

## MECHANICAL VENTILATING-APPLIANCES.

193. Where a mechanical contrivance for ventilation is used at any mine it shall not be placed beneath the surface; Provided that this regulation shall not be so construed as to prevent mechanical contrivances being placed underground either—

- (a.) When such contrivances are auxiliary only, and the contrivance whereby the main ventilation is produced is placed on the surface, and is capable of producing such amount of ventilation as in an emergency would be sufficient for the safety of the persons employed underground; or
- (b.) When such contrivances afford a complete additional system of ventilation, and when a complete ventilating-appliance is provided on the surface capable of producing such sufficient amount of ventilation as is required by the said Act and the regulations, and immediately available for use in the event of accident, and is kept in effective condition, and is used once at least in each week.

194. There shall, at every mine at which a mechanical contrivance for ventilation is used, be provided and maintained in a condition to be put into immediate operation adequate means for reversing the air-current.

195. Mechanical ventilation appliances shall be installed whensoever at any mine deemed necessary by the Inspector.

196. (1.) In every mine in which inflammable gas has been reported within the preceding six months, an adequate amount of ventilation, as provided in the said Act, shall, by means of a mechanical ventilation appliance, be produced continuously during the whole of the time when there are any persons in the mine, also during the preceding eight hours, and also during such additional times as may be required by the Inspector.

(2.) At other mines where mechanical ventilation appliances have been installed such appliances shall be started and continuously run to their usual running-capacity during the whole of the time when any person is in the mine, and for at least two hours before workmen enter the mine, and also for such additional times as may be required by the Inspector.

197. The owner or manager shall cause to be provided in connection with every ventilating-fan driven by mechanical power a water-gauge and either an automatic indicator registering the number of revolutions of the fan or an automatic indicator registering the water-gauge. This regulation shall not apply to auxiliary fans underground.

## PERSONS IN CHARGE OF VENTILATING-MACHINES.

The following regulations shall not apply to any auxiliary fan placed underground which does not contribute to the general ventilation of the mine or of any ventilating district of the mine:—

198. The person in charge of any ventilating machinery driven by mechanical power shall keep the machinery running at the speed ordered by the manager or underviewer, and shall examine the machinery and observe the indicators at intervals which each shall be of not more than half an hour or such longer time as may be approved by the Inspector, but in no case shall the interval exceed four hours, and shall enter the result of such examination in a book kept for the purpose at the fan-house.

199. In changing shifts the man in charge of the ventilating-apparatus shall not leave his place before the arrival of a substitute. In case of sickness or lawful absence the fan attendant must give early and sufficient notice to the manager, so that a substitute may be provided.

200. He shall from time to time observe the ventilating pressure as indicated by the water-gauge, and where an automatic indicator registering the water-gauge is not in use he shall at the end of each period of two hours enter in a book to be provided by the manager the number of revolutions of the fan and the pressure shown by the water-gauge at the end of that period.

201. The person in charge of any ventilating machinery as aforesaid shall immediately report to the official under whose direction he works any stoppage of, any damage to, or defect or derangement in, the machinery, or any unusual variations in the water-gauge or other indicators.

## ENGINE-DRIVERS.

202. Each engine-driver shall, before commencing work, examine his engine and all the machinery connected therewith, and immediately report any defect to the manager or engineer.

203. In case of sickness or lawful absence the engine-driver must give early and sufficient notice to the engineer or other official under whose direction he works so that a substitute may be provided.

## BOILER-MINDER.

204. The person appointed to attend to any boiler shall from time to time throughout the day examine the boiler,

feed apparatus, safety-valves, dampers, and other fittings, and see that they are in good working-order; and shall at once report to the official under whose direction he works any defect or derangement in the same.

205. He shall maintain the water in each boiler as nearly as practicable at the proper working-level; but if it becomes too low he shall at once lower the dampers, and damp down the fire and, if necessary, draw the same, and report the circumstances to the official under whose direction he works. He shall also see that the pressure of steam fixed by the manager is on no account exceeded.

## STOPPINGS AND AIR-CROSSINGS.

206. Every ventilation-door shall be kept in good repair, and hung so that it will close automatically, and no door shall be propped or fastened back whilst on its hinges. Doors which are only occasionally used must be kept securely locked, and only opened by properly authorized persons.

207. In all mines, within three years after the gazetting of these regulations,—

(1.) All stoppings between main intake and main return airways shall either—

(a.) Be constructed of masonry or brickwork not less than 9 in. in thickness, or such greater thickness as may be required by the Inspector; or

(b.) Be constructed of tight stone, dirt, sand, or rubbish packing at least 3 yards thick, and having the end of the packing nearest the intake airway faced with a sufficient thickness of lime or cement plaster to prevent leakage of air.

(2.) The space between the face of the stopping and the roadway shall be kept clear.

(3.) The floors and walls of all air-crossings shall be—

(a.) Not less than 9 in. in thickness if constructed of masonry or of brickwork or of concrete not properly reinforced.

(b.) Not less than 6 in. in thickness if constructed of properly reinforced concrete.

(4.) The space between the frame of any door used in connection with the ventilation of a mine and the roof and sides of the drive shall be filled with masonry, brickwork, or concrete not less than 9 in. in thickness, provided that the Inspector may exempt any door from the requirements of this regulation.

## RAILWAY-SIDINGS.

208. No person, except those in charge of the wagons, shall pass immediately in front of or between wagons moving under the screens.

209. Where, during the period between one hour after sunset and one hour before sunrise, or in foggy weather, shunting or any operations likely to cause danger to persons employed are frequently carried on, efficient lighting shall be provided either by hand lamps or stationary lights, as the case may require, at all points where necessary for the safety of such persons.

210. No materials shall be placed near a line of rails in such a manner as shall expose persons employed to risk or injury from traffic by having to pass a foot over them or between them and the line, and in no case, unless with the special permission of the Inspector, shall materials be placed within 5 ft. 6 in. from the centre-line of the nearest line of rails.

211. No person shall cross a line of rails by crawling or passing underneath a train or wagons thereon where there may be risk of danger from traffic.

212. Wherever railway-wagons are specially placed so as to afford a thoroughfare, such thoroughfare shall be at least five yards in length.

213. Where a locomotive pushes more than one wagon and risk of injury may thereby be caused to persons employed, a man shall, wherever it is safe and reasonably practicable, accompany or precede the front wagon, or other efficient means shall be taken to obviate such risk.

214. No person shall be upon the buffer of a locomotive or wagon in motion unless there is a secure handhold, and shall not stand thereon unless there is also a secure footplate.

215. No locomotive or wagon shall be moved on a line of rails until warning has been given by the person in charge to persons employed whose safety is likely to be endangered.

216. Where persons employed have to pass on foot or work, no locomotive or wagon shall be moved on a line of rails during the period between one hour after sunset and one hour before sunrise, or in foggy weather, unless the approaching end, wherever it is safe and reasonably practicable, is distinguished by a suitable light or accompanied by a man with a lamp.

217. All spaces between the rails of turnouts and crossings in which the boot of a workman having to pass over them is liable to be caught, shall be kept filled with concrete, tar asphalt, or wooden blocks.