenographer.

SPOKANE: Spokane, Stevens, Ferry, Pend Oreille, Okanogan, Chelan, Douglas, Lincoln, Grant, Adams, Garfield, Whitman, Asotin, Columbia, Walla Walla, Franklin, Benton and Yakima counties and part of Kittitas, including Ellensburg on N. P. and Milwaukee Railway, and Slate Creek district in Skagit county. This District is covered by an Assistant Commissioner, one claim adjuster, two auditors and one stenographer.

BELLINGHAM: Whatcom, Skagit and San Juan counties. This District is covered by one Auditor in Charge.

VANCOUVER: Klickitat, Cowlitz, Skamania, Clarke, Wahkiakum and part of Pacific county. This District is covered by an Auditor in Charge.

It is the duty of each Assistant Commissioner or Auditor in Charge to audit regularly the payrolls of all employers employing men in extra hazardous occupations in his district, to give out information pertaining to the administration of the law and to assist claimants in filing their claims. The Commissioners, with the aid of the adjusters, investigate the more difficult claims and settle a large number of claims which cannot be handled by correspondence, calling in the assistance of trained medical specialists when necessary to determine the nature and extent of the disability. All claims are scrutinized very carefully and if there is any delay in the recovery of the claimant his case is investigated promptly so that the worthy claimant may receive his full compensation and to discourage malingering on the part of those who might be disposed to do so.

The watchwords of the Commission are "loyalty" and "efficiency" and the results attained speak for themselves.

P. GILBERT,
Secretary.



AUDIT DIVISION

AUDIT DEPARTMENT.

While the volume of business done by the Auditing Department was largely greater during the second year than in the first, the cost to the administration fund did not materially increase.

Greater familiarity on the part of employers with the requirements under the act has facilitated the work of the field auditors, and there has been a marked growth of efficiency among the entire staff, both in the office and in the field, resulting from longer experience and a more highly perfected organization.

Necessity of strictest economy to keep within the maintenance appropriation has compelled the most careful study to simplify methods and avoid all lost motion or duplication of work in office routine and records. The recent substitution of a card system of ledger accounts, instead of the eleven heavy firm ledgers formerly used, has immensely simplified the work of bookkeepers and resulted in great saving of time to all having occasion to refer to the accounts. Transmissal sheets containing lists of claims approved for payment, and issued in quadruplicate, were recently adopted, with great saving of time and labor to the auditing department and also to the offices of the State Auditor and the State Treasurer, the sheets forming pages in the volumes of record in each of these offices, thus avoiding all duplication of entry. The change from a card system of general index of nearly nine thousand separate employers to a single volume, with a finely divided alphabetical subdivision, has just been effected and results in great saving of valuable time.

The entire State has been carefully gone over by the field auditors and as nearly as possible the payrolls of all employers engaged in the extra-hazardous industries have been audited quarterly. During the second year 2,502 new accounts were listed, bringing the total number of separate employers up to 8,891. In these establishments 162,970 employes are working under the protection afforded by the act.

Assessments have been made upon the various classes, or groupings of industries as provided in the act, as the several class funds required to be replenished, and employers generally have promptly paid as the calls became due. In a few cases it has been necessary to bring suit, but in all such cases, where decisions have ben rendered, judgment has been taken for the amount due:

The following statement shows the receipts and disbursements of the Accident Fund during the first and second years, and the totals for the first two-year period ending October 1st, 1913:

Contribution first year, ending Oct. 1, 1912.....\$980,445.75 Contribution second year, ending Oct. 1, 1913...1,604,093.05

Cash balance, Oct. 1, 1913...

Total contribution two years, ending Oct. 1\$2,584,538.8	0
Claims paid first year, ending Oct. 1, 1912 \$419,160.68 Claims paid second year, ending Oct. 1, 19131,019,360.21	-
Total paid during two years, ending Oct. 1\$1,438,520.8 Pensions paid first year, ending Oct. 1, 1912 \$26,366.83 Pensions paid second year, ending Oct. 1, 1913 64,227.54	9
Total during two years	

\$2,584,538.80

The large difference between the receipts and also the disbursements during the first and second year is chiefly accounted for by the fact that payments to the Accident Fund are usually made after the work has been performed and the payrolls audited. No payments could have been received during the first year from any previous period and a large amount was contributed during the second year on account of work performed during the first year. A similar reason largely explains the difference between the amounts paid during the first and second years on account of accidents.

An examination of the statement (opposite page) showing the condition of the class funds and the rates assessed upon the various classes, and the rates actually required to pay the

awards resulting from accidents, will show that the rates specified in the act as probable maximum rates are for the most part largely in excess of the required rate. The costs shown for the first year, i. e., from October 1st, 1911, to October 1st, 1912, cannot be regarded as affording a reasonable basis from which to estimate future costs, as there was no previous period from which to supply a normal overlap of claims or serious development of injuries, nor could the records for the first year show the full average quota of losses, as claims on account of very many injuries received during at least the last two months of the year were either not filed or had not been approved for payment until the beginning of the second year. In estimating future costs, therefore, a somewhat more accurate basis will be found in showing of required costs during the combined twoyear period, or preferably, as to the larger classes, in the costs for the second year. In the first nine or construction classes, except in class 7, different rates of contribution are specified in the act as required on the several kinds of work listed in each class. In expressing the costs, therefore, in these classes, the rates are stated in percentages of the rates specified in the act. Adjustment of the amount due from employers listed in the various classes is made for calendar years. In figuring the costs, therefore, for the fiscal years ending on October 1st, one rate would apply for the first three months and another rate might apply for the first nine months of the next calendar year.

CLASS 1.

In this class the following operations are listed with rates of contribution specified in the act as noted.

Tunnel construction								61/2%
Sewer construction								61/2%
Shaft sinking								6%
Well drilling								2%
Excavation	٠.							4%

Excavation defined as openings of six feet or less in depth, or if of greater depth, where width is more than half the depth. Number of separate employers, 137.

Average rate assessed during first two years, 71% of rates specified in the act.

Average rate required to pay awards on claims, approved up to October 1st, 1913, 38% of specified rates.

Full rates were charged for the month of October, November, December, 1911. Adjustment for 1912 was made to specified rate on only eight-twelfths of payroll; adjustment for 1913 to same basis.

Fifteen fatalities occurred in the work of this class, six workmen leaving dependents entitled to pension and nine leaving no dependents.

Tunnel construction, as listed in this class at $6\frac{1}{2}\%$, has been held in a decision of the superior court not to include tunnel work in connection with railway construction, but that such work should be rated in class 7 at 5% under the general classification of railway construction.

This question has not yet been passed upon by the Supreme Court, but, if upheld, the work of tunneling will practically be eliminated from class 1, as, if in connection with railway construction, it would be listed in class 7, or, if in connection with coal mining, in class 16; or, if in metal mining, in class 17. Tunneling in sewer work is rated as sewers, which is enumerated in this class.

As in other classes, where several kinds of work are listed, no segregation has been made of contributions or claims paid on account of the several kinds of work listed in the class.

CLASS 2.

This class includes work as follows, with specified ratings noted:

Bridge building 61	2%
Mill wrighting 39 Trestles 64	60%
Steeples 59	5
Towers or grain elevators not metal framed	1
Water towers 40	6
Windmills not metal framed 49	0

Includes assembling of material. Excludes manufacture in shops.

Number of separate employers, 135.

Average rate assessed during first two years, 71% of rates specified in act.

Average rate required to pay awards, approved up to October 1st, 1913, 44% of specified rates.

Adjustments for calendar years:

1911 (3 months), full rates.

1912, full rates on eight-twelfths of payroll. 1913, full rates on eight-twelfths of payroll.

Nine fatalities occurred in the work of this class, four workmen leaving dependents entitled to pension and five leaving no dependents.

The building of new mills or of substantial additions is rated as millwrighting, but the work of millwrights regularly employed by sawmills, or work of repairs in such mills, is regarded as an operation in class 10 under the classification of sawmills.

CLASS 3.

This class includes work as follows with specified ratings as noted:

Sub-aqueous work	,-
without blasting 6	1/2%
Pile driving 5	5%
Jetties 5	5%
Breakwaters 5	10%
Marine railways 5	190

Number of separate employers, 85.

Average rate assessed during first two years, 74% of rates specified in the act.

Average rate required to pay awards, approved up to October 1st, 1913, 63% of specified rates.

Adjustments for calendar years:

1911 (3 months), full rates.

1912, full rates on eight-twelfths of payroll.

1913, full rates on nine-twelfths of payroll.

Five fatalities occurred in the work of this class, only one workman leaving dependents entitled to pension and four leaving no dependents. This class illustrates the danger of too finely segregating different operations into separate classes, especially where an inconsiderable number of employers are engaged in the work listed.

Most of the employers listed in this class are engaged in pile driving, and it happened that out of the five fatalities which occurred only one workman left dependents entitled to pension, to secure which it was necessary to set aside and invest a reserve of \$4,000. In the cases of the other four fatal accidents no dependents were left; but had it been otherwise, the rates specified in the act might have been altogether insufficient and have involved the necessity of making good a considerable deficit by assessment upon all contributors listed in this class in proportion to their respective payrolls.

The class, too, does not receive contributions on all wages paid for pile driving, as much of that work is in connection with railway construction and is included in report of payroll for that work, which is listed in class 7, and pile driving in connection with fish canneries is listed in class 33. It is recommended that when opportunity for re-classification occurs, that the operations listed in this class be appropriately assigned to other classes and this class be eliminated.

CLASS 4.

Operations are enumerated in this class with specified ratings as follows:

House	moving										61/2%
	wrecking										
Safe m	oving										5%

Experience in this class showed that in auditing contractor's payrolls, most of the work of destruction of buildings was included in the statement of payroll for carpenters and masons and their helpers and for general labor, and the assessments on those payrolls therefore came in as a credit to class 5, in which work of carpentering and masonry is enumerated, thus depriving class 4 of the full credit to which it was entitled owing to the apparent impracticability of auditing and report-

ing separately all work of demolition as distinguished from construction.

The classification "safe moving" was held to include the moving or hauling of heavy articles, as boilers, machinery and similar unwieldy material, but difficulty was experienced in ascertaining just what portion of the time of the teamster and his helpers should be reported for that work, as during most of their time they were hauling light merchandise, which work is not considered as included among the extra-hazardous industries as defined in the act. In consequence of these facts and for the reason that most of the men employed in house-moving contracts are ordinarily engaged as carpenters or carpenters' helpers, auditors have been instructed to include wages paid for house moving and house wrecking under the general classification of carpentering, as listed in class 5, and to report wages paid for moving and installing safes, boilers, machinery and similar articles as an operation under the head of "Installation of Machinery" as listed in class 6. In this manner no further entries are made in class 4 and accounts remaining in the class are being re-rated and transferred into classes 5 and 6.

CLASS 5.

In this class is listed general work of building, and with 1,980 separate employers this class constitutes one of the principal groupings under the act, leading all others in number of contributors and second only to class 10 in number of workmen afforded protection. The rates vary from 8% on steel frame structures to 2% on wooden stair building. The following occupations are listed with specified rates as noted:

Iron or steel frame structures or parts of structures	8%.
Erecting fire-proof doors or shutters	5%
Concrete chimneys	5%
Fire-proofing of buildings	5%
Marble, stone or brick work	5%
Slate work	5%
Metal smokestacks or chimneys	5%
Advertising signs	31/2%
Carpentering	31/2%
Marble, stone or tile setting	3%
Metal ceiling work	
Concrete laying in floors and foundation	

Lathing 29	To.
Plastering 29	
Fire escapes 61	
Blast furnaces (construction)	
Elevators 59	
Galvanized iron or tin works 59	
Roof work 59	
Plumbing (inside) 29	
do (roughing in)	
Ornamental metal work in building	
Mantel setting 39	
Painting of buildings 39	
Glass setting 29	6
Building hot houses 29	6
Paper hanging	6
Wooden stair building 29	10

Average rate assessed during first two years, 65% of rates specified in the act.

Average rate required to pay awards, approved up to October 1st, 1913, 46% of specified rates.

Twenty-six workmen were killed in the work of this class, of whom nineteen left dependents entitled to pension and seven left no dependents.

Full rates were charged in this class, as in all classes, for the first three months of the operations of the act, namely: October, November and December, 1911. Adjustment for 1912 was made to specified rates on only eight-twelfths of the year's payroll and adjustment for 1913 to specified rates on only sixtwelfths of the payroll.

CLASS 6.

Some of the heavier forms of construction are listed in this class with specified ratings as follows:

1	
Electric light and power plant construction	5%
Cable or electric railways—	
Without rock work or blasting	31/2%
With rock work or blasting	5%
Installation of steam boilers or engines	
Installing of dynamos	
Installation of automatic sprinklers	
	0/0
Installing electrical apparatus or fire alarm systems in	0 - 1
buildings	2%
Telegraph or telephone systems	5%
Water works or systems	5%
Steam heating plants	4%
Gas works or systems	
Placing wires in conduits	
Putting up belts for machinery	
Covering steam pipes or boilers	
Installation of machinery, including foundations	3%
House heating or ventilating systems	
	- /0

Number of separate employers, 351.

Average assessed rates during first two years, 65% of specified rates.

Average rate required to pay awards, approved up to October 1st, 1913, 36% of specified rate.

Adjustments for calendar years:

1911 (3 months), full rates.

1912, specified rates on eight-twelfths of payroll.

1913, specified rates on only six-twelfths of payroll.

In the work of this class 29 workmen were killed during two years, of whom 18 left dependents entitled to pension and 11 left no dependents.

CLASS 7.

In this class is listed work of railway construction with specified rating of 5%. It is held to also include the operation of steam and logging railways in so far as they are not under federal jurisdiction by reason of being engaged in interstate commerce.

For this reason none of the interstate carriers contribute to the accident fund on payroll in connection with the operation of their lines, nor would employes injured in their operating departments be entitled to award. Work of line extension, however, or any work done on track not yet turned over to the operating department, and work of construction or substitution done by contractors is held to be under the act.

Number of separate employers, 348.

Average rate assessed during first two years, 3%.

Average rate required to pay awards approved up to October 1st, 1913, 23/4%.

Fifty-six fatalities occurred in the work of this class during the past two years; 33 workmen leaving dependents entitled to pension and 23 leaving no dependents.

Adjustments for calendar years were made as follows:

1911 (3 months), 5%.

1912, 5% on six-twelfths of payroll.

1913, 5% on only four-twelfths of payroll.

CLASS 8.

In this class operations are listed with specified rates as follows:

Road making	2%
Street or other grading	31/2%
Concrete laying in street paving	3%
Asphalt laying	3%

Road making is construed as all work in connection with construction of new earth roads, including clearing, with a 2% rate applying except where powder is used, in which case a 5% rate applies on wages paid to the powder crew or others in hazard from blasting; also all work of maintenance or repair of old roads involving the use of road machines, scrapers or other machinery; but ordinary hand work, or hauling, in connection with upkeep of old roads is not considered to be under the act.

Laying of brick or block pavement is rated at 2% as road making, but the 3% rate applies on the concrete base.

Concrete sidewalk laying where no power mixer is used is excluded, but when power mixers are used, the rating of 3% applies on the entire crew. Street or other grading does not include grades for railway construction, which are rated in class 7 at 5%.

Number of separate employers, 515.

Average rate assessed during first two years, 65% of specified rates.

Average rate required to pay awards, approved up to October 1st, 1913, 29% of specified rates.

Adjustments for calendar years were made as follows:

1911 (3 months), full rates.

1912, specified rates on eight-twelfths of payroll.

1913, specified rates on six-twelfths of payroll.

Eleven workmen were killed in the work of this class; eight leaving dependents entitled to pension and three leaving no dependents.

CLASS 9.

This class includes operations with specified rates as follows:

Ship or boat building or wrecking with scaffolds	
Ship wrighting	
Ship or boat rigging	
Floating docks	41/2%

Number of separate employers, 56.

Average rate assessed during first two years, 44% of rates specified in the act.

Average rate required to pay awards on claims approved up to October 1st, 1913, 34% of specified rates.

No fatalities occurred in the work of this class, but one workman received injuries resulting in permanent total disability, on account of which he is entitled to a pension of \$20 per month. His life expectancy at age of 47, being 23.08 years, a reserve of \$2,613.07 was required to be invested to secure this pension.

Classes 10 to 25, inclusive, refer more particularly to the operation of industries rather than to construction, or to work in factories, although incidental work of repair is to be included in report of payroll for operation.

CLASS 10.

This largest grouping under the act includes operations with specified rates as follows:

Logging	
Saw mills	
Shingle mills	21/2%
Lath mills	21/2%
Masts and spars, with or without machinery.	21/2%

Includes booming logs or driving ties.

Includes pilers, manual laborers and teamsters; also planers on sawmill premises; stump pulling with donkey engines; land clearing when conducted as a separate industry or enterprise with workmen specially engaged for the purpose, but where such work is merely incidental to farming and performed by farm hands, the workmen are not covered, as farming is not considered to be an extra-hazardous industry.

Excludes retail lumber yards operating without machinery. Number of separate employers, 1,841; number of workmen, 47,548. During the first two years ending October 1st, 1913, assessments have been made upon employers in this class of $2\frac{1}{2}\%$ of the average payroll for seventeen months out of the twenty-four; the average cost, as assessed up to October 1st, 1913, has therefore been seventeen twenty-fourths of $2\frac{1}{2}\%$, or \$1.77 per \$100 of payroll. At the time of writing this report, and as a part of the operations of the third year under this act, assessments have been made upon this class for three more months, which will make the true cost to this class on payroll up to October 1st, 1913, twenty twenty-fourths of $2\frac{1}{2}\%$, or \$2.08 1-3 per \$100 of payroll. The rate actually required to pay awards on claims approved up to October 1st, 1913, was \$1.77 per \$100 of payroll, as of the \$1,072,286.83 collected up to that date, only \$4,660.95 remained on hand October 1st, 1913.

Adjustments for calendar years:

1911 (3 months), 21/2%.

1912, 21/2% on eight-twelfths of payroll.

1913, up to October 1st, 2½% of six-twelfths of annual payroll had been assessed, but it is, at this date, uncertain on how many twelfths of the annual payroll the 2½% will be required. It is estimated that 2½% of eleven-twelfths may be sufficient.

Two hundred and sixty-eight fatal accidents occurred during the first two years; 130 workmen leaving dependents entitled to pensions, to secure which reserves were required to be invested in the amount of \$347,775.22, being an average in each case of \$2,675.19; 138 workmen, or a little over one-half of those killed in the work of this class, left no dependents entitled to pension.

Class 10 averages are as follows:

Total average annual payroll	\$30,276,334.08
Average proceeds of call for one month	63,075.70
Average contribution per month	44,678.62
Average claims paid per month	29,993.78
Average pension paid per month	1,607.86
Average reserved to secure pension per month	12,882.77
Average reserve required when workmen left dependents	2,675.19
Average reserve required counting all fatalities	1,297.67
Average contributions per month in excess of requirements	194.21
Average number of fatalities per month necessitating	
pension 5.41	
Average number of fatalities per month not necessi-	
tating pension5.75	
Average number of fatalities per month	11.16

Class 10 percentages, as compared with entire accident fund, as shown by experience of first two years, are as follows:

29.17% of all workmen in extra-hazardous employments in Washington are engaged in the work of this class, the number so employed being approximately 47,548.

47.17% of all payments to injured workmen and reserves to secure pensions are on account of the work of this class, the amount for two years being \$1,067,625.88.

50.03% of all awards to living workmen, the amount for two years being \$719,850.66.

43.28% of all reserves to secure pensions, the amount reserved during two years amounting to \$347,775.22.

42.59% of all pensions to dependents of fatally injured workmen, the amount paid in pensions on account of the work of this class during two years being \$38,588.67.

48.46% of the fatal accidents in the industries under the act occurred in this class. Of the 47,548 workmen engaged in this work, 268, or one out of each 355, was killed annually, making average of a fraction less than three in each thousand.

41.49% of all contributions to the accident fund were paid by employers listed in this class.

Statement showing disbursements from funds of class 10 on account of claims paid and pensions, and reserved to secure pensions during second year and totals at ending of first year:

		Reserved	
	Claims	to secure	Total
	paid	pensions	charges
October, 1912	\$39,405.90		\$39,405.90
November, 1912	40,025.65		40,025.65
December, 1912	42,673.25	\$28,395.63	71,068.88
January, 1913	37,396.70	33,146.39	70,543.09
February, 1913	39,962.45	8,789.77	48,752.22
March, 1913	33,784.95	14,834.77	48,619.72
April, 1913	37,112.26	16,565.25	53,677.51
May, 1913	43,391.52	30,513.19	73,904.71
June, 1913	46,438.10	10,881.82	57,319.92
July, 1913	47,972.90	16,122.63	64,095.53
August, 1913	60,868.77	35,151.38	96,020.15
September, 1913	55,658.36	25,021.42	80,679.78
Total for 2nd year .	\$524,690.81	\$219,422.25	\$744,113.06
Total for 1st year	195,159.85	128,352.97	323,512.82
Totals to Oct 1st, covering 2 years	\$719,850.66	\$347,775.22	\$1,067,625.88
oring 2 years	φιτυ,000.00	ψυτι,110.22	φ1,001,020.00

Of the forty-two classes in which the industries of the state are listed, only nine refer exclusively to one kind of operation, and, as 267 separate occupations are enumerated, an average of about seven different kinds of work are listed in each of the remaining classes. Contributions, therefore, to class 10, in which employers in seven different kinds of work are included, are, as in other compound classes, merged in the class fund and awards on account of all accidents in the class are charged against the common fund of the class without further segregation.

To have kept separate accounts, as to each kind of work mentioned in the act, both as to number of employes, amount of payrolls and of contributions, and of awards on account of injuries in each of the great number of occupations listed, would have involved such an increase in the work of the auditing and claim departments as to have made it impossible to have kept within the maintenance appropriation, which was barely sufficient to perform the work in accordance with the groupings as prescribed in the act.

CLASS 11. (Omitted in the Act.)

CLASS 12.

This class includes operations and ratings as follows:

Number of separate employers, 22.

No fatal accidents have occurred in the work of this class during the past two years.

Average rate assessed during first two years, \$1.93 per \$100 of payroll.

Average rate required to pay claims approved up to October 1st, 1913, \$1.33 per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), 5%. 1912, 5% on four-twelfths of payroll. 1913, 5% on three-twelfths of payroll. Before it was finally determined what rate of adjustment was necessary for the year 1913, in view of the class experience and general hazard, it was expected that an adjustment for the 1913 account would be required at 5% of six-twelfths of the payroll, and in a preliminary statement of class costs the rates were figured upon that basis instead of at 5% of only three-twelfths as finally found justified.

CLASS 13.

This class includes operation of industries with ratings as follows:

Electric light or power plants or systems	4%
Steam heat or power plants or systems	21/2%
Electric systems, not otherwise specified	2%

The operation of elevators and the use of steam heating or electric plants in office buildings, hotels and private houses is held to be only incidental to the ownership and operation of such places, which is not an extra-hazardous industry as defined by the act. Contribution is required therefore only when such plants are in connection with construction or the operation of extra-hazardous industries or in manufacturing plants or when light, heat or power is sold commercially.

Number of separate employers, 138.

Average rate assessed during first two years, assuming a uniform rate of 4%, at which rate most of the contributions were received, \$2.62 per \$100 of payroll.

Average rate required to pay claims approved up to October 1st, 1913, assuming uniform rate of 4%, \$2.32 per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), full rate.

1912, full rate on six-twelfths of payroll.

1913, full rate on nine-twelfths of payroll.

Thirteen fatal accidents occurred in the work of this class; nine workmen leaving dependents entitled to pension and four leaving no dependents.

CLASS 14.

In this class operations are listed with specified rates as follows:

Street rail	ways					 	3%
Interurban	electric	railways	with th	ird rai	1	 	5%
Interurban	electric	railways	without	third	rail.	 	4%

Number of separate employers, 24.

Average rate assessed during first two years, assuming a uniform rate of 3%, at which rate most of the contributions were received, \$1.03 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, assuming uniform rate of 3%, 80 cents per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), 3%. 1912, 3% on three-twelfths of payroll. 1913, 3% on three-twelfths of payroll.

Seven fatal accidents occurred in the work of this class; four workmen leaving dependents entitled to pension and three leaving no dependents.

CLASS 15.

In this class operations are listed with specified rates as follows:

Number of separate employers, 70.

Average rate assessed during first two years, \$1.69 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, \$1.13 per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), 3%. 1912, 3% on only one-half the payroll. 1913, 3% on only one-half the payroll.

Three fatal accidents occurred in the work of this class and in each case dependents were entitled to pension.

The telephone and telegraph operators are regarded as in a non-extra-hazardous department of these industries and are not covered by the act. Work of repairs and connections from operating lines is included in this class, but extension of plant would be rated in class 6 at 5%.

CLASS 16.

This important class refers exclusively to operation of coal mines, with specified rating of 3%.

Number of separate employers, 49; number of workmen. 6.700.

Average rate assessed during first two years, \$1.97 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, \$1.93 per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), 3%. 1912, 3% on six-twelfths of payroll. 1913, 3% on nine-twelfths of payroll.

Forty-two fatal accidents occurred in the work of this class; thirty workmen leaving dependents entitled to pension, to secure which it was necessary to set aside and invest a reserve of \$85,-524.84. Twelve workmen left no dependents entitled to pension.

CLASS 17.

