

TRINIDAD AND TOBAGO.

Mines, Borings and Quarries.

No. 13.—1907.

27th February.

AN ORDINANCE to provide for the Regulation of Mines,
Borings and Quarries.

H. W. Jackson

Governor.

8th April, 1907.

BE it enacted by the Governor of Trinidad and Tobago with the advice and consent of the Legislative Council thereof as follows:—

1. This Ordinance may be cited as the Mines Regulation Short title. Ordinance 1907.

2. This Ordinance shall come into operation upon a date Commence- to be fixed by the Governor by Proclamation to be published ment. in the *Royal Gazette*.

3. This Ordinance shall apply to all mines, borings and Application. quarries in the Colony.

4.—(1.) Every mine, boring or quarry shall be under Manager of a manager, who shall be responsible for the control, manage- Mine. ment and direction thereof; and the owner or agent of every mine, boring or quarry shall nominate himself or some other person to be the manager thereof and shall send written notice to the Inspector of Mines of the manager's name and address.

Manager to be
certificated.

5.—(1.) In the case of a mine as herein defined, a person shall not be qualified to be a manager of a mine unless he is for the time being registered as the holder of a certificate of competency as manager under this Ordinance.

Exemption.

(2.) A mine in which not more than 20 persons are employed below ground shall be exempt from the provisions of this section, unless the Inspector of Mines by notice in writing served on the owner or agent of the mine, requires that it be under the control of a certificated manager.

Personal
supervision.

6. In every mine required by this Ordinance to be under the control of a certificated manager, daily personal supervision shall be exercised by the manager or by a competent person nominated in writing by the owner, agent or manager: but such nomination shall not affect the personal responsibility of the manager under this Ordinance. In all cases notice of the nomination of such competent person shall be sent to the Inspector of Mines. In this section the term 'competent person' means a person who has been employed as undermanager or foreman in a mine for not less than six months.

Contractor not
to be manager.

7. A contractor for mineral, or person employed by such a contractor, shall not be eligible for the post of certificated manager, or to be nominated to act for the manager under Section 6 hereof.

Issue of
manager's
certificate.

8.—(1.) A certificate of competency as manager shall be issued only to a person who has been certified to be practically conversant with the working and ventilation of a mine by a Board composed of the Inspector of Mines and two persons appointed by the Governor, and hereinafter called "the Board." Such certificate shall be signed by the Inspector and the members for the time being of the Board.

(2.) A first-class certificate of competency as a manager of a mine granted in England under the Coal Mines Regulation Act 1887 shall be deemed to be a certificate under this Ordinance.

Cancellation
or suspension
of certificate.

9. The Board shall have power to cancel or suspend the certificate of the manager if it finds that he is by reason of incompetency or gross negligence or of his having been

convicted of an offence under this Ordinance unfit to discharge his duties, and may require such manager, if deemed unfit, to deliver up his certificate; and if any manager fails without sufficient cause to comply with such requisition he shall be liable to a fine of Fifty Pounds.

Where a certificate of a manager is cancelled or suspended in pursuance of this Ordinance, the cancellation or suspension shall be recorded in the register of holders of certificates.

10. The Board may at any time renew or restore on such terms as it thinks fit any certificate which has been cancelled or suspended in pursuance of this Ordinance, and cause the renewal or restoration to be recorded in the register aforesaid. Restoration of certificate.

11. Where any person proves to the satisfaction of the Board that he has without fault on his part lost or been deprived of any certificate granted to him under this Ordinance, the Board shall on payment of such fee if any as may be directed, but not exceeding five shillings, cause a copy of the certificate to which the applicant appears by the register to be entitled to be made out and certified by the person who keeps the register and delivered to the applicant, and any copy which purports to be so made and certified as aforesaid shall have all the effect of the original certificate. Issue of copy of certificate.

12. Every person who commits any of the following offences, that is to say:— Offences in regard to certificates.

- (1.) Forges, or counterfeits, or knowingly makes any false statement in any certificate of competency granted under this Ordinance or any official copy of any such certificate; or
- (2.) Knowingly utters or uses any such certificate or copy which has been forged or counterfeited or contains any false statement; or
- (3.) For the purpose of obtaining, for himself or any other person, employment as a certificated manager, or the grant renewal or restoration of any certificate under this Ordinance, or a copy thereof, either
 - (a.) Makes or gives any declaration, representation, statement or evidence which is false in any particular, or

- (b.) Knowingly utters, produces, or makes use of any such declaration, representation, statement or evidence or any document containing the same,

shall be guilty of a misdemeanour, and be liable on conviction to imprisonment for a term not exceeding two years, with or without hard labour.

Examination
for certificates.

13. The Board shall examine the applicants for certificates of competency, and in such examination regard shall be had to such knowledge as is necessary for the practical working of mines.

