

offices on Saturday of each week at twelve o'clock noon, retaining a sufficient force to transact the public business that may offer on Saturday afternoon.

Partial
release of
force.

Passed the House February 8, 1917.

Passed the Senate February 22, 1917.

Approved by the Governor March 2, 1917.

CHAPTER 36.

[S. B. 152.]

COAL MINING CODE.

AN ACT relating to and regulating the operations of coal mining, providing for the inspection thereof and limiting the hours of labor therein; creating a state mine inspection department and prescribing the qualifications and duties of inspectors; prescribing the qualifications and duties of certain officials and employees in coal mines, fixing penalties for violation of this act and repealing all acts relating to coal mines and the inspector of mines in the State of Washington.

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

ARTICLE I.

DEFINITIONS OF TERMS.

SECTION 1. That for the purpose of this act the terms and definitions contained therein shall be as follows:

Mine: The term "mine" shall mean all the excavations penetrating coal or other strata used in the opening, developing or operation of workings for the purpose of mining coal, operated by one operator, and all machinery, tramways, sidings, either above or below ground, in or adjacent to and belonging to said operation.

Definitions.

Shaft: The term "shaft" shall mean any vertical excavation in the earth or strata used as a means of ingress or egress, for hoisting or lowering of material, for ventilation or drainage, or any other purpose incidental to the operation of a mine.

Slope: The term "slope" shall mean any excavation in the earth or strata driven at an angle to the plane of the

horizon, used as a means of ingress or egress, for hoisting or lowering of material, for ventilation or drainage, or other purpose incidental to the operation of a mine.

Airway: The term "airway" shall mean any underground passage the principal purpose of which is to carry air.

Working Face: The term "working face" shall mean any portion of a mine from which coal or rock is being cut, removed, sheared, broken or loosened.

Opening: The term "opening" includes shafts, slopes, inclines, tunnels, levels, or any other means of access to a mine.

Map: The term "map" includes plans and projections, section tracing and print of an original plan, or section of a mine or portion thereof.

Plane: The term "plane" shall mean an inclined roadway, other than slopes, used for the transportation of coal, men or material.

Tunnel: The term "tunnel" shall mean any excavation in the earth or strata driven approximately horizontally, used in ingress and egress of men and material, or for ventilation, drainage or haulage.

Level—Gangway—Entry: The term "level," "gangway," or "entry" shall mean an excavation driven parallel, or nearly so, to the strike of the seam, and used for ventilation, traveling, haulage or drainage.

Sump: The term "sump" shall mean a catch-basin into which the drainage from a mine flows, and from which it is pumped directly or indirectly to the surface.

Crosscut—Breakthrough: The term "crosscut" or "breakthrough" shall mean an excavation driven to connect two parallel working places.

Inspector: The term "inspector" shall mean the person commissioned by the governor to inspect the coal mines, as hereinafter provided for in this act.

Deputy Inspector: The term "deputy inspector" shall mean a person appointed by the inspector, to be a deputy mine inspector, as hereinafter provided for in this act.

Operator: The term "operator" shall mean any firm, company, corporation, or individual working any mine or any part thereof.

Manager or General Manager: The term "manager" or "general manager" shall mean any person who shall have, on behalf of the operator, general supervision of the operation of any mine or group of mines.

Superintendent: The term "superintendent" shall mean the person who shall have, on behalf of the operator, immediate supervision, under the manager or operator, of any mine or group of mines.

Mine Foreman: The term "mine foreman" shall mean a person whom the operator, manager or superintendent, shall place in charge of the workings of a mine, and of the persons employed in or about the same.

Assistant Mine Foreman: The term "assistant mine foreman" shall mean a person appointed by the management to assist in directing the operation of a mine or the persons employed in or about the same.

Fire Boss: The term "fire boss" shall mean a person appointed by the management to inspect all the working places of a mine in his district.

Shot Firer—Shot Lighter: The term "shot firer" or "shot lighter" shall mean a person appointed by the mine foreman to inspect and fire shots used for the breaking of coal or rock, and to otherwise supervise the use of explosives in a mine.

Miner: The term "miner" shall mean a person employed underground to mine, cut, shear, break or loosen coal or rock, either by hand, machinery or powder, load same when required, and do necessary timbering.

Company Man: The term "company man" shall include any man or men employed in or about a mine and not mentioned in the foregoing definitions of terms.

Certificated Man: The term "certificated man" shall mean any person holding a certificate of competency as provided for in this act.

Approved Safety Lamps: The term "approved safety lamps" shall mean any safety or electric lamp approved by the federal bureau of mines.

Permissible Explosives: The term "permissible explosives" shall mean any explosives declared by the federal bureau of mines to be permissible for use in a mine, when said explosive is used as provided for by the federal bureau of mines.

Check Weighman: The term "check weighman" shall mean an employee selected and paid by the miners, to inspect the weighing of the miners' coal that is being mined by the ton.

Weighman: The term "weighman" shall mean a person employed by the operator to weigh coal.

Terms not previously defined: All terms used in this act not hereinabove defined shall have their commonly accepted meanings as used in coal mines of this state.

ARTICLE II.

INSPECTION DEPARTMENT.

Department created.

SEC. 2. The state mine inspection department shall consist of a mine inspector and deputy mine inspector, who shall be appointed as provided for in this act.

State board of examiners.

SEC. 3. When this act goes into effect the governor shall appoint a state board of examiners to pass upon the qualifications of applicants for the positions of mine inspector and of deputy mine inspector. This board shall consist of one practical coal miner, one mine manager or superintendent, and one practical mining engineer. All members of the aforesaid board shall be citizens of the United States and of the State of Washington, and shall have had at least three years' practical experience in or about the mines of this state.

Appointment of examiners.

The appointments of the first state board of examiners under this act shall expire April 1st, 1921, and a new board shall be appointed by the governor on that date, and every four years thereafter. Nothing in this act shall be construed to prevent the reappointment of any mem-

ber of the board for any number of consecutive terms. After the expiration of the term of the first board, each board shall be appointed for four years, but any member may be removed by the governor at any time for cause. Each vacancy on the board shall be filled by the governor within two months after the occurrence of such vacancy.

The state board of examiners provided for in this act shall take the following oath of office before some person duly authorized to administer an oath: "We do solemnly swear (or affirm) that we are citizens of the United States and of the State of Washington and that we will perform the duties devolving on us to the best of our ability, and that in giving or refusing certificates of competency as mine inspector of the State of Washington, we will be governed entirely by the evidence of fitness of the applicant, as defined in the state mining laws; that we will certify all whom we may find qualified, and who shall have passed the required examination, according to the law, to the best of our knowledge and judgment."

Oath.

The state board of examiners shall receive six dollars (\$6.00) per diem, and their actual and necessary traveling expenses for the time actually engaged in the performance of the duties imposed upon them in this act. Such compensation and expenses are to be paid out of the general fund of the state in the manner provided by law. The expenses for stenographic work and printing of the board shall be paid in like manner.

Per diem
and
expenses.

The mine inspector shall furnish, from his office maintenance fund, whatever blanks, blank books, stationery and similar supplies as are needed by the board.

SEC. 4. It shall be the duty of the state board of examiners to examine into the qualifications of all applicants for appointment to the position of inspector of mines of the State of Washington, by conducting a thorough examination as to the knowledge of laws applying to mines in the State of Washington, on mine working, ventilation, gases, machinery, first aid and mine rescue work and actual experience in underground mining and to acquaint them-

Examina-
tions for
inspectors.

selves with the person, character, habits and general worthiness of each applicant. The general examination shall be in writing, and the manuscripts and other papers of all applicants, together with the tally sheets and the solution of each question as given by the examining board, shall be filed with the secretary of state as public documents, but such applicants shall undergo an oral examination pertaining to explosive gases, safety lamps, mine fires, mine rescue appliances, and general mining subjects, including the laws of the state applying to coal mines. The board of examiners shall confine the examination of applicants to questions as designated in this act. All candidates shall be allowed the use of such text books as the board may deem proper during the examination. No person shall be certified as competent whose average per cent. shall be less than seventy-five (75), and certificates shall show what per cent. the applicant has obtained, and such certificates shall be valid only when signed by a majority number of the examining board. The examining board shall, immediately after the examination, furnish to each person who came before it to be examined, a copy of all questions, whether oral or written, which were given at the examination, each question to be marked: "Solved right;" "Imperfect;" or "Wrong," as the case may be.

Each candidate shall receive a certificate of competency if he makes an average of seventy-five (75) per cent. on the examination credits to be given as follows:

- Practical experience, worthiness and
 general fitness40 points
- Written examination40 points
- Oral examination20 points

The board shall file with the governor and with the mine inspector names of all persons given certificates of competency as mine inspectors: *Provided*, That anyone who has satisfactorily served as state coal mine inspector in the State of Washington, for one full term of four years, upon making written application to the board set-

Certificates
of com-
petency.

Eligibility
of former
inspectors.

ting forth these facts, shall be certified to the governor as properly qualified for appointment.

SEC. 5. Applications to the state board for examination for mine inspector and deputy mine inspector shall be made in writing, accompanied by an affidavit showing that the applicant is a citizen of the United States and of the State of Washington, and that he has attained the age of thirty (30) years; has had at least five (5) years' practical experience in and about the mines in the United States, and at least three (3) years' practical experience in and about the mines in the State of Washington, and that he has a certificate of competency in mine rescue and first aid work from the United States bureau of mines. He shall also furnish an affidavit from two citizens of the state that he is a man of good repute, temperate habits, and in good physical condition, and above thirty (30) years of age.

Affidavits of applicants for examination.

SEC. 6. Beginning the first Monday of July, 1917, and every four years thereafter, or at such other times as requested to do so by the governor, or by the mine inspector, the state board of examiners shall conduct examinations at the office of the mine inspector. Each examination shall be thoroughly advertised by sending notices to the management of each coal mine, to be posted at the mine at least thirty (30) days before such examination.

Examinations, when held.

The governor shall appoint as mine inspector a man who has been given a certificate of competency by the board of examiners, or who has otherwise qualified for the position, under the provisions of this act. The mine inspector shall hold his office for four (4) years, and be at all times subject to removal from office by the governor for neglect of duty or for malfeasance in the discharge of his duties.

Appointment of inspector.

The mine inspector shall appoint as deputy mine inspector a man who is a citizen of the United States and of the State of Washington, who has had five (5) years' practical experience in and about the mines of the United States and three (3) years' practical experience in and about the mines in the State of Washington, and that he

Appointment of deputy.

has a mine inspector's certificate of competency given by the board of examiners after an examination as provided for in this act. The deputy mine inspector shall hold office subject to removal by the mine inspector for cause.

Tenure of present officers.

The persons who, at the time this act goes into effect, are acting as inspector, or deputy inspector, of mines under the acts hereby repealed, shall continue to act in the same manner as if they had been appointed under this act and until the term for which they were appointed has expired.

Reappointments.

Nothing in this act shall be construed as preventing the reappointment of any mine inspector or of any deputy mine inspector who has qualified for these positions under the provisions of this act.

Salaries and expenses of inspectors.

SEC. 7. The salary of the mine inspector shall be three thousand dollars (\$3,000.00) per annum, and the salary of the deputy mine inspector shall be twenty-four hundred dollars (\$2,400.00) per annum. The inspector and his deputy shall be allowed their necessary expenses for office maintenance, stenographic services, and for equipment and instruments, as well as for actual and necessary traveling expenses while in the performance of their duties, under the provisions of this act. The auditor of this state is hereby authorized and directed to draw his warrant on the state treasurer in favor of the mine inspector and his deputy for the amounts due them for their salaries monthly, and also for their expenses, upon proper vouchers, to be paid out of any monies in the state treasury appropriated for that purpose.

Duties of inspectors.

The mine inspector and his deputy shall devote their entire time to the duties of their respective offices; they shall have no financial interest, direct or indirect, in any mine under the supervision of the inspection department.

Oath.

The mine inspector and his deputy shall, before entering upon the discharge of their duties, each take an oath to discharge their duties impartially and with fidelity and to the best of their knowledge and ability.

It shall be the duty of the mine inspector and his deputy to enforce the provisions of this act, for the regulation of mines, unless enforcement is otherwise especially provided for.

SEC. 8. The mine inspector and his deputy shall have the right, and it is hereby made their duty to enter, inspect and examine any coal mine in this state, and the workings and the machinery belonging thereto, at all reasonable times, either day or night, but not so as to impede or obstruct the working of the mine. They shall also have the right, and it is their duty to make inquiry into the condition of such mine, workings, machinery, ventilation, drainage, method of lighting or using lights and into all methods and things connected with and relating to the health and safety of persons employed in or about said mine, and especially to make inquiry whether or not the provisions of the acts regulating mines have been complied with. The management of each mine is hereby required to furnish the means necessary for such entry, inspection, examination and exit.

Right of entry for inspection.

SEC. 9. (a) It shall be the duty of the said inspector or his deputy to carefully examine each coal mine in operation in this state at least every four (4) months, and as much oftener as is necessary, to see that every precaution is taken to insure the safety of all workmen who may be engaged in the mine. These inspections shall include at least two visits of the inspection force to every working place in every mine in the state during each calendar year. The mine inspector or his deputy shall make a record of each visit, noting the time and the material circumstances of the inspection, and shall keep each record on file in the office of the inspection department; and also post at the mine a notice of his inspection.

Frequency of inspection.

Records of inspection.

(b) If the management of any operating company shall refuse to permit the members of the inspection department to enter any mine, the inspector or his deputy shall file an affidavit setting forth such refusal, with the judge of the superior court of the county in which the

Order of court for inspection.

mine is situated, and obtain an order from such judge commanding the management of the operating company to permit such examination and inspection, and to furnish the necessary facilities for the same, or in default thereof to be adjudged in contempt of court and punished accordingly.

Enjoining
operation of
unsafe mine.

(c) If the mine inspector or his deputy shall, after examination of any mine, or the works and machinery connected therewith, find the same to be worked contrary to the provisions of this act, or unsafe for the workmen employed therein, said inspector shall notify the management, stating what changes are necessary. If the trouble is not corrected within reasonable time, the inspector shall, through the prosecuting attorney of the county in which the mine is located, in the name of the state immediately apply to the superior court of the county in which the mine is located, or to a judge of said court in chambers, for a writ of injunction to enjoin the operation of all work in and about the said mine. Whereupon said court or judge shall at once proceed to hear and determine the case, and if the cause appears to be sufficient, after hearing the parties and their evidence, as in like cases, shall issue its writ to restrain the workings of said mine until all cause of danger is removed; and the cost of such proceeding shall be borne by the operating company of the mine: *Provided*, That if the said court shall find the cause not sufficient, then the case shall be dismissed, and the costs will be borne by the county in which the mine is located: *Provided, also*, That should any inspector find during the inspection of a mine, or portion of a mine, such dangerous condition existing therein that in his opinion any delay in removing the workmen from such dangerous places might cause loss of life or serious personal injury to the employee, said inspector shall have the right to temporarily withdraw all persons from such dangerous places until the foregoing provisions of this section can be carried into effect.

Withdrawal
of workmen
by inspector.

(d) Whenever he is notified of any loss of life in or about the mine, or whenever an explosion or other serious accident occurs, the inspector shall immediately go or send his deputy to the scene of the accident to investigate and to render every possible assistance.

Investigation of explosions and loss of life.

