

## (b.) DANGEROUS OCCURRENCES REPORTED.

(Regulation 81.)

The following is a short account of the more serious of these. A full list is contained in the District Inspectors' reports.

*Taupiri Extended Mine.*—On the 20th November an outbreak of fire took place in the No. 4 section, west side. This was got under, but a much more serious fire occurred in the same section on the 5th December. To deal with the second outbreak the whole of the workings in the section had to be sealed off. The cause of the fire was a severe crush due to working the top seam over old workings in the bottom-seam, the pillars of the latter being too small to carry the weight without crushing.

*Liverpool State Mine.*—On the 26th July a blower of gas was struck in the low-level tunnel of the Morgan seam.

*Blackball Mine.*—The fire up No. 17 section gave much trouble during the year, as it kept drawing air from cracks to the surface, and the water coming down the bank carried noxious fumes on to the water-level. Another underground fire broke out in No. 5 bank on the 19th August, and had to be stopped off. A much more serious fire occurred on the 24th November, in the cable-road at the foot of No. 4 bank, caused probably by a fall of roof breaking the insulation of the electric cables and causing arcing, which ignited the coal. Every effort to extinguish it by water failed, and finally the whole of the workings past No. 3 had to be sealed off; this meant the stoppage of fully two-thirds of the working-places of the mine. As many men as possible were employed working a small section up No. 1 bank on three shifts, but this could not accommodate all the former employees, and the balance were forced to leave Blackball and seek employment elsewhere. An attempt was made in February of this year to reopen the sealed-off area, but it failed. A second effort at the end of March succeeded. The grave danger in this fire was its close proximity to the main intake, and the possibility of a similar outbreak trapping men inbye. In order to provide fully against this steps are now being taken to guard against a recurrence, and, if such should take place, to make it impossible for the fire to get down to the intake airway.

*Millerton Mine.*—On the 15th December two officials climbed up a fall in the South Pillar section to inspect the roof. They were using naked lights, and ignited some inflammable gas that had accumulated in the cavity over the fall, with the result that both of them were seriously burned. The law requires such an inspection to be made with a locked safety-lamp. On previous occasions gas had been detected in this mine in small quantities, and after this accident the Department insisted on the mine being worked with safety-lamps.

## (c.) ELECTRICITY AT COLLIERIES.

(Regulation 160.)

During 1922 there has been a further increase in the number or capacity of electrical installations. The following is a summary of the annual returns, in accordance with Regulation 160 (c), regarding electrical apparatus at collieries:—

Number of collieries at which electrical apparatus is installed	..	..	19
Number of continuous-current installations	..	..	13
Number of alternating-current installations	..	..	7
Number of collieries electrically lighted	..	..	19
Number of collieries using electrical ventilating-machines	..	..	11
Number of collieries using electrical pumping plants	..	..	11
Number of collieries using electrical haulage plants	..	..	10
Number of collieries using electrical screening plants	..	..	3
Number of collieries using electrical miscellaneous plants	..	..	1
Number of collieries using electrical locomotives	..	..	9
Total horse-power employed from motors on surface	..	..	2,860
Total horse-power employed from motors below ground	..	..	1,146½

## (d.) PROSECUTIONS.

On the 16th March the manager of Rotowaro Mine was convicted and fined for having failed to install safety-lamps after he had been notified as to the necessity for his so doing.

On the 17th March the Department unsuccessfully prosecuted the manager and deputies of Waipa Mine for having used other than a permitted explosive in what the Department held was a dry and dusty mine within the meaning of the Coal-mines Act.

On the 20th March an underviewer was convicted and fined for a breach of Special Rule 17.

On the 7th August an underviewer at Pukemiro Mine was convicted and fined for a breach of Special Rules 8 and 10.

On the 7th, 8th, and 9th August the manager of Pukemiro Colliery was prosecuted for failing to install safety-lamps in that mine, but the prosecution did not succeed.

On the 5th December proceedings were heard against the company and the two brakemen in charges arising out of the fatal accident to two men at Wilson's Colliery, Hikurangi, on the 4th August. The informations against the company were dismissed; the two brakemen were convicted and fined.

## SECTION V.—LEGISLATION AFFECTING COAL-MINES.

The Coal-mines Amendment Act, 1922, makes the following provisions:—

Section 2 gives power to the Warden and Commissioner of Crown Lands to grant coal licenses and leases in respect of scenic reserves. Section 3 provides for the granting of licenses over any education reserve or education endowment. Section 4 amends the former provisions regarding the