A fee of £1 shall be paid by each person making application for a certificate.

A register of the holders of such certificates shall be kept by the Inspector of mines.

Shafts and
outlets.

14. The owner, agent or manager shall not employ any person in a mine, or permit any person to be in a mine for the purpose of employment therein, unless the following conditions respecting shafts and outlets be complied with, that is to say :—

- (a.) There must be at least two shafts or outlets with which every seam or deposit for the time being at work in the mine shall have a communication, so that such shafts or outlets shall afford separate means of ingress or egress available to the persons employed in every such seam or deposit, whether the shafts or outlets belong to the same mine or to more than one mine.
- (b.) Proper means for obtaining ingress or egress for persons at each shaft or outlet shall be kept on the works belonging to a mine, and such means if not in actual use at the shafts or outlets shall be constantly available for use.

Every owner, agent, or manager of a mine who acts in contravention of or fails to comply with this section shall be guilty of an offence against this Ordinance.

Exemptions as
to shafts,

15. The foregoing provisions with respect to shafts or outlets shall not apply :—

- (1.) in the case of a new mine being opened
- (a.) To any working for the purpose of making a communication between two or more shafts; or
 - (b.) To any working for the purpose of searching for or proving minerals, provided that not more than twenty persons are employed underground at one time.

(2.) In the case of any mine in which exemption by order of the Governor in Executive Council has been granted and providing that the conditions (if any) annexed to the order of exemption are duly observed.

16.—(1.) The owner, agent or manager of every mine shall keep in the office of the mine an accurate plan of the workings of the mine, showing workings up to a date not more than three months previously, and the general direction and rate of dip of the strata sunk through, or if that be not reasonably practicable, a statement of the depth of the shaft, with a section of the seam or deposit; such plan not to be of a scale less than 25 inches to the mile. Plan of mine.

(2.) The owner, agent or manager of every boring shall keep in the office of the boring, an accurate log of the working of the boring, showing the depth of the boring, the various strata bored through, and the quantity of oil or other mineral extracted. Log of borings.

(3.) The owner, agent or manager of the mine or boring shall on request at any time of the Inspector of Mines or any person duly appointed in writing by the Governor produce to him at the office of the mine or boring, such plan, section or log, and the said Inspector or person shall be entitled to examine the same and for official purposes only and not for publication without the consent of the owner, agent or manager, to make a copy of any part thereof respectively.

(4.) If the owner, agent or manager of any mine or boring fails to keep, or wilfully refuses to produce or allow to be examined, the plan, section or log aforesaid, or wilfully withholds any portion thereof, or wilfully refuses, on request, to mark thereon the state of the workings, or conceals any part of those workings, or produces an imperfect or inaccurate plan, section or log, he shall (unless he shows that he was ignorant of the concealment, imperfection or inaccuracy) be guilty of an offence against this Ordinance; Penalty for not keeping plan, log, etc.

further, the Inspector of Mines may by notice in writing (whether a penalty for the offence has or has not been inflicted) require the owner, agent or manager of a mine to cause an accurate plan and section, showing the particulars hereinbefore required, to be made within a reasonable time at the expense of the owner of the mine. Every such plan must be on a scale of not less than twenty-five inches to the mile.

Plan of
abandoned
mine or seam.

17. Where any mine or seam is abandoned, the owner of the mine or seam at the time of its abandonment shall, within three months after the abandonment, send to the Inspector of Mines an accurate plan showing the boundaries of the workings of the mine or seam up to the time of the abandonment, and the position of the workings with regard to the surfaces, and the general direction and rate of dip of the strata, together with a section of the strata sunk through, or if that is not reasonably practicable, a statement of the depth of the shaft, with a section of the seam. Every such plan must be on a scale of not less than twenty-five inches to the mile. A mine which has ceased to be worked for a period of twelve months or more shall be deemed to have been abandoned.

Return by
owner, agent
or manager.

18.—(1.) On or before the 21st day of January in every year the owner, agent or manager of every mine, boring or quarry shall send to the Inspector of Mines on behalf of the Governor a correct return, specifying with respect to the year ending on the preceding 31st day of December, the amount of slate, stone, coprolites, asphalt, petroleum oil or other minerals gotten and the average number of persons employed by him during the year.

(2.) Forms for the purpose of the returns required by this section shall from time to time on application be furnished by the Inspector of Mines.

(3.) The Governor may publish the aggregate result of the returns under this section, and no individual return relating to the quantity of mineral gotten shall be published without the consent of the person making the return, and no person except an Inspector of Mines or person duly appointed by the Governor shall be entitled without such consent to see any such individual return.

(4.) Every owner agent or manager who fails to comply with this section or makes any return which is to his knowledge false in any particular shall be guilty of an offence against this Ordinance.