This class includes operations with specified rates as follows:

Quarries			 	 4%
Stone crushing	ng		 	 3%
Mines other	than	coal	 	 21/2%

Number of employers, 200; number of workmen, 2,680.

Average rate assessed during first two years, 57% of specified rates.

Average rate required to pay awards on claims approved up to October 1st, 1913, 53% of specified rates.

Adjustment for calendar years:

1911 (3 months), full rate.

1912, full rate on four-twelfths of payroll.

1913, full rate on nine-twelfths of payroll.

Fourteen fatal acidents occurred in the work of this class; six workmen leaving dependents entitled to pension and eight leaving no dependents.

A quarry is defined as an open cut from which coal is mined, or clay, ore, mineral, gypsum, sand, gravel or rock is cut or taken for manufacturing, building or construction purposes; the operation of sand and gravel companies is therefore rated in this class as to their gravel pit, including teamsters who drive into the pit, but teamsters loading from bunkers are not covered. Bunker work not adjacent to quarry is listed in class 31. Stone cutting yards in connection with quarries are rated in this class, but if on property not adjoining they are listed in class 31.

CLASS 18.

This class includes operations with specified rates as follows:

Blast furnaces													
Smelters													
Rolling mills													21/2%

Number of employers, 7; number of workmen, 881.

Average rate assessed during first two years, assuming uniform specified rate of 3%, at which nearly all contributions were received, \$1.59 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, \$1.29 per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), full rate.
1912, full rate on four-twelfths of payroll.

1912, full rate on four-twelfths of payroll.

Only one fatal accident occurred in the work of this class, the workman leaving no dependents entitled to pension.

CLASS 19.

This class refers exclusively to operation of gas works, specified rate of 3%.

Number of employers, 16; number of workmen, 950.

Average rate assessed during first two years, \$1.03 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 84 cents per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), 3%. 1912, 3% on three-twelfths of payroll. 1913, 3% on three-twelfths of payroll.

One fatal accident occurred in the work of this class, requiring the investment of a reserve of \$3,132.84 to secure the pension of \$20 per month to the widow whose life expectancy in this case was 27.45 years, and also providing for the payment of \$5 per month for a child who reached the age of 16 five months after the accident.

CLASS 20.

Steamboats, tugs and ferries, specified rate 3%. In accordance with an opinion of the Honorable Attorney General, the compulsory application of the act, as to the operation of boats. is limited "to vessels operating upon the navigable waters of the state without any navigable outlet to any other state or country," as "the State Legislature is without power to prescribe an exclusive remedy" where an injured seaman has the right of relief in admiralty. (For notes as to the admiralty and interstate jurisdiction, see Sec. 18, annotated copy of act.)

Ferries operated by the current and attached to cables are listed.

Number of separate employers, 16.

Average rate assessed during first two years, \$1.97 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, \$1.97 per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), 3%. 1912, 3% on six-twelfths of payroll. 1913, 3% on nine-twelfths of payroll.

One fatality occurred, requiring a reserve of \$1,536.09 to secure pension of \$15 per month, payable to the mother, aged 54, with life expectancy of 18.09 years.

So few employers are engaged in these industries in Washington and so few workmen employed, that it is recommended that when opportunity for reclassification occurs, that these operations be assigned to class 42, and that this class be eliminated.

CLASS 21.

Grain elevators, specified rate 2%.

This class is held to include, at the same specified rate, operation of flour mills, chop and feed mills and grain warehouses with or without use of machinery, but not to include threshing or hay bailing operations.

Number of separate employers, 239; number of workmen, 2,340.

Average rate assessed during first two years, 69 cents per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 54 cents per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), 2%.

1912, 2% on three-twelfths of payroll. 1913, 2% on three-twelfths of payroll.

One fatal accident occurred in the work of this class, but the workman left no dependents entitled to pension.

CLASS 22.

Laundries, specified rate 2%.

Number of separate employers, 195; number of workmen, 3,540.

Drivers and office force regarded as non-extra hazardous department and not included, but all other employes are covered.

Average rate assessed during first two years, 46 cents per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 43 cents per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), 2%.

1912, 2% on one-twelfth of payroll. 1913, 2% on two-twelfths of payroll.

No fatalities have occurred in the work of this class during the past two years.

To this class belongs the honor of being the first to make careful investigation as to the cause of every accident reported from the work of laundries, in order that effective action may be taken by the Laundry Association toward the prevention of accidents and the safeguarding of all such plants.

Similar action on the part of other trade and manufacturing associations cannot be too strongly urged. The employment at the expense of the various associations of expert mechanics to visit the plants in their respective classes and to advise and assist in the installation of all reasonable safety devices and appliances, would very largely reduce the number of accidents, and at an expense which would appear trivial in view of the certain reduction in assessments following the lessening number of claims.

CLASS 23.

Water works (operation), specified rate 2%.

Number of separate employers, 126.

The making of new connections is regarded as operation, but extension of plant is rated in class 6 at 5%.

Average rate assessed during first two years, \$1.31 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, \$1.14 per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), 2%. 1912, 2% on six-twelfths of payroll. 1913, 2% on nine-twelfths of payroll.

Three fatal accidents occurred in the work of this class during the first two years, each workman leaving dependents entitled to pension and requiring the investment of a reserve of a total of \$6,793.08.

CLASS 24.

Paper or pulp mills, specified rate 2%. Number of plants, 5.

Average rate assessed during the first two years, \$1.81 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, \$1.64 per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), 2%.

1912, 2% on entire payroll. 1913, 2% on nine-twelfths of payroll.

Four fatal accidents occurred in the work of this class during the first two years; two workmen leaving dependents entitled to pensions, to secure which reserves were required to be invested amounting to \$6,005.56. The other two workmen left no dependents.

This is the only class in which it was necessary to charge the full specified rate during the year 1912. A considerable number of the accidents occurring that year were in consequence of conducting extensive repairs in one of the plants without closing down operations.

CLASS 25.

In this class operations are listed with specified rates as follows:

Garbage	works		 												2%
Fertilizer															21/2%

Number of separate employers, 11; number of workmen, 163.

Total	contrib	ution									.\$3,315.09
Total	claims	paid.									. 1,262.50

Cash balance Oct. 1, 1913.....\$2,052.59

Average rate assessed during first two years, 56% of rates specified in the act.

Average rate required to pay awards on claims approved up to October 1st, 1913, 21% of specified rates.

Adjustments for calendar years:

1911 (3 months), full rate. 1912, full rates on six-twelfths of payroll. 1913, full rates on six-twelfths of payroll.

No fatalities or very serious accidents have occurred in the work of this class, but so few employers are engaged in these industries and so few workmen are employed, that it is recommended that when opportunity for reclassification occurs that these operations be listed in some other class, preferably, especially as to fertilizer plants, in class 43, in which stock yards, packing houses, etc., are listed, and that this class be eliminated.

CLASS 26.

Stamping tin or metal, specified rate 41/2%.

It is probable that no employers in Washington are exclusively engaged in this industry, and that where such work is conducted, it is in connection with other work, properly to be rated in some other class. Some of this work is in connection with the manufacture of jewelry, which is listed in class 41, and some in canneries, which are in class 33; much of this work is in connection with manufacture of iron, steel and other metals as listed in class 34.

For these reasons no employers are listed in this class, their work being appropriately elsewhere rated, and it is recommended that the class be eliminated.

CLASS 27.

This class refers to the manufacture in factories and shops of—

Bridge work, specified rate	21/20%
Tanks	21/2%
Water towers	21/2%

As in regard to the industries listed in class 25, it is doubtful if any employers in Washington are exclusively engaged in the manufacture in factories of any of the articles enumerated in this class; but that, so far as such work is done, the work can as properly be listed in class 34, in which the work of manufacturing iron and steel articles, and work of boiler and machine shops and foundries is listed. No listings are therefore made in this class, such work being rated in class 34, to which class it is recommended that these operations be assigned when opportunity for reclassification occurs, and that the class be eliminated.

CLASS 28.

This class refers to the manufacture and repair in shops of railroad cars and locomotives, specified rate $2\frac{1}{2}\%$.

Most of this work in Washington is done by employes of companies engaged in interstate commerce, and under such conditions as to bring any claims on account of injuries under Federal jurisdiction; no such employers are therefore listed, and any such work done by others is rated in class 34, to which it is recommended that the industries listed in this class be assigned when reclassification can be made, and that the class be eliminated.

CLASS 29.

In this class are listed the lighter or less hazardous forms of wood working with specified rates as noted:

Cooperage 2½%
Staves 2½%
Veneer or box 2½%
Packing cases 2½%
Sash, door and blinds 2½%
Barrel, keg and pails 2½%
Baskets or tubs
Woodenware or wood fibre ware 21/2%
Kindling wood 2½%
Excelsior 2%
Woodworking not otherwise specified 2%
9

Planing mills are also listed in this class at $2\frac{1}{2}\%$ if operated independently from sawmills. All teamsters employed in the above industries are included. Men in hazard from saws in wood yards are listed in class 10, but drivers delivering wood from fuel yards and not in hazard from saws are not covered.

Number of separate employers, 333; number of workmen, 5,104.

Average rate assessed during first two years, assuming uniform rate of $2\frac{1}{2}\%$, at which nearly all the contributions were received, \$1.30 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, assuming uniform rate of $2\frac{1}{2}\%$, \$1.19.

Adjustments for calendar year:

1911 (3 months), $2\frac{1}{2}\%$. 1912, $2\frac{1}{2}\%$ of five-twelfths of payroll. 1913, $2\frac{1}{2}\%$ of six-twelfths of payroll.

Four fatal accidents occurred in the work of this class; three workmen leaving dependents entitled to pension, to secure which reserves amounting to \$6,551.33 have been invested. The other workman left no dependents.

CLASS 30.

Asphalt manufacturing, specified rate 21/2%.

Only eleven employers are rated in this industry in Washington, with only 261 employes.

							\$1,743.61
Total	claims	paid	during	two	years	 	 385.30
Cash	halance	in th	is class	Oct	1 1913		\$1 358 31

Average rate assessed during first two years, 65 cents per \$100 of payroll.

Average rate required to pay claims approved to October 1st, 1913, 14 cents per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), $2\frac{1}{2}\%$. 1912, $2\frac{1}{2}\%$ of one-twelfth of payroll. 1913, $2\frac{1}{2}\%$ of three-twelfths of payroll.

No fatal or serious accidents occurred in the work of this class during the first two years.

Experience has shown that there are no firms engaged in asphalt manufacturing in the State of Washington. The mixing of the prepared asphalt could no more be classed as asphalt manufacturing than mixing cement could be called cement manufacturing. The work is all being done by contractors on the work and the accounts in this class will be transferred into class 8 and in future will be rated the same as asphalt laying in class 8 at 3%.

CLASS 31.

This class includes operations with specified rates as follows:

	machinery	
Building material not	otherwise specified	21/00/

Includes operation of gravel bunkers, away from the hazard of gravel pits which are listed as quarries in class 17. Drivers hauling from bunkers only are not covered. Includes lime burning, cutting paving blocks and manufacture of paints and oils. Pumping oil strictly in connection with merchandising in oil not covered.

Number of separate employers, 94; number of workmen, 1,230.

Average assessed rate during first two years, \$1.64 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, \$1.34 per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), $2\frac{1}{2}\%$. 1912, $2\frac{1}{2}\%$ on six-twelfths of payroll. 1913, $2\frac{1}{2}\%$ on nine-twelfths of payroll.

Four fatal accidents occurred in the work of this class during the first two years; three workmen leaving dependents entitled to pension, to secure which it was necessary to invest a reserve of \$9,129.25. One workman left no dependents.

. CLASS 32.

Canneries of fruits and vegetables, 21/2%.

This classification is regarded as equally defined as "working in foodstuffs" as listed in class 39, and therefore no employers are listed in this class. It is recommended that when opportunity for reclassification occurs that this industry be assigned to class 39, and that this class be eliminated.

CLASS 33.

Canneries of fish or meat products, specified rate 21/2%. Includes manufacture of dog fish oil.

Nearly all employers in this industry employ labor in pile driving, rated in class 3 at 5%, and in other work carrying a higher rate than 21/2%, but owing to the difficulty of accurately segregating the payroll, a flat rate of 3% covering all forms of labor has been agreed upon. Cannery operators are ruled to be primarily responsible for contributions due on Oriental or white contract labor.

Number of separate employers, 45; number of workmen, 4,100.

Average rate assessed during first two years, \$1.31 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, \$1.19 per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), 3% of three-twelfths of 1911 payroll. 1912, 3% of three-twelfths of payroll. 1913, 3% of six-twelfths of payroll.

Five fatal accidents occurred in the work of this class during the first two years; three workmen leaving dependents entitled to pensions, to secure which reserves were invested amounting to \$11,358.58. Two workmen left no dependents entitled to pensions.

CLASS 34.

In this class are listed metal manufacturing operations, with specified rates as follows:

Iron, steel, copper, zinc, brass, or lead articles or wares 2	_ / -
Hardware 2	
Boiler works 2	2%
Foundries 2	2%
Machine shops not otherwise specified	2%

Includes automobile mechanicians in garage, excluding chauffeur hazard; plumbers exclusively engaged in shop work; also sheet metal or galvanized iron or tin works, with or without machinery, exclusive of outside construction, which is rated in class 5 at 5%. Includes beveling glass at 21/2%. Machine shops in connection with mills regarded as incidental to operation of the mills and included in the class in which the mills are listed.

Number of separate employers, 600; number of workmen, 5,380.

Average rate assessed during first two years, \$1 per \$100 of payroll.

Average rate required to pay awards on claims, approved up to October 1st, 1913, 98 cents per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), 2%.

1912, 2% on six-twelfths of payroll. 1913, 2% on four-twelfths of payroll.

Six fatal accidents occurred in the work of this class; five workmen leaving dependents entitled to pension and one leaving no dependents. To secure the pensions it was necessary to set aside and invest reserves amounting to \$11,304.60.

CLASS 35.

In this class are listed manufacturers of earthenware with specified rate as noted:

Tile,	bric	k or		te	r	ra	l	C	0	t	ta	a								2%
Fire	clay	or	p	ot	te	er	у													2%
Earth	enw	are										. ,								2%
Porce	elain	wai	e.																	2%

Includes manufacture of glass jars and insulators.

Number of employers, 52; number of workmen, 1,983.

Average rate assessed during first two years, 69 cents per \$100 of payroll.

Average rate required to pay awards on claims, approved up to October 1st, 1913, 51 cents per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), 2%. 1912, 2% on three-twelfths of payroll. 1913, 2% on three-twelfths of payroll.

Three fatal accident occurred in the work of this class; two workmen leaving dependents entitled to pension, to secure which reserves were invested amounting to \$1,892.18. In the case of the other fatality, no dependents were left who were entitled to pension.

					C	: [_	A	8	35	S	ij	3	6									
Peat fu	le1																					29	6
Bricket	tes																					20	6

There being probably no employers exclusively engaged in these operations in Washington, no listings are made in this class, but such work, if any, would be listed in class 35, to which class it is recommended that these operations be assigned when opportunity for reclassification occurs, and that this class be eliminated.

CLASS 37.

Breweries	. 29
Bottling works	. 2%
Also manufacture of ammonia and alcohol	1 20%

Brewery teamsters and helpers included.

Bottled beer delivery from bottling works not covered.

Average rate assessed during first two years, 88 cents per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 82 cents per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), 2%. 1912, 2% on three-twelfths of payroll. 1913, 2% on six-twelfths of payroll.

Two fatal accidents occurred in the work of this class; only one workman leaving dependents entitled to pension, to secure which a reserve of \$4,000 was required to be invested.

CLASS 38.

Cordage					11/2%
Work in	wool,	cloth, leat	her, paper,	brush, rubber	
or text	ile not	otherwise	specified		11/2%

Number of employers, 160; number of workmen, 1,980.

Average rate assessed during first two years, 52 cents per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 28 cents per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), $1\frac{1}{2}\%$. 1912, $1\frac{1}{2}\%$ on three-twelfths of payroll. 1913, $1\frac{1}{2}\%$ on three-twelfths of payroll.

One fatal accident occurred in the work of this class, the workman leaving parents entitled to a pension of \$20 per month until December 29, 1914, at which time the workman would have become of legal age.

An investment of \$527.95 was required to secure the pension until the date stated, at which time the pension will cease unless a continuance of dependency is proven.

CLASS 39.

Working in foodstuffs, including oils, fruits and vegetables, $1\frac{1}{2}\%$.

This class refers exclusively to edibles and includes manufacture of candies and crackers.

Oils for paints are listed in class 31 under the heading of "Building Material N. E. S.," and manufacture of dog fish oil is rated in class 33 at 21/2%.

Number of separate employers, 93; number of workmen, 1,471.

Average rate assessed during first two years, 52 cents per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 34 cents per \$100 of payroll.

	years\$4,683.73 years	
Balance on hand October		

Adjustments for calendar years:

1911 (3 months), $1\frac{1}{2}\%$. 1912, $1\frac{1}{2}\%$ on three-twelfths of payroll. 1913, $1\frac{1}{2}\%$ on three-twelfths of payroll.

No fatal accidents occurred on account of the work of this class during the first two years.

CLASS 40.

Creameries,	specif	ied	rate.	 				11/2%
Condensed								

Number of separate employers, 113; number of workmen, 638. Average rate assessed during first two years, 34 cents per \$100 of payroll.

Average rate required to pay award on claims approved up to October 1st, 1913, 13 cents per \$100 of payroll.

Total contributions during two years	\$2,774.03
Total claims paid during two years	1,118.35
Balance on hand October 1st 1913	

Adjustments for calendar years:

1911 (3 months), 1½%.

1912, $1\frac{1}{2}\%$ on one-twelfth of payroll. 1913, $1\frac{1}{2}\%$ on two-twelfths of payroll.

No fatal accidents occurred in the work of this class during the first two years.

CLASS 41.

In this class are included operations with specified rates as follows:

Printing									11/2%
Electrotyping									11/2%
Photo-engraving									11/2%
Engraving									11/2%
Lithographing									
Making jewelry									11/2%

Includes compositors, linotypers, proofreaders and foremen in room with machinery or shafting; also errand boys, but bookkeepers and office force and hand engravers not in room with machinery are not covered.

Number of separate employers, 369; number of workmen, 2,108.

Average rate assessed during first two years, 27 cents per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 13 cents per \$100 of payroll.

Total	contrib	utions	during	g first	t two	years	 \$8,123.70
Total	claims	paid	during	first	two	years	 3,841.55
a .			1.0		4 - 1	1010	01.000.15

Cash balance on hand October 1st, 1913......\$4,282.15

Adjustments for calendar years:

1911 (3 months), 11/2%.

1912, 11/2% on one-twelfth of payroll.

1913, 1½% on one-half of one-twelfth of payroll.

No fatal accidents occurred in the work of this class during the first two-year period.

The honor of the low record in assessed and required costs during the first two years under the act is won by this class. The creamery industry, as listed in class 40, shares the record as to the rate actualy required to pay awards for accidents, but owing to the smaller cash balance to the credit of the class on October 1st, 1913, a somewhat higher rate was required to be assessed upon that class than upon class 41.

Adjustment of all accounts in this class for year 1913 is made to the basis of 6½ cents for each \$100 of payroll. This purely nominal basis is used in order that all the employers

listed in this class may pay equally in proportion to their payrolls, and the accounts for the year be uniformly adjusted.

CLASS 42.

Stevedoring															
Longshoring															
Wharf oper	a	ti	0	n	L		٠.								2%

Number of separate employers, 87.

In wharf operations, members of crews of boats engaged in loading or unloading are not covered.

Average rate assessed during first two years, assuming a uniform rate of 3%, at which most of the contributions were received, \$1.87 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, \$1.57 per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), 3%. 1912, 3% on four-twelfths of payroll. 1913, 3% on twelve-twelfths of payroll.

Six fatal accidents have occurred in the work of this class during the first two years; two workmen leaving dependents entitled to pensions, to secure which reserves were required to be invested in the amount of \$8,000. The other four workmen left no dependents entitled to pension.

Total contributions were received to the amount of \$38,019.28 and \$29,201.37 has been paid to injured workmen.

In accordance with a recent decision by the Federal Court, the line of demarcation between the exclusive jurisdiction of the State and Federal Courts, as to stevedoring, appears to lie between the wharf and the vessel; and if injury is received on the vessel itself, it may be that the State Legislature was without power to prescribe an exclusive remedy where an injured workman had the right of relief in admiralty. There is provision in Section 18 of the act for the mutual signing of such agreements between the employer and his workmen, as, when "filed with and approved by the department, shall subject the acceptors irrevocably to the provision of this act" so far as not forbidden by any act of Congress. (For notes as to ad-

miralty and interstate jurisdiction, see Sec. 18, annotated copy of act.)

CLASS 43

Industries are listed in this class with specified rates as noted:

Stock yards, with or without railroad entry	
Packing houses	21/2%
Making soap, tallow, lard or grease	
Tanneries	
Workmen engaged in slaughtering to be included at	21/20/2

Retail meat markets, including incidental use of power grinding or sausage machines, and packing house agencies, regarded as merchandising in meat, which is not an extra-hazardous industry and therefore not covered.

Average rate assessed during first two years, assuming uniform rate of $2\frac{1}{2}\%$, at which nearly all the contributions were received, \$1.09 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, assuming uniform rate of $2\frac{1}{2}\%$, \$1 per \$100 of payroll.

Adjustments for calendar years:

1911 (3 months), $2\frac{1}{2}\%$. 1912, $2\frac{1}{2}\%$ on three-twelfths of payroll. 1913, $2\frac{1}{2}\%$ on six-twelfths of payroll.

One fatal accident occurred in the work of this class, requiring the investment of a reserve of \$639.94 to secure a pension of \$20 per month, payable to his father until September 15th, 1915, at which date the workman would have become 21 years of age, and at which date the pension will cease unless proof of dependency is made.

CLASS 44.

Artificial ice						
Refrigerating	or	cold	storage	plants	 	2%

Excludes refrigerators of retail meat markets and packing house agencies.

Includes ice wagon drivers and helpers.

Average rate assessed during first two years, \$1.31 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 59 cents per \$100 of payroll.

Adjustment for calendar years:

1911 (3 months), 2%. 1912, 2% on six-twelfths of payroll. 1913, 2% on nine-twelfths of payroll.

CLASS 45.

Theater stage employes, specified rate 1½%.

Excludes moving picture operators.

Number of separate employers, 24; number of employes, 140. Average rate assessed during first two years, 65 cents per \$100 of payroll.

Average rate required to pay awards on claims approved upto October 1st, 1913, 16 cents per \$100 of payroll.

Total contributions during first two years......\$757.86 Total claims paid during first two years...... 181.15

Cash balance on hand October 1st, 1913.....\$576.71

Adjustments for calendar years:

1911 (3 months), $1\frac{1}{2}\%$. 1912, $1\frac{1}{2}\%$ on three-twelfths of payroll. 1913, $1\frac{1}{2}\%$ on six-twelfths of payroll.

This class, like class 30, is too small to provide an application of the law of averages, and should a serious accident occur the burden of making good a deficiency would fall heavily upon the small number of contributors. The protection afforded by the principle of mutual insurance is given in only a very slight degree and the class affords an illustration of the danger to an employer of being listed in a small class and of the unwisdom of too finely segregating industries into separate classes. Theater stage employes are chiefly subject to such hazards as attend work of construction, and it is recommended that when opportunity for reclassification occurs, this industry be assigned to class 5 at 11/2%, and that the class be eliminated.

CLASS 46.

This class includes operations of industries with specified rates as follows:

Fireworks	manufacturing							. 5%	2
Powder wo	orks							.10%	,

Includes handling and storing explosives as an industry.

Average rate assessed during first two years, slightly less than 50% of specified rate.

Average rate required to pay awards approved up to October 1st, 1913, slightly more than 40% of specified rates. Payment of the amount due this class fund having been refused by the largest employer in the class, suit has been brought for its collection, and the case is still pending in the courts.

Adjustments for calendar years:

1911 (3 months), specified rate and deficiency assessment in addition equal to 75.97% of specified rate.
1912, specified rate on only two-twelfths of payroll.

1913, specified rate on only four-twelfths of payroll.

Only six separate employers are engaged in the industries listed in this class in Washington; one in the manufacture of fireworks, three in the making of powder and two being engaged in the handling and storing of explosives as an industry and not in manufacture. The payroll of the E. I. DuPont De Nemours Powder Company represents 92.58% of the payroll of the entire class, and though formal demand was made upon them for the amount due upon their payroll, payment was refused, and suit has been brought by the state to compel payment, but no decision has vet been rendered. In November, 1911, an accident occurred in one of the plants listed in this class, in which eight employes, each being under 21 years of age, were killed. To secure the pensions payable to the parents of these minors until they would have become of legal age would have required the investment of reserves amounting to \$7,-659.35, but the largest employer listed in the class and representing a very large proportion of the entire class payroll, having failed to pay the amount due the class fund, the reserve could not be set aside, and though warrants drawn on the class fund are mailed regularly to the pensioners, they are marked "not paid for want of funds in class 46."

In January, 1913, another fatal accident occurred in one of the plants listed in this class and a reserve of \$4,000 should be invested to secure the pension payable in this case.

The rates specified in the act are more than ample in view of the class experience during the two years, and if all employers in the class had paid the assesments made upon them, the reserves could have been set aside and invested, and the assessed rate during the first two years would have been slightly less than \$5 per \$100 of payroll upon powder works and \$2.50 per \$100 of payroll upon manufacture of fireworks.