(e) The mine inspector or his deputy shall make a record of the circumstances attending each accident investigated, which record shall be preserved in the files of the inspection department. To enable the mine inspector or his deputy to make such investigation and record, they shall have power to compel the attendance of witnesses and to administer oaths or affirmations to them. The costs of such investigations shall be paid by the county in which such accident has occurred, in the same manner as the costs of the coroner's inquests or investigations are paid.

Record of accidents.

Compulsory attendance of witnesses.

(f) During his absence from the state on official business, or at such times as he may be incapacitated by illness, or by other causes, the mine inspector shall have the authority to designate his deputy to act as mine inspector.

When deputy to act as mine inspector.

(g) Whenever a properly signed and executed petition is filed in the superior court, stating that the mine inspector, or his deputy, has neglected his duties, or is incompetent, or is guilty of malfeasance in office, it shall be the duty of said court to issue a citation in the name of the state to said inspector to appear (at not less than five days' notice) on a day fixed, before said court, and the court shall then proceed to inquire into and investigate the allegations of the petitioners. Such action shall be prosecuted by the county attorney.

Citation to inspector or deputy on charge of incompetency or malfeasance.

(h) The above mentioned petition shall be signed by twenty (20) residents of the state, reputable citizens who are employed in or about the mines, or who are engaged in the operations of mines. It shall be accompanied by the affidavits of two or more of the petitioners, and by a bond in the sum of five hundred dollars (\$500.00), running to the state.

Requisites of petition for removal.

(i) If the court finds that the said mine inspector or his deputy is neglectful of his duties or is incompetent to

Certification of incompetency to governor.

perform the duties of his office, or that he is guilty of malfeasance in office, the court shall certify the same to the governor, who shall declare the office of said inspector vacant. This office shall then be filled in compliance with the provisions of this act.

Costs.

(j) If the charges are not proved the costs of the investigation shall be imposed on the petitioners. If the charges are proved the costs of the investigation shall be paid by the county in which the charges are preferred.

Annual reports.

SEC. 10. It shall be the duty of the mine inspector to transmit a synopsis of his annual report to the governor not later than March 1st of each year.

It shall also be the duty of the mine inspector to see that his complete report is placed in the hands of the state printer for publication on or before the first day of April in each annual period; the same to be published under the direction of the mine inspector. At least two thousand (2,000) copies must be printed.

Budget of department expenses.

SEC. 11. For the purpose of carrying this act into effect the mine inspector shall make an estimate of the expenses of the department and submit same to the legislature. It shall be the duty of the legislature to make the necessary appropriation.

ARTICLE III.

EXAMINING BOARD.

Examinations for first and second class certificates.

SEC. 12. The state board of examiners, with the addition of the state mine inspector, shall conduct the examination of applicants for first and second class certificates, and issue the same under the provisions of this act.

SEC. 13. Examinations for first and second class certificates shall be held yearly, or oftener, as the mine inspector may direct, but not more than thirty (30) days per year shall be allowed for this work. The examinations shall be held at such places as the mine inspector shall direct.

Notice of time and place.

SEC. 14. Notice of the place and date on which examinations for first and second class certificates are to

be held shall be sent to each mine in the state, and shall be posted in a conspicuous place, at least fifteen (15) days before the time set for the examination.

Certificates issued to candidates who pass the examinations shall be in such form as shall be prescribed by the examining board. The mine inspector shall keep a record in his department of all such certificates granted. Each certificate shall contain the full name, age and birth place of the applicant; shall designate whether first class or second class; the average percentage made on the entire examination, and shall be valid only when signed by a majority of the board. Certificates.

Each application for a first or second class certificate must be accompanied by a fee of two dollars (\$2.00), made payable to the state treasurer, to be applied to pay the salaries and expenses of the members of the examining board. Fees.

SEC. 15. Examinations for first class certificates shall cover the following subjects: Laws applying to mines in the State of Washington; methods of mine working and ventilation; mine fires; mine rescue work and appliances; first aid to the injured and actual experience in underground mining; methods of timbering, bratticing and blasting. The general examination shall be in writing, and the manuscripts and other papers of all applicants, together with the tally sheets and the solution of each question as given by the examining board, shall be filed with the mine inspector as public documents. The papers may be destroyed one year from date of examination. In addition to the written examination, the applicants shall undergo an oral examination pertaining to explosive gases, safety lamps, first aid to the injured, mine rescue appliances and general mining subjects. All candidates shall be allowed the use of such text books as the board may deem proper during the examination. Examination subjects for first class.

Each candidate shall receive a certificate of competency if he makes an average of seventy-five (75) per cent. on the examination, credits to be given as follows:

| | |
|---|-----------|
| Practical experience, worthiness and general fitness | 40 points |
| Oral examination | 40 points |
| Written examination | 20 points |

Examination
subjects for
second class.

SEC. 16. Examinations for second class certificates shall cover the following subjects: The sections of the law of the State of Washington applying to the duties of men with second class certificates; mine ventilation and similar subjects; questions in regard to mine rescue work and appliances; first aid to the injured; methods of timbering, bratticing and blasting.

The general examination shall be in writing and the manuscripts and other papers of all applicants, together with the tally sheets and the solution of each question as given by the examining board shall be filed with the mine inspector as public documents. These papers may be destroyed one year from date of examination.

In addition to the written examination the applicant shall undergo an oral examination. The examination shall include the use and care of safety lamps; work in timbering; bratticing, charging and firing blasts; work in first aid to the injured, and, wherever possible, in the use of mine rescue apparatus, and other work which men with second grade certificates may be called upon to do in pursuance of their duties. An average percentage of seventy-five (75) on the whole examination shall be required for qualification. Credits to be given as follows:

| | |
|---|-----------|
| Practical experience, worthiness and general fitness | 50 points |
| Oral examination | 30 points |
| Written examination | 20 points |

Service
certificates.

SEC. 17. Service certificates shall be granted by the examining board without examination, to mine foreman, assistant mine foreman, and fire bosses, who are now acting in these capacities. Proper affidavits must be furnished the examining board by the applicants for service certificates, covering time of service, moral character and general fitness for the position.

All first or second class certificates granted by the examining board without giving an examination in the manner herein provided, shall be designated on the face of the certificates as a service certificate.

A service certificate shall have the same effect for the purpose of this act as a certificate of competency granted by the board after examination.

SEC. 18. The certificate of any mine foreman, assistant mine foreman, or fire boss, may be cancelled or suspended by any examining board upon notice and hearing as hereinafter provided. If it shall be established in the judgment of said board that the holder of said certificate has become unworthy to hold said certificate by reason of violation of the law, or obtained by fraud, or of intemperate habits, or incapacity, said certificate may be cancelled or suspended for any period not to exceed two years: *Provided*, That any person against whom charges or complaints are made hereunder shall have the right to appear before said board and defend himself against such charges, and he shall be given fifteen (15) days' notice in writing of such charges, previous to the hearing. The meeting of the board of examiners to investigate charges against the holder of any certificate of competency of any grade shall be held within a reasonable time after such charges are made. In no case shall the meeting of said board be deferred longer than thirty (30) days after the charges are made. Any holder of a first or second class certificate, who shall have had his certificate cancelled, shall be eligible to take an examination for a new certificate on and after two years from date of cancellation, by setting forth in his application the time, place and causes of cancellation of his former certificate.

Cancellation
of
certificates.

Hearings.

Eligibility
for exam-
inations.

SEC. 19. In case of the loss or destruction of a certificate, the board may supply a copy thereof to the person losing the same, upon the payment of the sum of fifty cents (50c): *Provided*, It shall be shown to the satisfaction of the board that the loss has actually occurred.

Lost
certificates.

Penalty for making or using forged or false certificate.

SEC. 20. Any person or persons who shall forge or counterfeit a certificate, or knowingly make or cause to be made any false statement in any certificate under this act, or any official copy of same, or shall urge others to do so, or shall use any such forged or false certificate, or any official copy of such, or shall make, give, alter or produce, or make use of any false declaration, representation or statement in any certificate or copy thereof, or any document containing the same, shall be guilty of a misdemeanor.

ARTICLE IV.

CERTIFICATED MEN.

What employees to be certificated.

SEC. 21. Men employed in the coal mines of the State of Washington as mine foreman, assistant mine foreman, or fire bosses, shall have certificates of competency as heretofore provided.

Division into first and second class.

SEC. 22. Such certificates of competency shall be first class as mine foreman, and second class as assistant mine foreman or fire boss. A first class certificate shall be considered as including the second class certificate also.

Applications and fees.

SEC. 23. Applications for examination for first and second class certificates must be made in writing to the mine inspector and must be accompanied by an affidavit showing that the applicant is eligible as provided for under section 24 of article IV of this act (qualifications of candidates for certificates of competency). Each application must be accompanied by a fee of two dollars (\$2.00).

Qualifications for certificates.

SEC. 24. In no case shall a certificate of competency be granted to any candidate until he shall satisfy the board of examiners, which is holding the examination, by qualifying as follows, or by service certificate as hereafter provided for:

(a) If a candidate for a first class certificate, that he has had at least five (5) years' experience in and about the actual workings of a coal mine, and is at least twenty-five (25) years of age.

(b) If a candidate for a second class certificate, that he has had at least one year's experience in the underground workings of a coal mine, and is at least twenty-three (23) years of age.

(c) If a candidate for either first or second class certificate, that he has taken a course in mine rescue and first aid training equivalent to the work required by the federal bureau of mines for a certificate of competency in these subjects.

Provided, That when satisfactory evidence is submitted to the examining board showing the work the candidate for a first class certificate has completed in any mining course in any university, college, or correspondence school, the board may in lieu of actual experience allow him credit for not more than eighteen (18) months on his practical experience for such work completed.

SEC. 25. No one shall be allowed to act as a mine foreman of a coal mine in this state except he be the holder of a first class or service certificate under this act.

Qualifications for foreman.

SEC. 26. No one shall be allowed to act as assistant mine foreman or fire boss in any coal mine in this state, except that he be the holder of a second class or service certificate under this act.

Qualifications for assistant foreman and fire boss.

ARTICLE V.

VENTILATION.

SEC. 27. The operator, or superintendent, of every mine shall provide and maintain ample means of ventilation to furnish a constant and adequate supply of pure air for employees in the mine. The minimum quantity of air shall be one hundred (100) cubic feet per minute for each person employed in the mine, and five hundred (500) cubic feet per minute for each horse or mule, and as much more as may be necessary to keep the mine free from dangerous and explosive gases.

Quantity of air for ventilation.

SEC. 28. Every mine shall be divided into districts or splits of not more than seventy (70) men in each district or split (unless in the judgment of the inspector it

Separate air current for each split.

is impracticable to comply with this requirement, in which case a larger number, not to exceed ninety (90) persons, may be permitted to work therein). Each district or split shall be supplied with a separate current of fresh air. The return air from each district or split, when from seventy to ninety men are employed, shall be conducted direct or through an overcast or undercast to the main return airway.

Character of
ventilation.

SEC. 29. The ventilation shall be conducted to all working places in the mine in sufficient quantities to dilute, render harmless and carry off the smoke, noxious and other dangerous gases generated therein, to such an extent that all working places, traveling roads, and such other places as may be necessary for the general safety of the mine, shall be in a safe and healthful condition.

Measure-
ment of air.

SEC. 30. The quantity of air passing a given point shall be ascertained by an anemometer, the measurements to be taken by the mine foreman, or his assistant, at least once each week at or near the main inlet and outlet of the mine, and the inlet and outlet for each district or split, and also in the last crosscut or breakthrough nearest to face of entry, gangway or air course beyond the last breast, chute or room, turned, and in the top crosscut or breakthrough between the two inside working breasts, chutes or rooms, also in the top crosscut or breakthrough between the two outside working breasts, chutes or rooms.

SEC. 31. Weekly measurements shall also be taken of air traveling through pillars that are being drawn. Said measurements shall be taken on the days when the men are at work.

Record of
measure-
ment.

SEC. 32. A record of all air measurements shall be entered in a book provided for that purpose and kept at the mine.

Inspection
for inflam-
mable gas.

SEC. 33. In every mine in which inflammable gas has been found within the preceding twelve (12) months, or spontaneous combustion occurs, a fire boss, or fire bosses, shall be appointed, who shall, within three hours before

the time for commencing work in any part of the mine, inspect with an approved safety lamp all working places, and shall make a true report of the condition thereof.

SEC. 34. Where fire bosses are employed workmen shall not go to work in the mine until the same and the traveling way leading thereto are reported safe by the fire boss or fire bosses so inspecting. Every such report shall be recorded as provided for under the duties of fire bosses, article IX, section 115, of this act.

Fire boss to report on safety of mine.

SEC. 35. At non-gaseous mines the fan may be stopped during a suspension of work, temporary or otherwise. However, it must be started two hours before employees are admitted to the mine.

Suspension and starting of fan.

SEC. 36. Every main fan at gaseous mines shall be kept in operation continuously, day and night, unless operations are definitely suspended: *Provided*, That should it at any time become necessary to stop any fan at any mine, gaseous or non-gaseous, on account of accident to part of the machinery connected therewith, or by reason of any other unavoidable cause, it shall be the duty of the mine foreman, or the assistant mine foreman, in charge, after having first provided for the safety of the persons employed in the mine, to order said fan stopped for necessary repairs.

Continuous operation of fan in gaseous mines.

Stoppage for repairs.

SEC. 37. Every main ventilating fan shall be provided with a recording instrument by which the ventilating pressure of the fan shall be registered, and the registration of each day, with the date thereof, shall be kept in the office of the mine for future reference for one year, the same to be produced upon request of the inspector.

Recording instrument for air pressure.

No fan, unless driven by electricity or compressed air, shall be placed in any mine. In gaseous mines if the fan be electrically driven, the motor shall be placed in the intake airway.

Location of fans.

SEC. 38. It shall be unlawful to use a furnace for ventilation in any coal mine in the state.

Furnaces prohibited. o

Air bridges,
under and
overcasts.

SEC. 39. In every mine all permanent air bridges, undercasts or overcasts, shall be substantially built of ample strength. If built of wood they must be covered with fire-proof material on all exposed sides; or they must be driven through the solid strata.

Ventilating
doors.

SEC. 40. All doors used in assisting or in any way affecting the ventilation shall be so hung that they will close automatically.

Doors hung
in pairs.

SEC. 41. All permanent doors on main haulage roads affecting main air currents shall be hung in pairs and so placed that when one door is open, another which has the same effect upon the same air current, shall be and remain closed and thus prevent any temporary stoppage of the air current. An extra door shall be so placed and kept standing open as to be out of reach of accident, and arranged so that it can be closed should one or both of the other doors be out of order.

Extra doors.

Self-acting
doors or
attendants
required.

SEC. 42. The inspector may require either self-acting doors of an approved type, or an attendant at permanent doors that control the air current on any main haulage roads through which cars are hauled, for the purpose of opening and closing it for the employees and cars to pass in and out from the workings. A hole for shelter shall be provided at each door, to protect the attendant from danger from cars while performing his duty. Persons employed for this purpose shall remain at the doors at all times during working hours: *Provided*, That the same attendant may attend two doors if his absence from the first door does not endanger the safety of the employees.

Construc-
tion of
stoppings
between
airways.

SEC. 43. In all mines, all new permanent stoppings in crosscuts or breakthroughs between the main intake and return airways shall be substantially built of masonry, concrete, or blocks of timber. Renewals of old stoppings shall be built as above. When timber is used the same must be faced with concrete or other incombustible material.