19. (1.)—Where in or about any mine, boring or quarry whether above or below ground, either— Notice of accidents to be given.

- (i.) Loss of life or any personal injury whatever to any person employed occurs by reason of any explosion of gas or of any explosive material, or of any steam boiler or by reason of any outbreak of fire ; or
- (ii.) Loss of life or any fracture of head or limbs, any dislocation of limbs, or any other serious personal injury to any person employed in or about the mine, boring or quarry occurs by reason of any accident whatever,

the owner, agent or manager shall, within twenty-four hours next after the explosion or accident, send notice in writing of the explosion or accident and of the loss of life or personal injury occasioned thereby to the Inspector of Mines, and shall specify in the notice the character of the explosion or accident and the number of persons killed or injured respectively.

(2.)—Where loss of life or serious personal injury has immediately resulted from an explosion or accident, the place where the explosion or accident occurred shall be left as it was immediately after the explosion or accident, until the expiration of at least six days after the sending of such notice as aforesaid of such explosion or accident, or until the visiting of the place by an Inspector of Mines, whichever first happens, unless compliance with this enactment would tend to increase or continue a danger or would impede the working thereof.

(3.)—Where any personal injury, of which notice is required to be sent under this section, results in the death of the person injured, notice in writing of the death shall be sent to the Inspector of Mines on behalf of the Governor within twenty-four hours after such death comes to the knowledge of the owner, agent or manager.

(4.) Every person receiving any injury shall (if able) report the same to the official for the time being in charge before leaving the mine, boring or quarry.

(5.) Every owner, agent, manager or person who fails to act in compliance with this section shall be guilty of an offence against this Ordinance.

Notice of
opening and
abandonment.

20. In any of the following cases, namely,

- (i.) Where any working is commenced for the purpose of opening a new shaft for or a seam of any mine, boring or quarry.
- (ii.) Where a shaft, boring or quarry or seam of any mine is abandoned or the working thereof discontinued ;
- (iii.) Where the working of a shaft, boring or quarry or a seam of any mine is re-commenced after any abandonment or discontinuance for a period exceeding two months ; or
- (iv.) Where any change occurs in the name of any mine, boring or quarry, or in the name of the owner, agent or manager thereof to which this Ordinance applies, or in the principal officers of any incorporated company which is the owner thereof ;

the owner agent or manager shall give notice thereof to the Inspector of Mines within one month after the commencement abandonment discontinuance re-commencement or change, and if such notice is not given the owner agent or manager shall be guilty of an offence against this Ordinance.

Appointment
of Inspector
and Assistants.

21. A Mining Engineer may be from time to time appointed to carry out the provisions of this Ordinance, at such salary as the Governor with the consent of the Legislative Council may from time to time appoint. Such Engineer, who is herein referred to as "the Inspector of Mines," shall be assisted by such officers at such remuneration as the Governor may with like consent from time to time appoint.

Powers of
Inspector.

22. An Inspector under this Ordinance shall have power to do all or any of the following things ; namely

- (i.) To make such examination and inquiry as may be necessary to ascertain whether the provisions of this Ordinance and the Regulations for the time being in force thereunder relating to matters above ground or below ground are complied with ;
- (ii.) To enter inspect and examine any mine, boring or quarry and every part thereof, at all reasonable times by day and night, but so as not to impede or obstruct the working thereof ;
- (iii.) To examine into and make inquiry respecting the state and condition of any mine, boring or quarry or any part thereof, and the sufficiency of the regulations for the time being in force, and all matters and things connected with or relating to the safety of the persons employed in or about the mine, boring or quarry or any mine, boring or quarry contiguous thereto ;
- (iv.) To exercise such other powers as may be necessary for carrying this Ordinance and the Regulations for the time being in force thereunder into effect ;
- (v.) To delegate any of the powers exercisable by him under this Ordinance to assistants duly appointed hereunder.

Every person who wilfully obstructs any Inspector or Assistant in the execution of his duty under this Ordinance, and every owner agent and manager who refuses or neglects to furnish to the Inspector or Assistant the means necessary for making any entry inspection examination or inquiry under this Ordinance, in relation to the mine, boring or quarry shall be guilty of an offence against this Ordinance.

23.—(1.) If in any respect an Inspector finds any mine boring or quarry or any part thereof or any matter, thing or practice in or connected with any such mine, boring or quarry to be dangerous or defective so as in his opinion to threaten or tend to the bodily injury of any person, he may give notice in writing thereof to the owner, agent or manager, and shall state in the notice the particulars in which he considers the mine, boring or quarry or any part thereof or any matter thing or practice

Notice by
Inspector of
causes of
danger.

to be dangerous or defective, and require the same to be remedied, and unless the same be forthwith remedied shall report the same to the Governor.

