

(2.) If any explosive remains in the possession of a workman at the end of his shift he shall bring it with him out of the mine and return it at once to the place of storage provided for the purpose.

(3.) No explosive shall be taken or used underground except in cartridges of the diameter of $\frac{7}{8}$ in., $1\frac{1}{4}$ in., $1\frac{1}{2}$ in., $1\frac{3}{4}$ in., or 2 in.

(4.) No drill shall be used for the boring of a shot-hole unless it allows at least a clearance of $\frac{1}{8}$ in. over the diameter of the cartridge which is intended to be used in that hole, and no person shall attempt to charge a shot-hole unless such clearance exists.

(5.) Subject to the provisions of paragraphs (e) and (f) of section 40 of the said Act, detonators shall not be used in or taken for the purpose of use into any mine unless the following conditions are observed:—

(a.) Detonators shall be under the control of the manager of the mine, or some person or persons specially appointed in writing by the manager for the purpose, and shall be issued only to shot-firers appointed in pursuance of Regulation 131 or (in mines to which Part II does not apply) to officials specially authorized in writing by the manager.

(b.) Shot-firers and other authorized persons shall keep all detonators issued to them, until about to be used for the charging of a shot-hole, in a suitable case or box, securely locked, separate from any other explosive.

(6.) In the case of a shaft being sunk from the surface or deepened, it shall not be deemed a contravention of the foregoing provision if the primers for charges are fitted with detonators on the surface before being taken into the shaft, provided the primers are so fitted in a workshop established for the purpose, and are only taken into the shaft immediately before use by the shot-firer or other authorized person, and in a thick felt bag or other receptacle to protect them from shock.

126. (1.) Every charge shall be placed in a properly drilled and placed shot-hole, and shall have sufficient stemming, and each such charge shall consist of a cartridge or cartridges of not more than one description of explosive. It shall be the duty of the person firing the shot to satisfy himself that these requirements are fulfilled before he fires the shot.

(2.) No explosive shall be forcibly pressed into a hole, and when a hole has been charged the explosive shall not be unrammed, nor shall any part of the stemming be removed, nor shall the detonator leads be pulled out.

(3.) Before any shot is charged the direction of the hole shall, where possible, be distinctly marked on the roof or other convenient place.

(4.) The person firing the shot shall, before doing so, see that all persons in the vicinity have taken proper shelter, and he shall also take suitable steps to prevent any person approaching the shot. He shall also himself take proper shelter. If he has reason to believe that there is a possibility of the shot blowing through into an adjoining place he shall send verbal warning to the persons in that adjoining place to take proper shelter.

(5.) No shot shall be fired in any mine except by means of an efficient magneto-electrical apparatus, or by means of a fuse complying with the conditions and ignited in the manner specified in the Fourth Schedule to the British Home Office Explosives in Coal-mines Orders from time to time issued.

(6.) The person firing the shot shall, after the shot has been fired, make a careful examination of the place, and see that it is safe in all respects.

(7.) Where shots are fired electrically they shall only be fired by a person authorized in writing by the manager for the purpose. The authorized person shall not use, for the purpose of firing, a cable which is less than 20 yards in length. He shall himself couple up the cable to the fuse or detonator wires, and shall do so before coupling the cable to the firing-apparatus. He shall take care to prevent the cable coming into contact with any power or lighting cables. He shall also himself couple the cable to the firing-apparatus. Before doing so he shall see that all persons in the vicinity have taken proper shelter.

(8.) Every electrical firing-apparatus shall be provided with a push-button and with a removable handle, which shall not be placed in position until the shot is required to be fired, and which shall be removed as soon as a shot has been fired. The removable handle shall at all times remain in the personal custody of the authorized person whilst on duty. For the push-button there may be substituted an arrangement by which the firing-contact is automatically made at the end of the travel of the handle, and on the release of the handle is automatically broken.

127. If a shot misses fire—

(a.) If the person firing the shot has occasion to leave the place he shall fence off the place before leaving, and indicate by chalk marking on such fence the presence of a misfired shot.

(b.) A second charge shall not be placed in the same hole.

(c.) If the shot was fired electrically he shall, before approaching the shot-hole, disconnect the cable and the removable handle from the firing-apparatus, and shall examine the cable and connections for any defect.

(d.) Except where the misfire is due to a faulty cable or a faulty connection, and the shot is fired as soon as practicable after the defect is remedied, another shot shall be fired in a fresh hole (except in the case of nitro-glycerine compounds, when the distance below the hole shall not be less than 3 ft.), which shall be drilled not less than 12 in. away from the hole in which the shot has missed fire, and shall, as far as practicable, be parallel with it.

(e.) If the misfired shot contains a detonator the person firing the second shot shall, before doing so, attach a string to the electric leads or the fuse of the misfired shot, and secure it by attaching it to the cable or to a prop or otherwise.

(f.) After the second shot has been fired no person shall work in the place until the person firing the shot or an official of the mine has made a careful search for the detonator and charge of the misfired shot. If the detonator and charge are not found, the stone or coal shall be loaded under the supervision of the person firing the shot, or an official, and sent to the surface in a specially marked tub. The search for the detonator and charge, and the loading of any stone or coal which may contain a detonator, shall be carried out as far as possible without the aid of tools.

(g.) Should the misfired shot not be dislodged by the second shot, further holes must be drilled and the same precautions taken as aforesaid.

(h.) The person or persons firing the shots shall report the circumstances to the manager or underviewer without delay, and the number of cartridges (if any) which have not been found, and hand to him the detonator and charge, if found.

Part II.—Special Provisions.

128. (1.) In any coal-mine in which inflammable gas has been found within the previous three months in such quantity as to be indicative of danger, no explosive other than a permitted explosive as hereinafter defined shall be used in or taken for the purpose of use into the seam or seams in that mine in which the gas has been found, or any shaft or drift communicating therewith which is in process of being sunk, deepened, driven, or enlarged, as the case may be.

(2.) In all coal-mines other than opencast workings which are not naturally wet throughout, no explosive other than a permitted explosive as hereinafter defined shall be used in or taken for the purpose of use into any road or any dry and dusty part of the mine, or any shaft or drift communicating therewith which is in process of being sunk, deepened, driven, or enlarged, as the case may be.

129. In all cases in which permitted explosives are required by these regulations to be used—

(a.) A competent person (in these regulations called a shot-firer) shall be appointed in writing by the manager of the mine for the purpose of firing shots. No person shall be so appointed if the amount of his wages depends upon the amount of coal or stone to be gotten, and no person, unless he is employed in a mine in which inflammable gas is unknown, shall be qualified to be appointed or to be a shot-firer unless he has obtained a fireman-deputy's or underviewer's certificate stating that he has passed in testing for inflammable gas.

(b.) A shot-firer shall keep a daily record (in a book which shall be kept at the mine for the purpose) of the number of shots fired by him, the number of misfired shots (if any) and the number of cartridges in each shot.

(c.) No shot shall be fired in coal unless the coal has been holed or sidecut to a depth greater than the depth of the shot-hole. This provision shall not apply to any anthracite-mine or to any mine which may be exempted by the Inspector on the ground that, by reason of the character of the coal or the inclination of the seam, holing would be impracticable or dangerous.

(d.) Every shot shall be charged and stemmed by or under the supervision of a shot-firer. Before the hole is charged a shot-firer shall examine it for breaks running along or across, and if any such break is found the hole shall not be charged, except in stone drifts if special permission has been given in writing by the manager or underviewer.