○
Airtight
stoppings.

SEC. 44. Stoppings on levels between intake and return airways shall be substantially built and made as near

airtight as possible. On levels driven more than two thousand (2,000) feet, stoppings shall be built of masonry, concrete or blocks of timber.

SEC. 45. Stoppings shall be built in crosscuts or break-throughs, between breasts, chutes or rooms, or other working places, to conduct the ventilation to the working places. However, such stoppings may be built of wood.

When stoppings may be of wood.

SEC. 46. It shall be unlawful for the owner, operator or superintendent of any mine, or the agent of such owner, operator or superintendent, to employ any person or persons in such mine, or permit any person or persons to be in such mine for the purpose of working therein, unless there are provided and maintained in connection with and leading from such mine, in addition to the hoisting shaft, slope or other place of delivery not less than two openings or outlets to the surface, or one outlet to the surface and one underground passage leading to a contiguous mine; said openings or outlets to be separated from each other and from such hoisting shaft, slope or other place of delivery, by a stratum of not less than seventy-five (75) feet in thickness, at and through which openings or outlets safe and ready means of ingress and egress are at all times available by not less than three routes, for any person or persons employed in said mine; and in connection with and leading from each seam or stratum of coal being worked in said mine, and from every lift thereof, not less than two openings or outlets leading directly or indirectly to the surface, and separated by a stratum of not less than seventy-five (75) feet in thickness; at and through which two openings safe and ready means of ingress and egress are at all times available by not less than two routes for any person or persons employed in said stratum or seam of coal or lift thereof. This section shall not apply to a mine while being worked for the purpose of making communication between said outlets, or to open a seam or stratum of coal, or new lift thereof, so long as not more than twenty (20) persons are employed at any time in

Number of outlets to surface required.

Application of act.

such part of a mine, or new lift of a mine; neither shall it apply to any mine or part of a mine in which any outlet has been rendered unavailable by reason of the final robbing of pillars, previous to abandonment, so long as not more than twenty (20) persons are employed in such mine or any part of such mine at one time.

Application
of act.

This section shall apply only to mines or parts of mines which shall be developed or in which development shall be started after this act shall go into effect, but it shall not be construed to permit any openings or outlets now in use for the safety of men to be abandoned unless other such openings are substituted therefor.

Prohibited
distances
for removal
of coal.

SEC. 47. It shall be unlawful for the owner, operator or superintendent of any mine to loosen or remove, or cause or permit to be loosened or removed from its original position, any coal within a distance of two hundred and fifty (250) feet on either side of any hoisting slope, or within a distance of fifty (50) feet on either side of any permanent airway, or escapeway, or within twenty-five (25) feet of any level or gangway, or any parallel airway to any level or gangway, except for the purpose of driving air and escapeways, crosscuts and such other passages as may be necessary for the proper operation of the mine. This section shall not be construed to prevent the drawing of pillars previous to the final abandonment of the mine.

Withdrawal
of pillars.

Crosscuts.

SEC. 48. Crosscuts between room, breasts and chutes shall be made not to exceed sixty (60) feet apart.

Crosscuts between gangways, levels, airways and counters, or main slopes and main air courses, shall not exceed sixty (60) feet, unless they may be properly ventilated by sufficient brattices.

Conducting
air to
crosscuts.

SEC. 49. The required air current shall be conducted to the cross cut nearest the face of each entry, gangway, breast or chute.

Danger
signs.

SEC. 50. Danger signs in all mines shall be uniform, and of a design submitted by the mine inspector. All danger signs shall be kept in good condition, and no defective sign shall be allowed to remain in any mine.

ARTICLE VI.

MAPS AND PLANS.

SEC. 51. The operator of every coal mine in this state shall make, or cause to be made, an accurate transit survey and an accurate map or plan of such mine, drawn to the scale of one hundred (100) feet to the inch, on which shall appear the name of the state, county and township in which the mine is located; the designation of the mine, the name of the company or owner; the certificate of the mining engineer or surveyor as to the accuracy and date of the survey; the direction of the true meridian, and the scale to which the drawing is made.

Survey
and map
of mine.

SEC. 52. Every such map or plan shall correctly show the surface boundary lines of the coal rights pertaining to each mine, and all section or quarter section lines or corners within the same; the lines of town lots and streets, the tracks and sidetracks of all railroads and the location of all wagon roads, rivers, streams, lakes or ponds, with depth shown, all buildings, landmarks and principal objects on the surface.

Map to
show surface
objects.

SEC. 53. For the underground workings said maps shall show all shafts, slopes, tunnels or other openings to the surface or to the workings of a contiguous mine; all excavations, entries, rooms and crosscuts; the location of pumps, hauling engines, engine planes, abandoned works, firewalls and standing water; and the boundary line of any surface outcrop of the seam. Sea level datum and pitch of seams shall be placed on the maps at top and bottom of slopes and shafts, at ends of all gangways and at top of escapeways.

Underground
workings
shown.

Datum and
pitch of
seams.

SEC. 54. A separate map, drawn to the same scale in all cases, shall be made of each and every seam worked in any mine, and the maps of all such seams shall show all shafts, inclined planes or other passageways connecting the same, and shall show the sea level datum and pitch of seams, as provided in section 53, article VI.

Separate
map for
each seam.

When
separate
surface map
required.

SEC. 55. A separate map shall also be made of the surface whenever the surface buildings, lines or objects are so numerous as to obscure the details of the mine workings if drawn upon the same sheet with them, and in such cases the surface map shall be drawn upon transparent cloth or paper, so that it can be laid on the map of the underground workings and thus truly indicate the local relation of lines and objects on the surface to the excavations of the mine.

Copies of
maps filed
with
inspector.

SEC. 56. The original or true copies of all such maps shall be kept in the office of the mine, and prints thereof shall also be furnished to the mine inspector. The maps so delivered to the inspector shall be the property of the state, and shall remain in the custody of the inspector during the term of his office, and be delivered by him to his successor in office; they shall be kept at the office of the inspector, and be open only to the inspector or his deputy for his examination and he shall not permit any copies of the same to be made.

Mappings of
changes in
plans or
new work.

SEC. 57. An extension of the last preceding survey of every mine in active operation shall be made once in every twelve months prior to July 1st of every year, and the results of said survey, with the date thereof, shall be promptly and accurately entered upon the original maps and all copies of same so as to show all changes in plan or new work in the mine and all extensions to the old workings which have been made since the last preceding survey. The said changes and extensions shall be entered upon the copies of the maps in the hands of said inspector, or a new copy furnished and the old copy returned to the operator.

Final survey
and map of
abandoned
mine.

SEC. 58. When any coal mine is worked out or is about to be abandoned or indefinitely closed, the operator of the same shall make or cause to be made a final survey of all parts of such mine, and the results of the same shall be duly extended on all maps of the mine and a copy of such final survey shall be filed with the mine inspector, so as to show all excavations and the most advanced workings

of the mine, and their exact relation to the boundary or section lines of the surface.

SEC. 59. Whenever an operator of any mine shall neglect or refuse or for any cause not satisfactory to the mine inspector, fail for the period of three months to furnish said inspector the map or plan of such mine, or a copy thereof, or the extensions thereto, as provided in this article, such operator shall be deemed guilty of a misdemeanor, and the inspector is hereby authorized to make or cause to be made an accurate plan or map of such mine at the cost of the operator thereof, and the cost of the same may be recovered from the operator in an action at law brought in the name of the inspector, for his use.

Penalty for neglect to furnish map to inspector.

SEC. 60. The mine inspector may order a survey to be made of the workings of any mine, in addition to the regular annual survey, the results to be extended on the maps of the same and copies thereof, whenever the safety of the workmen, unlawful injury to the surface, unlawful encroachment on adjoining property, or the safety of an adjoining mine requires it.

When inspector may order survey.

If the inspector shall believe any map required by this act is materially inaccurate or imperfect, he is authorized to make or cause to be made a correct survey and map at the expense of the operating company, the cost recoverable as for debt: *Provided*, If such test survey shows the operator's map to be practically correct, the state shall be liable for the expense incurred, payable in such manner as other state accounts incurred by the mine inspector.

New map by inspector.

ARTICLE VII.

HOISTS AND HOISTING.

SEC. 61. The owner, operator or agent of every coal mine operated by shaft or slope, shall provide efficient means of signalling between the top and bottom thereof and each intermediate working level, by an electric bell or other equally satisfactory signalling device, and also a uniform code of signals for use therewith.

Signalling apparatus.

The operator or the superintendent shall provide, and hereafter maintain in good condition from the top to the bottom of every shaft or slope, and at each alternate intermediate working level from or to which persons or materials are lowered or hoisted, a telephone or metal tube of proper diameter, suitably adjusted to the free passage of sound, through which conversation may be held and understood between persons at the top and bottom of said shaft or slope.

SEC. 62. For the purpose of hoisting or lowering men in any shaft or slope the owner, operator or agent thereof shall provide:

Hoisting
apparatus.

(a) A type of hoisting apparatus of sufficient strength to hold twice the maximum weight of the cage or cars loaded with men at any point on the shaft or slope. Each hoisting apparatus to be equipped with a brake or brakes on each drum of sufficient power to fully control the speed of the cage or cages or cars in such shaft or slope.

Indicators.

(b) An efficient indicator that will show at all times the true position of the cage or cages or cars attached to each hoist.

Prevention
of over-
winding.

(c) An efficient device for the prevention of overwinding shall be attached to every hoisting apparatus hereafter put in service for hoisting or lowering persons in a shaft.

Cage con-
struction.

(d) A cage with a floor free from all obstructions must be provided for all shafts. Such cage shall be solidly constructed of heavy timber or iron beams for the frame, sufficient to withstand severe shocks under strains, and shall be covered with a substantially supported bonnet of boiler iron to protect persons riding in the cage from anything falling down the shaft. Each cage must be equipped with chains, bars or gates at each end, which must be always in place when men are hoisted or lowered. Each cage must also be equipped with efficient safety catches to prevent the cage from falling down the shaft in the event of the rope breaking. All rope links or chains at-

tached to cars or cages must be of ample strength with a factor of safety of not less than five to one on the maximum load.

(e) On all regular man trips being hoisted on slopes of twenty (20) degrees or more, each car shall be attached to the car ahead by two or more separate connections, each one of which must be of ample strength to hold any load placed upon it by the breaking of the other. And the first car shall be secured to the socket by an extra cable or chain securely attached to the car: *Provided*, That any other approved safety device may be used in lieu of those hereinabove in this paragraph (e) mentioned. On all slopes of less than twenty (20) degrees a safety rope shall extend from the main rope to the last car, or other approved safety device that will answer the same purpose.

Safety devices connecting cars.

(f) At all shafts, when hoisting men or material, there must be provided a competent person at the top and bottom to have control of the admission of cars, material or persons, to the cage operating in such shaft.

Control of cars in shafts.

(g) Safety gates must be provided at the top and at any intermediate landing of a shaft, or of a slope inclined over sixty (60) degrees from the horizontal, such gates to be so constructed that when closed access to the shaft or slope will be entirely cut off; and such gates to be kept closed at all times when the rope rider or other person in charge of such landing is not present.

Safety gates.

(h) At distances not to exceed sixty (60) feet on inclined planes or slopes where men are employed during operations suitable holes for refuge must be provided, these to be cut into the strata not less than two and one-half (2½) feet deep and four (4) feet wide and five (5) feet high and level with the road. Such holes to be located at points easy of access and to be kept whitewashed.

Refuge holes.

SEC. 63. All ropes, chains, safety catches, etc., as enumerated above, must be of ample strength to support a strain equivalent to five times the maximum load, and must be kept in safe condition; and, furthermore, they

Strength and inspection of safety devices.

must be inspected at least once in twenty-four (24) hours by a competent person appointed by the superintendent for that purpose, and a record of such examinations, reporting all defects that may have been found, must be written in ink in a book kept for that purpose at the mine office. Any defects must be corrected immediately and no persons shall be lowered into or hoisted from the mine by defective apparatus; and, furthermore, all coupling links, pins and chains used on main haulage in hoisting or lowering men on a slope shall be annealed once in every three months. Pins and couplings on all other cars must be annealed once a year.

Testing
safety
catches.

SEC. 64. The following tests of safety catches on cages shall be made once every six months: The cage shall be secured by passing a heavy hemp rope through the bridle chain ring or link and fastening both ends of the ropes to guides or to diagonally opposite posts of head frame, drawing the rope taut. A blocking to be passed below the cage to support same before hoisting rope is taut. The hoisting engineer shall then slack away until the cage is suspended on the hemp rope with at least four feet of the slack hoisting rope on top of it. Everything being in readiness the hemp rope shall be suddenly cut. If the safety catches stop the cage before it rests upon the blocking, the apparatus shall be considered efficient.

Proximity of
buildings to
ventilating
fans or
main airway.

SEC. 65. No building or structure shall be erected within seventy-five (75) feet of any main ventilating fan or main entrance to or exit from main airway slope or drift, except the tipple building and trestle thereto, unless same shall be built of fireproof material, and no fires shall be allowed in or about said tipple or trestle, except it be in a fire box of a boiler: *Provided*, That this section shall not apply to any shaft or slope heretofore sunk, or to any building heretofore erected, or to prospecting or development work otherwise regulated by this act.

Men and ma-
terials not to
be hoisted
together.

SEC. 66. No person, except mine officials, cagers or repair men, shall be hoisted or lowered in a cage with a

loaded or empty car or with material of any kind on either the same or opposite cage.

SEC. 67. Not more than six (6) persons per ton of hoisting capacity shall be hoisted or lowered in any cage or car in any shaft, slope or incline at any one time: *And, provided,* That not more than one person for each three (3) square feet of floor surface shall be hoisted or lowered in any cage at any one time.

Number
limit of men
hoisted.

SEC. 68. No person or persons other than trip riders or mine officials shall be hoisted or lowered at a speed exceeding six hundred (600) feet per minute.

Speed limit.

SEC. 69. An engineer placed in charge of the hoisting engine, where men are being hoisted or lowered, must be a sober, competent person not less than twenty-one (21) years of age.

Competency
of hoisting
engineer.

SEC. 70. No person, except those whose regular duties require it, shall be allowed to ride in or on the outside of any loaded car or skip in any slope. In any mine opened after this act goes into effect, separate traveling ways shall be provided and no employee, except those whose regular duty compels them to use a slope or incline, will be allowed to walk up or down the same while they are in operation.

Riding
loaded cars.

Traveling
ways for
men.

ARTICLE VIII.

DUTIES OF OPERATORS.

SEC. 71. For the purpose of this act the superintendent or mine foreman in direct charge of the operation of any mine or mines, shall be considered as the agent of the owner or operator, and shall be held jointly responsible with the owner or operator for any failure to comply with the sections of this act governing owners, operators or agents.

Liability of
agents of
owner or
operator.

SEC. 72. Every operator of a coal mine shall make, or cause to be made, for the information of the inspection department, upon uniform blanks furnished by said department, a record of all deaths and all injuries sustained by any employees in the pursuance of their regular occu-

Record of
deaths and
injuries.

pations. These records shall be forwarded to the inspection department within one month from the time the accident occurs.

Matters of which inspector must be notified.