(2.) If the owner agent or manager object to remedy the matter complained of in the notice, he may within 7 days after the receipt of the notice, send his objection in writing stating the grounds thereof, to the Governor, and thereupon the matter shall be determined by the Governor in Executive Council.

(3.) If the owner agent or manager fails, when no objection is sent as aforesaid, to comply with the requisition of the notice within 7 days after the expiration of the time for objection, or when there has been an order to comply with the decision of the Governor in Executive Council, he shall be guilty of an offence against this Ordinance.

Coroner's
Inquest.

24.—(1.) Where a Coroner holds an inquest in respect of any person whose death may have been caused by any explosion or accident, of which notice is required by this Ordinance to be given to the Inspector of Mines, the Coroner shall adjourn the inquest unless the Inspector of Mines or some person on behalf of the Crown is present to watch the proceedings.

(2.) The Coroner shall give the Inspector of Mines notice in writing at least 48 hours before the holding of such inquest and at least four days before holding the adjourned inquest.

(3.) The Inspector of Mines shall be at liberty at any such inquest to examine any witness, subject nevertheless to the order of the Coroner.

(4.) Any relative of any person whose death may have been caused by the explosion or accident with respect to which the inquest is being held, and the owner, agent or manager of the mine, boring or quarry in which the explosion or accident occurred, and any person appointed by the order in writing of the workmen employed at the said mine, boring or quarry shall be at liberty to attend and examine any witness, either in person or by his counsel, solicitor or agent, subject nevertheless to the order of the coroner.

(5.) When evidence is given at an inquest at which the Inspector of Mines is not present of any neglect as

having caused or contributed to the explosion or accident, or of any defect in or about the mine, boring or quarry appearing to the Coroner to require a remedy—the Coroner shall send to the Inspector of Mines notice in writing of such neglect or defect.

25.—(1.) It shall be lawful for the Governor in Executive Council to make Regulations for the safe working and regulation of mines, borings and quarries, and when made, to revoke or amend such Regulations. ^{Regulations.}

(2.) The Regulations in the Schedule hereto shall be deemed to be regulations made under this section, and shall come into operation at the commencement of this Ordinance. The said regulations may from time to time be amended or revoked by further regulations to be made under sub-section (1) hereof.

(3.) A draft of all regulations intended to be made under Sub-section (1) hereof shall be published for three weeks in the *Royal Gazette* and one daily newspaper; and all such regulations when made shall be laid before the Legislative Council at least thirty days before the time at which the same are to come into operation, and may be sanctioned or disallowed by vote of such Council in whole or in part, but shall not be amended except by permission of the Governor, and so far as not disallowed shall come into force on the day therein fixed or on any subsequent day approved by the Governor in Legislative Council in that behalf.

26. All Regulations made under sub-section (1) of Section 25 hereof shall on coming into force be published in the *Royal Gazette*, and production of a copy of the *Royal Gazette* purporting to contain a copy of any such regulations shall be sufficient evidence of the tenor, due making and approval of such regulations. ^{Publication and evidence.}

27. Every person who contravenes or does not comply with this Ordinance and the Regulations in the Schedule hereto or any regulations hereafter to be made under this Ordinance, shall be guilty of an offence against this Ordinance, and in the event of any contravention or non-compliance by any person whomsoever, the owner, agent and manager shall each be guilty of an offence against this Ordinance unless he proves ^{Breach of regulations}

that he had taken all reasonable means, by publishing and to the best of his power enforcing the said regulations as regulations for the working of the mine, boring or quarry to prevent such contravention or non-compliance.

Posting up regulations.

28. The regulations in the Schedule hereto and all further regulations made under the provisions of this Ordinance shall be posted up in legible characters in some conspicuous place at or near the mine, boring or quarry where they may be read by the persons employed, and when obliterated or defaced shall be renewed. Every person who pulls down, injures or defaces any regulation when posted up in pursuance of the provisions of this Ordinance, shall be guilty of an offence against this Ordinance.

Defacing regulations.

Person other than owner committing offence.

29. Every person employed in or about a mine, boring or quarry other than an owner, agent or manager, who is guilty of any act or omission which in the case of an owner agent or manager would be an offence against this Ordinance shall be deemed to be guilty of an offence against this Ordinance.

Penalties for offences.

30. Every person who is guilty of an offence against this Ordinance for which a penalty is not expressly prescribed shall be liable to a fine not exceeding, if he is an owner agent or manager, Twenty Pounds, and if he is any other person, Two Pounds for each offence; and if the Inspector of Mines has given written notice of any such offence, to a further sum not exceeding One Pound for every day after such notice that such offence continues to be committed.

Penalty for wilfully endangering life or limb.

