

and the loading of any stone which may contain a detonator, shall be carried out as far as possible without the use of tools.

(f.) Should the miss-fired charge not be dislodged by the second charge, further holes must be drilled and the same precautions taken as aforesaid.

32. No drill shall be used for the boring of a hole for a charge 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 the hole, and no person shall attempt to charge a hole unless such clearance exists.

33. 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.

34. The fuse known as instantaneous fuse shall not be used at or in any quarry.

35. After a hole has been bulled, all loose material shall be removed therefrom, and no charge shall be placed therein within one hour unless the hole has been swabbed with water before the second charge is inserted.

36. Explosives other than blasting-powder shall not be dropped into holes exceeding 6 ft. in depth, but shall be lowered therein by some suitable device.

IV. MACHINERY AND PLANT.

37. No person shall remain under the rope or chain of an aerial incline whilst a wagon or load is ascending. Whilst a load is being moved on the landing-table no person shall remain immediately beneath it; and no person shall be allowed, without special permission from the manager or other official, to ascend or descend by means of an aerial incline.

38. A competent person appointed for the purpose shall daily inspect the external parts of the plant, machinery, and appliances installed in or about a quarry, 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 for such purpose.

39. The rails on the tops of all inclines and on all landing-tables shall be provided with proper stops or other appliances for preventing the wagons from running away, except when the rope or chain is not detached from the wagon.

40. Every crane shall be provided with an efficient catch or an efficient brake.

41. Machinery other than that used in connection with stone-crushing shall not be oiled while in motion.

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

43. Only wire ropes shall be used for haulage purposes on self-acting inclines, except on the advancing top section of jigs where chains may be used.

44. All underground haulage inclines and self-acting inclines exceeding 100 ft. in length shall be fitted with bells or other adequate signalling appliances.

45. On every inclined haulage road where mechanical haulage other than endless rope or chain is used provision shall be made, to the satisfaction of the Inspector, to arrest the runaway trucks before reaching the bottom of the incline, and where direct haulage is in use a backstay or trailer shall be attached to each ascending truck or set of trucks if required by the Inspector.

46. No person shall ride upon any truck without permission of the manager or foreman.

V. AMBULANCE AND WATER-SUPPLY.

47. (1.) At every quarry where more than five persons are employed there shall be provided and kept in good condition and ready for immediate use at a convenient spot—

(a.) A suitably constructed stretcher.

(b.) A box containing a sufficient supply of suitable splints and bandages, adhesive plaster, boric vaseline, cotton-wool, and tincture of iodine or other suitable antiseptic solution.

(2.) The manager or foreman shall personally inspect the appliances so provided, at least once in every month, and satisfy himself that they are in conformity with the above requirements.

48. A sufficient supply of fresh drinking-water shall be provided for the free use of all persons employed at all quarries.

VI. DUTIES OF INSPECTOR.

49. (a.) It shall be the duty of the Inspector generally to see that the provisions of the said Act and these regulations are complied with, and from time to time to visit and inspect quarries and all machinery used in or about such quarries other than steam-engines and boilers.

(b.) In the performance of his duties and functions under the said Act the Inspector, or any person appointed by the Inspector in writing, shall at all convenient times have full and free access to any such quarry or machinery, or to any tramways used in connection with any such quarry, and may use all convenient means and appliances belonging thereto

or connected therewith; and it shall be the duty of the owner of such quarry, machinery, or tramway, and all persons in any way employed in or about the same, to afford such assistance as is reasonably required for facilitating such inspection.

(c.) Every person commits an offence who refuses to permit the use of such means and appliances, or to render such assistance, or who obstructs the Inspector or the person so appointed by him as aforesaid in making any such visit or inspection.

VII. DUTIES OF OFFICIALS AND WORKMEN.

50. The quarry manager or foreman shall see that the provisions of the said Act and these regulations are carried out.

51. The quarry manager or foreman shall daily and within two hours immediately before the time for commencing work in any part of the quarry inspect every working-place and travelling-road, and all adjacent places from which danger might arise, and shall forthwith make a true report of his inspection in a book kept for the purpose at the quarry, which book shall be accessible to the Inspector and the workmen employed; and should danger be apprehended, steps shall at once be taken to remove the source of it. He shall also satisfy himself as to the safety of any rope and other appliances used by the workmen.

52. The quarry manager or foreman shall once at least in every twenty-four hours examine the state of all safety appliances or gear connected with the working of the quarrying operations; and he shall once in each week carefully examine the buildings, machinery, shafts, levels, planes, and all places used in the working of such quarrying operations; and every such manager and person forthwith after every such examination shall record in writing, in a book to be kept for that purpose, his opinion as to their condition and safety, and as to any alterations or repairs required to ensure greater safety to the persons employed in the working of such quarry.

53. The quarry manager and foreman shall cause to be provided proper sanitary arrangements for the use of the workmen in the locality of the quarry to the satisfaction at all times of the Inspector.

54. All workmen shall comply with the provisions of the said Act and these regulations, and with such directions concerning safety and discipline as may be given to them by the officials.

55. Each workman working on the face of the quarry, or standing on a narrow ledge shall, when requisite, use a rope or other appliance; and every workman shall, before commencing work, satisfy himself as to the safety of any rope and other appliances for his personal use, and shall not use anything that he finds unsafe.

56. 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 rocks, stones, or earth which might be dangerous.

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

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

59. Every person howsoever employed in or about the quarry shall be subject to the provisions of the said Act and regulations thereunder, and shall obey the commands or instructions of the manager or foreman.

60. No person shall use threatening or abusive language towards the manager or foreman, nor shall the manager or foreman use threatening or abusive language towards any person employed at or about a quarry.

61. No person shall enter or remain in or about the quarry or works while in a state of intoxication. No intoxicating liquor, on any pretence whatever, except in cases of necessity and with the consent of the manager, shall be taken into a quarry.

62. A copy of these regulations and of the general rules under the said Act shall at all times be posted in a conspicuous place in every quarry, and it shall be the duty of every quarry-manager to see that such copies are renewed as often as they may become torn or defaced.

VIII. PREVENTION OF DUST, AND VENTILATION.

63. When rock is crushed in a dry state there shall, if required by the Minister of Mines, be provided an adequate jet or spray of water, or a suction fan, which in the opinion of the Inspector will effectually keep the air pure and prevent the circulation of dust.

64. No rock-drills operated by compressed air, steam, or electrical power shall be used in any tunnel other than axial water-feed rock-drills, unless a certificate under the hand of the Inspector is in force to the effect that there is sufficient water in the ground to prevent the formation of dust or that the dust is innocuous.