

Hauling.

140. Codes of signals required shall be posted and maintained in a clear and legible form at the top and bottom of each section of haulage. The following signals shall be used at all mines in connection with haulage worked by gravity or mechanical power :—

- (a.) Direct or main-rope haulage—
 - To stop 1
 - To lower 2
 - To wind up 3
- (b.) Haulage (other than endless-rope or chain haulage) or self-acting inclines—
 - To stop 1
 - To lower 2
 - When persons are about to travel up or down the incline 4
 - This signal shall be acknowledged by signalling 4
- (c.) Main- and tail-rope haulage—
 - To stop 1
 - To haul inbye 2
 - To haul outbye 3
 - To slack out tail-rope 4
 - To tighten tail-rope 5
 - To slack out main rope 6
 - To tighten main rope 7
- (d.) Endless-rope haulage—
 - To commence hauling 2
 - To stop hauling 1

141. When persons are about to be conveyed inbye or outbye, each of the signals required by the foregoing regulations to be given when a set or train of tubs is about to be hauled inbye or outbye, as the case may be, shall be preceded by a cautionary signal of 8, or other means approved by the Inspector.

142. The manager shall, in the case of a mine where there are several districts, prescribe the additional signals that may be required.

143. A notice shall be posted in the hauling-engine house, and at each signalling-station, containing the system of haulage signals in use at such engine-house or signalling-station.

ADDITIONAL REGULATIONS FOR SINKING.

For the purpose of these regulations, "kibble" includes "kettle," "hoppet," "tub," "bowk," "barrel," "bucket," or "cage."

144. (a.) The manager shall fix by a notice which shall be kept posted at the top of the shaft in a prominent position the number of persons who may ride in the kibble at one time, and the banksman or chargeman, as the case may be, shall not allow any person to ride in excess of that number.

(b.) No person shall ride on or against a full kibble or on the edge of a kibble.

145. No engine worked by mechanical power other than a fixed engine shall be used for lowering and raising persons and material in the shaft.

146. Every cradle or platform on which men work in the shaft shall be so protected as to prevent any one falling off.

147. While men are at work on any cradle or platform in the shaft the following precautions shall be strictly observed :—

(a.) The cradle or platform shall be secured to the sides of the shaft in order to prevent its swinging.

(b.) The flap over the kibble-hole shall be securely fastened.

(c.) If the cradle or platform is constructed of two or more pieces hinged, the pieces shall be securely bolted together.

(d.) The cradle or platform shall not be moved except by the express direction of the manager, master-sinker, or chargeman.

148. If work is carried on during the night the surface at the shaft-top shall be efficiently lighted.

149. The competent person appointed shall during his shift have entire charge of the operations in the shaft-bottom, subject, however, to the directions of the master-sinker or of the manager of the mine, and is hereinafter referred to as the chargeman.

150. The examination required to be made by the chargeman before the commencement of work shall be made immediately before the descent of the shift.

151. The chargeman shall as part of his examination before the commencement of work, or if work is carried on without any interval by a succession of shifts, than as part of his examinations during his shift, examine carefully the sides of the shaft, take off any loose stones, and otherwise satisfy himself that the shaft is in a safe condition for men to work at the bottom. When men are engaged in walling or tubbing the shaft a similar examination shall be made by a competent person appointed by the manager.

152. The chargeman shall be the last man to ride at the end of the shift, and, if his shift is succeeded immediately by another shift, he shall, before leaving the shaft, confer with the chargeman succeeding him, and shall give him such

information as may be necessary for the proper conduct of the work and the safety of the following shift.

153. When stone, coal, debris, gear, tools, or materials are being sent to the surface the chargeman shall see—

- (a.) That the kibble is properly loaded :
- (b.) That no stones, coal, or debris are packed above the level of the top of the kibble :
- (c.) That gear, tools, or materials are put into an empty kibble, and, if they project above the level of the top of the kibble, are securely fastened to the bow or chains of the kibble before the kibble is sent away :
- (d.) That the kibble before being sent away from the bottom is put into line with the pulleys and carefully steadied, and that the bottom and sides are free from adhering stones and dirt.

154. No person shall be allowed to descend after any cessation of work in the shaft caused by the withdrawal of the workmen for shot-firing or other purposes until the chargeman, accompanied if necessary by not more than two other persons, has descended and examined the shaft and found it to be safe in all respects.

155. When lowering the kibble the winding-engine man shall stop it when it has reached a point six yards above the bottom of the shaft or above any cradle or platform upon which the kibble is to alight, and shall wait the signal from the chargeman to let it down. When raising the kibble he shall stop the engine as soon as the kibble has been raised four feet from the bottom, in order that the chargeman may see that the rope is steadied, and shall not again move his engine until the chargeman has given the signal.

156. When gear, tools, or materials are being lowered the banksman shall see (a) that the kibble is properly loaded, (b) that no loose material is packed above the level of the top of the kibble, and (c) that gear or tools are put into an empty kibble, and if they project above the level of the top are securely fastened to the bow or chains of the kibble, and (d) that timber and other bulky articles are safely slung.

157. The banksman shall at all times keep the shaft-top and landing-edge free from loose material.

158. The following signals shall be used :—

- To raise up 1
- To lower down 2
- To stop when in motion 1
- When men are to ride—a preliminary signal of 3

The manager shall fix such other signals as may be required.

159. No person other than the banksman or chargeman shall give any signal unless he is an official of the mine or is authorized in writing by the manager to give signals.

TELEPHONES.

160. In any mine in which the total number of persons employed underground exceeds thirty, and the length of the main haulage-road exceeds 440 yards, efficient means of telephonic communication shall be provided and maintained between the end of the main haulage and the surface.

161. Efficient telephonic or other equivalent means of communication shall be provided for communicating between the place in which the switch gear provided under Regulation 253 (1) is erected and the shaft-bottom or main distributing centre in the pit.

HORSES AND STABLES UNDERGROUND.

162. Every person having charge of a horse, pony, mule, or donkey shall drive it carefully, and shall observe any directions that may be given to him by the horse-keeper or by the official under whose direction he works.

163. No person while below ground shall ride upon any animal.

164. All horses underground shall, when not at work, be housed in properly constructed stables, and in stalls of adequate size.

165. All stables in use underground shall be separated from any road used for travelling or haulage of minerals, and shall continuously and thoroughly be ventilated with intake air into the return airway, and cleaned daily, and kept in a sanitary condition, and all roofs, walls, and partitions of any stables shall, unless painted or made of slate, tiles, glazed brick, or iron, be lime-washed at least once in every three months.

166. A sufficient supply of wholesome food and pure water shall be provided daily for every horse while in the stable, and while at work.

TRAINS FOR CONVEYANCE OF WORKMEN.

167. Trains run for the conveyance of workmen, whether above or below ground, and whether on the premises of a mine or on a line or siding belonging to such mine, shall be under the entire control of a person appointed to accompany and have charge of the train; and no person shall attempt to get into or out of the train when in motion, nor ride upon the foot-board (if any) or upon the buffers or couplings, nor refuse