31. Where a person who is an owner agent or manager of or a person employed in or about a mine, boring or quarry is guilty of any offence against this Ordinance, which in the opinion of the Court that tries the case is one which was reasonably calculated to endanger the safety of the persons employed, or to cause serious personal injury to any such persons, or to cause a dangerous accident, and was committed wilfully by the personal act personal default or personal negligence of the person accused, such person shall be liable, if the Court is of opinion that a fine will not meet the circumstances of the case, to imprisonment with or without hard labour for a period not exceeding three months.

32. All offences under this Ordinance not declared to be Procedure. misdemeanours, and all fines under this Ordinance and all money and costs by this Ordinance directed to be recovered as fines may be prosecuted and recovered in manner directed by the Summary Conviction Offences (Procedure) Ordinance (No. 1.)

33.—(1.) Any complaint or information made or laid in Procedure. pursuance of this Ordinance shall (save as otherwise expressly provided by this Ordinance) be made or laid within three months from the time when the matter of the complaint or information arose.

(2.) Any person charged with any offence under this Ordinance may if he thinks fit be sworn and examined as an ordinary witness in the case.

(3.) The Court shall if required by either party cause minutes of the evidence to be taken and preserved.

34. No prosecution shall be instituted against the owner Protection of agent or manager of a mine, boring or quarry for any owner, agent, offence under this Ordinance not committed personally by manager and such owner agent or manager, which can be prosecuted before Coroner. a Court of summary jurisdiction, except by the Inspector of Mines or with the consent in writing of the Governor; and in the case of any offence of which the owner agent or manager is not guilty, if he proves that he had taken all reasonable means to prevent the commission thereof, the Inspector of Mines shall not institute any prosecution against such owner agent or manager, if satisfied that he had taken such reasonable means as aforesaid. No prosecution shall be instituted against a Coroner for any offence under this Ordinance except with the consent in writing of the Governor.

35. The Inspector of Mines shall in each year make a Annual report report to the Governor of his proceedings during the by Inspector. preceding year, which report shall be laid before the Legislative Council.

36. In this Ordinance, and in the regulations in the Interpretation schedule hereto and in all further regulations made under of terms. this Ordinance, unless the context otherwise requires:—

“Mine” includes every shaft in the course of being sunk, and every level and inclined plane in the course of being driven, and all the shafts, levels, planes, works, tramways and sidings, both below ground and above ground, in and adjacent to and belonging to the mine.

“Shaft” includes pit.

“Boring” includes every borehole in the course of being made, and all borings from which petroleum oil, brine, water, or other mineral substances, are extracted, and all works, tramways and sidings connected with, adjacent to, and belonging to the boring.

“Quarry” includes every place (not being a mine) in which persons work in getting slate, stone, coprolites, asphalt, or other minerals, and all the works, tramways and sidings in and adjacent to and belonging to the quarry.

“Owner” when used in relation to any mine, boring or quarry means any person or body corporate who is the immediate proprietor or lessee or occupier of any mine, boring or quarry or of any part thereof, and does not include a person or body corporate who merely receives a royalty, rent or fine or is merely the proprietor subject to any lease, grant or license for the working thereof, or is merely the owner of the soil, and not interested in the minerals thereunder; but any contractor for the working of any mine, boring or quarry or any part thereof shall be subject to this Ordinance in like manner as if he were an owner, but so as not to exempt the owner from any liability.

“Agent” when used in relation to any mine, boring or quarry means any person appointed as the representative of the owner in respect of any mine, boring or quarry or of any part thereof, and as such superior to a manager appointed in pursuance of this Ordinance.

“Plan” includes a correct copy or tracing of any original plan.

Passed in Council this Twenty-seventh day of February in the year of Our Lord one thousand nine hundred and seven.

Alfred Gault.

Acting Clerk of the Council.

 SCHEDULE.

 MINE REGULATIONS.

The following Regulations shall be observed so far as is reasonably practicable, at every mine.

1.—An adequate amount of ventilation shall be constantly produced in every mine to dilute and render harmless noxious gases to such an extent that the working places of the shafts, levels and workings of the mine and the travelling roads to and from these places shall be in a fit state for working and passing therein. Ventilation.

In mines where safety lamps are required to be used, or when the Inspector of Mines may direct, the quantity of air shall at least once in every month be measured and entered in a book to be kept for the purpose at the mine.

2.—A competent person or competent persons appointed by the Manager for the purpose, not being contractors for getting minerals in the mine, shall, within one hour before the commencement of each shift, and in addition once during each shift, inspect every part of the mine in which workmen are to work or pass during the shift, and shall ascertain the condition thereof, so far as the presence of gas, ventilation, roof and sides and general safety are concerned. Inspection before commencing work.

No workmen shall be allowed into the mine until it has first been examined and stated to be safe by such competent person.

The inspection shall be made with a locked safety lamp, except in the case of any mine in which inflammable gas has not been found within the preceding twelve months.