CLASS 47.

Creo	soting	works .										21/2%
Pile	treatin	ng works	١.									21/2%

This classification applies to industries where piling, shingles or other articles are subjected to creosoting processes. The manufacture or preparation of creosote, in Washington plants, being usually in connection with manufacture of roof paints and oils, etc., as listed under "building materials not elsewhere specified" as rated in class 31.

Number of employers, 8; number of workmen, 137.

Average rate assessed during first two years, \$1.53 per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 64 cents per \$100 of payroll.

Total claims paid during first two years\$ Total claims paid during first two years	
Cash balance on hand October 1st. 1913	\$889.08

Adjustments for calendar years:

1911 (3 months), $2\frac{1}{2}\%$. 1912, $2\frac{1}{2}\%$ on five-twelfths of payroll. 1913, $2\frac{1}{2}\%$ on nine-twelfths of payroll.

So few employers are engaged in this industry and so few workmen are employed that the objections and dangers referred to under classes 30, 25 and 45 apply particularly. view of the handling of piles, and other manufactures of lumber involved in this industry, it is recommended that when opportunity for reclassification occurs that the work be assigned to class 10, and that this class be eliminated.

CLASS 48.

Elective adoption for non-extra hazardous industries, specified rate 1.35%.

This class was created by resolution of the Commission to provide for workmen in non-extra hazardous industries or occupations who elect to come under the act under the provisions of Section 19.

Number of employers, 64; number of workmen, 960.

Average rate assessed during first two years, 59 cents per \$100 of payroll.

Average rate required to pay awards on claims approved up to October 1st, 1913, 15 cents per \$100 of payroll.

Total	contribu	ution	s durin	g firs	t two	years.	 .\$2	,657.54
Total	claims	paid	during	first	two	years.		686.35
Cash	halance	Octo	her 1st	191	3		\$1	971 19

Adjustments for calendar years:

1911 (3 months), 1.35%.

1912, 1.35% of three-twelfths of payroll.

1913, 1.35% of six-twelfths of payroll.

Any employer, not under Federal jurisdiction, engaged in non-extra hazardous industries or departments are considered eligible for this class, but where an employer has a number of workmen doing practically the same kind of non-extra hazardous work, applications will not be approved unless a large percentage of such workmen engaged in the plant apply to come under this elective provision of the act.

It is expected that, as the very low required costs in this class come to be appreciated, that many applications will be received and that this will become a large and important class.

F. W. HINSDALE, Chief Auditor.

INVESTMENTS OF RESERVE FUNDS TO OCTOBER 1, 1913.

These reserves are held to secure the maintenance of pensions.

Date of Purchase	Bonds	Int.	Ter Yrs		
Feb. 9, 1912	2, City of North Yakima Less paid		6 20	\$60,000.00 28,000.00	\$32,000.00
Feb. 15, 1912	Town of Elma	6 %	6 10		10,000.00
	School Dist. No. 16, King Co				10,000.00
	Town of White Salmon				9,000.00
-	, School Dist. No. 40, Spokane Co.				10,000.00
	, School Dist. No. 14, Yakima Co.				11,500.00
	, School Dist. No. 96, Yakima Co.				9,000.00
	, School. Dist. No. 88, Spokane Co			10,000.00	
, , , , , , , , , , , , , , , , , , , ,	Less paid			1,000.00	9,000.00
June 1 1912	, School Dist. No. 49, King Co	5160	5		5,000.00
	City of Oroville (Water)				6,500.00
	City of Oroville				2,000.00
	, School Dist. No. 82, Whatcom Co				15,000.00
	, School Dist. 105, Pierce Co			5,000.00	
	Less paid			1,000.00	4,000.00
Tulm 1 1010	School Dist No 26 Comits Co	E 01	20		30,000.00
	, School Dist. No. 36, Cowlitz Co , School Dist. No. 2, Pend Oreille C				20,000.00
	School Dist. No. 2, Pend Oreme C				10,000.00
	School Dist. No. 25, Asotin Co				16,000.00
	School Dist. No. 7, Clallam Co				34,000.00
	School Dist. No. 1, Clanam Co		,		200,000.00
	City of Wenatchee				27,000.00
	City of Wenatchee				15,500.00
	Clallam County				50,000.00
	Clallam County				50,000.00
	School Dist. No. 17, Okanogan Co				22,000.00
	School Dist. No. 17, Okanogan Co				2.800.00
	School Dist. No. 1, Whitman Co				10,000.00
	Pt. of Seattle, Lake, Wash			17,000.00	10,000.00
	Pt. of Seattle, Cen. Water Front				
	Pt. of Seattle, East Waterway.				
	Pt. of Seattle, Smith's Cove				
	Total purchase value		\$	112,000.00	
	Purchase price at 98c				109,760.00
Sep. 5, 1913,	Chehalis Co., School Dist. No. 28	3.41/2%	20		90,000.00
Average rate	Total amount invested in bonds of interest earned, 4.84 1/2 %				\$820,060.00

Statement of total expenses from June 1st, 1911, to October 1st, 1913, covering a preliminary period of four months before the Workmen's Compensation Act went into effect, and two full years of operation under the law.

Salaries—Commissioners \$ 24,351.29 Secretary, medical director, auditors, office 108,879.71 Railway fares 11,618.88 Meals and hotel accommodations 11,651.30 Incidentals—Commissioners and auditors 293.48 Stationery and office supplies 9,087.67 Postage 8,554.36 Telephone and telegraph 1,840.28 Printing and general expense, including court costs 8,822.25 Rents 3,266.75 Office furniture and equipment 11,341.51 Physicians 10,372.30 \$210,079.78 Total receipts, accident fund, first two years Cash in accident fund \$321,217.30 Reserved to secure pension 28.41% 734,206.24 Claims paid 59.16% 1,529,115.26
100.00% \$2,584,538.80
Total expense from June 1st, 1911, to September 30, 1913,
which was paid out of the general fund of the state \$210,079.78
Ratio of expense to total contribution to accident fund 8.13%

EMPLOYERS SHOULD:

Report all accidents promptly.

Interest themselves in their employees' cases beyond the filing of reports. By keeping in touch with the workmens' condition and advising the Commission thereof periodically, beneficial results will be obtained.

Report full details of any case of suspected malingering or "faking."

Not expect this Commission to assume facts which are only in possession of the employer.

We are the custodians of your money, assist us in dispensing it fairly and equitably with justice to all.

Safety First: Accident prevention is the best protector of the "Accident Fund." It is more satisfactory to a workman than compensation for an injury.

All large plants should maintain a "Safety Committee" composed jointly of Employer's officials and Employees.

SUGGESTIONS TO EMPLOYERS.

BY THE CHIEF AUDITOR.

The following suggestions to employers are submitted with a view of facilitating the work of this Commission in the obtaining of payrolls:

We advise the adoption of a payroll sheet on which is a summary of each month's operation taken from the time-book.

The segregation of the construction labor on the payroll from the operating or manufacturing labor.

If you have knowledge of any new firms or individuals commencing business, it is your duty to the State as well as to your own advantage, to send the information to this Commission. The greater the number of contributors to a class, the less the cost to individual operators.

A Postal Card addressed to this Commission with the information is very desirable and at the first opportunity one of our auditors will call upon the new firm and their contribution to the Accident Fund will be obtained.

Assessments as needed are computed on quarterly estimates of your payroll. In outlying districts it is more satisfactory to report your payroll every three months, when call can be made on your actual instead of average payroll. Any under or over payment will be adjusted after the close of the current year.

Make all drafts, checks and money orders payable to the INDUSTRIAL INSURANCE COMMISSION.

Checks in payment of assessments due the Accident Fund should reach Olympia before the due date—do not wait until the last day before mailing your check. The accident may happen while your remittance is on the way.

In the handling of 9000 accounts with a limited force, mistakes will occur. If there is an error in your assessment notice, do not hesitate to call the attention of the department to it. Inform us immediately on receiving the notice, do not wait until it is due, nor allow yourself to go in default on account of it.

If you do not receive your receipt for money sent in payment of an assessment within ten days, notify the Olympia office, when a duplicate receipt will be sent you.

Address all communications to The Industrial Insurance Commission, Olympia, Washington.

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MEDICAL DIVISION

REPORT OF MEDICAL ADVISOR.

(1) Disability Groups.

Infections.

Scalds, Burns.

Cuts.—Sprains.—Puncture Wounds.

Bruises, Contusions, Abrasions.

Multiple injuries.

Eyes.—Opthalmia Electrica.

Table of all injuries.

Death table and causes.

Table Typical Injuries, Kinds and Awards.

(2) Problem Cases.

Head .- Eye.

Spine.—Nerve.

Miscellaneous.

Claims not due to injury.

Injury caused by third party.

Epilepsy.

(3) Hernia.

Conclusions on Hernia.

(4) Fractures of Long Bones.

Plating.—Wiring.—Simple.

Murphy splints, non-union, delayed union.

Some suggestions.

Conclusion.

In presenting the classes of disabilities that have been disposed of in the last year, we give classification of injury and totals to save the expense of printing the entire disability chart of each class of injury. The only charts presented are the death chart, classification causes of death, chart showing the degrees paid for disability, and chart showing total of all injuries.

FRACTURES: In the first year, our report covered 6,356 completed claims, of which 663 were due to fractures. In the

last year, we completed 12,380 claims, of which 1,383 were for fracture. In this number there were 251 fractured tibiae, 36 femurs, 130 forearms, 45 humeri, 7 fractures involving the elbow joint, 8 fractures involving the shoulder joint, 41 fractures of clavicle and 12 fractures of the inferior maxilla.

In the present year, of the 1,383 cases of fractures, we had 266 disabilities.

In the 6,356 cases, we had 71 dislocations of joints, while in this year in the 12,380 claims, we had 114 cases of dislocations.

AMPUTATIONS: In the 6,356 cases, we had 396 amputations, while in the 12,380 cases for this year, we had 590 amputations. In the first year the 396 amputations cost \$115,-157.50, while in the last year, the 580 amputations cost \$189,-526.80.

The member that suffered the most is the index finger. We have had 92 amputations of the index finger, 70 amputations of the thumb, 12 amputations of hand, 10 amputations of the thigh, 10 amputations of the leg, 8 amputations of the foot, 6 amputations of the forearm, and 7 amputations of the arm above the elbow. The index finger alone has cost \$15,671.05 from amputations in the last year.

INFECTIONS: There have been 650 cases of infection, of which 454 were in the hand, 87 in the foot, 82 in the leg and knee, and 42 in the wrist and arm. As the result of infection, there have been 23 disabilities occurring in the 650 cases. The average time loss in these 650 cases was 20.2 days and the total cost was \$21,128.75 for the infection cases that resulted during the year.

SCALDS AND BURNS: There were 299 claims, 40 of which involved the hands. There were 7 serious disabilities resulting. CUTS: In the 6,356 cases reported last year, there were 928 cuts and 30 disabilities. In the 12,380 cases this year, there were 1,860 cases reported and 92 disabilities. The hand suffered most with 927 cases, the foot coming second with 359 cases. The knee comes third with 123 cases.

SPRAINS: There were 899 sprains reported this year, of which 298 involved the ankle, 92 the knee and 85 the wrist. PUNCTURE WOUNDS: There were 415 puncture wound claims filed, of which 186 involved the foot, 129 the hand.

BRUISES, CONTUSIONS, ABRASIONS: Under bruises, contusions, abrasions, etc., there were 4,626 cases reported. As usual the hand comes in for the larger per cent. of them, with the foot second and the leg and knee following. Of these 4,626 claims, there were 70 minor disabilities resulting from infection and other causes that came up as a result of bruising, lacerations and neglect on the part of claimant.

MULTIPLE INJURIES: Under the head of multiple injuries, the cases that have more than one member injured are included. There were 1,027 claims that had multiple injuries. In this class, the ankle and foot come first. There were 70 disabilities resulting from the 1,027 cases.

EYES: The first year in 6,356 cases, we had 181 eyes injured with 55 disabilities. In the 12,380 cases this year, we had 367 injuries to eyes with 109 disabilities, so the proportion of disability still remains about one to three.

In the first year we had injury to hearing or ears, 7 cases reported, and the present year shows just 7 cases reported.

OPHTHALMIA ELECTRICA: We simply call attention to this subject again because in the first year of the administration of this law, we had a number of claims filed for injuries to eyes, caused by electric flashes or switches, controllers, etc. We called attention to this on page 222 of our first report. In the year just passed, we have not had one single claim filed claiming injury to eyes from this cause. If the claims filed the first year had any merit in them, we certainly would have had more of the same kind of accidents in this, the second year.

TOTAL OF ALL INJURIES.

From October 1st, 1912, to Septebmer 30th, 1913, the Commission have disposed of by settlement, 12,380 claims. The du-

ration of disability in working days was 340,759½ days, making an average of 27.5 time loss per claim.

The cost in time loss was \$465,090.75 or \$37.57 per claim. In the 12,380 claims, there were 1,437 permanent partial disabilities. Permanent partial disability allowance was \$412,-909.00, making a total expense for the 12,380 claims settled during the year of \$877,999.75. This does not include the death loss or pensions for permanent total disabilities.

In the 6,456 cases of the first year's work, there was a time loss of 170,024 days, average duration of 25.2. The amount of time award was \$215,936.50, making an average of \$33.97 per claim. There were 685 disabilities costing \$184,337.50, making a total of \$400,274.00. Taking into consideration the number of claims disposed of the first and second years, we find that the general average of cost per claim is practically the same in both years.

By looking at the Table "Total of all Injuries" in this section, you will see the entire cost of time loss and permanent partial disabilities of the year's work. We would like to call your attention especially to the cost of injuries to hands. In the 6,356 claims reported the first year, there were 2,099 cases of injury to hands, with a total cost of \$136,137.50, while in the present year in the 12,380 cases, there were 3,825 cases of injury to hands with 820 permanent partial disabilities, making a total cost of \$323,643.36.

Claims for injured feet number 1,729, with 74 permanent partial disabilities and a total cost of \$68,333.15. The claims for injury to thigh, knee and leg number 1,977, with 171 permanent partial disabilities and a total cost of \$184,542.70. For injury to arms, there were 970 claims filed with 104 permanent partial disabilities, at a cost of \$94,949.14.

TOTAL—ALL INJURIES—YEAR 1912-13.

MEMBER	Number of Injuries	Duration of Disa- bilities (Work days)	Amount of Time Awards	Number of Degree Awards	of Degree	Total Awards
Foot	1,138	24,829	\$33,162 75	34	\$15,352 50	\$48,515 25
First toe		6,6092	9,084 75	11 7	1,125 00	10,209 75
One other toe	82	1,139	1,512 90	7	362 50 950 00	1,875 40 2,952 70
Two toes	89	1,597	2,002 70	11 5	900 00	2,113 50
Three toes	38	883½ 456	1,213 50 665 15	5	1,050 00	1 715 16
Four toes	7	299	363 90	9	587 50	1,715 16 951 40
Five toes	763	49 9941	56,721 85	88	36,112 50	92.834 35
Thigh	198	11.078%	14,469 45	45	27,700 00	42,169 45
Ankle	499	12,649	14,469 45 16,976 65 17,264 40 2,647 85	4 2 88 45 14 20	27,700 00 2,925 00	92,834 35 42,169 45 19,901 65 26,064 40 3,572 85 47,088 71
Knee	453	12,650	17,264 40	20	8,800 00	26,064 40
Hip	64	1,7021	2,647 85	4	925 00 22,950 00 13,125 00	3,572 88
Hand	871	17,4981	24,058 71	55	22,950 00	47,008 71
Thumb	530	17,498½ 10,550½	14,014 48	101	13,125 00	27,139 48 30,787 70
Five toes Leg Thigh Ankle Knee Hip Hand Thumb First finger Second finger	568	11,5212	15,350 20	20 4 55 101 142 123	15,437 50 7,900 00 4,490 00	22,958 24
Second Inger	534 343	6 7791	0 210 08	120	4,490,00	13,700 98
Third finger Fourth finger	312	11,521½ 11,065 6,778½ 6,488½ 3,996½	24,058 71 14,014 48 15,350 20 15,058 24 9,210 98 8,915 95	106	5,262 50	14,178 48
First and second fingers	154	3.9961	5,342 45	54	11,137 50	16,479 98
Second and third fingers	187	0,0002	5,342 45 5,137 80	44	5,837 50	10,975 30
Third and fourth fingers	82	1,888½ 3,569	2,579 45	29	3,975 00	6,554 48
Fourth finger First and second fingers Second and third fingers Third and fourth fingers There fingers Four fingers Thumb and one finger. Thumb and three fingers Thumb and three fingers	124	3,569	4,959 50	31	9,650 00	14,609 50
Four fingers	47	1,828 1,486½	2,448 50	19 21	0 000 00	10,748 50 8,142 20
Thumb and one finger.	45	1,4862	2,142 20	21	5 012 50	6,482 90
Thumb and two ingers	24	1,016	1,470 40 99 20	20	862 50	961 70
Thumb and three fingers Thumb and four fingers	9	67 258	390 30	2	1.525 00	1,915 30
Wrist	2 2 2 246 316	4,633	6,168 20	12	3,012 50	
Forearm	316	13,5075	18,261 43	43	23,325 00	41,586 43
Elbow	68	1,637	2,301 01	. 11	3,600 00	5,901 0
Arm	144	6,7071	9,341 40	25	5,000 00 5,012 50 862 50 1,525 00 3,012 50 23,325 00 3,600 00 18,675 00 3,700 00 2,325 00	9,180 70 41,586 43 5,901 03 28,016 40
Shoulder Clavicle	196	4,672	6,564 60 3,616 85	18	9 995 00	5 041 8
Neck	49 14	2,779½ 206	324 10	. 0	5,300 00 50 00 300 00 1,500 00	324 10
Spine	8	1.042	1,272 15	5	5,300 00	6,572 1
Back	386	7,124	10,448 60	1	50 00	10,498 60 2,358 50 6,125 2
Chest	75	1,536	2,058 50	1	300 00	2,358 5
Side	164	8,208	4,625 25	1	1,500 00	5,139 5
One rib Two ribs Three ribs	149	3,5575	5,139 50 4,207 40			4,207 4
Two ribs	112 31	2,942½ 954½	1,376 30			1,376 3
Four ribs	1	47	94 90			94 9
Buttock	20	4013	563 35			563 3
Polytic	8	5211	642 85	2	2,000 00 750 00	2,642 8
Abdomen	24	743	1,007 45	1	750 00	1,757 4
Groin	18	412	503 15			503 1
Abdomen Groin Testicles Head	35	8552	1,196 15		250 00 4,966 50	1,196 1 2,694 2
Head	69	1,795½ 3,027 1,399	2,444 20 3,887 55	10	4 966 50	8,854 0
Skull Scalp	38 133	1 300	1,905 00	10	4,000 00	1.905 0
Face	95	9534	1,292 13			1,292 1
Nose	24	953½ 443	576 55			576 5
Forehead	72	729	931 40			931 4
Jaw	25	6765	1,028 40			1,028 4
Brain	8	121	176 90	1	200 00	376 9
Еуе	367	7,647	11,475 40	109	73,325 00	84,800 4
EarOther members	7 53	263 1,698	452 15 2,395 43	4	200 00 73,325 00 3,025 00 1,625 00	3,477 1 4,020 4
Inguinal hernias— 1. Single	68	1,570	2,243 86	69 3 3	21,675 00	23,918 8
1. Single	3	78	105 00	3	1,200 00	1,305 0
Femoral hernia	3	78	105 00	8	1,125 00	1,305 0 1,230 0
Umbilical hernia				1	375 00	375 0
		0.1	THE OF			175 6
Recurrent hernia Multiple members	3	64,686	175 65 88,918 78	42	22,350 00	111,268 7

SOME TYPICAL INJURIES AND THEIR AWARDS.

MEMBER-INJURY	Number of Injuries	Duration of Disabilities (Work days)	Average Duration of Disa- bilities	Amount of Time Awards	Average Time Award	Number of Per- manent Partial Disability Awards	Amount of Permanent Partial Disa- bility Awards	Total
Foot bruised Leg bruised Thumb bruised Thumb bruised Hand cut Knee cut Foot punctured Ankle sprained Leg tractured Forearm fractured One Tib fractured Shoulder dislocated Thumb amputated First finger amputated	* 488 8316 1151 1151 1255 1174 1174 1174 1174 1174 1174 1174 11	8 176 6 644 6 644 6 644 2 945 2 902 2 902 1 889 1 889 1 159 9 174 9 159 9 174 9 174	16.8 21.0 21.0 20.0 19.5 23.6 10.7 117.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1	\$10,901.50 9,097.70 4,088.35 4,1088.35 1,589.30 2,589.30 1,589.30 1,589.30 1,589.30 1,669.60	\$22.46 28.73 28.73 28.73 28.73 28.73 28.73 29.73 20.73	2010 2010 2010 2010 2010 2010 2010 2010	\$770 00 100 00 500 00 500 00 1,700 00 500 00 50 00 1,237 50 11,237 50 11,230 00 11,325 00 11,325 00 11,325 00 11,325 00	\$11,711 50 9,197 70 4,538 35 4,937 83 10,721 80 5,550 43 8,222 30 64,412 00 52,461 90 8,315 60 53,315 60 54,412 40 64,412 40 6

KINDS OF INJURIES AND THEIR AWARDS.

KINDS OF INJURIES	Number of Injuries	Duration of Average Disabilities Duration (Work days) of Disa- bilities	Average Duration of Disa- bilities	Amount of Time Awards	Average Time Award	Number of Per- manent Partial Disa- bilities	Amount of Permanent Partial Disa- bility Awards	Total Awards
Bruises Outs Punctures Sprains Fractures Amputations Amputations Unclassified Multiple injuries Total—All injuries	4,626 1,860 1,860 1,383 114 590 650 650 650 1,027 1,027	83, 5663, 34, 384 5, 2913, 90, 555, 90, 555, 90, 573, 4, 544, 4, 548, 6, 921 13, 133, 45, 820	18.11 18.55 19.66 65.55 65.55 89.55 89.55 89.51 18.66	\$114,004 52 46,434 48 7,201 70 25,717 70 121,705 70 122,705 70 123,705 70 123,705 70 117,228 75 117,228 75 117,228 75 117,228 75 117,228 75	\$24 64 24 98 17 35 17 35 17 35 88 66 55 28 55 28 55 12 31 37 57 58 36 46 61 12	70 822 236 296 296 29 662 7 70 70 1,437	\$9, 087 50 13, 237 50 2, 255 00 2, 255 00 8, 584 00 8, 584 50 155, 240 00 105, 200 00 106, 200 00 24, 600 00	\$129 82 114 76 212 50 222 50 224 50 224 50 224 50 225 16 55 65 55 65 55 16 851 43

The following table shows the number of fatal accidents reported during the fiscal year ending September 30, 1913, with the immediate cause of death:

Asphyxiation	3 9 6
Burns	0
Disease—	1
Caisson disease	4
Cerebral hemorrhage	
Diabetes	'1
Heart	1
Natural causes (direct cause unknown)	1
Nephritis	1
Pneumonia (not traumatic)	2
Rheumatism	1
Septic meningitis (brain abscess)	2
Drowning	39
Electrocution	11
Freezing	1
Infection	6
Internal injuries	113
Paralysis	1
	1
Sarcoma	32
Shock	103
Skull injuries	
Spine fractures	20
Suffocation	12
Total	371

HEAD INJURIES: By referring back to death chart for immediate cause of death, you will see that there were 103 deaths as a result of injury to skull and 113 deaths as a result of internal injuries.

For the number of fractured skulls and head injuries, we refer you to statistics on death (death table in following chapter), as the greater portion of injuries of this kind have resulted in the death of the patient, either immediately or within a few days.

Workman 46 years old; occupation, rigging slinger; struck across the head with piece of a limb. There was no evidence of fracture; had received an injury to head three years before and claimed that he had entirely recovered from same. Following the second injury, he complained of pain in the head with numbness in the arms and hands and slight difficulty in talking. This condition, after seven or eight months, increased, and be be-

came very erratic, easily aroused to anger, and had "spells" during which his family could scarcely do anything with him. Later, all his deep reflexes became exaggerated. After a thorough examination by a neurologist and surgeon, the Commission advised that the skull be trephined; found the menanges quite adherent to the skull at the site of injury. His condition improved following operation and his mind became clear. Some six months later he was thought by his physician to be suffering from gall stones, operated, found normal gall bladder, but did find strong adhesive bands between the under surface of the liver and colon, that must have been due to some internal trauma. These were separated and omentum interposed to prevent readhesion. Following this, he had an attack of pueumonia. At the present time this man's condition is fair, mind clear, and able to do some work.

Workman struck on head by a limb; four-inch scalp wound with depressed fracture of skull over left parietal; unconscious for a few days. Seemed to recover and left hospital He was lost sight of by the Commission; mail all returned. After some months he was found in a half-dazed condition with a marked depression in skull at site of injury. Was examined by neurologist, operation advised, trephined, elevating the depression, and he made a rapid recovery. Left hospital practically normal. Present condition or whereabouts not known.

Workman 25 years old; wheeling concrete while working on a roof; fell through skylight, injury to head, followed by unconsciousness. This man was found upon examination to have mytral heart lesion; also a depressed fracture of skull. A decompression operation was followed by a disappearance of all his brain symptoms. Claimant has been lost sight of.