SEC. 73. In addition to the foregoing, immediate notice must be conveyed to the state inspection department by the management of the operating company interested: (1) Whenever a new mine is opened; (2) Whenever it is intended to abandon any mine or to reopen an abandoned mine; (3) When the workings of any mine are approaching any abandoned mine believed to contain any accumulation of water or gas; (4) Upon the accidental closing or abandonment of any regularly established passageway to an escapement outlet; (5) Upon the occurrence of any serious fire within the same; (6) When any unusual amount of or accumulation of gas is encountered; (7) Whenever any person is seriously burned by the ignition of explosive gas.

Superintendent as mine foreman.

SEC. 74. It shall be unlawful for the operator to have the superintendent to act as mine foreman, unless the superintendent holds a certificate of competency as a mine foreman issued by the state board of examiners.

Temporary mine foreman.

SEC. 75. It shall be unlawful for the operator of any mine to have in his service as mine foreman any person who does not hold a certificate of competency as mine foreman issued by the state board of examiners. Anyone holding a first-class certificate may serve as a mine foreman: *Provided*, That whenever an exigency arises by which it is impossible for any operator to secure the immediate services of a certificated mine foreman, he may employ any trustworthy and experienced man to act as temporary mine foreman for a period not to exceed thirty (30) days, and in the event that no person possession [possessing] a certificate of competency satisfactory to the mine superintendent can be found to fill the position, then the mine inspector may grant a temporary certificate to some person he may deem qualified, who may then fill the position until thirty (30) days from and after the next meeting of

the board of examiners held for the purpose of granting certificates.

SEC. 76. It shall be unlawful for the operator of any mine to have in his employ as assistant mine foreman or fire boss any person who does not hold a first or second class certificate of competency issued by the board of examiners: *But, provided,* That whenever any exigency arises by which it is impossible for any operator to secure the immediate services of a certificated man, he may employ any trustworthy and experienced man for a period not exceeding thirty (30) days, and in the event that no person possessing a certificate of competency satisfactory to the mine superintendent can be found to fill the position, then the mine inspector may grant a temporary certificate to some person he may deem qualified, who may then fill the position until thirty (30) days from and after the next meeting of the board of examiners held for the purpose of granting certificates.

Temporary
assistant
foreman.

SEC. 77. Underground operations shall be under the charge of a person holding a first class certificate under this act: *Provided, however,* That this section shall not apply to prospecting or exploring work where less than ten (10) men are employed underground at any one time, unless the mine inspector, by written notice served on the management of such mine, requires such mine to be under the control of a certificated mine foreman.

Certificated
foreman for
underground
operations.

SEC. 78. The operator or superintendent of every mine shall, within thirty (30) days, send notice to the mine inspector when any change occurs in the name of a mine, under the provisions of this act.

Change of
name of
mine.

SEC. 79. If any mine is worked for more than thirty (30) days without a foreman as required by this act, the operator of such mine shall be guilty of a misdemeanor and liable to a penalty not exceeding fifty dollars (\$50.00) for every day during which such mine is worked: *Provided, however,* That one foreman may act as foreman at more than one mine operated by the same company in the same camp.

Penalty for
operating
without
foreman.

Steam boiler inspections.

SEC. 80. All boilers used for generating steam in and about coal mines must be inspected by a qualified person once in every six months, or oftener if required by the mine inspector. The result of such inspection shall be certified in writing to the mine inspector within thirty (30) days thereafter, on blank furnished by the mine inspection department.

Failure to make such reports shall constitute a misdemeanor.

Boiler safety devices.

SEC. 81. Every boiler must be equipped with water glasses, trycocks, steam gauge, safety valves and such other safety devices as may be required by law. All such devices must be kept in proper adjustment and their condition inspected and reported on in the same manner as provided for the boiler inspection.

Permit for locating boilers near shaft.

SEC. 82. In the case of mines being developed where ten men or less are employed on one shift, the mine inspector shall, upon request of the operator, issue a written permit authorizing the placing temporarily of a boiler or boilers nearer than seventy-five (75) feet to a shaft, slope or other opening.

Duty to test boiler safety devices.

SEC. 83. The engineer or fireman in charge of a boiler or boilers shall keep a constant watch over all safety devices and shall try same frequently to determine their proper adjustment. He shall immediately notify his employer of any defect.

Wash house.

SEC. 84. Whenever sixty per cent of the employees of a coal mine in this state shall petition the operator of such mine to provide a suitable wash house for their use, and shall enter into an agreement with such operator to pay for the interest on the cost, for the depreciation, maintenance and operation of such building a reasonable fee of not to exceed one dollar (\$1.00) per month per employee, for the use thereof, such operator shall provide a suitable building which shall be convenient to the principal entrance to the mine or group of mines to be used as a wash house, changing and drying room for the em-

Fees for installation.

ployees of the mine. Such building or wash house to have sufficient floor space for the accommodation of miners or others using the same. The flooring in such wash house to be of concrete tiling or cement, and the flooring in changing room to be optional with the owner as to the material used. Lockers or some other arrangement shall be put in the changing room for the use of employees using same, and shower baths shall be provided in the wash room, one for each twenty (20) men employed on one shift. The operator shall furnish an attendant to look after the operation, ventilation, drying of clothes, and sanitary conditions of the wash house and changing rooms, the reasonable cost of which shall be paid by the employees as a part of the maintenance and operation of the building.

This section shall not apply to mines where less than twenty (20) men are employed, or to mines under development which are not on a permanent operating basis.

SEC. 85. At each and every coal mine in this state the owner or operator thereof shall, within three (3) months after this act goes into effect, provide and maintain in good condition efficient means of protection against fire at the following places, to-wit: Main entrance to hoisting shafts, slopes, permanent escapeways and ventilating fans on surface; also at all underground stables, pump rooms, hoists of more than fifty (50) horse-power, and ventilating fans delivering more than ten thousand (10,000) cubic feet of air per minute. Said means of fire protection shall consist of sufficient chemical extinguishers of approved type, or of proper hydrants, hose not less than one and one-half (1½) inch internal diameter, with suitable connections and nozzles, and pipe lines of not less than two (2) inches internal diameter, to convey water at a pressure of not less than twenty-five (25) pounds per square inch from an adequate supply of each of the aforementioned places.

Fire
protection.

At mines where open flame lamps are used at all main landings for a distance of two hundred (200) feet from the shaft or slope in all stables, pump rooms, or hoist

When
automatic
sprinklers
required.

rooms that are timbered, or where timber is used in such quantities that a fire would be likely to spread, there shall be maintained two lines of automatic sprinklers on each side of the passageway attached to not less than one and one-half (1½) inch pipes connected with the fire fighting water supply, and such sprinklers shall not be more than ten (10) feet apart.

All automatic sprinklers shall be of the fusible plug type and shall not require a temperature of more than one hundred and sixty-five (165) degrees Fahrenheit to release the water.

Timber
for props.

SEC. 86. The owner or operator of any coal mine shall provide a sufficient supply of timber at any such mine where the same is required for use as props, so that the workmen may at all times be able to properly secure their working places, and it shall be the duty of the owner or operator to send down into the mine all such props, the same to be delivered at the entrance to the working place, or as may be agreed upon between the employees and the operator.

Sales or
leases
reported to
inspector.

SEC. 87. Any mine owner transferring any coal mine shall immediately report such sale or lease to the mine inspector, giving the name or the names of the purchaser, purchasers, or lessee, and the address or addresses of the same. The purchaser, purchasers, or lessee of any such coal mine shall also immediately report to the mine inspector giving the names of the officers and superintendent of such coal mine, with their addresses.

Accidents
and
explosions.

SEC. 88. Whenever by reason of any explosion or any other accident in or about any coal mine, whereby loss of life or serious injury has occurred, or is thought to have occurred, it shall be the duty of the person having charge of the mine to give notice thereof to the mine inspector by telephone or telegraph, and if any person is killed thereby, to the coroner of the county, who shall give due notice to the mine inspector if an inquest is to be held. If the coroner shall determine to hold an inquest, the mine inspector shall be allowed to testify and offer such testi-

Coroner's
inquests.

mony as he shall deem necessary to thoroughly inform the said inquest of the cause of death, and the said inspector shall have authority at any time to appear before such coroner and jury and question or cross-question any witness, and in choosing a jury for the purpose of holding such inquest it shall be the duty of the coroner to impanel a jury no one of whom shall be directly or indirectly interested. It shall be the duty of the mine inspector upon being notified as herein provided, to immediately repair to the scene of the accident and make such suggestions as may appear necessary to secure the safety of the men, and if the results of the explosion or accident do not require an investigation by the coroner, he shall proceed to investigate and ascertain the cause of the explosion or accident, and make a record thereof which he shall file as provided for, and to enable him to make the investigation he shall have the power to compel the attendance of persons to testify, and administer oaths or affirmations. The cost of such investigation shall be paid by the county in which the accident occurred, in the same manner as costs of inquests held by coroners or justices of the peace are paid, and copies of evidence taken at inquests shall be furnished the mine inspector.

Investigation by inspector.

Costs.

SEC. 89. No steampipes, through which high pressure steam is conveyed for the purpose of driving pumps or other machinery, shall be laid on traveling or haulage ways, unless they are encased in asbestos or some other suitable material, or so placed that the radiation of heat into the atmosphere of the mine will be prevented as far as possible.

Steampipes to be encased in asbestos.

SEC. 90. When a steam locomotive is used for the purpose of hauling coal out of a mine, the tunnel or tunnels through which the locomotive passes shall be properly ventilated and kept free as far as practicable of noxious gases. The use of steam locomotives shall be prohibited in any mines opened in the state after the passage of this act, or in mines already opened that are not now using the same.

Steam locomotives in mines.

SEC. 91. In any mine or part of mine where, from the nature of the coal or method of handling the same, an undue quantity of dust is produced either on the roadways or in the working places, which may tend to cause danger of explosion, then all the haulage ways leading thereto and all the haulage roads and working places in such section of the mine, shall be thoroughly and effectively watered by some recognized and approved system of watering, or other treatment equivalent to watering. If, in the opinion of the inspector, an undue quantity of dust is produced and the method employed is not adequate or effective, he may notify the manager in writing and proceed as provided for in section 9, article II of this act: *Provided, however,* That the provisions of this section shall not apply to any mine or separate split or panel of such mine if no explosives are permitted and safety lamps are used in such separate part of a mine, unless in the opinion of the inspector this exemption would be dangerous to the persons employed in such section or part of the mine.

SEC. 92. It shall not be lawful to provide a horse or mule stable in any mine unless the same is excavated in solid rock, or built, or thoroughly lined with a fireproof material; and all openings to such stables shall be equipped with fireproof doors, free from all obstruction, which can be closed in case of fire.

No hay or straw shall be taken into any mine unless pressed and made up into compact bales, which shall be kept in a storehouse built apart from the stable and in the same manner as the stable. Under no circumstances shall the hay or straw be stored in the stable.

All permanent under-ground pump rooms must be thoroughly lined with fireproof material, unless the same are excavated in solid rock.

SEC. 93. It shall be unlawful for any mine owner, lessee or operator of coal mines in the State of Washington, employing miners at ton rates, to pass the output of coal mined by said miners over any screen or other device which will take any part from the value thereof before the

Excessive
coal dust.

Protection
against
explosion.

Stables in
mines.

Storage of
hay and
straw.

Lining of
pump rooms.

Weighing
coal before
screening.

same shall have been duly weighed and credited to the employee sending the same to the surface, and accounted for at the legal rate of weights as fixed by the laws of the State of Washington.

SEC. 94. All escapement shafts or slopes over thirty (30) degrees pitch shall be equipped with stairways or ladders having landing places or platforms at reasonable distances apart or, in lieu thereof, such hoisting apparatus as will enable the employees in the mine to make safe and speedy exit in case of danger. At all points where the passageway to the escapement shaft and other places of exit is intersected by other roadways or entries, conspicuous signboards, subject to the approval of the mine inspector, shall be placed indicating the direction it is necessary to take in order to reach such place of exit.

Equipment of escapement shafts.

Signboards.

SEC. 95. The operator of every coal mine shall leave barrier pillars at least fifty (50) feet in width along the line of the property he operates; failure to do so shall constitute a gross misdemeanor and he shall be subject to a fine of not less than five hundred dollars (\$500.00) nor more than one thousand dollars (\$1,000.00), or imprisonment of not less than six months: *Provided, however,* That nothing herein shall be construed as forbidding owners or operators of adjacent properties from extracting all the coal after they have agreed that same might be done.

Width of barrier pillars.

SEC. 96. On or before the 25th day of January in each year, the operator or superintendent of every mine shall send to the office of the state mine inspector a correct report specifying with respect to the year ending the 31st day of December preceding, containing the following:

Operator's annual report.

- Name of company.....
- Postoffice address.....
- Officers* *Name* *Address*
- President
- Manager
- General superintendent.....
- Mining engineer.....

- Superintendent
- General foreman.
- Outside foreman.
- Inside mine foreman.
- Location of mine.
- On what railroad.
- Principal market.
- Average value of coal per short ton at mine.
- Average value of coke per short ton at mine.
- Price paid per gross ton for mining.
- Are wages paid monthly or semi-monthly.
- Number of feet of gangway or entry driven.
- Also number of feet of slope or shaft driven or sunk during year.
- Scale of wages paid above ground.
- Scale of wages paid under ground in the different classes
- A report of ventilating and other important machinery installed during the year.

A report of new openings.

On or before the last day in each month, or as soon thereafter as possible to compile such data, the operator or superintendent shall also furnish the state mine inspector with a monthly report relative to the month preceding, containing the following information:

Monthly reports.

- Name of company.
- Name or number of mine.
- Location of mine.
- County

REPORT IN SHORT TONS.

- No. tons of coal shipped.
- No. sold to employees and local trade.
- No. used for power.
- No. charged into ovens for coke.
- Total production of coal.
- Total production of coke.
- No. days operated.
- No. inside employees.

- No. outside employees.....
- No. killed.....
- No. injured.....
- No. widows.....
- No. orphans.....

The operator or the superintendent who fails to comply with the provisions of this section shall be deemed guilty of a misdemeanor. Penalty.

SEC. 97. The operator shall provide that all mechanical haulage roads, driven after this act takes effect, where separate traveling ways are not maintained, where general clearance is less than two and one-half (2½) feet on one side shall be provided with shelter holes not more than sixty (60) feet apart, giving clearance not less than three (3) feet wide and four (4) feet high along the road. They shall be kept whitewashed. Shelter holes.

SEC. 98. All machinery used in or about any mine that when in motion would be dangerous to persons coming in contact therewith, such as engines, wheels, screens, shafting, gears and belting, shall be guarded by covering or railing to prevent persons from walking or falling against same. All sides of stairs, trestles and platforms around mines shall be provided with hand and guard railing to prevent persons from falling over the sides. Safeguarding machinery and stairways.

ARTICLE IX.

DUTIES OF OFFICIALS.

SEC. 99. The superintendent shall, at least once every week, read, examine carefully and counter-sign all reports entered in the mine record book by the mine foreman, and if he finds on such examination that the law is being violated in any particular, he shall order the mine foreman to stop such violation forthwith, and shall see that his order is complied with. Superintendent's duties.

SEC. 100. The superintendent shall not obstruct the mine foreman or other officials in the fulfillment of any of their duties, as required by this act, but he shall direct that Supervision of officials.

the mine foreman and all other employees under him comply with the law in all its provisions.