A report of each inspection specifying where noxious or inflammable gas (if any) was found present and what defects (if any) in roof or sides and what (if any) other source of danger were or was observed, shall be recorded without delay in a book to be kept at the mine for the purpose, and accessible to the workmen, and such report shall be signed by, and so far as the same does not consist of printed matter shall be in the handwriting of the person who made the inspection.

Inspection of
machinery.

3.—A competent person or competent persons appointed by the owner agent or manager for the purpose, shall, once at least in every twenty-four hours, examine the state of external parts of the machinery, the state of the guides and conductors in the shafts, and the state of the head gear, ropes, chains, and other similar appliances of the mine which are in actual use both above ground and below ground, and shall once at least in every week examine the state of the shafts by which persons ascend or descend; and shall make a true report of the result of such examination; and every such report shall be recorded without delay in a book to be kept at the mine for the purpose, and shall be signed by the person who made the inspection.

Fencing of
entrances.

4.—Every entrance to any place which is not in actual use or course of working or extension shall be properly fenced across the whole width of the entrance, so as to prevent persons inadvertently entering the same.

Withdrawal of
workmen in
case of danger.

5.—If at any time it is found by the person for the time being in charge of the mine or any part thereof, that by reason of inflammable gases prevailing in the mine or in that part thereof, or of any cause whatever, the mine or that part is dangerous, every workman shall be withdrawn from the mine or part so found dangerous, and a competent person appointed for the purpose shall inspect the mine or part so found dangerous, and if the danger arises from inflammable gas shall inspect the mine or part with a locked safety lamp; and in every case shall make a true report of the condition of the mine or part; and a workman shall not except in so far as is necessary for inquiring into the cause of danger or for the removal thereof, or for exploration, be readmitted into the mine, or part so found dangerous, until the same is stated by the person appointed as aforesaid not to be dangerous. Every such report shall be recorded in a book which shall be kept at the mine for the purpose, and shall be signed by the person who made the inspection.

Use of safety
lamps.

6.—No lamp or light other than a locked safety lamp of approved type shall be allowed or used:—

- (a.) In any mine in which there is likely to be any such quantity of inflammable gas as to render the use of naked lights dangerous;

(b.) In any mine approaching a place in which there is likely to be an accumulation of inflammable gas.

(c.) In any mine in which an explosion of gas has caused any personal injury.

7.—In any mine in which safety lamps are required Safety lamps.
to be used :

(1.) A competent person appointed by the owner, agent or manager for the purpose, shall at the surface examine every safety lamp immediately before it is taken into the workings for use, and ascertain it to be in safe working order and securely locked, and such lamps shall not be used until they have been so examined and found in safe working order and securely locked.

(2.) A safety lamp shall not be unlocked in the mine, except with special permit from the Inspector.

(3.) A person shall not have in his possession any lucifer match or apparatus of any kind for striking a light, nor shall he have in his possession any contrivance for opening the lock of any safety lamp, nor shall he have in his possession any pipe or tobacco or smoking appliance.

8.—No explosive substance shall be used in a mine Use of explosives.
below ground in which the use of a locked safety lamp is required, or which is considered dangerous by nature of its dry and dusty condition, unless a license permitting its use be obtained from the Inspector of Mines.

Any explosive substance shall only be used in the mine below ground as follows :—

(1.) It shall not be stored in the mine and it shall not be taken into the mine, except in cartridges in a secure case or canister containing not more than five pounds.

(2.) In the process of charging or stemming for blasting, a person shall not use or have in his possession any iron or steel pricker, scraper, charger, tamping rod or stemmer.

(3.) No explosive shall be forcibly pressed into a hole of insufficient size, and when a hole has

been charged, the explosive shall not be unrammed, and no hole shall be bored for a charge at a distance of less than 12 inches from any hole where the charge has missed fire.

- (4.) All such precautions shall be taken and directions followed as may from time to time be directed by the Inspector of Mines.

Fencing and securing of shafts.

9.—The top and all entrances between the top and bottom of every shaft shall be properly fenced.

When the natural strata are not safe, every working shaft shall be securely cased, lined or otherwise made secure.

Securing roofs and sides.

10.—The roof and sides of every travelling road and working place shall be made secure, and a person shall not, unless appointed for the purpose of exploring or repairing, travel or work in any such travelling road or working place which is not so made secure.

Signalling for working shaft.

11.—Every working shaft in which persons are raised or lowered shall, if exceeding 30 yards in depth, be provided with guides and some proper means of communicating distinct and definite signals from the bottom of the shaft and from every entrance for the time being at work between the surface and the bottom of the shaft to the surface, and from the surface to the bottom of the shaft and to every entrance for the time being at work between the surface and the bottom of the shaft.

Brake and indicator. Fencing machinery.