INJURY TO EYES: There are a great many claims filed claiming injury to eyes from accidents, that are due to diseased conditions of eye or general disease of claimant, and never had any connection whatever with an accident. As an illustration of this the following one is a good example:

Young man 18 years old presented claim for injury to eye; claimed that sawdust blown in the eye was the cause of the trouble he was then suffering from. The case was reported as an irido-cyclitis. We had this man examined by several special examiners immediately on receipt of claim, which reports show that he had typical case of interstitial keratitis, and that the second eye had become involved with strong probability of both eyes being practically destroyed from the interstitial keratitis, as the vision was so reduced that he could only see shadows of an object. We were unable to get any specific history, but he gave a strongly positive Wassermann. As there was really no accident in this case, the diseased condition of the eyes could not be produced by the cause assigned here. The claim was rejected.

We have had a number of cases in the last year of which the above is a fair sample.

In another class of eye cases, the following is a sample:

Workman 55 years old; blind in the left eye for five years; was working in a basement in poor light, fell over a rock; claimed that a few hours after this he noticed sight of right eye failing, in which he later became practically blind, and the present indications are that he will be entirely blind in this eye. Examination showed that the blindness in the left eye had been produced by detachment of the retina, and there is now detachment of the retina in the right eye, very probably caused by the fall, which would not have happened, however, if not for the diseased condition of the eye. This man in a few months will be entirely blind, one eye not the result of accident, and the other eye of a diseased condition of eye, connected with a trivial accident. Of this particular type of eye conditions we have had several.

Workman 59 years old, struck in the right eye with piece of stone, cutting the cornea. This happened in December; wound in the cornea did not heal; tension in eyeball became increased. The eye became glaucomatous and eye was enucleated. In the

meantime, vision in left eye was reduced to one-tenth vision. Is lowered vision of left eye due to the accident?

SPINAL INJURIES: By referring to death chart, it will be shown that the immediate cause of death in twenty cases was fracture of the spine.

The larger percent of spinal injuries finally result in death from trophic disturbances, or infection from cystitis or other intercurrent disease. While we have a few that are still disabled, some of them being put on pension list, others have been able to take up some kind of work.

One case of fracture of tenth and eleventh dorsal vertebrae; complete paralysis in both legs; incontinence of urine and loss of control of bowels; was injured the 9th day of February, 1912; lamnectomy was performed, but he died the 19th day of March, 1913.

Another case: Fracture tenth and eleventh dorsal vertebrae; was injured February 29th, 1912. This man, like the one just preceding, was operated. He is still living, but not able to do any work.

Workman 26 years old; fracture of twelfth dorsal and first lumbar vertebrae. Accident happened June 11th, 1912. After about a year's slow recovery, the spine became ankylosed and his condition began to improve. Claimant was finally settled with as permanent partial disability.

There have been about ten cases of fracture of spine which have recovered to such an extent that they are able to follow some gainful occupation.

INJURY TO NERVES FROM FRACTURES: A very common cause of disability to the arm is injury to the musculospiral nerve. Where we have fracture of the humerus, we have had a number of cases of nerve injury to deal with. Some have recovered after protracted period of disability, while others seem to have permanent disability, either from destruction of the nerve, or the nerve function being cut off by the nerve being sur-

rounded by callous. Also injury to the brachial plexus in cases of dislocation of the shoulder has caused a great deal of trouble and time loss.

MISCELLANEOUS.

To illustrate some peculiar claims:

Workman received a slight injury to outer side of knee. Instead of improving, gradually grew worse. Developed tubercular condition of knee; resulted in amputation at lower third of thigh.

Workman claimed to have received an accident, or he termed it accident; said that he was using shovel and struck the handle of same against his side. On first examination by physician, it was found that he was suffering from pleurisy with effusion. Later this man developed ascites with considerable enlargement of the spleen. This claim was rejected as there was no history connecting same with accident.

Workman was working as general carpenter; received slight injury; taken to hospital; developed pneumonia and died. Claim was suspended as "No claim" was filed.

Workman has slight injury to heel from piece of glass falling into shoe; was reported by his physician as being unable to work. After a lengthy correspondence, he was sent to another physician for a special examination and found that the man was suffering from sarcoma of the inferior maxillary, which was the cause of his disability, and the cut on the heel was well. I recite this to show the watchful care necessary in all claims.

The following case is recited to show how cases can become complicated, both in results and with regard to settlement:

Workman received compound fracture of ankle; was treated for some time, and it became necessary to amputate the leg. At that time the Commission was paying a permanent partial disability, as soon as it was determined, paying time loss later; so this man was paid \$1,000.00 for the loss of his leg, but about that time, he developed an embolic thrombus in brain, resulting in hemiplegia, followed later by death, upon which his

large family came in for pension. They had already received \$1,000.00 and practically spent it, so following this, the Commission ruled that they would not pay a permanent partial disability until the patient had recovered.

We have a great many bad results, even partial permanent disabilities and some deaths, as a result of neglect by the claimant not giving proper care to some trivial injury that he received during the course of employment.

Workman had small ax cut on knee; gave it no attention for a few days, developed a septic condition and died.

We have had several cases of this kind where death resulted from infection.

Workman 57 years old, fractured leg. Injury occurred on 9th of December, 1912; fracture ununited. This man had been under treatment for diabetes for some two years previous. On April 17th died from diabetic coma. The death claim was rejected, death not a result of the injury. There have been several of this class of cases.

Workman 78 years old, working as a laborer. Had a hernia for years, wearing truss. Hernia come down while at work and became strangulated. He was taken to hospital, operated and died two days later following operation. As there was no accident in connection with this claim, it was disallowed.

Workman engaged in snowballing during noon hour; one was struck by snowball, breaking his arm. Claim was rejected as not being in course of employment.

Workman engaged in blasting. In trying to get out of the way of blast, fell over log, bruising right leg. Instead of subsiding gradually, became more painful, rapidly enlarged, developed sarcoma.

Another case where a man had an injury to his arm, fracturing humerus; did not unite. Lane's plate was applied, following which there was a rapid increase of spongy callous thrown out around humerus; developed myxo-sarcoma. Arm was amputated at shoulder.

Workman 22 years old; had fractured femur; weight taken off by nurse; result, shortening.

Young man got right arm caught between drum and cable, tearing off the triceps and biceps muscles so that the middle third of arm was very small, nothing left but bone and skin over same. Arm practically useless.

Workman, 22, had fractured leg in a serious accident; also traumatic hernia at the time. Leg was amputated above the knee in this case. We paid him time loss and the maximum permanent partial disability under the law; the hernia claim could not be paid.

Workman, 24, was struck across the right side in region of the tenth rib by falling snag. Accident happened October 15th, 1912. He was put in bed, remaining there for three or four weeks, then released from hospital; went to another hospital. On February 20th, 1913, was operated for abscess; April 17th, 1913, appendectomy; June 7th, for perinephritic abscess; July 11th, operated for empyema right chest. July 22nd, died.

Workman in mine. His partner had gone out to get some timbers. On his return five minutes later he told his partner that he had had an accident by a piece of timber falling upon him. There was no timber out. His partner asked which one, and he said he had replaced it (a timber that would take two men to put up). Worked the rest of the day; went to a physician that evening. There was no visible marks or evidence of injury. Did not work any more for something near a month. Became insane; remained in the asylum several months; was released. Claim was filed with Commission. After a very thorough investigation of the case, it was rejected, on which an appeal was taken and carried through the court. All the evidence went to show that this man undoubtedly was suffering from an hallucination at the time he claimed he had an accident. Court sustained Commission in rejection.

Workman in construction work received a bruising injury or contusion of left leg by a fellow workman dropping rock on him. He was laid up eight or nine days. During the time that he was laid up, he fell down stairs and fractured the patella. As the fractured patella was received while he was off duty, claim for fracture was disallowed.

Workman, 72 years old, working as carpenter, received a slight injury to hand, but had been suffering from chronic cystitis and pyelonephritis; died as result of same. Claimant was given time allowance on injury to hand, but death claim was rejected as cause of death was not due to accident.

Teamster kicked by a horse, injuring left hand, some two years ago. Upon following his usual occupation, finger became swollen. It was amputated as a result of the old fracture. Claim rejected.

The following are a number of peculiar claims filed, most of which were rejected:

Man sitting in a chair fell out and fractured clavicle. Claim rejected.

Claim for chronic trachoma. Cause assigned, getting dirt in the eye. Rejected.

Claim for pannus. Cause assigned, dirt in the eye. Rejected.

Claim for cataract, man 69 years old, night watch; claim set up by doctor that it was due to heat of furnace, as he had to keep up fire at night. Operated; bad result. Rejected.

Claim for blind eye due to getting dirt in eye, which upon immediate examination found there was an old cataract with anterior synechia, anterior chamber clear; eye not inflamed; lens completely involved by old cataract. Of course, this condition was not produced seven days before examination. Claim was rejected.

Rattlesnake bite claim was allowed because the workman was working at construction work, where rattlesnakes were one of the hazards of the occupation.

Claim filed for psoas abscess, undoubtedly of tubercular origin. No accident in connection with claim. Rejected.

Claim for broken leg reported to have occurred at the plant. Employer also reported answering the question, "Where it happened?" by "At the plant." After paying this man for two months, we were having claim checked up and found that he had quit work, gone fifteen blocks toward home, entered a saloon to get a drink; on coming out, slipped off the icy steps, falling and breaking his leg. This claimant and employer should both have been prosecuted for obtaining money under false pretenses.

Claim was filed for breaking leg where a man was allowed by the company to sleep in the elevator. Just in front of elevator, trap cut in floor for scales; no railing around same. Man going to bed at night fell through the hole and broke his leg. Rejected.

Workman while at work shot in the eye by a boy who was using an air gun. Resulted in the loss of the man's vision. This claim, however, was paid, as it was in the course of his employment.

Workmen while working in mill. Another man with whom he had quarreled walked into the mill, drew a gun and shot him. The shot resulted in his death. The case was taken into court to have the matter determined as to whether his death should be compensated for or not. The court held that the cause of this man's death had no connection with his employment and did not come within the scope of the Compensation Act. So in view of this decision, the preceding claim should not have been allowed.

A laborer who was working on road construction had trouble with the boss and the boss ordered him to get off the work. He did not move fast enough so the boss attacked him and injured him considerably in the fight. Man made claim under the Industrial Act that he was injured while at his regular work.

Claim filed for broken arm; claimant picking fruit during noon hour fell out of tree. Claim was rejected as not due to occupation. Our investigation of some cases show up some peculiar situations. One case where claim was filed for hernia, claiming that he received same while working in regular employment. Upon investigation of same, a well-worn truss was found in the man's suit case. We rejected this claim; no appeal.

Night-watchman filed a claim for gun shot, claiming he was accidentally shot while in the course of employment. Investigation showed that he had gone to a saloon to get a drink and while in the saloon was accidentally shot by a friend. Claim rejected.

In this case of the night-watchman, the employer reported in that this man was accidentally shot while in his regular employment and the funeral expenses of \$75.00 was allowed on the strength of that statement before a complete investigation of the claim had been made. For some reason or other, the employers often embarrass the Commission very seriously by their statements. One would naturally think that we could rely on their statements, especially where a matter affects them in the way this compensation act does.

A number of claims have been filed for orchitis and epedidymitis due to "strain."

Claimant whose occupation was looking after the employment of men, while on his way to take train at 2 A. M. was struck on the knee with stone thrown by some unknown party. No witnesses; claim rejected.

With regard to operation for hernia, the Commission has decided that they will not recognize the so-called "Injection" treatment for relief of hernia, and will not pay time loss while the man is taking same. One claimant who has hernia has been taking "injection" treatment for same at the hands of his physician for something over a year; is still being treated and continues to have hernia.

These are a few of the many claims that have come before the Commission for their disposal.

We have had a number of claims filed where the accident was caused by the third party. A typical case of this kind is the following: Workman loading lumber on a flat car working in a position near the end of the car and some ten feet above the ground. Switch engine bumped into car, knocked him off, injured shoulder, complete paralysis of arm followed; is now slowly recovering from the paralysis after some seven months. He declined to accept compensation from the State and brought suit against the railroad company. We have had a number of similar accidents; most of them preferred not to take compensation offered by the State.

EPILEPSY: I wish to call the employer's attention to epilepsy. We have had seven deaths since the law went into effect from accident to epileptics. It appears to me that some one around the work should discover the man is an epileptic, and if so, he should never be put in a position where it would be possible for his death to result from him having a fit while in that particular work. We have had two cases where the man was drowned, drowning due to his falling off a boom in epileptic fit. Five epileptics have died as a result of a fall from working on trestle or elevated place. Men that are known to be epileptics should certainly not be put in positions of this kind.

HERNIA.

The subject of oblique inguinal hernia is just as perplexing and unsettled as it was at the time of our report a year ago, not only in the State of Washington, but in all the other states that have compensation acts similar to ours, with the exception of Ohio. The Ohio Commission has formulated a plan for handling hernia cases coming under their act that is definite. Cases coming under the Ohio act, however, are not subject to review in court so the decision of the Commission is final and not appealable; they can settle hernia on its merits from a medical standpoint, and are not confronted with the legal side of hernia.

We have been thinking seriously of trying to get the different states to adopt some definite ruling so that hernia can be properly classed where it belongs when associated with an accident.

In the 111 cases of hernia that have occurred since this law went into effect, there is only one case that is a real traumatic hernia; the other cases have all passed through the inguinal canal, a large per cent of which have been operated, four of which have recurred. One death where the man was operated for strangulated hernia, death was due to strangulation, not result of operation.

At first thought, one would think that this is a subject easily handled, but it has many phases, for instance:

First: Man has dilated canal, no hernia appearing, but during his work he has a hernia descend through the canal. While the intent of the law is to pay for accident only, this man always claims an accident in connection with same and he will make affidavit, and as a rule, the employer will fill a blank corroborating his statement.

Second: Man may have an oblique hernia on one side today, he is examined and we find a dilated canal on the other side but

no hernia engaged in the canal. He asserts he has never had a hernia on this side, but in the course of a few months, claims that he was doing heavy lifting of some kind, or a slight accident and crowds down a hernia through the dilated canal, puts in claim for hernia and makes affidavit to same.

Third: Man has been operated for hernia in the past, probably several years old; has a slight accident and a hernia reappeared, makes claim for same; sets up the contention that he would not have had the recurring hernia if he had not been put in some particularly violent strain at the time, and then the question comes up whether to pay him for disability or time loss only.

Fourth: Man has an inguinal hernia; wearing a truss, following his usual occupation; claims that he was accidentally put in some position that forced this hernia down and he was unable to replace it. Operated to save his life.

Fifth: Man operated for appendicitis; abdomen does not unite well leaving a weak abdominal wall. In the course of a year or two, wall has given away sufficiently that he has a hernial protrusion through the weakened abdominal scar; claims hernia on account of heavy work and sets up the contention that this was suddenly produced by some particularly hard lift, falling down, or being knocked down, claiming same the immediate cause of the abdominal wall giving way.

Sixth: Man has an inguinal hernia appear while following his usual daily occupation, not connected with any accident whatever. A typical case occurred in a fireman whose duty it was to shovel coal into a furnace of a steam shovel. He claimed that while shoveling coal a hernia appeared. The contention set up by the Commission is that a hernia of this type is not associated with any accident, and that the appearance of the hernia itself is not an accident under the law.

The Commission has rejected a number of hernias along this particular line, hoping that we would get an appeal so that we might get the subject of hernia properly before the court. Up to the present time, however, we have had no appeal in the court.*

Originally the Commission tentatively decided to pay fifteen degrees plus one month's time loss so that the man might be operated and have sufficient time to be able to return to his work. However, within the last year, they have reconsidered this and changed the ruling on hernia to seven degrees plus 42 days time loss, paying this to a man who clearly establishes that he did not have the hernia before; that this hernia completed its descent in connection with some accident that happened him during the course of his employment, paying this amount to the man whether he is operated or not.

On going over hernia in all of its phases and considering the small number of traumatic hernias that have occurred, I have come to the conclusion that a hernia that completes its descent during the time that a laboring man is following his usual occupation, and connected with some accident, should be treated similarly to other accidents which come under this law, for instance:

1. A man while at work has some accident that results in a fractured bone. If this man happens to be under a hospital contract, he is treated by the physician in charge at the hospital and the law allows him time loss during his disability on being able to return to work. If he has a perfect limb and no permanent partial disability or handicap, his claim is settled on time loss only and no permanent partial disability paid. The man who has a hernia descend through the inguinal canal that is connected with some accident, may also be under hospital contract which bears his hospital and surgeon's expense. He enters the hospital, is operated, and if he secures a good result from the operation, after a few months' time his condition is just as good or better than it was, at least, with a patulous inguinal canal. Now, why should we pay this man any dis-

^{*}Since writing this, one of these cases has been tried out in the Superior Court of Chehalis County in which a decision was rendered in favor of the Commission upholding their ruling on same.

ability unless it is shown by examination that the abdominal wall is not well united?

- 2. The man who has a fractured bone and is not under a hospital contract, the law requires him to pay his own hospital and surgeon's charges out of his own pocket as there is no first aid in the law; and when he is able to return to work, if he has no permanent partial disability, he is paid nothing but time loss. If he has a disability, it is estimated and paid in proportion as the law indicates. The man with hernia who is in the same circumstances, that is, has no hospital contract, why should we pay his hospital bills and surgeon's charges any more than the other man's? However, upon examination, if we find that he has a disability from non-union or some failure of the abdominal wall to unite properly, his disability should be estimated as a permanent partial disability and settled for. If he has no disability, he should not be paid any permanent partial.
- 3. The man who has had a fractured leg, returns to work, has an accident and re-fractures the same leg; he again comes under the Act the same as before and would be treated the same as an original fracture; and if he has a permanent partial disability following this fracture, it is compensated for. The man who has a recurring hernia, in my opinion should be treated the same way unless he has been paid a permanent partial disability for the first hernia.
- 4. Then we have left the hernia case that may have a chronic nephritis or some contra indication for taking an anesthetic. In this case, he should be examined by at least one competent anesthetist to determine whether he can with reasonable safety take an anesthetic. If so, he should submit to operation. If it is determined that it is not safe, and he refuses to be operated under local or spinal anesthesia, then his disability should be estimated as a permanent partial and settled in that individual case. In the 111 cases of original hernias that have been operated under the Act, there has not been a single death. The one death was the result of an old, strangulated hernia, not due to operation and did not come under this Act.

The man who can safely take an anesthetic and refuses to be operated, should be treated in the same way as the man who has a broken leg and refuses to have the same surgically attended.

Handling hernia cases in this way would place them in the same position in the law as disability from any other accident and would not set them out specifically as they are at present, which I have always felt was a discrimination in favor of those suffering accident resulting in hernia.

FRACTURES OF LONG BONES.

For the benefit of the medical profession of the State, we herewith give our statistics on fractures of long bones.

FEMUR: We have fracture involving femur, 67 cases. Of these, there were 53 treated with neither wire nor plate, 14 that were plated or wired, in which the time loss averaged 209½ days, while the time loss in the 53 cases averaged 158½ days. Of the 14 cases, there were 13 plated in which 4 plates were removed, 8 not removed, 1 not determined. Time loss in the 4 cases where the plate was removed, averaged 257 days and in the 8 cases where the plate did not have to be removed, the average was 198 days. One case wired, wire removed, time loss 156 days.

TIBIA: Number of tibia treated 303 cases, in which there were 254 treated without plate or wire, 79 plated or wired. The average time loss in the 49 cases averaged 211½ days. The time loss in the 254 cases averaged 128 days. Of those plated and wired, there were 32 plated and 10 wired. Of the 32 plated, there were 21 plates removed, 6 not removed, 5 undetermined. The average time loss where the plate was removed 221½ days. Average time loss where the plate was not removed, 157 days. Of the 10 cases wired, there were 3 removed, 7 not removed. Average time loss where the wire was removed, 303 days. Average time loss where the wire was not removed, 155 days. The number plated and wired, 7. There were 3 where both plate and wire were removed. Time loss 253 days.

Of the 4 where neither plate nor wire was removed, the average time loss was 247 days.

HUMERUS: There were 74 fractures reported under this head of which 62 were treated with neither wire nor plate and 12 either plated or wired. The average time loss on the plated or wired 179 days, and average time loss on the 62 cases, 96 days. Of the 12 there were 8 plated, 5 plates removed, 2 plates not removed, 1 not determined. There were 3 cases wired; 2 wired not removed, average time loss 202 days. One disposition not known; average time loss 130 days. One plated and wired, not removed, average time loss 312 days.

RADIUS: Total number of fractures 219. Of these there were treated by neither plate nor wire 203 cases; 16 either plated or wired with an average time loss of $195\frac{1}{2}$ days. Average time loss for those not plated 66 days. There were 14 plated, 10 removed and an average time loss of 207 days. There were 4 not removed with a time loss of 146 days. One wired, not removed, average time loss 196 days. One case was plated and wired in which both were removed. Average time loss was 286 days.

ULNA: There were 113 cases reported of which there were 102 treated by neither plate nor wire, 11 plated or wired, in which the average time loss was 201 days. The average time loss on the 102 cases that were treated without plate or wire, 70 days. There were 8 cases plated of which 6 were removed with an average time loss of 119 days, 2 not removed with average time loss of 185 days. One of these was not united after 7 months and claimant refused to have the plate taken off or anything more done for the arm. Number of cases wired 2, of which 1 was removed and one not removed; 1 case plated and wired, both removed; average time loss 193 days.

The total of all long bone fractures reported 776. Of this number there were 674 treated by splints, neither plated nor wired. 102 were plated or wired or both. Average time loss on the 102 cases, 100½ days. Of the 102 cases there were

75 plated, of which 55 were removed, 20 not removed. The average time loss on those removed 211½ days, on the 20 cases not removed, 178 days. There was 17 cases wired of which 5 the wire was removed; 12 not removed. The average time loss where wire was removed 246 days; where it was not removed, 180 days. There were 10 cases where both plate and wire were used; 5 cases in which both were removed. The average time loss was 246 days. In the 5 cases where neither one was removed, the average time loss was 260 days.

There has been made use of Murphy's bone splint seven times, one case operated by Murphy himself. These were all cases of delayed union but the final results have been good. There have been a number of cases of delayed union, cause not determined.

In the last year there have been two cases of non-union; one case after about a year's duration, the limb was amputated. The other one was case of non-union in the radius.

We have had two cases where some two inches of bone was carried away by accident including the periosteum and this has never filled in; bone involved is the ulna. Would be a good case for some ambitious surgeon to try Muller's or Öllier's operation.

CONCLUSION.

We here include our statistics on wiring and plating of long bones, also some other opinions that have been forced upon us by observation of results. The surgeon who plates or wires too early, especially in the compound fractures, is sure to have infection follow. Then from observation, it is my opinion that the conical screw should not be used for the reason, that after the hole is drilled with a straight drill and a conical screw put in, the only place that it really touches is at the periphery of the bone. The end of the screw probably does not come in contact with the bone at all, so there is nothing holding except the very small portion of the screw; and if put in at all tightly, would probably result in pressure necrosis. I have observed in radiographs where the straight sided screw is used that fits the

hole all the way down to the mediallary cavity, the plate is more apt to remain without any disturbance.

We have also had a number of claims for dislocation of clavicle and the surgeon who has attempted to treat a complete dislocation of the acromial end of the clavicle by a Sayre's dressing, or any other form of fixation by bandage, has had failure result in every case; but the surgeon who wires same has invariably gotten good results. This holds true also with the dislocation of the sternal end, but not to such a marked degree as in dislocation at shoulder.

We have had several cases of dislocation of the clavicle at the acromial end that after three or four months, the clavicle was so loose that on moving the arm, it would fly up an inch or more. After operation and wiring, there was no deformity or disability.

I would like to call your attention to "Urgent Surgery" by Lajars. He speaks specially of the disability following dislocations of the clavicle where they are not wired, which is borne out by our observation in final settlements of claims that come before the Commission.

One other injury that I would like to call your attention to is fracture of the humerus that occurs about the middle of the distal third. I would suggest that every member of the profession review this particular subject, because, this fracture does occur and has a number of times in the last two years, and it certainly needs a great deal of care and thought when you have a condition of this kind confronting you. Also a fracture of the olecranon with dislocation. In the cases that have been handled by the open method, wiring, and early passive movements of the joint, the results have been so much better than the cases that have been handled by splint fixation only.

This report would not be complete without paying a tribute to the medical profession for the share they have had in the success of this law. To their support is due no small part of this success. An enormous amount of work has been put upon the profession at large as the Commission depends upon them entirely to report the progress of the repair in each individual case and the time when total disability ceases.

I cannot express in words my appreciation of the hearty support of the profession—support that cannot be bought nor estimated in money value. Nothing better expresses the public spirited, humanitarian principle that we always find in the true physician. According to this standard they have given full measure. I take this opportunity to thank them, as thanks and kindly feeling is all the Commission is yet able to offer.

J. W. Mowell, M. D., Chief Medical Advisor.

PHYSICIANS SHOULD:

Forward reports promptly after first treatment, direct to the Olympia office.

Forward discharge report when patient is discharged from treatment.

Report progress of cases at end of each thirty days of treatment.

TO THE EMPLOYERS.

BY MEDICAL DEPARTMENT.

Instruct your foreman so that he may require each employe to report to him immediately any accident that occurs during the day. Make it imperative that the accident must be reported the day it happens.