Visits to
working
places.

SEC. 101. It shall be the duty of every mine superintendent to visit, or to have his assistant superintendent visit every working place in every mine under his charge once every sixty (60) days: *Provided*, That the mine foreman shall not be considered as the assistant to the superintendent for this purpose.

Operator's
duties.

SEC. 102. The operator shall keep on hand at the mine a supply of the printed rules and notices and record books required by this act. He shall see that the rules and notices are posted in conspicuous places at or near the entrance to the mine and kept in such condition that they will always be legible.

Foreman's
duties.

SEC. 103. The mine foreman shall keep a careful watch over the ventilating apparatus, the ventilation, airways, traveling ways, timbering and drainage, and shall see that all stoppings along the airways are properly built. He shall also see that the proper crosscuts or breakthroughs are made in the pillars of all chutes, breasts, rooms, gangways, entries and levels, in accordance with this act, and that they are closed when necessary so that the ventilating current can be conducted in sufficient quantities through the last crosscut or breakthrough and to the working places by means of brattices or other devices, and all other duties pertaining to the safety of the men, as provided for in this act.

Has charge
of workings
and
employees.

SEC. 104. The mine foreman shall have charge of all inside workings and of the persons employed therein, in order that all of the provisions of this act as far as they relate to his duties concerning the safety of the mine and the persons employed therein be complied with, and the regulations prescribed for each class of workmen under his charge be carried out in the strictest manner possible.

Daily
record of
condition of
mine.

SEC. 105. The mine foreman shall each day write and sign with ink in a book provided for that purpose, a report of the general condition of the mine, which report

shall clearly state any unusual danger that may have come under his observation during the day, or any unusual danger reported to him by his assistants, or by the fire bosses. The report shall also state the manner in which the requirements of the law are not complied with.

He, or his assistant, shall also once each week enter plainly with ink in said book a true report of all air measurements required by this act, designating the place, the area of each breakthrough and entry separately, the velocity of the air in each breakthrough and entry, and the number of men employed in each separate split of air, with the date when measurements were taken. Said book shall at all times be kept in the main office at the mine for examination by the inspector and by any persons working in the mine. Such examinations made by others than inspectors shall be in the presence of the superintendent or mine foreman.

Record of
air meas-
urements.

The mine foreman shall also each day read carefully and countersign in ink all reports entered in the fire bosses' book.

Countersign
fire bosses'
book.

SEC. 106. In order that men may familiarize themselves with escapements to be used in case of accidents, it shall be the duty of the mine foreman to cause all miners and other underground employees to walk or climb to or from their working places to the surface by way of one of the traveling ways, escapements, or outlets, at least once every six months.

Drill in use
of escape-
ments.

SEC. 107. When operations are temporarily suspended in a mine, the mine foreman shall see that a danger sign is placed across the mine entrance, which sign shall be sufficient warning for persons not to enter the mine. If the circulation of air through the mine be stopped, each entrance to said mine shall be fenced off in such manner as will ordinarily prevent persons from entering said mine, and a danger sign shall be displayed upon said fence at each entrance. The mine foreman shall see that all danger signs used at the mine are in good condition, and if they

When
danger
signs to
be posted.

become defective he shall cause same to be repaired, or notify the superintendent.

Withdrawal of men for interrupted ventilation.

In case of accident to a ventilating fan or its machinery whereby the ventilation in a mine is, or is about to be seriously interrupted, the mine foreman shall order the men to withdraw immediately from the mine, and he shall not allow them to return to their work until the ventilation has been restored and the mine has been thoroughly examined by him, or by an assistant mine foreman or fire boss, and reported safe.

Removal of dangerous conditions.

SEC. 108. Whenever any dangerous condition is known to exist, or is reported by others to the mine foreman, he shall give prompt attention to its removal, and in case it is impracticable to remove the danger at once, he shall notify every person whose safety is menaced thereby to remain away from the place that the dangerous conditions affect. He or his assistant shall once each week travel and examine all the air courses and traveling ways, and in addition all the openings that give access to old workings or falls. He shall record and sign in ink in a book provided for that purpose the results of these weekly examinations.

Weekly examination of air courses and traveling ways.

Precautions against gas and water.

SEC. 109. In any working place that is being driven within supposedly dangerous proximity to an abandoned mine suspected of containing explosive gases, or that may contain a dangerous accumulation of water, the mine foreman shall see that at least one bore hole shall be maintained not less than twenty (20) feet in advance of the face; and in a seam of coal on either side of the bore hole, flank holes shall be driven not less than twelve (12) feet in advance, and any place driven to tap water or gas shall not be more than eight (8) feet wide.

Checking fire bosses.

SEC. 110. The mine foreman shall see as often as practicable that the fire boss has left his mark, as required by this act, in places examined or reported examined.

Visits to each shaft.

SEC. 111. The mine foreman, his assistant, or fire boss, shall visit each working place once each shift while

the employees are at work, and in addition thereto shall give special care, oversight and attention to the men drawing pillars.

SEC. 112. It shall be the duty of the mine foreman, or his assistant, in case of injury to employees while at work in the mine, to at once visit the scene of the accident, see that the injured person or persons are given all the aid that can possibly be given which will add to their comfort and safety. After being treated with all the skill known to the foreman or his assistant, the injured person or persons shall be carefully wrapped up and taken to their homes or the hospital.

Care of
injured
workmen.

SEC. 113. It shall be the duty of the fire boss to examine carefully not more than three (3) hours before a first shift enters the mine, every working place in his charge in which men have not been employed at the working face within ninety (90) minutes previous to the starting time of such shift all open places adjacent to live workings, and every unfenced road to abandoned workings. He shall see that the air current is traveling in its proper course. In making the examination he shall use no other than an approved safety lamp. The fire boss shall examine for all dangers in all portions of the mine under his charge, and after each examination he shall leave at or near the working face of every place examined the date of the examination as evidence that he has performed his duty.

Duties of
fire boss.

SEC. 114. At the entrance to and in crosscuts or breakthroughs to any working place where explosive gas is discovered or where there is immediate danger found to exist from any other cause, the fire boss shall place a danger sign, which shall be sufficient warning for persons not to enter.

Danger
signs for
explosive
gas.

The danger sign shall consist of a lagging, board or piece of timber, or other obstruction, placed across the entrance to the working place, and in crosscuts and breakthroughs open to such working place, so that it is dis-

tinctly visible and marked plainly showing that danger exists beyond.

Discoveries
of gas
bulletined.

Office
record.

SEC. 115. Each fire boss shall, immediately after making his inspection and before the employees are allowed to enter the mine, report on a bulletin board provided for that purpose at the entrance to the mine, a true record of such inspection, designating each place where gas is found, also that all other places are clear. A like report of such inspection shall immediately be made by the fire boss, with ink, in a book kept for that purpose at the mine office on the surface, and in addition shall set forth the time of the inspection, the reason for the presence of any danger found, the means taken and by whom for the removal of same. If explosive gas is found the report shall show as near as possible the amount found, and time the place was clear. The fire bosses' record shall, at all times, be accessible to the mine inspector or his deputy, and to the employees of the mine in the presence of a mine official. The fire boss, mine foreman, or his assistant must re-examine all places in which gas is reported in advance of employees working in such places. After making such examination he shall personally direct the removal of said gas or other danger. Gas shall not be removed by brushing.

Employment
of skilled
shot firers.

SEC. 116. In all parts of a mine where explosive gas is being generated, or dust exists in such quantities as to be dangerous or liable to cause an explosion from blowout or windy shots, there shall be employed a sufficient number of competent persons to act as shot firers, whose duty it shall be to fire all shots properly placed by the miners, and refuse to fire any shots improperly placed. No blasts in such part of a mine shall be fired by any other person than a shot firer, fire boss or foreman. Incombustible material for tamping must be used for that purpose, and the mine foreman shall supply same at convenient places inside the mine. Under no circumstances shall coal dust or any other combustible material be used for tamping. Each shot firer shall report to the fire boss, mine foreman, or his assistant, every shot that he has refused to fire, every blown

out shot, and every shot that has missed fire, and a record shall be kept of same.

SEC. 117. No shot firer or any other person shall fire a shot in any working place if he can detect explosive gas in the place. In dusty mines no shot shall be fired unless the place in which the shot is to be fired is thoroughly wetted or otherwise treated to prevent the existence of any dust for a distance of not less than one hundred (100) feet from the shot to be fired. Shot firing.

ARTICLE X.

MINE RESCUE EQUIPMENT.

SEC. 118. Within one year after this act goes into effect, every mine employing as many as twenty (20) underground men, shall have and maintain ready for use at all times, at least three (3) sets of mine rescue apparatus, and one reviving device, of a type approved by the U. S. bureau of mines. Rescue and reviving apparatus.

For each one hundred (100) underground men in addition to the first twenty (20), one additional apparatus shall be maintained, up to six (6) sets.

At every mine where mine rescue equipment is maintained, supplies for same shall be kept on hand to last at least twenty-four (24) hours. The superintendent of the mine, or some person designated by him for that purpose, shall examine each apparatus once each month and report the condition of same, also the amount of supplies on hand at the time of such examination. This report shall be made in writing by the person making the examination and a record of same shall be kept at the mine office and shall be accessible to the mine inspector or his deputy at all times. Necessary supplies.

Whenever two or more mines are operated by the same company within a radius of seven (7) miles, they shall be considered as one mine. However, mines within a radius of seven (7) miles and connected by a wagon road or railroad, may agree to equip and maintain one central station at which there shall not be less than six (6) apparatuses and Central stations for several mines.

one reviving device; when more than four (4) mines are associated at one central station, an additional machine must be added.

Stretchers.

SEC. 119. The operator or superintendent of every mine employing from five (5) to fifty (50) persons, shall provide and keep in good condition near the principal entrance to the mine, one stretcher. When more than fifty (50) persons are employed, they shall keep at least two stretchers. These stretchers shall be used for conveying to his abode, or to the hospital if necessary, any person who may be injured while in the discharge of his duties.

Blankets.

SEC. 120. Suitable woolen blankets shall be kept on hand for each stretcher.

Bandages,
splints and
medical
supplies.

SEC. 121. At all times there shall be provided bandages, splints, and other medical supplies, to render first aid and relief to employees who may be injured. These supplies shall be kept in a suitable room near the entrance to the mine.

First aid
supplies.

SEC. 122. At each working level, or entry, of every mine in this state, the operating company shall maintain a box of first aid supplies equivalent to the American Red Cross (industrial) first aid box. If these boxes are kept locked, the keys shall always be near at hand and plainly visible. Such keys may be kept under glass as a fire alarm box key is kept. Additional keys may be given to employees selected by the mine foreman on each level or working section of the mine. The foreman shall keep a list of those who have keys in their possession posted on the (industrial) first aid box nearest their working places. In addition to the above first aid boxes, the operating company of each mine shall furnish each driver or motorman with a metallic covered packet equivalent to those sold by the American Red Cross. At all times when they are underground or at their respective places of employment, said drivers or motormen shall have the metallic packets in their possession. Failure of the operator to provide the supplies required by this section shall constitute a misde-

meanor. Any person destroying or stealing any of the first aid supplies shall be guilty of a misdemeanor.

ARTICLE XI.

POWDER AND EXPLOSIVES.

SEC. 123. Every person who has powder or other explosives in a mine shall keep the same in a proper, closed receptacle. Said receptacle shall be kept as far as practicable from the track or chute; and all powder receptacles shall be kept as far as practicable from each other, and each in a secluded place. Detonators shall at all times be kept in securely closed cases, separate and apart from other explosives, until required for use.

Safe-guarding explosives.

SEC. 124. Whenever a workman using an open light is about to open a receptacle containing explosives, and while handling the explosives, he shall place and keep his lamp at least five (5) feet distant from said explosive and in such position that the air currents cannot convey sparks to it, and at such time no person shall approach nearer than five (5) feet to any explosive with an open lamp, lighted pipe, or anything containing fire, except safety lamps, unless such explosive is contained in a proper closed receptacle. No miner, workman, or other person shall open any receptacle containing an explosive except in the manner prescribed by the manufacturer thereof, and it shall be unlawful for any person to have in his possession in any mine any receptacle containing explosives which has been opened in violation of this act.

Use of lamps and lighted pipes near explosives.

Opening receptacles of explosives.

SEC. 125. No high explosive shall be stored in any mine and no more shall be taken into any mine at any one time, by any person, than is required in one shift. The quantity used shall be subject to the approval of the mine inspector.

High explosives.

SEC. 126. No person shall fire a dependent shot in the coal as hereinafter defined. A dependent shot is a shot dependent on another shot so placed as to make an opening sufficient for the dependent shot to do its work

Firing dependent shots.

properly. At mines where solid shooting is allowed the opening shot shall be fired first and no dependent shot shall be fired at that time. In no case shall more than one kind of explosive be used in the same drill hole: *Provided*, That in any mine where the coal bed worked is less than three (3) feet between walls and no gas or dust is present, where it can be shown to the satisfaction of the mine inspector that the above rule would prohibit the operating company to mine the coal at a profit, the mine inspector may grant him a permit to suit his conditions.

Permits to vary rule.

SEC. 127. Black powder for use in mines shall be put up in metallic cans or canisters, or receptacles of equally safe material. No black powder, high explosive, or detonators shall be hauled on any electric motor trip in any mine, unless the same are encased in non-conductive boxes or receptacles: *Provided*, That they may be hauled in non-conductive car.

Black powder, how handled.

No black powder, other than that taken by each man for his own use, shall be hauled on man trips.

SEC. 128. The needle used in preparing a blast of black powder shall be made of copper, and the tamping bar shall be tipped with at least five (5) inches of solid copper. All other explosives where a cap or detonator is used for the purpose of exploding the blast, shall be tamped with a wooden tamping bar. In no case shall iron or steel or other metal that is liable to cause a spark while tamping, be used for the purpose of tamping any explosive. Neither shall a scraper be used for tamping. It shall be unlawful for any person to have in his possession in the mine underground, any iron or steel needle or tamping bar not tipped as above required.

Tamping bars.

No hole shall be drilled more than six (6) feet in depth for the purpose of blasting: *Provided, however*, That where mining machines are used holes may be drilled to the depth of the cut.

Depth of blast holes.

Any violation of this section shall be a misdemeanor and the offender shall be punished under the provisions of this act.

Penalty for violations.

SEC. 129. Each person, firm or corporation, engaged in coal mining, requiring the use of powder or other explosives, shall provide (subject to the approval of the mine inspector) at or near the entrance of each coal mine operated, at some suitable place near such work, a suitable distributing magazine for the storage of such powder or other explosives. There shall be posted upon such magazine a notice printed in letters not less than three (3) inches in height, that such magazine contains explosives. No person shall store or keep in any magazine mentioned in this section, any powder or other explosive in excess of one ton. Such powder or other explosives shall be issued daily in quantities not to exceed the amount used by each workman in one shift, in proper receptacles. Any miner taking powder into the mine and having to return the same on account of not being able to work, may return the same to the operator and the operator shall receive it. Any person or corporation violating or failing to comply with the provisions of this section shall be guilty of a misdemeanor.

Storage of explosives.

Issuance of explosives to workmen.

SEC. 130. Any person who shall store or keep any powder or other explosive in a quantity greater than one pound in any occupied dwelling house or residence, or in any out-house appertaining thereto, within three hundred (300) feet of any dwelling, shall be guilty of a misdemeanor.