12.—There shall be attached to every machine worked by steam or mechanical power and used for lowering and raising persons, an adequate break and a proper indicator (in addition to any marks on the rope), showing to the person who works the machine the position of the cage or bucket in the shaft.

If the drum is not on the crank shaft, there shall be an adequate break on the drum shaft.

Every fly wheel and all exposed and dangerous parts of the machinery used in and about the mine shall be kept securely fenced.

Ladders.

13.—A ladder permanently used for the ascent and descent of persons in the mine shall not be inclined at an angle of less than 10° from the vertical or in an over-

hanging position, and every such ladder shall have substantial platforms at intervals of not more than twenty yards. All ladderways so used shall be securely partitioned off from the winding compartment.

14.—Every steam boiler, whether separate or one Steamboilers. of a range, shall have attached to it a proper safety valve, and also a proper steam gauge and water gauge, to show respectively the pressure of steam, and the height of water in each boiler; and every steam boiler shall be cleaned out and examined internally by a competent person at least once in every 3 months and oftener if necessary, and shall be examined externally and internally by a competent engineer at least once in every 12 months. The result of all such examinations shall be recorded and signed by the person making them without delay, in a book to be kept for the purpose at the mine.

15.—The books mentioned in these regulations shall be provided by the owner, agent or manager, and the books, Books to be kept at Mine office. or a correct copy thereof, shall be kept at the office at the mine, and the Inspector of Mines and any person employed in the mine or any one having the written authority of the Inspector or person so employed, may at all reasonable times inspect and take copies of and extracts from any such books; but nothing in these regulations shall be construed to impose the obligation of keeping any such book or a copy thereof for more than twelve months after the book has ceased to be used for entries therein under this Ordinance.

Any report required to be recorded in a book may be partly in print (including lithograph) and partly in writing.

16. No person shall wilfully damage or without proper Wilful damage. authority remove or render useless any fence, place of refuge, safety lamp, guide, conductor, brake, rope, chain, signal, safety valve, steam gauge, water gauge or any other appliance or thing provided in any mine in compliance with these regulations.

17. Every person shall observe such directions with Director's to be complied with. respect to working as may be given to him with a view to comply with these regulations.

QUARRY REGULATIONS.

The following Regulations shall be observed so far as is reasonably practicable at every quarry.

1.—The working of the sides, tops, or overburden of the quarry shall be carried on so as to prevent dangerous falls.

2.—The overburden or “ tops ” of the quarry, and all loose ground or material, shall be cleared far enough back from the edge of the quarry to prevent danger to the persons employed.

3.—When the quarry is worked in steps or “ galleries ” these shall be of sufficient breadth in comparison with their height to ensure safety. When the quarry is worked without steps or galleries, sufficient support to the sides shall be left to ensure safety to those employed.

4.—There shall be a clear space between the outside rails of tramways and the edges of galleries, sufficient to prevent both the falling of stones from the wagons and the falling of the men themselves to galleries below. Where such a space is impracticable the edges shall be securely fenced.

5.—The top of the quarry, if dangerous, and the top of every shaft, shall be securely fenced.

6.—All explosives shall be conveyed from the magazine to the quarry and kept till used in secure cases or canisters so made and closed so as to prevent any escape of the explosives and any danger from sparks. Detonators shall be kept in separate and secure boxes.

No person shall smoke while carrying, handling or using explosives, or when near any person so doing.

7.—No iron or steel tool shall be used for charging or stemming a hole with any explosive, wooden rammers only shall be used for pushing in explosives. No straw fuses shall be used.

After firing a charge of any explosive, no further charge shall be introduced into the hole nor into any rent made until after the lapse of two hours.

8.—No hole shall be charged or fired by any person unless duly authorised by the owner, agent or manager.

9.—Due warning shall be given by an efficient system of signals before blasting may be commenced and when it is finished. In quarries where blasting occurs daily, it shall as far as possible take place only at fixed stated intervals. Where danger from blasting may arise to the public, efficient means shall be taken to give them due warning.

10.—A sufficient number of proper shelters shall be provided (which must be used by the persons employed) except where all leave the quarry during blasting.

11.—If a shot has apparently missed fire, no person shall be allowed to go near it until after the lapse of two hours, except when electricity has been used. The person or persons whose shot has apparently missed fire shall immediately give warning of the same. A shot that has missed fire shall not be unrammed, bored, or picked out, and no hole shall be bored within 12 inches of the one which has missed fire.

12. The owner agent or manager shall frame regulations as to intervals and signals for blasting, copies of which shall be kept constantly affixed in the quarry office, and in a sufficient number of places in and adjacent to the quarry.

13.—Secure means of access shall be provided by which workmen go to and from their working places.

14.—Where machinery is used for raising and lowering persons, further regulations shall be made to suit the special circumstances of the case, copies of which shall be kept posted at the quarry.