The foreman should keep on hand tincture of iodine and paint all small scratches, splinter punctures, etc., that do not

go immediately to be attended by some physician.

Eye injuries, no matter how trivial they seem to be, should be sent at once to some physician. Where some foreign body is lodged in the cornea, the men are so prone to pick them out with a dirty knife, toothpick, or most anything that they happen to get hold of and thereby infect the cornea. It is a fact that more infection is carried to wounds of this kind by inexperienced hands than any other way. In case of foreign body sticking in cornea, it should be removed with as little abrasion of cornea as possible and the eye dusted with iodoform, xeroform or even touched with tincture of iodine. This treatment would be followed by great reduction of infections and corneal ulcers, which have cost employers a great deal of money and needless disability to employees.

There should be kept at the plant first aid packages. This may be sterile gauze and a sterile bandage to wrap around any open wound or cut and nothing else applied as we often see all manner of stuff such as soot, tobacco, turpentine, flour, or any old thing that they happen to have, daubed on to try to stop the hemorrhage. Put nothing but a clean piece of sterile gauze and bandage and send them to the doctor.

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CLAIM DIVISION

CLAIM DIVISION.

TABLE INDEX.

- (1) Accidents reported and claims disposed of by months during the second fiscal year, also first fiscal year.
- (2) Comparative table showing total accidents reported, and the disposition made of claims during the first and second fiscal years, with the total to the end of the second fiscal year, i. e., September 30, 1913.
- (3) Comparative table of all accidents reported monthly during the first and second fiscal years.
- (4) Vouchers outstanding unpaid (Liabilities against "Accident Fund")
- (5) Fatal accidents reported during the year with disposition of same.
- (6) Comparative table of fatal accidents reported monthly during first and second fiscal years.
- (7) Fatal accidents reported, showing remote cause of death.
- (8) Fatal accidents reported, showing nationality of injured workmen.

The payment of awards in compensation for injuries is as prompt and rapid as is practicable and possible. There are delays, of course, in some instances, but in such cases, there is some good cause for it. To insure prompt action, workmen immediately after sustaining an injury, should report its occurrence to the superintendent or foreman of the plant, or whoever is in charge. The workman's claim for compensation should be filed at once and the employer should also render his report to the Commission's head office without delay. The same action is essential on the part of the attending physician.

Monthly payments covering time loss only, are made in extended cases of disability, warrants being forwarded without the

necessity of signing vouchers; if a permanent partial disability is sutained, compensation therefor is not awarded until the exact outcome is known and the workman surgically healed and discharged by his attending physician. Final settlement is then made by voucher prior to the issuance of State warrant.

One of the most frequent delays in workmen receiving their money, is due to their neglect to notify this office of their change of address.

Attention is drawn particularly to Table One (1) which shows the large increase of claims disposed of during the second year as compared with the first year's operation. Upon reference to this table, it will be noted that the number of accidents reported during the first year was 11,896 and in the second year, 16,336, an increase of 4,440 in the second year, whereas the claims adjusted during the first year amounted to 8,893 and in the second year 17,355, an increase of 8,462 for the second year, or nearly double that of the first year. The increase of reported accidents was 4,440 as against an increase of 8,462 cases disposed of, showing a surplus of 4,022 cases settled, over and above the increase of reported accidents. This was occasioned by the adjustment of long pending cases which originated during the first year.

Further attention is drawn to the claims disposed of from April 1, 1913, to September 30, 1913, the last half of this year, the total being 9,949 as compared with 8,893 for the entire first year. This denotes the vast increase of work entailed in this Department, but which was accomplished with a working force of twelve (12) as against fifteen (15) at the close of the first year, and is the result of the adoption of improved office methods founded on prior experience.

FATAL ACCIDENTS: There were 371 fatal injuries reported this year and 279 the first year, an increase of 92 (See Table 6). Of this total, 319 cases were adjusted.

The number of fatal injuries to workmen is appalling and by reference to Table 7, the cause of the injuries will be found. The greater percentage is in the logging and lumber industries; for instance, falling trees, 44; falling or rolling logs, 45; drowning (mainly boom men), 39; struck by cables, 23; coal mining causes were in the main; explosion of powder and dynamite, 14; falling rock, 14. The foregoing is not intended to infer that the figures quoted were exclusively in the industries mentioned, but were mainly so.

Table Nine (9) shows the nativity of workmen who received fatal injuries. As during the first year, American born workmen head the list with 42.32 per cent.

Considerable misunderstanding still exists as to compensation due the widow or dependents of a workman fatally injured, the idea being that the beneficiaries or dependents are entitled to a lump sum payment of four thousand dollars (\$4,000.00). This is incorrect, as in the case of a surviving widow, she is entitled to award of compensation (commonly termed pension) at the rate of twenty dollars (\$20.00) per month for life, or until she remarries. In the latter event, she receives, once and for all, a lump sum of two hundred and forty dollars (\$240.00), equivalent to twelve (12) monthly payments of twenty dollars (\$20.00).

The Act provides for the setting aside of a reserve to guarantee her monthly payments. It further provides that this reserve shall be calculated upon the theory that a monthly payment of twenty dollars (\$20.00) to a person thirty (30) years of age, is equal to a lump sum payment, according to the expectancy of life as fixed by the American Mortality Table, of four thousand dollars (\$4,000.00), the maximum reserve being four thousand dollars (\$4,000.00). A widow being of any age over thirty (30) her reserve would be less in proportion than four thousand dollars (\$4,000.00), same also being based on the American Mortality Table. A widow receiving a pension of twenty dollars (\$20.00) per month, to continue for life, or during the period of her widowhood, has a far better source of income guaranteed by the State than the average investment she could make of four thousand dollars (\$4,000.00) (or a pro-

portionately lesser sum) to yield her twenty dollars (\$20.00) per month for life.

It is, therefore, not the policy of this Commission to make lump sum settlements, as experience has shown that payment of a lump sum is inadvisable, and not good business policy. The tendency of a young widow is towards remarriage and were a lump sum payment made to a widow, who later remarries, there is no opportunity to recover the money she received and she is in possession of funds which clearly she was not to have after remarriage, according to the Act.

A small cash advance on the reserve has been made in a few instances to save widows' homes from mortgage foreclosure, but in such instances, the monthly payment was reduced in proportion to the amount of cash advanced.

J. F. GILLIES, Claim Agent.

INDUSTRIAL INSURANCE COMMISSION OF THE STATE OF WASHINGTON

Statement of Awards on Account of all Injuries. Year from Oct. 1, 1912, to Oct. 1, 1913

								NO	N-FATA	L AC	CCIDENTS												FAT	AL ACCI	DEN	TS		
OCCUPATION	Class		MPORAR	Y TOTA	L DISABILI	TIES	1	PORARY I DISABILIT s of Earning	TES	PEI	RMANENT PA DISABILITA (Degrees)	IES		ARDS TO P. OF MINO % of Perm. Disabilitie	RS Partial	D	RMANENT ISABILITI PENSION F	ES ON		Requir-	MONTI PENSI		RESERVE			URIAL WARDS	ALL	AWARDS
OCCUPATION	Class	No.		Average Dura- tion of (Work Days)	Total Amount of	Average Amount of Awards	No.	Total Amount	Average Amount	No.	Total Amount	Average Amount	No.		Average Amount	No.	Total Amount of Monthly Pensions	Total Amount of Reserves	Pen- sion	ing Pen- sion	Total Amount	Average	Total Amount	Average Amount	No.	Total Amount	No.	Total Amount
wers and Tunnels ridge and Tower lile Driving ouse Wrecking eneral Construction ower Line Installation ailroads treet Grading hip Building umbering, Milling, etc	1 2 3 4 5 6 7 8 9	159 97 64 20 558 207 640 243 83 6,309	4,957 3,728½ 2,435 715 18,112 6,181½ 18,126½ 7,598½ 2,561 176,997½	31.2 38.4 38.0 35.8 32.4 29.9 28.3 31.2 30.9 28.1	\$6,677 33 5,315 35 3,179 93 900 40 25,706 23 7,863 60 22,917 77 10,506 60 3,326 80 236,535 01	54 80 49 69 45 02 46 07 37 99 35 81 43 24 40 08 37 49	11 2 7 2	\$180 22 41 40 58 55 64 80 879 29	\$16 38 20 70 8 36 32 40	16 17 10 1 65 19 80 25 9 787	\$3,325 00 5,554 00 3,300 00 75 00 22,187 50 4,062 50 24,800 00 7,100 00 2,537 50 226,017 50	\$207 81 326 70 330 00 75 00 341 35 213 82 310 00 284 00 281 94 287 18	1 1 1 1 1	\$7 50 70 00 75 00 17 50 1,838 75	\$7 50			\$2,367 39 14,081 80 3,430 82 2,613 07 8,000 00	3 4 3 2 3 5 17 2	5 1 1 1 9 9 20 3	\$117 50 10 00 30 00 20 00 217 50 197 50 461 50 45 00	\$23 50 10 00 30 00 20 00 24 17 21 94 23 08 15 00	\$14,451 88 2,048 12 4,000 00 2,367 39 25,682 25 23,665 39 53,289 50 4,515 29	2,048 12 4,000 00 2,367 39	8 5 4 1 12 13 32 5	\$600 00 375 00 290 00 75 00 900 00 975 00 2,392 00 375 00 11,376 35	189 120 79 24 655 250 784 280 94 7,465	\$27,421 13,292 10,769 3,425 74,656 36,607 117,609 26,067 8,494 668,793
redging tectric Systems treet Rallways telephone and Telegraph. oal Mines tearries melters as Works	12 13 14 15 16 17 18 19	20 71 271 36 1,029 146 219 42	569 2,483 5,943 1,406½ 24,014 4,464½ 6,132½ 800½	28.5 35.0 21.9 39.1 23.3 30.6 28.0 19.1	721 35 3,705 85 8,343 40 1,939 55 36,211 96 6,079 55 8,082 60 1,089 61	52 19 30 78 53 88 35 19 41 64 36 91	1 1 2	57 85 3 95 15 90	57 85 3 95 7 95	9 25 4 53 17 15	3,600 00 9,062 50 1,325 00 19,775 00 6,115 00 3,837 50	400 00 362 50 331 25 373 11 359 71 255 83	3	5 00 72 50 31 25	5 00 24 17 10 42	2	55 00		2 1	3 2 1 13 4 1	55 00 55 00 35 00 330 65 85 00 2 25	18 33 27 50 35 00 25 43 21 25 2 25	8,564 80 5,193 32 4,000 00 87,707 81 12,499 29 239 33	2,854 93 2,596 66 4,000 00 2,900 60 3,124 82 239 33	4 3 1 16 7 2	300 00 225 00 75 00 1,200 00 484 10 150 00	20 89 301 43 1,118 174 240	72 16,23 22,82 7,34 102,74 25,17 12,34 1,76
eamboats rain Elevators aundries fater Works aper Mills arbage Works ood Working	20 21 22 23 24 25 29	3 82 42 21 164 14 564	$ \begin{array}{c} 117 \\ 2,722 \\ 1,692 \\ 1,011\frac{1}{2} \\ 2,307\frac{1}{2} \\ 344\frac{1}{2} \\ 12,980 \end{array} $	39.0 33.2 40.3 48.2 14.1 24.6 23.0	108 70 4,006 25 1,728 90 1,342 83 3,168 65 564 80 17,056 09	19 32 40 34 30 24	1 1 	91 70 18.00	91 70 18 0 0	4 2 7 9 4 15 1 103	675 00 237 50 3,025 00 3,637 50 400 00 3,150 00 87 50 22,000 00	168 75 118 75 432 14 404 17 100 00 210 00 87 50 213 59	1 3 24	6 25 77 50 37 50 407 50	6 25 19 38 12 50 16 98	1 	35 00	4,000 00	1	1	20 00 45 00	20 00	1,536 09 1,893 01 5,426 08	1,893 01	1	75 00 75 00 75 00 225 00	46 8 91 56 26 184 15 697	1,96 7,19 5,46 5,74 8,32 68 45,13
phalt Manufacturing sh Canneries eel Mfg. and Foundries. ick Manufacturing weeries xtile Manufacturing		97 89 444 58 64 50	167 2,089½ 2,342 8,818 1,717 1,701 1,158	41.8 21.5 26.3 19.8 29.6 26.6 23.2	292 25 2,760 95 3,247 05 11,662 63 2,213 20 2,774 05 1,310 20	26 27 38 16 43 34 26 20	1 1 3 1	14 70 45 40 35 2 85	14 70 45 13 45 2 85	1 11 19 47 7 5	100 00 4,212 50 2,787 50 13,500 00 1,600 00 2,375 00 825 00	100 00 382 95 146 68 287 23 228 59 475 00 117 86	3 9 1 3	20 00 302 50 1 25	7 50	i	25 00	3,353 52	2 1 1 1	2 3 3 2	55 00 80 00 56 25 23 35	27 50 26 67 18 75 11 67	7,272 00 11,267 16 6,674 85 1,855 60	3,755 72	2 2 4 3	150 00 150 00 300 00 225 00	5 113 117 511 72 69 62	39 14,41 17,47 35,88 5,88 5,14 2,76
od Stuffs eameries Inting ngshoring eking Houses Manufacturing eater Stage wder Works	40 41 42 43 44 45 46	35 32 35 234 72 37 2	654½ 489 796 9,229 1,407 921½ 101 196	18.7 15.3 22.7 39.4 19.5 24.9 50.1 65.3	622 86 563 65 1,003 60 12,528 55 1,819 35 1,375 88 150 85 332 30	17 80 17 61 28 67 53 54 25 27 37 18 75 43	1 4 1 1	132 50 6 70 30 30	33 12 6 70	3 4 8 18 5 3	1,025 00 300 00 1,625 00 5,850 00 1,900 00	380 00 191 67	3 2						4	3 1	65 00 20 00		8,096 24 639 94	2,698 75 639 94	6 1	450 00 75 00	39 40 45 265 80 37 6	1,68 90 2,68 27,08 4,44 1,37 78 4,90
eosoting n-Hazardous, Elective	47 48	14 6	294½ 253	21.0 42.2	352 30 413 70 347 60	29 55 57 93				1	500 00 62 50	62 50									35 00	35 00	4,000 00				15 6	47 34
Totals	All	12,380	340,7282	27.5	\$460,497 78	\$37 20	102	\$1,679 06	\$16 46	1,437	\$413,124 00	\$287 49	138	\$3,055 00	\$22 14	13	\$324 75	\$45,612 57	156*	173*	\$3,728 95	\$21 55	\$431,560 23	\$2,494 57	293	\$21,742 45	14,536	\$1,377,2

^{*}Includes 28 reopened claims reported in previous year as fatals requiring no pension

Fatals not under act... 18

ROBIN ADAIR, Statistician.

EXPLANATION.—The above table presents in elaborate detail a record of the various kinds of injuries, and the awards made for them, together with certain averages. The observer will note that a record is presented for each of the 42 classes under the Industrial Insurance Act. Reading across the top of the page, will be found the kinds of injuries which occur, and awards for them, as follows: Temporary Total Disabilities, Temporary Partial Disabilities, Permanent Partial Disabilities, Awards to Parents of Minors, Permanent Total Disabilities, Pensions, Reserves, and Burial Awards. For instance, the coal mines, Class 16, are shown to have experienced 1,029 temporary total disabilities which resulted in 24,014 days time lost, and \$36,211.96 awards. Following still further along the same line it will be found that there were charged to the coal mines, 53 permanent partial disabilities, resulting in awards of \$19,775.00, and 13 deaths requiring pensions, the reserves for which required \$37,707.81. The two columns at the extreme right give the total number and total amounts of the different awards for each class. In the same manner the totals at the bottom of each column exhibit the totals for each separate heading.

WORKMEN SHOULD:

Report accidents immediately after their occurrence to foreman or whoever is in charge of plant.

Procure surgical aid promptly, as trivial injuries often have serious results through infection (blood poison).

File claim on Form 22, or certify to Employer's report on Form 21-22.

See that the attending physician forwards his Report, Form 23, promptly after first treatment.

Sign name plainly and clearly on all papers and always sign it the same way.

Report to the Commission at Olympia, at the end of thirty days if the disability continues beyond that period.

Have employer, upon return to work, fill in Certificate of Condition (Form 36), showing the date on which, duties were resumed.

Have attending physician forward Discharge Report when discharged from treatment.

Always advise the Olympia Office of any change of address.

When corresponding regarding claim, always quote the number of it as furnished by the Olympia Office on Postal card which acknowledges receipt of claim when filed.

Address all communications to

INDUSTRIAL INSURANCE COMMISSION, Olympia, Washington.

CLAIM DIVISION—TABLE 1.

The following table exhibits the total accidents reported and total number of claims disposed of (with disposition thereof) during the first half of the first fiscal year ending September 30, 1912; each month, and the total during the second half of the first fiscal year ending September 30, 1912; and also monthly with total during the first and second halves of the second fiscal year ending September 30, 1913, with the total to the end of the second fiscal year September 30, 1913.

			1						
OLAIMS RECEIVED	Total first half fiscal year ending September 30, 1912	April 1912	May 1912	June 1912	July 1912	August 1912	September 1912	September fiscal year fiscal year and fiscal year fiscal year ending ending September September 39, 1912	Total fiscal year ending September 30, 1912
Accidents reported Files incomplete	4,529	865 960	1,137	1,396	1,285	1,374	1,310	7,367	1,703
Files complete	3,672	844	1,087	719	1,338	1,455	1,078	6,521	10,193
Final settlements Fatal cases Total nermanent disability	1,810	695	604	24	504	1,099	1,101	4,546	6,356
Rejections (for cause)	110	44	14	36	42	78	54	268	378
dress, etc.) Suspensions (claims not filed by workmen-trivial	31	73	23	99	43	46	19	317	348
cases)	531	153	162	145	231	198	132	1,021	1,552
Total disposed of	2,568	986	255	814	844	1,457	1,397	6,325	8,898
CLAIMS RECEIVED			October 1912		November December 1912	January 1913	February 1913	March 1913	Total first half fiscal year ending September 30, 1913
Accidents reported Files incomplete Files complete			1,242 1,308 1,637	1,173 1,211 1,270	1,198 1,530 879	1,110	1,206	1,401	7,330

5,989	. 423 264 1,353	8,188	Grand Total to September 30, 1913	28,232	27,339	19,511	18,734 1576 1,125 867 87 87 4,931 * 777	26,248	471 196 424	27,339
1,157	91 76 564	1,923		16,336	16,624	13,155	12,378 319 13 747 519 3,379	17,355		
23	81 25 67	1,184	Total fiscal y ing Se 30,	:			18,132			
1,090	64 30 268	1,467	Total second half fiscal year fiscal year endending ing September 30, 1913	9,006	9,132		7,166 170 8 324 255 2,026	9,949		
288 %	85 104	1,170	Septem-fi ber 1913	1,574	1,729		1,393 10 12 52 70 689	2,215		
90	: - 10 63		August 1913	1,550	1,656		1,131 39 4 1 50 34 295	1,548		
28	61 152	1,263	July 1913	1,347	1,453		1,233 30 44 303	1,661		ment
857	57 43 198	1,176	June 1913	1,488	1,422		1,154 38 2 40 41 266	1,541	earning 1	van mus
			May 1913	1,619	1,421		1,176 32 32 72 51 876	1,710	30, 1913). reduced earning power)	v lumn
			April 1918	1,428	1,973		1,079 21 8 61 13 97	1,274	ptember ount of	settled b
AIMS DISPOSED OF	Rejections (for cause). Suspensions (pending receipt of claimant's address, etc.). Suspensions (claims not filed by workmen—trivial cases)	Total disposed of.	OLAIMS REGEIVED	Accidents reported Files incomplete	Files complete	CLAIMS DISPOSED OF	Final settlements Fatal cases Total permanen disability Rejections (for cause) Suspensions (pending receipt of claimant's address, etc.) Suspensions (claims not filed by workmen—trivial cases)	Total disposed of	Monthly payments continued (disability still existing September Partial payments continued September 30, 1913 (account of Claims in process of adjustment September 30, 1913.	* Total. * Less reopened during year. + Deduct account settled by hum sum navment.

The following table exhibits the total accident reports received and the disposition made of same during the second fiscal year of the operation of the Compensation Act, i. e., the year ending September 30, 1913; also the total from the first day of operation, October 1, 1911, to September 30, 1913.

ACCIDENTS REPORTED AND CLAIMS DISPOSED OF FISCAL YEAR ENDING

Sept	ember 30, 1913.	September 30, 1912.	Total to September 30, 1913
RECEIVED			
Accidents reported	16,336 893	11,896 1,703	28,232 893
Accidents reported (files complete)	15,443	10,193	27,339
DISPOSED OF			
Claims allowed (total temporary disability; full and final award) Claims rejected (for cause)			18,736 1,125
(A) *Claims not made by workmen; injuries trivial(B) Unable to locate claimants, etc	3,339 19	1,552 348	
	3,858	1,900	5,758
Total permanent disability (pensions) Fatal accidents	13 319	2 257	20
account of temporary disability existing) Partial payments (continued account of reduced earning power existing	471	314	471
as a result of the injury) In process of adjustment (tracing claimants; completing files; under	196	33	196
investigation, etc	462	• 953	462
	18,446	10,193	27,339

Comparative statement showing the number of all accidents by months, during the second fiscal year ending September 30, 1913, with the first fiscal year ending September, 1912.

FISCAL YEAR ENDING

1100112 11	THE BITTE		
		Increase	
		year endi	
Month.	September Sept		
	30, 191330	0, 1912. 30, 19	913
October	1,242	547	695
November	1,173	689 4	184
December	1,198	769 4	129
January		841 2	269
February		836	370
March	1,401	894 5	507
April	1,428	965 4	163
May		1,137 4	182
June	- 100	1,396	92
July		1,285	62
August		1,455	95
September		1,082 4	192
Total	16,336		
Total to September 30, 1913			
Increase for year ending September			440
Average number of accidents repo	orted per month,		
September 30, 1913		1,8	361
Average number of accidents repo	orted per month,		
September 30, 1912			991
Average increase per month, year	ending September	30, 1913	370

TABLE 4

This table shows awards made in settlement of claims and which are unpaid September 30, 1913, account of vouchers not returned signed for payment, or were returned by postal authorities. These constitute liabilities against their respective classes of the Accident Fund.

(Note—The major part of these vouchers would be received and paid within a few days after close of fiscal year, September 30, 1913.)

Class	Number of Claims	Amount Outstanding
	7	
2	7	
3	3	21.75
5	20	241.85
6		365.25
7	71	896.15
8	10	104.10
9	1	8.45
13	3	20.45
	8	
	16	
	8	
	5	

Class	Number of Claims	Amount Outstanding
	1	
24	12	114.15
25		21.65
29	7	70.00
	2	
33	2	62.30
	10	
	3	
	1	
	1	
	9	
	2	
10		
Total	484	\$8.716.60

The following table shows the number of fatal accidents reported, and claims disposed of, during the fiscal year ending September 30, 1913.

Reported		371
Pensions awarded		
Rejected for cause	52	
dependents if any, unknown)	122	
Total disposed of		319
established)		35
Files incomplete September 30, 1913		17
Total		371

In addition to the above, there were 22 cases, the files of which, were incomplete at the beginning of this year and on which pension awards were made during this year; also 14 cases that were previously suspended and that were reopened, 6 of which, pensions were awarded on, and 8, claims rejected for cause.

TABLE 6

Comparative statement showing the number of fatal accidents by months, during the second fiscal year ending September 30, 1913, with the first fiscal year ending September 30, 1912.

Fiscal year of Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept. Total 1913....24 12 11 33 42 42 41 37 24 44 46 15 1912....28 45 22 18 15 19 27 33 22 22 16 12 279 *4 *2 *22 *30 *3 33 11 *15 *27 *23 *14 Total to September 30, 1913, 650; increase for fiscal year ending September 30, 1913 92 Average number of fatal accidents reported per month, year ending September 30, 191330.91

^{*(}Increase).

The following table shows the number of fatal accidents reported during the fiscal year ending September 30, 1913, with the remote cause of death.

1.	
Burns	. 6
Caisson Disease	. 1
Carrying Objects	
Caught in Saw	
Caught by Shafting and Machinery	. 19
Crimes (shot)	. 1
Crushed Between Cars	. 12
Crushed by Cars in Mine	. 3
Drowning	
Electrocution; by power wires	
Explosions:	
Of Boilers	. 4
Of Chemicals	
Of Dust	
Of Oil	
Of Powder and Dynamite	. 14
Falling Coal	. 2
Falling Earth	
Falling Rock	
Falling Timbers	
Falling Trees	
Falling Objects (other)	
Falls from Trains	
Falls from Scaffolds	
Falls from Wagons	
Falls (other)	
Freezing	
Natural Causes	
Struck by Cable	
Struck by falling or rolling logs	
Struck by other objects	
Train Wrecks	
metal.	971
Total	. 211

TABLE 8

The following table shows the nationality of workmen fatally injured during the fiscal year ending September 30, 1913.

Nationality	Number	Per Cent
American	157	42.32
Unknown	63	16.98
Norwegian	24	6.47
Swedish	21	5.66
Italian	16	4.31
Austrian	15	4.04
Canadian	15	4.04
Finnish	13	3.50
German	10	2.69
Scotch	5	1.35
English	4	1.08
Danish	,	1.08

Nationality	Number	Per Cent
Russian	3	.81
Montenegrin	3	.81
Greek	3	.81
Irish	3	.81
Bohemian	2	.54
Icelandic	2	.54
French	2	.54
Japanese	1	.27
Swiss	1	.27
Philippino	1	.27
Welsh	1	.27
Australian		.27
New Zealander	1	.27
Total	371	100.00

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SEATTLE FORCE

DIVISION OF STATISTICS.