Penalty for keeping explosives in residence or out-house.

ARTICLE XII.

SAFETY LAMPS.

SEC. 131. In every working of a coal mine approaching any place where there is likely to be an accumulation of explosive gases, or in any working place where there is imminent danger from explosive gases, no light or lamp other than a magnetic locked safety lamp or electric lamp shall be allowed or used, except by superintendents, shot lighters or other certified men, who may use such lamps as may be approved by the mine inspector.

When safety lamps to be used.

Whenever safety lamps are required in any mine they shall be the property of the owner of said mine, and a

Examination before use.

competent person who shall be appointed for that purpose shall examine every safety lamp immediately before it is taken into the workings for use and ascertain it to be clean, safe and securely locked; and safety lamps shall not be used until they have been examined and found safe, clean and securely locked.

Open lights.

SEC. 132. At mines where the danger from explosive gas requires the use of safety lamps, no open lights shall be used in that part or district of the mine where safety lamps are in use.

Penalty for tampering with lamps or using other lighting devices.

SEC. 133. In any mine where locked safety lamps are used, any person other than those authorized by this act, opening or tampering with one of said safety lamps, or found with matches or any lighting device other than safety lamps, shall be guilty of a misdemeanor and upon conviction thereof he shall be fined not less than fifty dollars (\$50.00) nor more than two hundred dollars (\$200.00), or imprisonment for a term of not more than one year: *Provided, however,* This shall not prohibit the use of any flame used in making repairs to any machinery or wires when such repairs are made on the intake air.

Penalty for failure to use safety lamps.

SEC. 134. For the violation of any provisions of section 131 and 132, the operator or employee of any mine shall be deemed guilty of a misdemeanor, and upon conviction thereof may be fined in any sum not less than fifty dollars (\$50.00) nor more than two hundred dollars (\$200.00), and in addition thereto the mine inspector shall have authority and it shall be his duty to close such mine until the provisions of this act shall be complied with.

Appeals to mining board.

SEC. 135. The operator of any mine may appeal to the mining board when in his judgment the order of the mine inspector to place a mine on safety lamps is unreasonable. The decision of the board shall be final.

Number required.

At every mine in this state the operator shall provide and maintain in condition for use, not less than four (4) approved safety lamps.

ARTICLE XIII.

SHAFT SINKING.

SEC. 136. Any shaft or other opening in process of opening or driving for the purpose of mining coal shall be subject to the inspection of the mine inspector.

Shaft driving to be inspected.

SEC. 137. Over every shaft that is being sunk, or that shall hereafter be sunk, there shall be a safe and substantial structure erected to support the sheaves or pulleys at a height of not less than twenty-five (25) feet above the tipping place. The landing platform of such shaft shall be so arranged that material cannot fall down the shaft while the bucket is being emptied or taken from the hoisting rope. If provisions are made to land the bucket on a truck, said truck and platform shall be so arranged that material cannot fall into the shaft.

Prevention of falling material.

SEC. 138. Rock or coal shall not be hoisted except in a bucket or on a cage when men are in the bottom of a shaft, and said bucket or cage must be connected to the hoisting rope by a safety hook or clevis or other safety attachment, and said bucket shall be so arranged that there will be no danger of its tipping over while the bucket is being hoisted or lowered. The rope shall be fastened to the side of the drum, and not less than three coils of rope shall always remain on the drum. In shafts over one hundred (100) feet in depth, such shafts shall be provided with guides and guide attachments applied in such manner as to prevent the bucket from swinging while descending or ascending, and such guide or guide attachments shall be maintained at a distance of not more than seventy-five (75) feet from the bottom of such shaft, until its sinking shall have been completed.

Hoisting methods.

SEC. 139. Whenever persons are employed on platforms in shafts the person in charge must see that said platforms are properly and safely constructed and secured.

Shaft platforms.

SEC. 140. Where the strata are not safe, every shaft level shall be securely cased, lined, or otherwise made se-

Shaft level to be made secure.

cure, and the person in charge shall see that all loose rock or other material on the sides of the shaft, or on the timber in the shaft, shall not be allowed to remain on said timber or sides of the shaft after each blast.

Examination
for gas.

SEC. 141. Where explosive gas is encountered in sinking shafts, the person in charge shall see that the shaft is examined before each shift of men enters to work and before the men descend after each blast. All blasts in shaft sinking shall be exploded by an electric battery placed on the surface.

Blasts ex-
ploded by
electric
battery.

Ventilation.

SEC. 142. Provision shall be made for the proper ventilation of shafts while they are being sunk.

Restriction
on riding
buckets.

SEC. 143. Not more than four (4) persons shall be hoisted or lowered in or on a bucket in a shaft at one time, and no person shall ride on a loaded bucket.

ARTICLE XIV.

RULES FOR THE INSTALLATION OF ELECTRICITY.

Compliance
with rules.

SEC. 144. The operator, superintendent, or mine foreman in charge of any coal mine in which electricity is used as a means of power, shall, within six (6) months after the passage of this act, comply with the following rules:

DEFINITIONS.

Electrical
terms
defined.

Potential: The terms "potential" and "voltage" are synonymous and mean electrical pressure.

Difference of Potential: The expression "difference of potential" means the difference of electrical pressure existing between any two points of an electrical system, or between any point of such system and the earth, as determined by a volt meter.

Potential of a Circuit: The potential or voltage of a circuit, machine, or any piece of electrical apparatus, is the potential normally existing between the conductors of such circuit or the terminals of such machine or apparatus.

(a) Where the conditions of the supply of electricity are such that the difference in potential between any points

of the circuit does not exceed three hundred (300) volts, the supply shall be deemed a low voltage supply.

(b) Where the conditions of the supply of electricity are such that the difference in the potential between any two points in the circuit may at any time exceed three hundred (300) volts, but does not exceed six hundred (600) volts, the supply shall be deemed a medium voltage supply.

(c) Where the conditions of the supply of electricity are such that the difference of potential between any two points in the circuit exceeds six hundred (600) volts, the supply shall be deemed a high voltage supply.

Grounding: Grounding any part of an electric system shall consist in so connecting such part to the earth that there shall be no difference of potential between them.

Underground Station: An underground station is herein considered as any place where electrical machinery is permanently installed.

SEC. 145. All metallic coverings, armoring of cables other than trailing cables, and, where installed underground, the frames and bed-plates of generators, transformers and motors, other than low voltage portable motors, shall be efficiently grounded, as shall also the neutral wire of three wire continuous current systems.

Necessary
grounding.

SEC. 146. No higher voltage than medium voltage shall be used underground, except for transmission or for application to transformers, or other apparatus, in which the whole of the high voltage circuit is stationary.

Voltage in
underground
workings.

In gaseous mines, high voltage transmission cables shall be installed in the intake airways only, and high voltage transformers shall be installed only in suitable chambers ventilated by the intake air which has not passed through or by a gaseous district.

All high voltage machines, apparatus, and lines shall be so marked as to clearly indicate that they are dangerous by the use of the word "danger" placed at frequent intervals.

Material
used in
switch-
boards.

SEC. 147. Switchboards: Main and distribution switch and fuse boards, underground, shall be made of incom-
bustible insulating material, such as marble or slate, free
from metallic veins, and be fixed in as dry a situation as
practicable.

Insulating
material.

SEC. 148. Precaution Against Shock: Gloves or mats
of rubber or other suitable insulating material shall be pro-
vided and used by persons so engaged when repairs are
made to the live parts of any electrical apparatus, or
when the live parts of electrical apparatus have to be
handled for the purpose of adjustment.

Interference
with
electrical
system.

SEC. 149. Any person who shall wilfully damage, or,
without authority, alter or make connection to any por-
tion of a mine electrical system, shall be guilty of a mis-
demeanor.

Defects to
be reported.

SEC. 150. Report of Defective Equipment: In the
event of a breakdown, or of damage or injury to any por-
tion of the electrical equipment of a mine, or of overheat-
ing, or of the appearance of sparks or arcs outside of en-
closing casings, or in the event of any portion of the
equipment, not a part of the electrical circuit, becoming
alive, every such occurrence shall be promptly reported to
the person in charge of the electrical equipment.

Installation
of equip-
ment.

SEC. 151. Underground Stations and Transformer
Rooms: Switchboards: All switches, circuit breakers,
rheostats, fuses and instruments used in connection with
underground motor-generators, rotary converters, high
voltage motors, transformers, and low and medium voltage
motors of more than fifty (50) horsepower capacity, shall
be installed upon a suitable switchboard, or its equivalent.
Similar equipment, for low and medium voltage motors of
fifty (50) horsepower and less, may be separately installed
if mounted upon installing bases of slate or equivalent in-
sulating material.

Passage-
ways at
switch-
boards.

In underground stations where switchboards are in-
stalled, there shall be a passageway in front of the switch-
board not less than five (5) feet in width, and if there are

any high voltage connections at the back of the switchboard, any passageway behind the switchboard shall not be less than three (3) feet clear.

Unauthorized Persons: No person other than one authorized by the mine foreman shall enter a station or transformer room, or interfere with the workings of any apparatus connected therewith.

Entrance denied unauthorized persons.

Fire Equipment: Fire equipment of an approved type shall be kept in electrical stations and transformer rooms, ready for immediate use in extinguishing fires.

Fire extinguishers.

SEC. 152. Transmission Circuits and Conductors: Power and Light Circuits: All high pressure wires used inside of the mines shall be in the form of insulated, lead covered or armored conductors, subject to insulation tests, and with carrying capacity according to the rules of the National Board of Fire Underwriters.

Insulation.

Medium or low pressure conductors may be bare, except in gaseous portions of the mines, where they may be used only on intake air. No bare conductors shall be used in rooms, or beyond the last cut-through in intake entries.

All underground cables and wires, other than trailing cables, unless provided with grounded or metallic covering, shall be supported by means of efficient insulators. Conductors connecting lamps to the power supply shall in all cases be insulated.

Main Circuits: Every main circuit coming from generating or transformer stations shall there be provided with switches, fuses or circuit breakers.

Circuit breakers.

In any gaseous mine, or gaseous portion of a mine, the electrical supply shall be brought underground only through such portions of the mine as are ventilated by the intake air, unless in lead incased cables.

Grounded Circuits: One side of the grounded circuits shall be very effectively insulated from earth.

Underground Trolley: In underground roads the trolley wires shall be securely supported on hangers placed at such intervals that the sag between points of support shall not exceed three inches. The sag between points of support

Trolley height and guards.

can exceed three inches if the height of the trolley wires above the rail is five (5) feet or more and does not touch the roof when the trolley passes under.

In underground haulage roads where the potential is higher than low voltage, all trolley or other bare power wires which are placed less than six and one-half (6½) feet above the top rail, shall be efficiently protected. This protection shall consist in placing boards along the wire, which shall extend below it, or the use of other approved devices that will afford the same protection: *Provided*, That this rule shall not apply to entries or gangways already driven where the height is less than five (5) feet above the lower rail.

All low pressure trolley wires must be guarded in front of loading chutes, slants, landings and partings where men are required to regularly work or pass under same.

Switches on
branch
trolleys.

All branch trolley lines shall be fitted with an automatic trolley switch or section insulator and line switch, or some other device that will allow the current to be shut off from such branch headings.

Conductor
joints.

Joints in Conductors: All joints in conductors shall be mechanically and electrically efficient, and wherever it is possible to do so, they shall be soldered. Wherever the conductors cannot be soldered together, suitable screw clamps or connectors shall be used. All joints in insulated wire shall, after the joint is complete, be re-insulated to at least the same extent as the remainder of the wire.

Where lead covered or armored cable is used, the lead or armor shall be electrically continuous throughout and shall be efficiently grounded.

Protection
of cable
ends.

Cables Entering Fittings: The exposed end of cables where they enter fittings of any description, shall be so protected and finished off that moisture cannot enter the cable, or the insulating material, if of an oily or viscous nature, leak.

Bushings.

Where unarmored cables or wires pass through metal frames, or into boxes or motor casings, the holes shall be substantially bushed with insulating bushings, and, where

necessary, with gas tight bushings which cannot readily become displaced.

Joints in Cables: Where cables other than signal cables are joined, suitable junction boxes shall be used, or the joints shall be soldered and the insulation, armoring, or lead covering replaced in at least as safe a condition as it was originally. Cable joints.

Power Wires and Cables in Shafts: All power wires and cables in hoisting shafts or manway compartments shall be highly insulated and substantially fixed in position. Cables and power wire insulation.

Cables and wires, unless provided with metallic coverings shall not be fixed to walls or timbers by means of insulated fastenings.

Trailing Cables: Trailing cables for portable machines shall be especially flexible, heavily insulated and protected with extra stout braiding, hose pipes or other equally effective covering. Trailing cables protected.

Each trailing cable in use shall be daily examined by the machine operator, for abrasions and other defects, and he shall also be required to carefully observe the trailing cable while in use, and shall at once report any defect to the person in charge of electrical equipment. Daily examination.

In gaseous portions of a mine a fixed terminal box shall be provided at the points where trailing cables are attached to the power supply. This terminal box shall be flame-proof and shall contain a switch and fuse on each pole of the circuit. The switch shall be so arranged that it can be operated only from without the box, when the latter is completely closed, and the switch shall also be so constructed that the trailing cables cannot be attached or removed when the switch is closed. Terminal box.

SEC. 153. Switches, Fuses and Circuit Breakers: Operation and Capacity: Fuses and automatic circuit breakers shall be so constructed as effectually to interrupt the current on short circuit, or when the current through them exceeds a predetermined value. Circuit breakers.

Circuit breakers shall be adjusted to trip at from fifty (50) per centum to one hundred and fifty (150) per centum

of their normal rated capacity, and provided with an indicator which shall show at what current the circuit breaker is set to trip.

Fuses. Fuses shall be stamped or marked, or shall have a label attached indicating the maximum current which they are intended to carry. Fuses shall only be adjusted or replaced by a competent person authorized by the mine foreman.

Breakers on feeder circuits. Feeder Circuit Breakers: Circuit breakers used to protect feeder circuits shall be set to trip when the current exceeds by more than fifty (50) per centum the current carrying capacity of the feeder. In case the feeder is subjected to overloads sufficient to trip the circuit breaker, but of short duration, the circuit breaker may be equipped with a device which shall prevent its acting unless the overload persists for a longer period than ten seconds.

Bases. Bases: All switches, circuit breakers and fuses shall have incombustible bases.

Switches. Switches: All points at which a circuit, other than a signal circuit, has to be made or broken, shall be provided with proper switches. The use of hooks or other make shifts is prohibited, except that connection for gathering locomotives, or locomotives and machines used in driving headings or rooms, may be made to the trolley by means of suitable hooks; switches shall be so installed that they cannot be closed by gravity. In any gaseous portions of a mine switches, circuit breakers or fuses shall not be of the open type, but must be enclosed in explosion proof castings, or break under oil.

Protection of stationary motors. SEC. 154. Stationary Motors: Every stationary motor underground, together with its starting resistance, shall be protected by a fuse or circuit breaking device on at least one pole for direct current, and all poles for alternating current motors, and by switches arranged to entirely cut off the power from the motor. The above devices shall be installed in a convenient position near the motor.