15.—Each steam boiler, whether separate or one of a range, shall have attached to it a proper safety valve, and also a proper steam gauge and water gauge, to show respectively the pressure of steam and the height of water in each boiler.

16.—Every steam boiler shall be cleaned out and examined internally by a competent person at least once in every 3 months and oftener if necessary, and shall be examined externally and internally by a competent engineer at least once in every 12 months. The result of all such examinations shall be recorded and signed by the person making them without delay, in a book to be kept for the purpose at the quarry.

17.—A competent person appointed for the purpose shall daily inspect the external parts of the plant, machinery and appliances, and shall forthwith make or cause to be made a true report, signed by himself, of the condition thereof, in a book to be kept at the quarry.

18.—Machinery shall not be cleaned while in motion.

19.—The machinery, appliances and permanent ways shall be kept in an efficient state of repair.

20.—The owner or some competent person appointed by him or his agent shall see that the provisions of these Regulations and any regulations hereafter made are carried out.

21.—The owner agent or manager or person in charge shall daily inspect every working place, and shall satisfy himself as to the safety of any rope or other appliance used by the workmen; he shall also record all dangers observed by him or notified to him by the workmen, in a book to be kept at the quarry for the purpose, which shall be duly signed.

22.—All workmen shall comply with the provisions of the Mines Regulation Ordinance 1907, with these regulations and with any regulations hereafter made, and with such directions concerning safety and discipline as may be given to them by the owner, agent or manager.

23.—Each workman shall before commencing work, and during the course of it, and especially after blasting, make a careful examination of his working place, and remove any loose rock, stone or ground which might be dangerous.

24.—No workman shall throw down rock, stones, ground or other material which might endanger other persons, without giving them warning and seeing that they have retired to a safe place.

Every workman who notices anything that appears unsafe or likely to produce danger, shall forthwith report it to the owner, agent, manager or person in charge.

25.—A copy of the Rules and Regulations for the time being in force shall be kept constantly posted at the Quarry in a conspicuous place, where it can be conveniently read by the persons employed.

BORING REGULATIONS.

The following Regulations shall be observed so far as is reasonably practicable at every boring.

1.—Every steam boiler, whether separate or one of a range, shall have attached to it a proper safety valve, and also a proper steam gauge and water-gauge: to show respectively the pressure of the steam and height of water in each boiler.

2. Every steam boiler shall be cleaned out and examined internally by a competent person at least once in every three months, and oftener if necessary, and shall be examined externally and internally by a competent engineer at least once in every twelve months. The result of all such examinations shall be recorded without delay and signed by the person making them, in a book to be kept for the purpose at the office of the boring.

3.—A competent person appointed by the owner, agent or manager shall once in every twenty-four hours inspect the machinery to each and every boring, and shall ascertain the condition thereof so far as general safety is concerned, and shall record without delay in a book kept for the purpose, the condition found at the time of inspection. Such report shall be signed by the person who makes the inspection.

4.—Lubricating, changing of parts, and gearing and fastening of belting must only be undertaken when the drill is stopped.

5.—No repairs shall be made to the drill or machinery whilst in motion.

6.—All working parts of steam engines, including belting and drills, shall be fenced round if there is any danger of an accident by carelessly coming into contact with them.

7.—Boring machines must be provided with an efficient brake.

8.—Borings in progress must be under the constant supervision of a competent person appointed by the owner agent or manager.

9.—No loose articles shall be left about the upper part of the derrick, or on the platforms, which could fall down and cause an accident to persons working below.

10.—Where work is being conducted in the upper part of the derrick, or when the casing is being lowered or raised, all workmen must stand at a safe distance from the mouth of the well.

12. No smoking, naked lights, or fires of any description shall be allowed within the vicinity of any oil-well, where there is danger of the gases taking fire.

12.—Every derrick shall be provided with a life line, securely fixed, to the upper scaffold, and to the ground at least fifty feet from the base of the derrick, to afford a means of escape from the top of the derrick in case of fire.

13.—Newly erected wells must not be placed nearer than one hundred feet to buildings where fire and lamps other than safety lamps and enclosed electric lights are used, and nearer than thirty-five feet to the boundary of adjacent premises or a public road. Workmen's barracks, blacksmith's shops, etc., must not be nearer than thirty-five feet to the boundary and one hundred feet to the oil-wells. Special exemption may be granted by the Inspector of Mines in the case of prospecting with portable plant, provided that such precautions are observed as the Inspector may direct.

14.—The owner, agent or manager of every boring shall provide and have in readiness for immediate use at each and every boring, some reasonable means of extinguishing fire.

15.—Every workman who notices gas issuing from the boring, or anything that appears unsafe or likely to produce danger shall forthwith report it to the owner agent or manager or person in charge.

16.—Every person shall observe such directions with respect to safety and working, as may be given to him, with a view to comply with these regulations.