ROBIN ADAIR, Statistician.

Compensation Acts in the United States.

The Washington Statistical Method.

Results Show Accident Increase.

Summary-Injuries and Awards.

Temporary Total Disabilities—Duration in Weeks.

Temporary Total Disabilities—Report by Classes.

Permanent Partial Disabilities-Report by Classes.

Permanent Partial Disabilities—Extent of Injuries.

Personal Fault.

Conjugal Condition.

Length of Experience.

Hours When Accidents Occur.

Nativities of Injured Persons.

Accident Benefits and Other Income.

Cost of Medical Treatment and Comparisons.

Cost of Accidents in Labor-Years.

Safeguarding.

Mechanical Fault.

Mechanical Causes of Accidents-Table and Chart.

COMPENSATION ACTS IN THE UNITED STATES.

nd of Law.	Date Effective
ective 1	.September 1, 1911
	January 1, 1914
ective	July 1, 1913
ective	July 1, 1914
ective	January 1, 1912
ective	July 1, 1912
	.September 1, 1912
ective	October 1, 1913
ective	July 17, 1913
	July 1, 1911
ective	January 1, 1912
ective 3	July 4, 1911
	January 1, 1912
	July 1, 1914
ective	October 1, 1912
ective	September 1, 1913
	October 1, 1911
	October 1, 1913
ective	.September 1, 1912
	ective

- 1. California Law amended to become compulsory, Jan. 1, 1914.
- 2. Michigan Law elective for private companies; compulsory for State, Counties, and Municipalities.
- 3. New Jersey Law elective for private companies; compulsory as to state, counties, and municipalities.
 - 4. Ohio Law amended to become compulsory, Jan. 1, 1914.

A number of these above laws, which are elective in name, are intended to be made compulsory in practice by abrogation of the defenses of employers who do not elect to come under the Law.

THE WASHINGTON STATISTICAL METHOD.

The Washington Commission follows the policy of collecting very elaborate and detailed statistics concerning the occurrence of industrial injuries, and their sociological effects. It is believed that the collection of adequate statistics is essential to the success of any Industrial Insurance system, because only by the statistical method can the facts be made known to the general public.

In this respect Washington has modeled its statistical work after that of the German Industrial Insurance system, which is still the standard for the world. We are pleased to note that other American states, notably California, Wisconsin, and Massachussets, are also collecting statistical data which should prove very useful.

Perhaps it would be well to call attention to the mechanical regularity in statistical results. The proportions in which the various items appear in every table seem to remain constant month after month; in the same manner the results for this year are practically indentical with those for the previous year.

Wherever marked divergence appears it is invariably due to changed conditions under which the act is operative or to changed administrative policy, and such changes can be nearly always predicted with surprising accuracy.

There is also remarkable correspondence between the statis-

tical results of Washington and those of other states, and even of foreign countries. We are therefore compelled to recognize that accident results are practically uniform throughout the whole industrial world, the different conditions resulting in minor differences only.

In view of the fact that the statistical work for the past year has been mainly that of continuing the statistical work of the previous year, the reader may be interested in comparing the results of the second year with those of the first year. These comparisons can be easily made by referring to the corresponding tables found in the First Annual Report.

On account of the fact that this year's report of the Industrial Insurance Commission does not immediately precede a session of the Legislature, the statistics presented in this report are in the main mere summaries of the more elaborate tables on file in the office. It is planned to insert more detailed statistics in the Third Annual Report, so it may be available for legislative purposes at that time.

RESULTS SHOW ACCIDENT INCREASE FOR THIS YEAR: Reference to the First Annual Report will show that 6,356 non-fatal claims were tabulated during the year from October 1, 1911, to September 30, 1912—an average of 529 claims for each of the twelve months. For the year just completed the statistician has compiled his reports on 12,380 non-fatal claims, which is an average of 1,032 claims per month. The number of non-fatal claims tabulated this year is, therefore, nearly twice as great as those tabulated for preceding year. The fatal accidents also show a considerable increase as compared to the number occurring the preceding year.

This notable increase in the number of cases tabulated is due primarily to two reasons:

1. The 6,356 claims tabulated during the first year were not an entire year's experience by at least two months, because many accidents which occurred during September, August and July, of 1912, had not been passed upon by the Commission prior to September 30th, 1912. In the same manner practically all of the cases of very long disability had not been completed by

September 30th, 1912, and so did not appear in the Annual Report, even though they had occurred during the first year. On the other hand, the 12,380 cases tabulated this year represent approximately the accident experience for a whole year. It is true that this number does not include some hundreds of injuries which occurred during the latter months of this year, but to offset this they include a correspondingly large number of holdover claims from the year previous.

2. Census reports for the State of Washington show that the population of the State is increasing at an exceedingly rapid pace. Along with this increase in population there is an equally remarkable expansion of business. The hazardous industries of the State have been employing at least 25,000 more men this year than last, and the report should normally show a correspondingly greater number of injuries.

It cannot be determined whether these two reasons fully explain this extraordinary increase in the number of cases tabulated. It has been asserted that constant speeding of machinery, the failure of employers to provide suitable safeguards, and the ignorance of employees regarding the essentials of industrial safety constitute other reasons. It is not possible to determine from our statistical experience if this be true or not, but the results for the year certainly justify the conclusion that industrial hazard has, at least, not been materially lessened.

SUMMARY—INJURIES AND AWARDS.*

1.	Non Fatal:—		
	Kind of Injury	lumber of	Total Awards
	Temporary Total Disabilities	. 12,380	\$460,497.78
	Temporary Partial Disabilities		1,679.06
	Permanent Partial Disabilities		413,124.00
	Awards to Parents of Minors	. 138	3,055.00
	Permanent Total Disabilities		45,612.57
2.	Fatal:—		
	Fatals not requiring pension	. 156	
	Fatals requiring pension		
	Amount of reserves for pensions		\$431,560.23
	Number of burial awards		
	Amount of burial awards		\$ 21,742.45
	Total number of all awards		
	Total amount of all awards		\$1,377,271.09

^{*}See big table "Kinds of Awards" which appears elsewhere in this report.

TEMPORARY TOTAL DISABILITIES—CLASSIFIED ACCORDING TO WEEKS DURATION.

Duration of Disability.	Number of	Per Cent
(weeks)	Cases	of Cases
Not more than one week	1,681	13.6
From 1 to 2 weeks		25.5
From 2 to 3 weeks	2,113	17.1
From 3 to 4 weeks	1,365	11.0
From 4 to 5 weeks	1,139	9.2
From 5 to 6 weeks	658	5.3
From 6 to 7 weeks	439	3.5
From 7 to 8 weeks	281	2.3
From 8 to 9 weeks	330	2.7
From 9 to 10 weeks		1.3
From 10 to 11 weeks		1.1
From 11 to 12 weeks	100	0.8
From 12 to 13 weeks		1.1
From 13 to 14 weeks		0.4
From 14 to 15 weeks		0.5
From 15 to 16 weeks		0.3
From 16 to 17 weeks		0.2
From 17 to 18 weeks		0.8
From 18 to 19 weeks :		0.1
From 19 to 20 weeks		0.3
From 20 to 21 weeks		0.2
From 21 to 22 weeks		0.6
From 22 to 23 weeks		0.2
From 23 to 24 weeks		0.1
From 24 to 25 weeks		0.1
From 25 to 26 weeks		0.3
More than 26 weeks	172	1.4
Total	12,380	100.0

DURATION OF TEMPORARY TOTAL DISABILITIES.*
(For industrial groups contributing more than 100 accidents).

(For industrial groups co	ntiibu	ting more tha	in 100 acciu	ches).
Occupation.	Class.	Number of V	Work days D	Average ouration of Disability
Sewers and Tunnels	. 1	159	4.957	31.2
General Construction		558	18.112	32.4
Power Line Installation		207	6.1811/2	29.9
Railroads		640	18,1261/2	
Street Grading		243	7.5931/2	
Lumbering, Milling, etc		6,309	176,9971/2	
Street Railway		271	5.943	21.9
Coal Mines		1,029	24.014	23.3
Quarries		146	4,4641/9	30.6
Smelters		219	6,1321/2	
Paper Mills		164	2,3071/2	
Wood Working		564	12,980	23.0
Steel Mfg. and Foundries		444	8,818	19.8
Longshoring		234	9,229	39.4
All other classes		1,193	34,872	29.2
Total all classes		12,380	340,7281/2	27.5

^{*}See big table "Kinds of Awards" which appears elsewhere in this report.

PERMANENT PARTIAL DISABILITIES.*

(Classifying industrial groups which contributed 15 or more permanent partial disabilities.)

Occupation. Class.	Number of Disabilities	Amounts of Awards.	Average Award.
Sewers and Tunnels 1	16	\$ 3,325.00	\$207.81
Bridges and Towers 2	17	5,554.00	326.70
General Construction 5	65	22,187.50	341.35
Power Line Installation 6	19	4,062.50	213.82
Railroads 7	80	24,800.00	310.00
Street Grading 8	25	7,100.00	284.00
Lumbering, Milling, etc 10	787	226,017.50	287.18
Street Railways 14	25	9,062.50	362.50
Coal Mines 16	53	19,775.00	373.11
Quarries 17	17	6,115.00	359.71
Smelters 18	15	3,837.50	255.83
Paper Mills 24	15	3,150.00	210.00
Wood Working 29	103	22,000.00	213.59
Steel Manufacturing 34	47	13,500.00	287.23
Longshoring 42	18	5,850.00	325.00
All Others	146	40,162.50	275.09
Total	1,437	\$413,124.00	\$287.49

PERMANENT PARTIAL DISABILITIES.

Amount of Disability	Number.	Per Cent.
Not more than 5% Perm. Part. Disability	636	44.3
From 5 to 10% Perm. Part. Disability	299	20.8
From 10 to 15% Perm. Part. Disability	186	12.9
From 15 to 20% Perm. Part. Disability	91	6.3
From 20 to 25% Perm. Part. Disability	36	2.5
From 25 to 30% Perm. Part. Disability	44	3.0
From 30 to 35% Perm. Part. Disability	42	2.9
From 35 to 40% Perm. Part. Disability	52	3.6
From 40 to 45% Perm. Part. Disability	3	0.2
From 45 to 50% Perm. Part. Disability		0.6
From 50 to 55% Perm. Part. Disability	2	0.2
From 55 to 60% Perm. Part. Disability		2.7
Total	1,437	100.0

Note:—The maximum award for any permanent partial disability is fixed by the Law at \$1,500.00 for the loss of a major arm at or above the elbow. This is arbitrarily estimated to be a sixty per cent disability, each one per cent of permanently reduced efficiency being awarded \$25.00. All other permanent partial disabilities are awarded in proportion to the estimated disability as compared to the loss of the major arm, each injury being awarded \$25.00 for each one per cent disability as estimated in the schedule of permanent partial disabilities.

^{*}See big table "Kinds of Awards" which appears elsewhere in this report.

PERSONAL FAULT: The following table shows the personal fault, if any, in the cases tabulated during the year. It appears that 69% of all cases were ascribed to risk of trade, and not to personal fault. Only 11.2% of the injuries are here charged to personal fault.

It should be noted, however, that fault is not a measurable quantity, but an estimate, of employers, employees and witnesses who are not, in most cases, experts. Moreover the cause of nearly every accident is complex, being the result of trade risk and one or more of the other factors combined. The table is therefore inexact because only the dominant factor is counted in each accident.

Fault.	Number.	Per Cent
Risk of Trade	 8,543	69.0
Workman's Fault	 951	7.8
Fellow Servant's Fault	 303	2.4
Employer's Fault		.7
Foreman's Fault	 12	.1
Third Person's Fault	 30	.2
Facts not Ascertainable .	 2,451	19.8
Total	 12,380	100.0

CONJUGAL CONDITION: Whether or not the injured person is married, and the size of his family, is of especial importance under the Washington Law, because his marital condition is one of the two factors which determine the scale of awards for temporary total disabilities. The workman may receive 60% of his wage, but not to exceed monthly awards as specified in the following schedule:

MAXIMUM MONTHLY AWARDS UNDER SEC. 5, PARAGRAPH (d).

Injured Workman. N Having able-bodied husband		One Child. \$30.00	2 Children. \$37.50	3 or More Children \$45.00
Unmarried	. 30.00			
Having wife or invalid husband	37.50	45.00	52.50	52.50
Widow or Widower	. 30.00	37.50	45.00	52.50

CONJUGAL CONDITION OF INJURED PE	RSONS.
Single and having Number.	Per Cent
a. No dependents	46.8 4.0
c. Two dependents	2.7
Married, and having	
a. No children 1,638 b. One child 1,375 c. Two children 1,091 d. Three children 763 e. Four children 389 f. Five children 240 g. Six children 77 h. Seven children 20 i. Eight children 5	13.2 11.1 8.8 6.2 3.0 2.0 0.6 0.2 0.1
j. Nine children 4 SUMMARY.	0.1 Per Cent
Single persons 6,778 Married persons 5,602	54.7 45.3
Total 12.380	100.0

LENGTH OF EXPERIENCE OF INJURED PERSONS:

The following table classifies persons injured according to their length of experience in the trade in which the injury occurred. The report covers a period of 21 months from October 1, 1911, to July 1, 1913. The table having been discontinued by the Commission, no figures are available for the accidents tabulated since July 1, 1913.

Length of Experience	Number of Cases
Not more than one week	750
From one week to one month	1,013
From one month to one year	3,606
From one year to five years	4,217
From five years to fifteen years	3,177
From fifteen years to thirty years	1,253
More than thirty years	197
Length of experience not stated	1,138
Total	15,351

HOURS WHEN ACCIDENTS OCCUR: The 5,731 cases tabulated below indicate that more accidents occur during the middle of each work period than at any other time in the day. In the morning, for instance, 10 A. M. contributed the maximum of 507 accidents, while, in the afternoon, the maximum of

421 accidents occurred at 3 P. M. These results seem to disprove the theory that fatigue is the predominent cause of accidents, because most accidents are here shown to happen during the hours when workmen are least fatigued.

On the contrary it would seem that accidents are caused more by the carelessness of the middle of each work period than by the fatigue of later hours.

Hour,	A. M.	Number	Hour, P. M.	Number
7:00		93	1:00	140
7:30		151	1:30	181
8:00		231	2:00	348
8:30		162	2:30	158
9:00			3:00	
9:30			3:30	
10:00			4:00	
10:30			4:30	
11:00			5:00	
11:30			5:30	
12:00			6:00	
	Hours not deter	mined		114
				=0.4
	Total			,731

NATIVITIES OF INJURED PERSONS: This table shows separately the number and percentage of injured persons of each nationality for the first and second years of operation of the Act. Notice that the percentage of North Europeans has decreased materially, and that the percentage of South Europeans, especially Austrians, has increased with remarkable rapidity. Another fact worthy of notice is that about $54\frac{1}{2}\%$ of all injured persons are natives of United States and Canada.

	Year 1911-1912		Year 1912-1913	
State or Country	Number.	Per Cent.	Number.	Per Cent.
Washington	323	5.1	726	5.9
Other Pacific States	220	3.4	486	3.9
West Central States	1,143	17.9	1,657	13.4
South Central States	79	1.3	183	1.5
East Central States	766	12.0	1,959	15.8
South Atlantic States	191	3.0	422	3.4
North Atlantic States	323	5.1	585	4.7
New England States	103	1.6	218	1.8
U. S., State not given	42	0.7	70	0.6
Canada	249	3.9	449	3.6
England	173	2.7	271	2.2
Scotland	69	1.1	111	0.9
Ireland	83	1.3	158	1.3

	Year 1	911-1912	Year 19	912-1913
State or Country	Number.	Per Cent.	Number.	Per Cent.
Sweden	408	6.4	681	5.5
Norway	328	5.2	588	4.8
Finland		3.6	413	3.3
Germany	202	3.2	369	3.0
Austria-Hungary	398	6.2	881	7.1
Russia		1.6	220	1.8
Italy	201	3.3	488	3.9
Greece	99	1.6	226	1.8
Japan	63	1.0	154	1.2
All other countries	276	4.3	507	4.1
Nativity not stated	287	4.5	558	4.5
Total, all countries	6,356	100.00	12,380	100.00

NATIVITIES-SUMMARY OF LARGER GROUPS.

	Year 1	911-1912	Year 19	12-1913
Countries	Number.	Per Cent.	Number.	Per Cent.
United States and Canada	3,438	54.1	6,755	54.6
North Europe	1,654	26.0	2,883	23.3
South Europe	880	13.9	1,963	15.8
Asia	70	1.1	171	1.4
Other Countries	27	0.4	50	0.4
Not determined	287	4.5	558	4.5
Total	6,356	100.00	12,380	100.00

ACCIDENT BENEFITS AND OTHER INCOME: The following table shows the number of injured workmen whose reports indicated that they would receive income of some sort during disability, other than Industrial Compensation. These "benefits" are usually in the nature of lodge or accident insurance, but a few cases have been found where the injured person was receiving interest, rent, or pension for military service.

This table is the best possible proof of the necessity of Workmen's Compensation, because it shows that more than eighty per cent of injured workmen have no other income whatsoever during disability, except what they receive from the State under the Workmen's Compensation Law.

Only 14.5% of those injured this year are shown to have had accident insurance or other income during disability. The reader will note, upon referring to the First Annual Report, page 175, that 18.9% had such protection during the first Compensation year. This decrease of 4.4% is evidently explained by the tendency of workmen to rely more and more

upon the State Industrial Insurance system for protection from the financial stress of disability or death.

Number of sources	Number of
of support*	Injured persons. Percentage
One source	1,619 13.1%
Two sources	145 1.2
Three sources	27 0.2
No benefits	10,038 81.1
Facts not determined	551 4.4
Total	12,380 100.0

COST OF MEDICAL TREATMENT AND COMPARISONS:

Unfortunately, we have not been able to get estimates of the cost of medical treatment in the vast majority of cases. In only 14% of the 12,380 cases tabulated have these figures been available. For the 1,722 cases in which such estimates were given the comparisons are presented in the two tables below. All these cases are typical, however, and there is every reason to believe that the proportions here shown would be found true if the facts were available in all cases. The recent adoption of a new workman's report blank, which is to be filled out at the expiration of disability, will make it possible to collect much more complete data on this subject for future reports.

TABLE NO. 1.

(Awards resulting in temporary disability only.)	
Number of cases reported	1,503
Number of work days lost	35,102
Total amount of wages lost\$	107,296.67
Total cost of medical treatment	36,206.80
Awards for temporary total disability	47,164.20
Total loss on account of disabilities (wages lost plus cost	
of medical treatment)\$	143,503.47
Amount of loss borne by employers (awards for temporary	
total disability)	47,164.20
Amount of loss borne by employees (total loss minus	
awards)	96,339.27
Percentage of loss borne by employers	32.9%
Percentage of loss borne by employees	67.1%

^{*}Other than awards under the Industrial Insurance Act.

TABLE NO. 2.

(Awards resulting	g in	both	temporary	disabilities	and	permanent
		pa	rtial disabili	ities.)		

Number of cases reported	219 9.737 1/2
Number of work days lost	
Total amount of wages lost\$	
	14,432.15
Awards for temporary total disability	13,340.19
Awards for permanent partial disability	51,435.50
Total loss on account of disabilities (wages lost plus cost	
of medical treatment)\$	47,083.20
Amount of immediate loss borne by employers (awards for	
temporary total disability)	13,340.19
Amount of immediate loss borne by employees (total loss	
minus awards for temporary total disability)	33.743.01
Percentage of loss borne by employers	28.3%
Percentage of loss borne by employees	71.7%
I crochage or ross borne by employees	11.170

NOTE:—That the awards for permanent partial disabilities are excluded from the above comparisons for the reason that these awards are made in payment for future reduced earning power, and hence, ought not to be compared with the immediate loss of wages, and cost of medical treatment.

COST OF ACCIDENTS IN YEAR'S LABOR: It is interesting to estimate this year's accidents in units of one man's labor for one year. Assuming that an average year of labor consists of 300 work days, and that the average expectancy of a workman's life is 25 years, which is a very conservative estimate, we find that the loss in years of labor has been as follows:

Kinds of Injuries.	Work Years.
For fatal cases	. 8,225.0
For temporary total disabilities	. 1,135.8
For permanent partial disabilities	. 4,131.2
For permanent total disabilities	. 325.0
Total for all injuries	13 817 0

This means that, at the present rate, the accidents of the State of Washington alone are lessening the productive capacity of this commonwealth to the extent of the perpetual labor of an industrial army of 13,817 men.

NOTE:—See big table "Kinds of Awards" from which the total numbers of the various injuries were taken for computation.

MISCELLANEOUS FACTS.

Average	daily	wage of	injured	persons		\$3.12
				*	total dis-	
Average	daily	cost of t	reatmen	t during	disability	1.12

SAFE GUARDING: The following table presents the conditions of safeguarding as accurately as possible from the reports of employers and employes. Note that 72.4% of all accidents are reported to have occurred under conditions where safeguards were not applicable. Safeguards were considered as applicable in only 22.8% of the accidents. If this table were based upon a more painstaking inspection of experts, the latter figure would doubtless be increased somewhat, but it is believed that this report is substantially correct.

	Number.	Percent.
Safeguarded	. 2,456	19.9
Not safeguarded	. 364	2.9
Possibility of safeguarding not determined	. 594	4.8
Safeguards not applicable	. 8,966	72.4
Total	.12,380	100.0

CONDITION OF MACHINERY: The following table gives the facts concerning the condition of machinery in connection with which accidents occurred. Note that only 29.8% of all injuries are shown to have been caused by power driven machinery; also, that 67.9% of the accidents are tabulated as non-mechanical. In view of these facts it would seem that the importance of mechanical conditions has been rather over estimated. See the table entitled "Causes of Accidents."

	Number.	Percent.
Machine's fault	. 295	2.4
Not Machine's fault	. 3,391	27.4
Conditions not determined	. 283	2.3
Accidents non-mechanical	. 8,411	67.9
Total	.12,380	100.0

MECHANICAL AND OTHER CAUSES OF ACCIDENTS:

The following table shows the number of accidents contributed by those mechanical and other agencies which have caused more than fifty accidents each. Agencies contributing less than fifty accidents have been omitted from the table on account of lack of space.

Causes of Accidents (Mechanical)	Number
Engines, dynamos, flywheels, etc	64
Gearing (Cogs, etc.)	96
Belts and pulleys	104
Elevators and lifts	54
Cranes and derricks	79
Slab and spalt conveyors	71
Other conveying apparatus	105
Coupling cars	50
Coal cars, dump cars, etc	311
Other railway causes (Misc.)	72
Power driven saws	911
Planers	93
Log carriages	93
Live rolls, cables, chains, etc	612
Wood working machines (Misc.)	118
Unclassified machines	179
	110
(Non-Mechanical)	07
Explosion and ignition of gases	67
Burns from steam and liquids	93
Falls from platforms, etc	163
Falls by collapse of support	121
Falls through openings in floor	55
Falls on level by slipping	389
Falls on level by tripping	67
Other falls	572
Falling coal, rock, earth, etc	480 98
Slides and cave-ins	495
	144
Falling trees	534
	198
Falling objects (Misc.)	127
Trucks, wheelbarrows, scrapers	302
Handling stones, weights, etc	691
Handling lumber, timbers, etc	955
Other injuries by weights	55
Flying fragments	276
Other flying objects	234
Vehicles and animals	175
Hand tools (hammers, knives)	312
Sharp projections	56
Axes, hatches, adzes	747
Stepping on nails	124
Cross-cut saws	151
Peavies, picks, pickaroons	203
Splinters, cable strands, etc	304
Definitions, capie strangs, etc	301
Total	1.200
TT	0 - 17 1

Note.—Upon reading down the column of the causes of accidents, the reader will notice that the first sixteen causes are purely mechanical, while the following twenty-nine causes are practically all non-mechanical. Reference to the more complete figures from which this table was copied will demonstrate that not more than 30% of all accidents occur in connection with power driven machinery; likewise, only a comparatively small number occur in situations where it is possible to utilize safeguards. It would therefore seem that this table corroborates the conclusions drawn from the two preceding tables entitled "Safeguarding" and "Condition of Machinery."

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HOW A CLAIM IS PAID

THE CASE OF CARL J. SWEEN, AMERICAN, NO. 15476.

BY HOWARD L. HINDLEY.

To illustrate the usual process in filing and adjusting a claim, the file of Carl J. Sween, American, born in Grand Falls, Minnesota, and injured December 19, 1912, while working for the Pacific Coast Steel Company, Youngstown, Seattle, was taken almost at random from the files. Its story is as follows:

Carl is a typical American family man of the wage-earning class. He is married, and, in the words of the occasional report, had "one wife and four children," at the time of the accident, the latter being Severian, 11; Alix, 9; Leon, 6; all boys, and Theodora, 4, a daughter. He earned \$3.00 a day, which was just enough to bring him within the "dead line" of the 60 per cent rule. The application of the rule is indicated in the following schedule of compensation, which is fixed by law and from which the Commission cannot vary:

"An unmarried injured workman is compensated at the rate of \$20 a month and \$5 is added in the case of a wife and \$5 for each child under 16 up to \$35 a month. These amounts are increased 50%, or one-half, during the first six months after injury, but in no case may they ever be over 60% of the monthly wage of the injured workman."