Motors in Gaseous Mines: In any gaseous portions of a mine, all motors, unless placed in such rooms as are sep-

arately ventilated with intake air, shall have all their current carrying parts, also their starters, terminals and connections, completely closed in explosion-proof enclosures made of non-inflammable materials. These enclosures shall not be opened except by an authorized person, and then only when the motor is switched off. The power shall not be switched on while the enclosures are open.

No coal-cutting machine shall be continued in operation in a gaseous portion of a mine for a longer period than half an hour without an examination being made for gas, and if the gas is found the current shall at once be switched off the machine, and the trailing cable shall be forthwith disconnected from the power supply.

Half hourly examination for gas.

The person finding gas shall at once report the fact to the fire boss or mine foreman, and the machine shall not again be started in such place until the fire boss, or a person duly authorized by the mine foreman has examined it and pronounced it safe.

Gas to be reported.

The person in charge of a coal cutter or drilling machine shall not leave the machine while it is working, and shall, before leaving the working place, see that the current is cut off from the trailing cables.

Coal cutting machines.

In any gaseous portion of a mine if any electric sparking or arc be produced outside of a coal-cutting or other portable motor, or by the cable or rails, the machine shall be stopped and not worked again until the defect is repaired, and the occurrence shall be reported to an official of the mine.

Stoppage for electric sparking.

SEC. 155. Electric Locomotives: Trolley System: Electric haulage by locomotives operated by a trolley wire is not permissible in any gaseous portions of a mine, except upon the intake air.

Use of electric locomotives.

In no case shall the potential used in the trolley system be higher than medium voltage. In mines opened after the passage of this act, or mines that are now operating where electricity is not used, when the power is not taken from a station now operating at a mine now operating, the potential shall not be higher than low voltage.

Enclosure
of storage
batteries.

Storage Battery System: Storage battery locomotives shall be used in gaseous mines only when the boxes containing the cells and all electrical parts are enclosed in flame-proof casings.

Incandescent
lamps.

SEC. 156. Incandescent Lamps: In all mines the sockets of fixed incandescent lamps shall be of the so called "weather-proof" type, the exterior of which shall be entirely non-metallic. Flexible lamp cord connections are prohibited.

Incandescent lamps shall not be used in gaseous mines, except under the conditions where trolley locomotives are allowable.

Electric
shot-firing.

SEC. 157. Shot-Firing by Electricity: Shot-Firing Circuits: Electricity from any grounded circuit shall not be used for firing shots.

When shot-firing cables or wires in the vicinity of power or lighting conductors, special precaution shall be taken to prevent the shot-firing cables or wires from coming in contact with the light, power or any other circuits.

Shot-Firers: Only competent persons who have been properly instructed and duly authorized by the mine foreman shall be allowed to fire shots electrically in any mine.

Electric Detonators: All electric detonators and leads thereto shall be suitable for the conditions under which the blasting is carried on, and shall be of a type approved by the testing station of the federal bureau of mines. Detonators shall be kept in a dry place and never stored with any other explosive.

Portable Firing Machines and Batteries: Portable shot-firing machines, sometimes called generators, shall be enclosed in a tightly constructed case when employed in any portion of the mine. All contacts, when made or broken, shall be within the case except that the binding posts for making connections to the firing leads may be outside.

No firing machine or battery shall be connected to the shot-firing leads until all other steps preparatory to the

firing of a shot have been completed, and all persons have moved to a place of safety, and no person other than the shot-firer shall make such connection.

Disconnecting of Leads: Immediately after the firing of a shot, the firing leads shall be disconnected from the supply or source of electricity, and no person shall approach a shot which has failed to explode until the firing leads have been so disconnected by the shot-firer from the device and an interval of five (5) minutes has elapsed since the last attempt to fire the shot.

Special Systems: The use of special electrical shot-firing systems, or equipment not covered by the foregoing, shall receive the approval of the testing station of the federal bureau of mines.

SEC. 158. Electric Signallings: Precautions: All proper precautions shall be taken to prevent electric signal and telephone wires from coming into contact with the other electric conductors, whether insulated or not. Signalling equipment.

Character of Equipment: Bells, wires, insulators, contact-makers, and other apparatus used in connection with electric signalling underground, shall be of suitable design, of substantial and reliable construction, and erected in such a manner as to reduce the liability of failure or false signals to a minimum.

Maximum Potential: In any gaseous portion of a mine, the potential used for signal purposes shall not exceed twenty-four (24) volts, and bare wires shall not be used for signal circuits except in haulage roads.

ARTICLE XV.

HOURS OF LABOR.

SEC. 159. It shall be unlawful for any person, firm or corporation operating any coal mine within the State of Washington, to cause any employee to remain at his place of work where the same is situated underground, for more than eight (8) hours, exclusive of one-half (1/2) hour for lunch, in any one calendar day of twenty-four (24) hours. Any person, firm or corporation, or agent Eight hour day.

Penalty for violation by employers.

of any person, firm or corporation, violating the provisions of this section, shall be guilty of a misdemeanor, and upon conviction shall be fined in any sum not less than ten dollars (\$10.00) nor more than one hundred dollars (\$100.00) for each offense.

Penalty for violation by workman.

SEC. 160. It shall be unlawful for any person in the employ of any person, firm or corporation operating any coal mine within the State of Washington, to wilfully remain at or in his working place, where the same shall be underground, to exceed eight (8) hours, exclusive of one-half (1/2) hour for lunch, in any one calendar day of twenty-four (24) hours. Any person violating the provisions of this section shall be guilty of a misdemeanor, and upon conviction shall be fined in any sum not less than five dollars (\$5.00) nor more than twenty dollars (\$20.00) for each offense.

Excepted class of employees.

SEC. 161. The provisions of sections 159 and 160 shall not apply to, or prohibit engineers, rope riders, motormen, cagers or others necessarily employed in transporting men in and out of the mine.

Necessary extra hours.

Provided, however, That all persons so employed shall not work more than ten (10) hours in any one calendar day: *And, provided further,* That this act shall not be construed to prohibit extra hours of employment underground necessitated by a weekly change of shift, or where rendered necessary by reason of making unavoidable repairs, or for the protection of human life.

Enforcement.

SEC. 162. It shall be the duty of the mine inspector to enforce the provisions of this article.

ARTICLE XVI.

GENERAL RULES.

Use and storage of oil and grease in mine.

SEC. 163. It shall be unlawful to oil or grease any cars inside of any mine, unless the place where said oil or grease is used is thoroughly cleaned at least once every day to prevent the accumulation of waste oil or grease on the roads or in the drains at that point. Not more than one barrel of lubricating oil shall be permitted in any

mine at one time, and it shall be kept in a fireproof building, cut out of solid rock, or made of masonry or concrete of sufficient thickness to insure safety in case of fire.

SEC. 164. No explosive oil shall be taken into or used in any mine for lighting purposes, except when used in safety lamps. Oil used for motor purposes shall be contained in metal tanks not to exceed ten (10) gallons, and if stored shall be put in a fireproof apartment, as provided in section 163 of this article.

Explosive oils.

SEC. 165. No boy under sixteen (16) years of age, and no girl or woman of any age, shall be employed or permitted to be in any mine for the purpose of employment therein. No boy under the age of fourteen (14) years, and no girl or woman of any age, shall be employed or permitted to be in or about the surface workings of any mine for the purpose of employment: *Provided*, That this prohibition shall not affect the employment of boys or girls or women for clerical or messenger duty about the surface workings, as permitted under the school laws.

Prohibiting employment of women and minors.

When an employer is in doubt as to the age of any boy applying for employment in or about the mine, he shall demand and receive proof of the age of such boy by certificate from the parents or guardian of such boy before he shall be employed. Said certificate shall consist of an affidavit, sworn and subscribed to before a justice of the peace or notary public, that he, the said boy, is of the prescribed age for employment.

Any person swearing falsely in regard to the age of a boy shall be guilty of perjury and shall be punished as provided in the statutes of the state.

Penalty for false swearing as to age.

SEC. 166. It shall be unlawful for any person except the mine officials, and in case of necessity such other person as may be designated by them, to pass beyond any danger signal, or to enter any place which has been reported dangerous on bulletin board, unless he be accompanied by a mine official. However, this does not apply to regular danger signals permanently posted above the mine.

Prohibiting entrance of danger zone.

Checking
miners en-
tering and
leaving
mine.

SEC. 167. No mine employee shall enter or leave a mine without indicating the fact of entering or leaving said mine by some suitable checking system provided by and under the control of the operator.

Permissive
entry of
mine.

SEC. 168. No unauthorized person shall enter the mine without permission from the superintendent or mine foreman.

Intoxicated
persons.

SEC. 169. No person shall go into or around a mine, the buildings or machinery connected therewith, while under the influence of intoxicants. No person shall use, carry, or have in his possession at, in, or around a mine, the buildings or the machinery connected therewith, any intoxicants. Any violation of this section will be a misdemeanor under this act.

Removing
pillars.

SEC. 170. No person shall be employed to mine out pillars unless in company with one or more miners.

Examination
of working
places.

SEC. 171. Every workman employed in the mine shall examine his working place before commencing work, and after any stoppage of work during the shift he shall repeat such examination.

Posting em-
ployees as to
mining rules.

SEC. 172. Every workman, when first employed, shall have his attention directed by the mine foreman, or his assistant, to the general and special rules contained in this act. Said rules shall be posted at a conspicuous place at or near the main entrance to the mine.

Warning
foreman of
unsafe
conditions.

SEC. 173. Employees shall notify the mine foreman, or the assistant mine foreman, of the unsafe condition of any working place, hauling roads or traveling ways, or of damage to doors, brattices or stoppings, or of obstructions in the air passages, when said conditions are known to them.

Prohibiting
traveling
slopes on
foot.

SEC. 174. No person shall be allowed to travel on foot to and from his work on any hoisting slope, inclined plane, or locomotive road, unless no other roads are provided for that purpose, and then only at such times as permitted by the mine foreman.

SEC. 175. No person shall ride upon or against any loaded car or cage in any shaft or slope in any mine. No person other than the trip rider shall be permitted to ride on empty trips on any slope, or inclined plane, except as provided for in other sections of this act.

Riding cars or cages.

SEC. 176. No person other than the driver or trip rider, shall be allowed to ride on the full car, except mine officials and repair men.

Riding full cars.

SEC. 177. Any person who shall deface, pull down, or destroy any notice board, danger signal, general or special rules, record books or mining laws, shall be prosecuted by the mine inspector on notice given by the superintendent, or obtained from other sources, as provided for in section 217 of article XVII of this act.

Penalty for destroying danger signs, etc.

SEC. 178. All persons are forbidden to meddle or tamper in any way with any electric or signal wires, or any other equipment in or about the mine.

Tampering with wires.

SEC. 179. No powder or high explosive shall be taken into the mine at any one time by any person in greater quantities than is required for use in one shift.

Quantity of explosive allowed in mine.

SEC. 180. No explosive shall be stored in any tippie or weighing office, and no naked lights shall be used while the attendant is weighing and giving out explosives.

Storing and handling explosives.

SEC. 181. Any person crowding or pushing to get on or off the cage or car shall be deemed guilty of a misdemeanor, and the mine inspector shall prosecute him in accordance with section 217 of article XVII of this act, when the matter is reported to him by the superintendent.

Penalty for crowding on or off cars.

SEC. 182. No safety lamp shall be entrusted to any person for use in a mine, until said person has given satisfactory evidence to the foreman that he understands the proper use thereof, and the danger of tampering with the same.

Entrusting safety lamps to workmen.

SEC. 183. No one, except a person duly authorized by this act, shall have in his possession a key or other instrument for the purpose of unlocking any safety lamp in any mine where locked safety lamps are used. Other

Possession of keys for unlocking safety lamps.

persons than those duly authorized by this act, having keys or other instruments for the opening of safety lamps, shall be prosecuted by the state mine inspector.

Brushing gas prohibited.

SEC. 184. Any accumulation of gas in a mine shall not be removed by brushing.

Gas ignited by blast.

SEC. 185. When gas is ignited by a blast, or otherwise, the person having charge of the place where the said gas is ignited, shall immediately extinguish it, if possible, and if unable to do so, he shall immediately notify the mine foreman, or the assistant mine foreman, of the fact. Miners must see that no gas blowers are left burning upon leaving their working places. It shall be the duty of the superintendent to notify the mine inspector of any violation of this rule, and the inspector shall then prosecute as provided for in section 217 of article XVII of this act.

Penalty for leaving gas blowers burning.

Warning of shot-firings.

SEC. 186. When a shot-firer is about to fire a blast where the miners are not present, he shall be careful to notify all persons who may be endangered thereby, and shall give sufficient alarm so that any person approaching may be warned of the danger.

SEC. 187. In driving crosscuts through pillars, before firing a blast, the miner must notify in person the workmen in the place toward which he is driving, so that they may find a place of safety. He shall also guard the passages on either side of his place at every shot, so that no person may come unawares upon it.

Care in handling explosives.

SEC. 188. Whenever a miner or shot-firer shall open a box containing powder or other explosives, or while in any manner handling the same, he shall first place his lamp, if open, not less than five (5) feet from such explosive and in such a position that the air current cannot convey sparks to the explosive, and he shall not smoke while handling explosives.

Tamping bars for blasting.

SEC. 189. In charging and tamping a hole for blasting, no person shall use any iron or steel needle. The tamping bar for high explosives shall be made of wood.

For black powder iron tamping bars must be tipped with copper at least five (5) inches in length.

SEC. 190. No explosive shall be forcibly pressed into a hole that is of insufficient size, and when a hole has been charged the explosive shall not be taken out, and no hole shall be bored for blasting at a distance of less than twelve (12) inches from any hole where the charge has misfired, and no hole for blasting shall be drilled more than six (6) feet deep.

Blasting holes.

SEC. 191. In gaseous or dusty mines, shot-firers or other persons charging holes for blasting, shall use incombustible material for tamping. All holes before being fired shall be solidly tamped the full length of the hole. Any person who violates this rule shall be guilty of a misdemeanor.

Tamping material in gaseous or dusty mines.

SEC. 192. Every abandoned slope, shaft, airhole or drift, shall, when so abandoned, be properly fenced around or across its whole entrance.

Fencing abandoned openings.

SEC. 193. No person shall go into an old or abandoned portion of any mine, or into any other place that is not in actual course of working, without permission from a mine official, and no person shall travel to and from his work except by the traveling way assigned for that purpose. It shall be the duty of the mine inspector to prosecute all persons who violate this rule, in accordance with section 217 of article XVII of this act.

Mines to be entered only by traveling way.

SEC. 194. Workmen and all other persons are expressly forbidden to commit any nuisance, or throw into, deposit or leave coal or dirt, stones or other rubbish in the airway or road to interfere with, pollute or hinder the air passing into and through the mine.

Nuisances in airways prohibited.

SEC. 195. In all shafts and slopes where persons, coal and other materials are hoisted by machinery, the code of signals shall be posted.

Posting signal code.

SEC. 196. No person shall carry any matches, pipes or other smokers' articles into a mine, or portion of a

Prohibition against smokers' articles.

mine worked with safety lamps, nor shall he have any of said articles in his possession while in such a mine.

Prompt
treatment
of injured.

SEC. 197. If any person shall receive any injury in or about the mine requiring surgical or medical treatment, and same is reported to the mine foreman, he shall see that said injured person receives such treatment immediately.

Penalty for
contravening
rules.

SEC. 198. Every person who contravenes or does not comply with any of the special or general rules in this act shall be deemed guilty of a misdemeanor.