It will therefore be seen that although Carl's family condition entitled him to \$52.50 a month, the 60% rule, which only works one way—to keep the low-priced wage-earner from getting the maximum compensation per month—cut this down to \$46.80 a month.

Carl's family is outside the law in another respect—four children entitle the father to no more compensation than two, so that two children, say little Theodora and Leon, are regarded by the law as non-existent; they haven't been born yet. Had Carl been killed, the pension would have been paid to his

widow, \$20; Severian, \$5; Alix, \$5; Leon, \$5; \$35 being the maximum.

Carl was working as night foreman in the steel works and about eleven o'clock in the evening (the employer says 10:45) he was "cutting steel rail on shear and it flew sideways and struck him on the leg. Right leg broken below hip." He was hurried to the new Providence Hospital, and Doctors J. Warren Richardson and R. A. McClure set the broken thigh and put on an extension which is a heavy weight, fastened to the foot and running over a pulley, to keep the broken bones in line.

Two days afterward, Arthur B. Vinton and Roy A. Knight helped Carl to make out his claim (Form 22) which reached the Commission two days after Christmas, (December 27). The employer's report (Form 21), was filed January 1st, 1913, and the doctor's report (Form 23), January 4th. These reports agreed in all material details and the first month's compensation, due January 19th, was ordered, and a voucher issued January 28th.

By using the new double form, 21 and 22 combined, both the claim and the employer's report may now be filed at the same writing.

Meanwhile, the papers had been assembled, the claim indexed, a summary written, endorsed by the Chief Clerk of the claim department, the claim agent and the chief medical advisor. Two Commissioners signed the claim and the voucher and the record of their action was placed on the minutes by the Secretary. The voucher was signed by Carl and a cash warrant issued to him by the State Auditor for his first month's compensation.

The second month was paid in routine, but before the third came due, the doctors decided on an operation. Carl's thigh was cut open March 11th, and the ends of broken bone were found to be un-united. They put on "plates," which are steel braces or clamps, fastened to the bone by steel screws, to hold the bone in line, the same as a fish-plate holds the ends of two rails in line. The leg was also put in a plaster cast, with the result that Carl got about on crutches about May 7th, and

had the cast taken off. Compensation had been sent him every month.

Carl worked every day of the week before he was hurt and did not understand why he was compensated on the 26-day basis. He hobbled into the Seattle office about June 26th, and asked about it. Here again, the law intervened, Section 5, Sub-division (d) limiting his compensation to "sixty per cent of the monthly wage (the daily wage multiplied by twenty-six) the workman was receiving at the time of his injury."

Carl was discharged by his doctor July 19th and went to work, but he had a two-inch shortening of the right leg and a slight limp. He worked, because he was a worker, but he had a permanent disability. He was accordingly ordered before one of the Commission's examining physicians in Seattle, Dr. C. H. Thompson. The expert confirmed the attending physician and the Chief Medical Advisor marked up the claim for 18 degrees or 18-60 of the disability paid when the leg is cut off at or above the knee.

A final settlement voucher was sent Carl Aug. 7th, 1913. It called for \$30.95 closing time loss, plus \$450, to pay for the Permanent Partial disability to the leg. (Figured at the rate of \$25.00 for each of the above mentioned 18 degrees.) Carl probably limps a trifle today, but he is back at his old job, supporting his family and training his children to be good citizens.

Summarized, the Carl J. Sween case is as follows:

Injured Dec. 19, 1912.

Claim made Dec. 21st, 1912.

Claim received Dec. 27th, 1912.

Month due Jan. 19th, 1913.

First monthly payment made Jan. 28th, 1913.

Operation performed Mar. 11th, 1913.

Cast removed May 7th, 1913.

Man on crutches May 14th, 1913.

Special examination Aug. 1st, 1913.

Final settlement Aug. 7th, 1913.

TABLE OF PAYMENTS.

Month to Jan. 19th \$	46.80
Month to Feb. 19th	46.80
Month to Mar. 19th	46.80
Month to Apr. 19th	46.80
Month to May 19th	46.80
Month to June 19th	46.80
*23 days to close	30.95
Permanent partial disability 4	50.00
Total\$7	61.75

*(Figured at \$35 per month, six months having elapsed since injury.)

WORKMEN'S COMPENSATION ACT.

With Notes and Rulings by The Industrial Insurance Commission. Chapter 74, Laws of 1911.

[H. B. 14.]

AN ACT relating to the compensation of injured workmen in our industries, and the compensation to their dependents where such injuries result in death, creating an industrial insurance department, making an appropriation for its administration, providing for the creation and disbursement of funds for the compensation and care of workmen injured in hazardous employment, providing penalties for the non-observance of regulations for the prevention of such injuries and for violation of its provisions, asserting and exercising the police power in such cases, and, except in certain specified cases, abolishing the doctrine of negligence as a ground for recovery of damages against employers, and depriving the courts of jurisdiction of such controversies, and repealing sections 6594, 6595 and 6596 of Remington & Ballinger's Annotated Codes and Statutes of Washington, relating to employes in factories, mills or workshops where machinery is used, actions for the recovery of damages and prescribing a punishment for violation thereof.

Be it enacted by the Legislature of the State of Washington:

SECTION 1. Declaration of Police Power.

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

The abolishing of jurisdiction of courts over personal injury claims applies only to those in the relation of employer and employe in "extra hazardous" occupations. Employes as members of the public have their rights against third persons as heretofore. Suits allowed against employer, see Sec. 8. Even though the injury or death be caused by the tort of a third person, the employe may obtain compensation by election and assignment, except where a wilful act of such other, committed against the employe, be for reasons personal and not because of his employment.

such other, committed aga because of his employment.

SEC. 2. Enumeration of Extra Hazardous Works.

There is a hazard in all employment, but certain employments have come to be, and to be recognized as being, inherently constantly dangerous. This act is intended to apply to all such inherently hazardous works and occupations, and it is the purpose to embrace all of them, which are within the legislative jurisdiction of the state, in the following enumeration, and they are intended to be embraced within the

term "extra hazardous" wherever used in this act, to-wit:

Factories, mills and workshops where machinery is used; printing, electrotyping, photo-engraving and stereotyping plants where machinery is used; foundries, blast furnaces, mines, wells, gas works, water works, reduction works, breweries, elevators, wharves, docks, dredges, smelters, powder works; laundries operated by power; quarries; engineering works; logging, lumbering and ship-building operations; logging, street and interurban railroads; buildings being constructed, repaired, moved or demolished; telegraph, telephone, electric light or power plants or lines, steam heating or power plants, steamboats, tugs, ferries and railroads. If there be or arise any extra hazardous occupation or work other than those hereinabove enumerated, it shall come under this act, and its rate of contribution to the accident fund hereinafter established, shall be, until fixed by legislation, determined by the department hereinafter created, upon the basis of the relation which the risk involved bears to the risks classified in section 4.

Admiralty Jurisdiction, see Sec. 18.

Unlisted extra hazardous occupations will be included in existing classes whenever possible. Obviously, accidents in new and small classes might bankrupt employers included therein. Non-hazardous elective, Class 48.

Includes civil engineers in connection with logging, concrete manufacture, quarrying and mining.

Also city, county and state civil engineers engaged in field work, and their salary is leviable at same rate as the work in which they are engaged.

Excludes business of wholesale and retail handling of inflammable oils.

SEC. 3. Definitions.

In the sense of this act words employed mean as here stated, to-wit: Factories mean undertakings in which the business of working at commodities is carried on with power-driven machinery, either in manufacture, repair or change, and shall include the premises, yard and plant of the concern.

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

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

and bunkers.

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

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

building or construction purposes.

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

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

Employer includes owner, contractor, sub-contractor, agent, municipality, see Sec. 17. Residence outside the State immaterial.

This act has no application where the United States is the employer. (Opinion Attorney General, Sept. 20, 1911.)

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

It has been held that a workman injured by a malicious act of a fellow workman does not come within the scope of the act.

Workmen injured at plant by third persons must assign right of action to State as a condition of compensation from the accident fund.

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

Dependent means any of the following named relatives of a workman whose death results from any injury and who leaves surviving no widow, widower, or child under the age of sixteen years, viz.: Invalid child over the age of sixteen years, daughter, between sixteen and eighteen years of age, father, mother, grandfather, grandmother, stepfather, stepmother, grandson, granddaughter, stepson, stepdaughter, brother, sister, half-sister, half-brother, niece, nephew, who, at the time of the accident, are dependent, in whole or in part, for their support upon the earnings of the workman. Except where otherwise provided by treaty, aliens other than father or mother, not residing within the United States at the time of the accident, are not included.

See John Kanton v. Albert Kelly, 65 Wash. 614; Rehearing denied Nov. 14, 1912; Bortle v. N. P. Ry., 60 Wash. 552. "There must be a substantial need on one side and a substantial financial recognition of that need on the other side, to make out a case of dependency within the meaning of this statute."

Does not apply to non-resident dependents other than father or mother.

When workman makes statement that he has a wife or wife and children under the age of sixteen years, but is living apart from them, the Commission requires an affidavit from the workman to show that he is contributing to their support. In absence of satisfactory proof his compensation is rated on basis of an unmarried man.

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

Wife and children conclusively presumed to be dependents. See Section 5. Where claimants reside abroad, sworn statement of dependency to be made before a magistrate whose authority to take deposition is to be attested by an

Original certified power of attorney by an alien dependent may be accepted in proving a claim. Pension warrants, however, will be mailed the dependent direct to the for-

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

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

Includes a step-child.

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

Employes injured by third person while actually engaged in the performance of their duties are entitled to compensation for disabilities resulting, (e.g. street car conductors assaulted by disorderly passengers for insisting on obedience to companies rules.)

Companies rules.)

Recent medical texts indicating that hernia (rupture) ordinarily develops gradually, rarely as a result of accident, the department rules that a workman in order to be entitled to indemnity for hernia must clearly prove:

(1) The hernia is of recent origin.

(2) Its descent occurred at a definite time, and was accompanied by pain;

It was immediately preceded by some accidental strain in the course of hazardous employment;

It did not exist prior to the date of the alleged injury. (Conclusive proof.)

SEC. 4. Schedule of Contribution.

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

CONSTRUCTION WORK.

Iron, or steel frame structures or parts of structures Electric light or power plants or systems; telegraph or telephone	.065
placement, but diriting, product records the second	.050
Steeples, towers or grain elevators, not metal framed; drydocks without excavation; jetties; breakwaters; chimneys; marine railways; water works or systems; electric railways with rock work or blasting; blasting; erecting fireprooof doors or shut-	
ters	.050
Steam heating plants; tanks, water towers or windmills, not	040
metal frames	.040
Shaft sinking	.000
ing; roof work; safe moving; slate work; outside plumbing	.050

^{*}Act amended before passage requiring payment each month after Dec. 31, 1911, if funds on hand are deemed insufficient.

Excavations not otherwise specified; blast furnaces Street or other grading; cable or electric street railways without	.040
blasting; advertising signs; ornamental metal work in buildings Ship or boat building or wrecking with scaffolds; floating docks. Carpenter work not otherwise specified	.035 .045 .035
ing; inside plumbing; wooden stair building; road making The absence of power driven machinery does not exempt occupations rin this subdivision, nor the small number of employes engaged, nor the time required to accomplish the work.	amed short
OPERATION (INCLUDING REPAIR WORK) OF	
(All combinations of material take the higher rate when not owise provided.)	ther-
Logging railroads; railroads; dredges; interurban electric railroads using third rail system; dry or floating docks Electric light or power plants; interurban electric railroads not	.050
using third rail system; quarries	.040
works; steamboats; tugs; ferries	.030
garbage works	.020
FACTORIES USING POWER DRIVEN MACHINERY.	
Stamping tin or metal	.045
cooperage; logging with or without machinery; saw mills; shingle mills; staves; veneer; box; lath; packing cases; sash, door or blinds; barrel, keg, pail; basket; tub; wooden ware or wooden fibre ware; rolling mills; making steam shovels or dredges; tanks; water towers; asphalt; building material not otherwise specified; fertilizer; cement; stone with or without	
machinery; kindling wood; masts and spars with or without machinery; canneries, metal stamping extra; crosoting works;	005
pile treating works Excelsior, iron, steel, copper, zinc, brass or lead articles or wares not otherwise specified; working in wood not otherwise speci-	.025
fied; hardware; tile; brick; terra cotta; fire clay; pottery; earthen ware; porcelain ware; peat fuel; brickettes Breweries; bottling works; boiler works; foundries; machine	.020
shops not otherwise specified	.020
rubber or textiles not otherwise specified	.015

Making jewelry, soap, tallow, lard, grease, condensed milk Creameries; printing; electrotyping, photo-engraving; engraving; lithographing	.015
MISCELLANEOUS WORK.	
Stevedoring; longshoring Operating stock yards, with or without railroad entry; packing	.030
houses	.020
Theater stage employes	.015
Dowidon wonling	100

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

Preliminary payment on an estimated payroll required of new establishments,

Freimmary payment on an estimated payroll required of new establishments, thereafter as assessed.

Special assessments on members of any class are required to be received at Olympia within 30 days from the date of the demand.

An establishment or business permanently dismantled or abandoned does not forfeit its "unearned premiums," but is entitled to a return of the excess payment by warrant against the Accident Fund. (Opinion Attorney General, Jan. 9,

In computing a shortage at the end of any year the uncollected premiums demanded shall be construed assets, and only the balance of the shortage be de-

manded pro rata.

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

The provision for non-assessment of premium does not seem equitably to apply to owners and contractors in construction work (Classes 1 to 9, inclusive). Continuous monthly contribution is required to place operators in such work on the same competitive plane as to bidding, advance ordering of material, etc. each contract thus providing for its average quota of injuries.

Excess contributions collected on any estimated payroll over the proper premium on actual payroll, stand as a credit to the contributor at the end-of-theyear adjustment; such contributor is entitled to exhaust such credit before making further payments into the accident fund.

After December 31st of any year, whether the contributor operated at full capacity, with reduced force, on part time, or not at all, a credit found to exist is available for further assessments, or cash refund where the business ceases.

A new establishment shall contribute an initial premium on an estimated three months' payroll; but shall be omitted from the list specially assessed for such months, except on the difference between estimated and actual payrolls.

Where a new establishment comes into a class late in the year and assessments are made thereafter, reverting back to "the last lapsed month," as many calls on older establishments shall first be made as the number of months in the new firm's preliminary contribution before the new firm is assessed.

After December 31st of any year the actual payroll of each establishment shall be obtained and all contributions made during the year shall be adjusted to as many twelfths of such actual payrolls as there have been monthly assessments paid into the fund during the year.

The intent of the law is that each of the forty-seven funds be automatic and self-adjusting. The rate is fixed; time of payment varies with the need. The actual premium (percentage of payroll) cannot be determined in advance. The proviso here was inserted as an amendment to the original bill; the first paragraph of Sec. 4, so far as inconsistent, to be disregarded.

Whenever a special assessment is ordered on any particular class, the basis shall be the average monthly payroll determined by reports on file in the Commission's office.

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

In that the intent is that the fund created under this section shall ultimately become neither more nor less than self-supporting, exclusive of the expense of administration, the rates in this section named are subject to future adjustment by the legislature, and the classifications to rearrangement following any relative increase or decrease of hazard shown by experience.

It shall be unlawful for the employer to deduct or obtain any part of the premium required by this section to be by him paid from the wages or earnings of his workmen or any of them, and the making or attempt to make any such deduction shall be a gross misdemeanor.* If, after this act shall have come into operation, it is shown by experience under the act, because of poor or careless management, any establishment or work is unduly dangerous in comparison with other like establishments or works, the department may advance its classification of risks and premium rates in proportion to the undue hazard. In accordance with the same principle, any such increase in classification or premium rate, shall be subject to restoration to the schedule rate. Any such change in classification of risks or premium rates, or any change caused by change in the class of work, occurring during the year shall, at the time of the annual adjustment, be adjusted by the department in proportion to its duration in accordance with the schedule of this section. If, at the end of any year, it shall be seen that the contribution to the accident fund by any class of industry shall be less than the drain upon the fund on account of that class, the deficiency shall be made good to the fund on the 1st day of February of the following year by the employers of that class in proportion to their respective payments for the past year.

Contribution by employes to a Hospital Fund of an establishment not prohibited by this section; such funds to provide resident physicians in remote camps, and procure first aid and competent care in sickness and injury. See Secs. 12, 13, 24.

See Wells v. Ferry-Baker Lumber Co., 57 Wash. 658; Harding v. Ostrander Ry. & Timber Co., 64 Wash. 225; Richardson v. Carbon Hill Coal Co., 10 Wash. 648.

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

^{*}Gross misdemeanor—penalty, imprisonment in county jail not more than one year, or by a fine not to exceed one thousand dollars or both. Rem. & Bal. Code, Sec. 2267; Sec. 15. Chap. 249, Laws 1909. The workman contributes nothing under this act; see Sec. 24.

CONSTRUCTION WORK

Where an establishment contributes as an operating concern under one class and afterwards performs construction work necessitating payment into funds of another class, the operating plant shut down meantime, transfer of credits on Commission's books will be made.

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

Includes all underground work of whatever character in connection with sewer construction, includes tunneling and shafting and work at the entrance thereof; also such work in open trenches exceeding six feet in depth, but not "excavations" as hereinafter defined.
"Excavations," rate 4 per cent: Ditches less than six feet deep; where deeper than six feet, width must exceed half of depth.

Class 2. Bridges; mill wrighting; trestles; steeples, towers or grain elevators not metal framed; tanks; water towers, windmills not metal framed.

Includes assembling of parts and erection; construction of concrete bridge piers, rate $6\frac{1}{2}$ per cent; excludes fabrication, manufacture.

Sub-aqueous works; canal other than irrigation or docks with or without blasting; pile driving; jetties; breakwaters; marine railways.

Includes dock excavations, $6\frac{1}{2}$ per cent. Ditches and canals, other than irrigation without blasting, rate $6\frac{1}{2}$ per cent, where deeper than six feet and in width less than half of depth.

Steam shovel excavation in the dry bed of a canal construed "excavations not otherwise specified," Class 1, rate 4 per cent.

Class 4. House moving; house wrecking; safe moving. Class 5. Iron or steel frame structures or parts of structures; fire escapes; erecting fireproof doors or shutters; blast furnaces; concrete chimneys; freight or passenger elevators; fireproofing of buildings; galvanized iron or tin work; marble, stone or brick work; roof work; slate work; plumbing work; metal smokestacks or chimneys; advertising signs; ornamental metal work in buildings; carpenter work not otherwise specified; marble, stone or tile setting; mantel setting; metal ceiling work; painting of buildings or structures; concrete laying in floors or foundations; glass setting; building hot houses; lathing; paper hanging; plastering; wooden stair building.

Includes building metal, concrete or brick chimneys, 5 per cent; construction of concrete buildings and tearing forms from walls, 5 per cent; outside plumbing, rate 5 per cent, includes "roughing in," and side sewer work, except where underground; inside plumbing, 2 per cent, includes installation of bath tubs, etc. Concreting piling of docks and trestles with hydraulic apparatus, 3 per cent; application of cold wall surfacing composition, 2 per cent; hot flooring compositions, 3 per cent; building coke ovens, 3 per cent.

Excludes iron or steel bridge construction (Class 2), 6½ per cent.

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

Includes placing wire in conduit at 3 per cent; blasting, 5 per cent; installing furnaces in residences, etc., 2 per cent; installation of machinery includes foundations for same; installation of gas machines after erection of tanks and buildings are complete, rate 3 per cent.

Class 7. Steam railroads; logging railroads.

Includes operation of logging and other railroads, 5 per cent.

The 5 per cent rate for railroad construction covers light and heavy risks without segregation; except that tunnel work be rated in Class 1 at 6½ per

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

street paving; asphalt laying.

Includes road-making with blasting, 5 per cent; concrete sidewalk laying, 3 per cent; plank road, street or sidewalk construction or repair, 2 per cent; new road grading, including clearing (without blasting), 2 per cent; brick or block paving and repair, 2 per cent. Includes city, county and state engineers engaged in field work.

Excludes maintenance of dirt roads without scrapers or machines.

Class 9. Ship or boat building with scaffold; ship wrighting; ship or boat rigging; floating docks.

Class 9 construed as continuously operating plants or factories instead of construction or contracting enterprises, and exempt from automatic continuous monthly assessment.

Includes construction of drydocks without excavation, 5 per cent.
Small boat building work without scaffolds, "Carpenter work, n. o. s." Class 5, 31/2 per cent.

OPERATIONS (INCLUDING REPAIR WORK) OF

Class 10. Logging; saw mills; shingle mills; lath mills; masts and

spars with or without machinery.

Includes pilers, manual laborers and planers on sawmill premises, and teamsters; stump-pulling with donkey engines, 2½ per cent; booming logs or driving ties, 2½ per cent; clearing land with blasting, 5 per cent. Includes operation of wood saws.

Or wood saws.

Premiums on tallymen checking foreign lumber shipments at various mills to be paid direct by Pacific Lumber Inspection Bureau.

Excludes retail lumber yards operating without machinery.

"Class 11." omitted by the legislature.

Class 12. Dredges; dry or floating docks.

Class 13. Electric light or power plant or systems; steam heat or

power plants or systems; electric systems not otherwise specified. Excludes elevators and individual steam heating plants in office buildings, els, apartment houses, residences, retail and wholesale stores. (Opinion Athotels, apartment houses, residence General, Sept. 8, 1911.)

Includes interurban electric railroads, with third rail, 5 per cent; without third rail, 4 per cent.

Class 15. Telegraph systems; telephone systems.

Includes line and repair work.

Excludes telephone and telegraph operators.

Coal mines.

Excludes office force only.

Shaft sinking in rock formation, in connection with mining operations, Class 1, 6 per cent.

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

Excludes teamsters, hauling gravel not subjected to cave-in hazard or in contact with machinery

Includes stone cutting when such operations are conducted on territory contiguous to and subject to quarry operation hazard.

Class 18. Blast furnaces; smelters; rolling mills.

Class 19. Gas works.

Excludes meter readers, complaint men, solicitors, store room employes, and chauffeurs.

Class 20. Steamboats; tugs; ferries.

Admiralty Jurisdiction. See Sec. 18, note.
Steamboats on Lake Washington, construed engaged in traffic on interstate waters, and outside this Commission's jurisdiction.
A seaman under contract with a ship outside the scope of this act.

Grain elevators.

Includes flouring mills, 2 per cent; grain warehouses, chop and feed mills, 2 per cent.

Excludes threshing machine and hay bailing outfits; merchandise warehouses without machinery.

Class 22. Laundries.

Excludes office force and drivers only. Excludes hand laundries. See Sec. 2.

Class 23. Water works.

Class 24. Paper or pulp mills.

Class 25. Garbage works: fertilizer.

FACTORIES (USING POWER-DRIVEN MACHINERY).

Class 26. Stamping tin or metal.

Class 27. Bridge work; making steam shovels or dredges; tanks; water towers.

Class 28. Railroad car or locomotive making or repairing.
Class 29. Cooperage; staves; veneer; box; packing cases; sash,
door or blinds; barrel; keg; pail; basket; tub; wood ware or wood
fibre ware; kindling wood; excelsior; working in wood not otherwise specified.

Includes planers, if independently operated, 2½ per cent. Excludes teamsters in fuel yards not working around machines.

Class 30. Asphalt.

Class 31. Cement; stone with or without machinery; building ma-

terial not otherwise specified.

Includes operation of gravel bunkers, lime burning, cutting paving blocks, rate 2½ per cent; manufacture of paints and oils, 2½ per cent.

Class 32. Canneries of fruits or vegetables.

Class 33. Canneries of fish or meat products.

Includes manufacturing dogfish oil, 21/2 per cent; contract work with third parties for pack at flat rate per case, Oriental or white labor, factory owner ruled primarily responsible.

Class 34. Iron, steel, copper, zinc, brass or lead articles in wares; hardware; boiler works; foundries; machine shops not otherwise specified.

Includes beveling glass, rate $2\frac{1}{2}$ per cent; sheet metal and tin shops, whether equipped with hand, foot or mechanical power.

Class 35. Tile; brick; terra cotta; fire clay; pottery; earthen ware; porcelain ware.

Includes manufacture glass jars, insulators, etc.

Class 36. Peat fuel; brickettes.

Class 37. Breweries; bottling works.

Includes brewery teamsters and helpers, manufacture of ammonia and alcohol, 2 per cent.

Class 38. Cordage; working in wool, cloth, leather, paper, brush, rubber or textile not otherwise specified.

Includes broom-making, 11/2 per cent.

Class 39. Working in foodstuffs, including oils, fruits, vegetables. Includes candy and cracker factories, excluding only drivers and office force. Class 40. Condensed milk; creameries.

Class 41. Printing; electrotyping; photo-engraving; engraving;

lithographing; making jewelry. Includes linotype compositors, proofreaders and foremen in room with machinery or shafting; errand boys.

Excludes bookkeepers and office force, hand engravers not in room with ma-

chinery.

Class 42. Stevedoring; longshoring; wharf operation.
Loaders and unloaders of tramp ships and other vessels, entitled to compensation from the funds of Class 42 when injured, even where owner or master has evaded contribution to the fund. See Sec. 18.

Stock yards; packing houses; making soap, tallow, lard, grease; tanneries.

Includes teaming in connection with stock yards and packing houses. Excludes retail meat markets and delivery wagons.

Class 44. Artificial ice, refrigerating or cold storage plants.

Includes ice wagon drivers and helpers. Excludes refrigerators of retail meat markets, etc.

Class 45. Theater stage employes. Excludes moving picture operators.

Class 46. Fire works manufacturing; powder works.

Class 47. Creosoting works; pile treating works.

Class 48 created August 14, 1911. Includes all funds derived "elect-

ive non-hazardous" employments.

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

The hazard of the business or enterprise determines the application of the act rather than the degree of hazard which the individual workman is subjected to. Hazardous departments are the unit of contribution, even though embracing employes rarely in danger of injury. (Opinion Attorney General, Sept. 8, 1911.) Ruled outside the scope of the act: Operation and maintenance of elevators and individual steam heating plants in office buildings, hotels, apartment houses, residences, retail stores, etc. Farm hands grubbing stumps even with blasting powder as an incident to the business of farming, not within the act.

Contributions made under misapprehension of the scope of this act will be promptly refunded.

promptly refunded.

promptly refunded.

The premium of any establishment given an average rate is credited *pro rata* to the respective classes represented by the department payrolls.

Bonus system prevailing in connection with logging operations are regarded as additional compensation to employes and should be added to the payroll.

SEC. 5. Schedule of Awards.

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

Compensation is payable whenever four facts appear, namely:

(1) The business of the employes was within the scope of this act;

(2) The employe was injured;

(3) Such injury occurred out of and incidental to his employment;

(4) Such injury was not caused by wilful misconduct. It makes no difference whose fault it was or who was to blame. It is sufficient that the industry caused the injury.

The finding of the department of the non-existence of any one of the facts above enumerated would result in the denial of an award, and in such case an appeal is allowed, as provided in section 20.

COMPENSATION SCHEDULE.

Where death results from the injury the expenses of burial shall be paid in all cases, not to exceed \$75.00 in any case, and,

(1) If the workman leaves a widow or invalid widower, a monthly payment of \$20.00 shall be made throughout the life of the surviving spouse, to cease at the end of the month in which remarriage shall occur; and the surviving spouse shall also receive \$5.00 per month for each child of the deceased under the age of sixteen years at time of the occurrence of the injury until such minor child shall reach the age of sixteen years, but the total monthly payment under this paragraph (1) of subdivision (a) shall not exceed \$35.00. Upon remarriage of a

widow she shall receive, once and for all, a lump sum equal to twelve times her monthly allowance, viz., the sum of \$240.00, but the monthly payment for the child or children shall continue as before.

The regular "pension roll" is certified to the State Auditor for payment the 15th of each month.

If the workman leaves no wife or husband, but a child or children under the age of sixteen years, a monthly payment of \$10.00 shall be made to each such child until such child shall reach the age of sixteen years, but the total monthly payment shall not exceed \$35.00, and any deficit shall be deducted proportionately among the beneficiar-

ies.

If the workman leaves no widow, widower or child under the age of sixteen years, but leaves a dependent or dependents, a monthly payment shall be made to each dependent equal to fifty per cent of the average monthly support actually received by such dependent from the workman during the twelve months next preceding the occurrence of the injury, but the total payment to all dependents in any case shall not exceed \$20.00 per month. If any dependent is under the age of sixteen years at the time of the occurrence of the injury, the payment to such dependent shall cease when such dependent shall reach the age of sixteen years. The payment to any dependent shall cease if and when, under the same circumstances, the necessity creating the dependency would have ceased if the injury had not happened.

If the workman is under the age of twenty-one years and unmarried at the time of his death, the parents or parent of the workman shall receive \$20.00 per month for each month after his death until the time at which he would have arrived at the age of twenty-one years.

The rule existing at the time of the passage of this act was that parents of a minor workman were not entitled to damages for his death, even though actually dependent, recovery being limited to the loss of his services during minority. The above provision is the exclusive compensation to be allowed for the death of an unmarried minor workman. (Opinion Attorney General, Jan. 9, 1912.)

The reserve to be set apart under this provision is the present value of the series of monthly payments to be made. *Ibid.*

(4) In the event a surviving spouse receiving monthly payments shall die, leaving a child or children under the age of sixteen years, the sum he or she shall be receiving on account of such child or children shall be thereafter, until such child shall arrive at the age of sixteen years, paid to the child increased 100 per cent, but the total to all children shall not exceed the sum of \$35.00 per month.

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

any work at any gainful occupation.

When permanent total disability results from the injury the workman shall receive monthly during the period of such disability: (1) If unmarried at the time of the injury, the sum of \$20.00.

If the workman have a wife or invalid husband, but no child under the age of sixteen years, the sum of \$25.00. If the husband is not an invalid, the monthly payment of \$25.00 shall be reduced to \$15.00.

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

(c) If the injured workman die during the period of permanent total disability, whatever the cause of death, leaving a widow, invalid widower or child under the age of sixteen years, the surviving widow

or invalid widower shall receive twenty dollars per month until death or remarriage, to be increased five dollars per month for each child under the age of sixteen years until such child shall arrive at the age of sixteen years; but if such child is or shall be without father or mother, such child shall receive ten dollars per month until arriving at the age of sixteen years. The total combined monthly payment under this paragraph shall in no case exceed thirty-five dollars. Upon remarriage the payments on account of a child or children shall con-

tinue as before to the child or children.

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

MAXIMUM MONTHLY AWARDS UNDER SEC. 5, PARAGRAPH (d).

(For first six months. In no case to exceed 60% of monthly wage.)

INJURED WORKMAN	No child	One child	Two children	3 or more children
Having able-bodied husband Unmarried Having wife or invalid husband Widow or widower	30 00 37 50	\$30 00 45 00 37 50	\$37 50 52 50 45 00	\$45 00 52 50 52 50

1 DAY'S AWARD, BASED ON MONTH OF 26 WORKING DAYS.

\$15 00	\$20 00	\$22 50	\$25 00	\$30 00	\$35 00	\$37 50	\$45 00	\$52 50
\$0.58	\$0 77	\$0 87	\$0.96	\$1 15	\$1 35	\$1 44	\$1 73	\$2 02

To establish a valid claim under this section the injured workman need not be so helpless as to require the assistance of a nurse, but there must be professional certification of his being entirely incapable of doing any gainful work for a period of time resulting in a loss of not less than 5 per cent of his monthly wage.

Awards under this paragraph for a temporary period, paid monthly or otherwise, not to be deducted from awards for dismemberment or "permanent partial disability" provided in subdivision (f). (Opinion Attorney General, Dec. 12,

1911.)
The award of 50 per cent increase over the rates scheduled in subdivision (b) may be paid monthly or at the termination of the disability. *Ibid*.

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

"The industries of today shall provide for the accidents of today." The reserve to guarantee the continuance of the pensions provided, "set apart for a beneficiary over thirty years of age, should be the proportionate part of \$4,000, determined by the relation of the expectancy of the life of the beneficiary to the expectancy of one thirty years of age." (Opinion Attorney General, Jan. 9, 1912.)

1912.)
To the reserve of a widow is added a reserve for children under 16, but not to exceed \$4,000 set apart "for the case." Ibid.
Expectancy of life: Age 30, 35.33 years; 40, 28.18 years; 50, 20.91 years; 60, 14.10 years; 70, 8.48 years.
See complete table of expectancy and reserves in Annual Report.
See Insurance Code, Sec. 92, Chap. 49, Laws 1911.
When the funds of any particular class are insufficient to pay an award this Commission will certify and the State Auditor issue warrants to be cashed by the individual employer. See Sec. 26.
Payment of warrants by employer, see Sec. 26.
Where a class has insufficient funds to permit the setting aside of the proper reserve, pension payment shall nevertheless be paid so long as any funds are available in the class. In such a case monthly assessments shall be called until a reasonable fund is accumulated. a reasonable fund is accumulated.

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

Awarded the ininor workman.

Awards hereunder dependent upon surgical discharge and proofs when the extent of the injury is determined. See Subd. (d). A lump sum will not be paid when total disability is probable, but monthly allowances under (d).

Awards made under this section are according to a surgical scale of relative impairment of earning capacity. Previous wages or specialized value of lost members cannot be considered. While the workman may not get full "compensation," he will always get some compensation, without expense to him and at a time when he most needs it.

For complete extendished scale under this subdivision see Annual Report.

For complete established scale under this subdivision see Annual Report.

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

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

(i) A husband or wife of an injured workman, living in a state of abandonment for more than one year at the time of the injury or

subsequently, shall not be a beneficiary under this act.

Payments provided in subdivisions (b) and (d) modified when the above family condition exists. A divorced man paying alimony construed single. (Opinion of Attorney General, May 16, 1912, p-.)

If a beneficiary shall reside or remove out of the state the department may, in its discretion, convert any monthly payments provided for such case into a lump sum payment (not in any case to exceed \$4,000.00) upon the theory, according to the expectancy of life as fixed by the American Mortality Table, that a monthly payment of \$20.00 to a person thirty years of age is worth \$4,000.00, or, with the consent of the beneficiary, for a smaller sum.

See Sec. 7, note.

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

Sec. 6. Intentional Injuries-Status of Minors.

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

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

minors.

Where lump sums awarded amount to a sufficient fund to reasonably justify investment, a guardian to be appointed.

Sec. 7. Conversion Into Lump Sum Payment.

In case of death or permanent total disability the monthly payment may be converted, in whole or in part, into a lump sum payment (not in any case to exceed \$4,000.00), on the theory, according to the expectancy of life as fixed by the American Mortality Table, that a monthly payment of \$20.00 to a person thirty years of age is worth the sum of \$4,000.00, in which event the monthly payment shall cease in whole or in part accordingly or proportionately. Such conversion may only be made after the happening of the injury and upon the written application of the beneficiary (in case of minor children, the application may be by either parent) to the department, and shall rest in the discretion of the department. Within the rule aforesaid the amount and

value of the lump sum payment may be agreed upon between the department and the beneficiary.

The power here given to the department will, as a matter of policy, be seldom exercised, as in practically all cases it is better for the beneficiaries to receive the award to which they are entitled in installments at stated intervals, rather than in a lump sum. The reasons for this are obvious.

If part of a reserve be converted into a lump sum, the pension to be reduced proportionately.

Sec. 8. Defaulting Employers.

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

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

be made only with the written approval of the department.

The defaulting employer cannot avail himself of the "common law" defenses, which have been so effective in defeating personal claims heretofore, where the fact of the injury to his employe is not contested.

These defenses now abolished, commonly referred to as "contributory negligence," "assumption of risk," and "fellow servant rule," are:

1. That the employe was not, when injured, in the exercise of due care, or was guilty of contributory negligence;

2. That the injury received by the employe was one of the ordinary risks incident to the contract of employment;

3. That the injury was the result of the negligence of a fellow servant.

It will thus be seen that by the common law rule the employe assumes all of the ordinary risks incident to his employment, and that his employer is only liable when he is guilty of negligence and the employe is wholly free from negligence, and his injury was not caused by the negligence of a fellow servant.

Under this section employers who have not contributed to the state insurance fund are deprived of the common law defenses, and it would seem that the only effective defense available in an action for damages for an alleged injury occurring to an employe in the course of his employment would be that no injury in fact had been sustained, or that the injury received was self-inflicted or that the employer was himself free from fault. The amount of the recovery should be determined by the "comparative negligence" of all parties.

See 16th Amer. & Eng. Annotated Cases, Note, pp. 8-56; Earl A. Sullivan v. Commercial Laundry Co. (Superior Court, Spokane, 1912.)

The injured employe, once having exercised his option, the decision is final and may not be withdrawn.

Injured employes of defaulting employer to be compensated even where employer fails or refuses to report.

ployer fails or refuses to report.

An injured employe of a defaulting employer may receive award for injuries, even though excluded from payroll; demand on employer or listing the workman is not a condition to payment. (Opinion Attorney General, Feb. 1, 1912, p—.)

A settlement made by an employer and giving of a release by the injured workman bars a claim by such workman on the accident fund.

Where interest or costs are obtained in connection with delinquent assets, the class to which the delinquent contributes shall be credited with same on general account.

Sec. 9. Employer's Responsibility for Safeguard.

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

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

amount.

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

A boy under 14 years of age, or a girl under 16 years, may not be employed in dangerous trades without written permit from superior court. (Sec. 2447, Rem. & Bal. Code.) Children under 15 may not be so employed while school is in session. (Sec. 4715, Rem. & Bal. Code.)

See Sec. 30 herein. Sec. 2446, Rem. & Bal. Code, ruled not applicable to factories.

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

SEC. 10. Exemption of Awards.

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

This action is necessary in order to protect the injured employe and his dependents. If the claim were made assignable he could sell it for a small sum, and thus deprive his dependents of benefits to which they are entitled. The compensation also is made exempt from his debts on the same principle that wages now are made exempt. The justice and fairness of this should be conceded by all.

Sec. 11. Non-Waiver of Act by Contract.

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

Sec. 12. Filing Claim for Compensation.

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

Claimant for compensation must prove:

1. The employer's business was extra hazardous within the meaning of the act; An accident occurred injuring the claimant while performing his duty in

such employment;
3. That the injuries resulted in wholly or partly impairing his earning power at any gainful work.

The duration of disability, if temporary, or the character, if permanent, must, except in rare cases, be proven by report of a licensed physician or sur-

The physician's report is a duty to the state; no payment is allowed there-

The physician's report is a duty to the state; no payment is allowed therefor. Charge for professional services rendered a workman is his personal debt, unless the employer contracted to pay the same. See Sec. 24, 4, 7.

When a claimant is unable to furnish proof of the magnitude of an injury sustained by the detailed report of a competent attending physician who made examination of the resulting physical condition within a reasonable time after an accident, the Commission will not open the door to fraud by making an award unless the injury is of such continuing and serious character that a State Surgical Examiner has been able to make a full and satisfactory special report thereon.

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

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

application therefor.

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

All blanks necessary in the judgment of the department for the administra-tion of the law are furnished free of cost to all employers and employes coming within the purview of the act.

Medical Examinations.

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

Refusal to submit to examination where a lump sum award is anticipated will be prima facie for rejection of claim which may be filed within the year.

Notice of Accident.

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

The time, cause and nature of the accident and injuries, and

the probable duration of the injury resulting therefrom.

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

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

may prescribe.

"Every person who, after due notice, shall refuse or neglect to make or furnish any statement, report or information lawfully required of him by any public officer, or who, in such statement, report or information, shall make any wilfully untrue, misleading or exaggerated statement, or who shall willfully hinder, delay or obstruct any public officer in the discharge of his official powers or duties, shall be guilty of a misdemeanor." Rem. & Bal. Code, Sec. 2672; Sec. 420, Chap. 249, Laws 1909.

Sec. 15. Inspection of Employer's Books.

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

Misdemeanor—Penalty, imprisonment in county jail not to exceed 90 days, or by a fine not to exceed \$250.00. Rem. & Bal. Code, Sec. 2266; Sec. 14, Chap. 249, Laws 1909.

Sec. 16. Penalty for Misrepresentation as to Payroll.

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

SEC. 17. Public and Contract Work.

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

Payments into the accident fund to be made out of the treasury of the city, county, school, port or drainage district; abstracts of contractors' payrolls, as well as of the direct employes in hazard, to be forwarded to the department monthly. The public corporation is entitled to (if it so elect) to recoup from the contractor. Contractors in such work required to file payrolls monthly with the

monthly. The pulse corporation is entitled to the solectery of the day rolls monthly with the city, etc.

No distinction in rate of assessments can be made between contractors, or others, in public or private work. The same premium and necessity of contribution apply, determined by the payroll of employes, hazard, accident experience of the class, and sound discretion of the department.

District auditors of the Commission will endeavor to audit payrolls of city contractors quarterly in addition to making final audit when the Commission is notified of the completion of a public contract.

Contractors engaged in work for the federal government: Where the United States acquired land by purchase for its own use, this act is not applicable to such works and occupations as may be carried on within the confines of such land. (Opinion Attorney General, Sept. 20, 1911.)

An expert rendering service at time rates is an independent contractor only where he fixes the conditions of work and hazard.

Regular employes of the state working upon state highways come within the act. Convicts from the different state penal institutions are not engaged under any contract of employment within the meaning of the act, and do not come within the provisions of the same. (Opinion Attorney General, Sept. 17, 1913.) Employers under civil service appointment are not under the act.

SEC. 18. Interstate Commerce.

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

ADMIRALTY JURISDICTION.

"The state legislature is without power to prescribe an exclusive remedy," where an injured seaman has the right of relief in admiralty. Act limited in compulsory operation "to vessels operating upon the navigable waters of the state without any navigable outlet to any other state or country." (Opinion Attorney General, Oct. 28, 1911); The Genesee Chief, 12 How. 457; West v. Martin, 51 Wash. 85.

Loading or unloading at wharf, see The Mary Garrett, 63 Fed. 1011; Herman v. Port Blakely Mill Co., 69 Fed. 646.

Campbell v. Hackfeld & Co., 62 C. C. A., 174. (Ninth Circ. 1903.)

INTERSTATE COMMERCE.

In the opinion of this Commission railroad construction for an interstate carrier is under the state's jurisdiction, whether the work be performed by a railroad company's own employes or by contract; such construction work does not become interstate commerce until turned over to the actual use of interstate

Operation and repair including incidental replacements and betterments covered by the Federal Liability Act, April 22, 1908 (35 Statutes-at-Large, 65); which furnishes employes therein an exclusive remedy and forbids agreements outlined in this section. See Second Employers' Liability Cases, 223 U. S. 1. (Jan. 15, 1912); 32 Sup. Ct. 169.

Southern Ry. Co. v. United States, 222 U. S. 20; Pedersen v. Delaware, etc., R. R., 184 Fed. 737 (bridge worker); Employers' Liability Cases, 207 U. S. 463; Tamura Ry. Co. v. G. N. Ry. Co., 108 Pac. 774 (loading rails).

Zikos v. O. R. & N. Co., 179 Fed. 893 (section hand).

N. P. Ry. v. Anna Maerkl, Admx., C. C. A. Portland, Aug. 5, 1912. 198 Fed. 1 (car repairer).

SEC. 19. Elective Adoption of Act.

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

Elective non-hazardous industries or occupations segregated into Class 48 rate of \$1.35 per \$100.00 of payroll. (Opinion Attorney General, Sept. 16,

1911.)

SEC. 20. Court Review.

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

The findings and award of the department appear to be reversible only on the three grounds: (1) That it acted without or in excess of its powers; (2) that the award was procured by fraud; (3) that the findings of fact by the department do not support the award.

SEC. 21. Creation of Department.

The administration of this act is imposed upon a department, to be known as the Industrial Insurance Department, to consist of three

^{*}Typographical error, should read "k." Was "i" in the draft bill. Legislature struck out sub-section "g" and changed "l" to "k."

Commissioners to be appointed by the Governor. One of them shall hold office for the first two years, another for the first four years, and another for the first six years, following the passage and approval of this act. Thereafter the term shall be six years. Each Commissioner shall hold until his successor shall be appointed and shall have qualified. A decision of any question arising under this act concurred in by two of the Commissioners shall be the decision of the department. The Governor may at any time remove any Commissioner from office in his discretion, but within ten days following any such removal the Governor shall file in the office of the Secretary of State a statement of his reasons therefor. The Commission shall elect one of their members as chairman. The main office of the Commission shall be at the state capitol, but branch offices may be established at other places in the state. Each member of the Commission shall have power to issue subpoenas requiring the attendance of witnesses and the production of books and documents.

See Sec. 15, note.

SEC. 22. Salary of Commissioners.

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

SEC. 23. Deputies and Assistants.

The Commissioners may appoint a sufficient number of auditors and assistants to aid them in the administration of this act, at an expense not to exceed \$5,000.00 per month. They may employ one or more physicians in each county for the purpose of official medical examinations, whose compensation shall be limited to five dollars for each examination and report therein. They may procure such record books as they may deem necessary for the record of the financial transactions and statistical data of the department, and the necessary documents, forms and blanks. They may establish and require all employers to install and maintain an uniform form of payroll.

SEC. 24. Conduct, Management and Supervision of Department.

The Commission shall, in accordance with the provisions of this act:

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

Ascertain and establish the amounts to be paid into and out of the accident fund.

It is contemplated that Class Bulletins to emphasize accident prevention in various industries may be issued from time to time; and Safety Regulations promulgated after consideration in trade conventions, violation of which may automatically increase the premium rate of the offending employer.

3. Regulate the proof of accident and extent thereof, the proof of death and the proof of relationship and the extent of dependency.

4. Supervise the medical, surgical and hospital treatment to the intent that same may be in all cases suitable and wholesome.

There is no fund or provision for payment of charges for ambulance, physician, surgeon, hospital, nurse, medicine or surgical appliances. The "first aid" provision was stricken from the proposed act before passage by the legislature.

5. Issue proper receipts for moneys received, and certificates for benefits accrued and accruing.

6. Investigate the cause of all serious injuries and report to the Governor from time to time any violations or laxity in performance of

protective statutes or regulations coming under the observation of the department.

7. Compile and preserve statistics showing the number of accidents occurring in the establishment or works of each employer, the liabilities and expenditures of the accident fund on account of, and the premiums collected from the same, and hospital charges and expenses.

8. Make annual report to the Governor (one of them not more than sixty nor less than thirty days prior to each regular session of the legislature) of the workings of the department, and showing the financial status and the outstanding obligations of the accident fund, and the statistics aforesaid.

SEC. 25. Medical Witnesses.

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

SEC. 26. Disbursement of Funds.

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

SEC. 27. Test of Invalidity of Act.

If any employer shall be adjudicated to be outside the lawful scope of this act, the act shall not apply to him or his workmen, or if any workman shall be adjudicated to be outside the lawful scope of this act because of remoteness of his work from the hazard of his employer's work, any such adjudication shall not impair the validity of this act in other respects, and in every such case an accounting in accordance with the justice of the case shall be had of moneys received. If the provisions of section 4 of this act for the creation of the accident fund, or the provisions of this act making the compensation to the workmen provided in it exclusive of any other remedy on the part of

the workman shall be held invalid the entire act shall be thereby invalidated except the provisions of section 31, and an accounting according to the justice of the case shall be had of moneys received. In other respects an adjudication of invalidity of any part of this act shall not affect the validity of the act as a whole or any other part thereof.

This act was attacked as unconstitutional on four distinct grounds: (1) In depriving persons of property without due process of law; (2) In granting citizens, classes of citizens or private corporations privileges or immunities not clearly available upon the same terms to all citizens and corporations; and in denying them the equal protection of the laws; (3) in providing a species of taxation that is not equal and uniform; and (4) in abolishing the right of jury trial in determining compensation for personal injuries.

Held, "That the act violates no provisions of either the State or Federal astitutions." State ex rel. Davis-Smith Co. v. Clausen, State Auditor, 65 Wash. 156; 117 Pac. Rep. 1101.

Similar compensation act decisions:

Borgnis et al. v. The Falk Co. (Wisconsin, Nov. 14, 1911; 113 N. W. 209.) State ex rel. Yaple v. Creamer (Ohio, Feb. 6, 1912; 85 Ohio St.; Ohio Law Rep., Vol. IX, No. 48, March 4, 1912.)

Cunningham, State Auditor, v. Northwestern Improvement Co. (Montana, Nov. 21, 1911; 110 Pac. 554.)

See opinion of Justices (Mass., July 24, 1911; 96 N. E. 308.) Contra: Ives v. So. Buffalo Ry. Co., 201 N. Y. 271; 94 N. E. 431. Mountain Timber Company case.

SEC. 28. Statute of Limitations Saved.

If the provisions of this act relative to compensation for injuries to or death of workmen become invalid because of any adjudication, or be repealed, the period intervening between the occurrence of an injury or death, not previously compensated for under this act by lump payment or completed monthly payments, and such repeal or the rendition of the final adjudication of the invalidity shall not be computed as a part of the time limited by law for the commencement of any action relating to such injury or death: *Provided*, That such action be commenced within one year after such repeal or adjudication; but in any such action any sum paid out of the accident fund to the workman on account of injury, to whom the action is prosecuted, shall be taken into account or disposed of as follows: If the defendant employer shall have paid without delinquency into the accident fund the payment provided by section 4, such sums shall be credited upon the recovery as payment thereon, otherwise the sum shall not be so credited, but shall be deducted from the sum collected and be paid into the said fund from which they had been previously disbursed.

SEC. 29. Appropriations.

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

The law requires the state to pay the entire cost of administration of the state insurance fund, leaving the whole amount paid into such fund by the employers to be devoted to the payment of awards for injuries.

The state can well afford to bear this expense, as its courts will be relieved of a large amount of work, and the burden now placed upon taxpayers by the trial of negligence cases will be minimized. The tendency of this act should be to produce good will between employer and employe, and to lessen the cases of hardship among dependents of injured employes. In taking into consideration the state's many vital interests in the welfare of the workman and his family, the general taxpayer may well afford to bear the expense of administration.

Sec. 30. Safeguard Regulations Preserved.

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

The formation of corporate or voluntary associations, by members of the compulsory classes of employers, to study methods and appliances for accident prevention and to reduce the insurance cost under this act is urged and the cooperation of the Commission tendered.

Sec. 31. Distribution of Funds in Case of Repeal.

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

SEC. 32. Saving Clause.

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

Passed by the House February 23, 1911. Passed by the Senate March 7, 1911. Approved by the Governor March 14, 1911.

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