Dead line
in shafts
or slopes.

SEC. 199. At the foot of any shaft or slope, or at any intermediate lift from which men and coal are regularly hoisted, the operator or superintendent or foreman shall designate a dead line beyond which men shall not pass in order to be hoisted out of the shaft or slope, until they are notified by the cager or foreman in charge of said place. Failure to recognize this rule shall be a misdemeanor under this act.

Rules to be
printed in
various
languages.

SEC. 200. Copies of these rules shall be printed in English, Slavic, Lithuanian, Polish, Italian, Croatian and Finnish, by the operator, and each workman in and around the mine shall procure a copy in the language he can read. If he cannot read any one of the languages as mentioned above, he must at his own expense, procure an interpreter to correctly interpret the rules to him. The workman will pay the operator twenty-five cents (25c) per copy for the rules, and if he returns the same to the operator in legible condition, the amount so paid by him shall be returned.

Identifying
checks of
miners.

SEC. 201. It shall be unlawful to change, exchange, substitute, alter or move any number or check or other device or sign used to indicate or identify the person or persons to whom credit or pay is due for the mining or loading of coal in any car or appliance containing the same; and it shall be unlawful for any person to place any number, check, device or sign upon any car or other appliance loaded by any other person in or about the mine. Any violation of this provision shall be deemed a misdemeanor under this act.

SEC. 202. The state mine inspector shall prosecute all violators of the mining law.

Prosecutions.

SEC. 203. All surface timber, brush and other inflammable material must be kept cleared for a distance of one hundred (100) feet on all sides of the air shafts and escapement ways: *Provided*, That this regulation shall not apply to a reasonable amount of cut timber kept on hand for immediate use underground.

Cleared space around air-shafts.

SEC. 204. (a) The operator of every coal mine where the miners are paid by the weight of their output, shall provide at such mine suitable and accurate scales for the weighing of such coal, and a correct record shall be kept of all coal so weighed, and each day's record shall be posted where it is open at all hours to the inspection of miners. Sufficient weights shall be furnished by the operator for the purpose of testing the accuracy of said scales: *Provided, however*, That where a check-weighman is employed the operator shall not be required to post each day's record.

Weighing coal and posting miner's record.

(b) The miners employed by or engaged in working at any coal mine in this state shall have the privilege, if they desire, of employing at their expense a check-weighman, who shall have like rights, powers and privileges in the weighing of coal as the regular weighman, and be subject to the same oath and penalties as the regular weighman. Said oath or affirmation shall be conspicuously posted in the weigh office.

Check-weighman.

(c) The weighman employed at any mine shall subscribe an oath or affirmation before a justice of the peace, or other officer authorized to administer oaths, in form as follows, to-wit:

Oath of weighman.

(Date).....

I,depose and say that I will do justice, as weighman, between the employer and employee, and weigh correctly the output of coal from the mine or mines, and keep an accurate record thereof, posting a daily

bulletin of such weights for the examination of the employee.

(Sign here)

Sworn to and subscribed before me, a on the day and date above written.

Penalty for false weighing or recording.

(d) Any weigher of coal, or any person so employed, who shall knowingly violate any of the provisions of this and the preceding section, shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than twenty-five dollars (\$25.00), nor more than one hundred dollars (\$100.00) for each offense, or by imprisonment in the county jail for a period not to exceed thirty (30) days, or by both such fine and imprisonment, proceedings to be instituted in any court having jurisdiction therein.

Returning to missed shots.

SEC. 205. No person shall return to a missed shot, if lighted with a squib, until twenty (20) minutes have elapsed from the time of lighting same, or, if lighted with a fuse, until eight (8) hours have elapsed; and no person shall return to a missed shot when the firing is done by electricity unless the wires are disconnected from the battery.

Penalty for receiving or offering bribe to procure employment.

SEC. 206. Any mine superintendent, mine foreman, or other person or persons who shall receive or solicit any sum of money or other valuable consideration, from any person for the purpose of continuing in his or their employ, or for the purpose of procuring employment, shall be guilty of a misdemeanor. Any person offering any mine superintendent, or mine foreman, any sum of money or any other valuable consideration as a bribe for the purpose of obtaining employment or retaining employment, shall be guilty of a misdemeanor, and in either case of superintendent, mine foreman, or other person, upon conviction they shall be subject to a fine of not less than fifty dollars (\$50.00), nor more than two hundred dollars (\$200.00), or by imprisonment in the county jail for a period not to exceed six (6) months, or by both such fine

and imprisonment, proceedings to be instituted in any court having jurisdiction thereof.

SEC. 207. The miner shall examine his working place before beginning work, and take down all dangerous slate, or otherwise make it safe by properly timbering it, before commencing to mine or load coal. He shall examine his place to see whether the fire boss has left the date marks indicating his examination thereof, and if said marks cannot be found it shall be the duty of the miner to notify the mine foreman, or the assistant mine foreman, of the fact immediately. The miner shall at all times be careful to keep his working place in a safe condition.

Miner to examine safety of working place.

Should he at any time find his place becoming dangerous from gas or from roof or from any unusual condition that may arise, he shall at once cease working and inform the mine foreman, or the assistant mine foreman, of said danger, but before leaving his place he shall put some plain warning across the entrance thereto to warn others against entering into danger.

After each blast he shall exercise care in examining the roof and coal, and shall secure them safely before beginning work.

He shall order all props, cap pieces, and all other timbers necessary at least one day in advance of needing them, or as provided for in the rules of the mine. If he fails to receive said timbers and finds his place unsafe, he shall vacate it until the necessary timbers are supplied.

The management of any mine may submit to the mine inspector, for his approval, uniform rules for timbering at mines where conditions may be favorable for same. If approved by the mine inspector, they will become part of the rules of said mine.

Rules for timbering.

Under no condition shall the miner use coal dust or other combustible material for tamping in any gaseous or dusty mines.

Tamping with coal dust.

When places are liable to generate sudden outbursts of explosive gas, no miner shall be allowed to charge or fire shots except under the supervision and with the con-

Firing shots under supervision.

sent of the mine foreman, or the assistant mine foreman, or some other competent person designated by the mine foreman for that purpose.

Miner not to leave working place.

The miner shall remain during working hours in the place assigned to him, and he shall not leave his working place without the consent of the mine foreman, assistant mine foreman, or fire boss, unless called upon to assist others, or in case of need. He shall not wander about the hauling roads or enter abandoned or idle workings.

Driver's duties.

SEC. 208. Duties of Driver: When a driver has occasion to leave his trip, he must be careful to see that it is left, when possible, in a safe place secure from cars and other dangers, and where it will not endanger the drivers of other trips or other persons.

He must take care while making his trip down grade to have the brakes or sprags so adjusted that he can keep the cars under control and prevent them from running over himself or others.

He shall not leave any cars standing where they may materially obstruct the ventilating current, except in case of accident, which he shall promptly report to the mine foreman, or assistant mine foreman.

He shall not allow any person to ride on loaded mine cars. He shall not allow any person to drive his horses or mules in his stead, unless authorized by a mine official. When it is his duty to open a door for the purpose of passing his trip through he shall see that the door is immediately closed thereafter.

Trip rider's duties.

SEC. 209. Duties of a Trip Rider: The trip rider shall exercise care in seeing that all hitchings are safe for use and that all the trip is coupled before starting, and should he at any time see any material defect in the rope, link or chain, he shall immediately remedy said defect, or, if he is unable to do so, he shall detain the trip and report the matter to the mine foreman or the assistant mine foreman. He shall not allow any person to ride on the loaded or empty trip, except as provided in article XVI, section 176.

SEC. 210. Duties of Hoisting Engineers: It shall be the duty of the engineer, who shall be a temperate competent person, to keep a careful watch over his engine and all machinery under his charge. He shall make himself acquainted with the signal codes provided for in this act, and by the special rules of the mine. Hoisting
engineers.

He shall not allow any unauthorized person to enter the engine house, nor shall he allow any person to handle or run the engine without the permission of the superintendent.

When workmen are being lowered or raised he shall take special precautions to keep the engine well under control.

SEC. 211. Duties of Motorman and Locomotive Engineer: The motorman or locomotive engineer shall keep a sharp lookout ahead, and sound the whistle or alarm bell frequently when coming near the parting switches or landings, and shall not exceed the limit allowed by the mine foreman. He shall see that the motors, cables and controlling parts are kept clean and in a safe operating condition, and that the headlight is burning properly when the locomotive is in motion. He shall not allow any person, except his attendant, or mine officials, to ride on the locomotive or motor. Engineers
and motor-
men.

SEC. 212. Duties of Firemen: Every fireman in charge of a boiler or boilers for the generation of steam shall keep a careful watch over same. He shall see that the steam pressure does not at any time exceed the limit allowed by the superintendent or master mechanic; he shall frequently try the safety valves, and shall not increase the weight on the same. He shall maintain a proper height of water in each boiler, and if anything should happen to prevent this he shall report it without delay to the superintendent or master mechanic, or other person designated by the superintendent, and take such other action as may under the circumstances be best for the protection of life and preservation of property. Firemen.

Fan opera-
tor's duties.

SEC. 213. The person in charge of the ventilating fan at a mine shall keep it running at such speed as the mine foreman shall direct in writing. He shall report promptly to the mine foreman, or assistant mine foreman, in case of accident to boiler or fan machinery. If only ordinary repairs to the fan or machinery become necessary, he shall await the instructions of the mine foreman or assistant mine foreman before stopping the fan. Should it become impossible to run the fan, or become necessary to stop it to prevent its destruction, he shall at once notify the superintendent or mine foreman, who shall give immediate warning to the persons in the mine.

Hooker-on's
duties.

SEC. 214. The hooker-on at the bottom of any slope shall be over eighteen years of age, and he shall be careful to see that the cars are properly coupled to a rope or chain, and to each other, and the safety device is properly attached to man trips, before signalling the engineer. He shall personally attend to the signals, and see that the provisions of this act in respect to hoisting and lowering persons in shafts or slopes are complied with.

Cager's
duties.

SEC. 215. Duties of Cager: The cager at the bottom of any shaft shall be over eighteen years of age. He shall not attempt to withdraw the car until the cage comes to a rest, and when putting the full car on the cage, he must be careful to see that the springs or catches are properly adjusted to keep the car in place before signalling the engineer. He shall personally attend the signals and see that the provisions of this act in respect to hoisting and lowering persons in shafts or slopes are complied with.

Shaft
topman's
duties.

SEC. 216. (a) The topman of a shaft shall not allow any tools to be placed on the same cage with persons, or on either cage when persons are being lowered into the mine, except for the purpose of repairing the shaft or the machinery therein. The men shall place their tools in cars provided for that purpose, which cars shall be lowered before or after the men have been lowered. He shall also see that no driver or other person descends the shaft with

any horse or mule, unless the said horse or mule is secured in a suitable box or safely penned, and only the driver in charge of said horse or mule shall accompany it in any cage. The topman of a shaft shall see that the springs or keeps for the cage to rest upon are kept in good working order, and when taking the full car off he must be careful that no coal or other material is allowed to fall down the shaft.

(b) The topman of a slope or inclined plane shall see that the safety device is closed at all times, except when cars or trips are passing, and in no case shall said safety device be withdrawn until the cars are coupled to the rope or chain and the proper signal given. He shall carefully inspect each day the rope and chain used for hoisting or lowering men or coal, and shall promptly report to the superintendent any defect discovered, and shall use care in attaching securely the cars to the rope. He shall ring the alarm bell in case of accident.

Slope
topman's
duties.

(c) It shall be the duty of all topmen to report to the superintendent any violation of section 188 of article XVI of this act.

(d) Nothing herein shall be construed to prevent the owner or operator of a coal mine from enforcing any rules or regulations now in effect, or that may be later adopted, which do not conflict with the provisions of this act.

Existing
rules.

ARTICLE XVII.

OFFENSES AND PENALTIES.

SEC. 217. Any miner, workman, or other person, who shall knowingly injure any water gauge, barometer, air course or brattice, or shall obstruct or throw open any airway, or shall handle or disturb any part of the machinery of the hoisting engine, or open a door in the mine and not have the same closed again, whereby danger is produced either to the mine or to those that work therein, or who shall enter into any part of the mine against caution, or who shall interfere with or intimidate any engineer, fireman, or other employee in or about such mine in

Interference
with appli-
ances or
employees.

the discharge of his duties or the performance of his labor, or who shall disobey any order given in pursuance of this act, or violate any of the provisions established by this act, for which the penalty is not otherwise provided, and who shall do any act whereby the lives and health of persons working in the mine, or the security of the mine or mines or the machinery thereof is endangered, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than two hundred dollars (\$200.00) nor less than fifty dollars (\$50.00), or by imprisonment in the county jail for a term not exceeding six months, or by both such fine and imprisonment, in the discretion of the court.

Penalty.

ARTICLE XVIII.

SEC. 218. All acts or parts of acts relating to coal mining in the State of Washington, or to the mine inspector of the State of Washington, be, and the same are hereby repealed.

Repealing clause.

SEC. 219. If it shall be adjudicated that any section or part of a section of this act shall be unconstitutional and invalid for any reason, an adjudication of invalidity of said section or part of a section shall not affect the validity of the act as a whole, or any part thereof.

Partial invalidity of act.

SEC. 220. Every operator of a mine affected by this act shall be given six (6) months after this act takes effect to make any necessary changes or secure any materials or supplies to comply with the provisions of this act.

Time allowed for conforming to act.

SEC. 221. No coal mine shall be considered a mine for the purpose of this act unless five men or more are employed underground on one shift, nor shall mines employing less than ten men be subject to the provisions of this act, except that the inspector of mines shall have the right to enter any of the places where men are at work within such prospect, and if the conditions therein are dangerous to life, the inspector may, and it shall be his duty to stop work on such prospect until such dangerous place is rendered safe, or the same be placed in control of

What constitutes coal mine.

Inspection of work on prospects.

a certified mine foreman: *Provided*, That all such operators of prospects and places herein in this section referred to shall make reports to the state mine inspector as are required to be made by other mines and mine operators under the provisions of this act.

Passed the Senate February 16, 1917.

Passed the House February 21, 1917.

Approved by the Governor March 2, 1917.

CHAPTER 37.

[S. B. 136.]

ALTERNATE JURORS IN CRIMINAL ACTIONS.

AN ACT relating to trials in criminal actions, and providing for the drawing, retaining and selection of alternate jurors, and providing when this act shall take effect.

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

SECTION 1. Whenever, in the opinion of a judge of a superior court about to try a defendant against whom has been filed any indictment or information for a felony, the trial is likely to be a protracted one, the court may cause an entry to that effect to be made in the minutes of the court, and thereupon, immediately after the jury is impaneled and sworn the court may direct the calling of one or two additional jurors, in its discretion, to be known as "alternate jurors." Such jurors must be drawn from the same source, and in the same manner, and of the same qualifications as the jurors already sworn, to be subject to the same examination and challenge: *Provided*, That the prosecution shall be entitled to one, and the defendant to two peremptory challenges to such alternate jurors. Such alternate jurors shall be seated near, with equal power and facilities for seeing and hearing the proceedings in the case, and shall take the same oath as the jurors already selected, and must attend at all times upon the trial of the cause in company with the other jurors; and

Additional
jurors
authorized.

Drawing
and qualifi-
cations.

Challenges.

Attendance
on trial.