

underground by an inrush of water was forcibly illustrated in July. Following upon pillar-extraction a large cavity 100 ft. in diameter and 60 ft. deep was formed on the surface. This cavity collected water which accumulated until the pressure was sufficient to wash away the silt, when the whole of the accumulation swept through the underground roadways. Fortunately no person was working underground at the time or loss of life would probably have resulted. It was later found necessary to install a pump on the surface to control the collection of water.

Wairaki Mine.—The resumption of work following the industrial dispute saw the introduction of a co-operative party at this mine, and only a small proportion of the original employees were re-engaged. Operations have been conducted on a very limited scale during the year, the whole of the work being confined to pillar-extraction. In the first half-year pillars were extracted in No. 1 and No. 2 west and later in the lower east section. It was found necessary to erect additional fire stoppings outby of the original stoppings which showed signs of leakage due to roof-movement. Trade requirements did not warrant the putting in hand of any further development work.

Black Lion Mine.—Almost the whole of the output was obtained from pillar-extraction. This was commenced in the area lying to the dip and has continued steadily. The sump section will soon be completed. Mining conditions are satisfactory for pillar-extraction, and practically 100 per cent. recovery is being obtained. A dip drive was commenced adjacent to the bottom of the main stone drive. It has proceeded approximately 4 chains and is still in coal and would seem to indicate the existence of a small additional area of coal in this direction.

Linton No. 1 Mine.—Since the resumption of work early in the year very little development has taken place, the bulk of the output having been procured from pillar-extraction in the various panels. Indications of heating have been observed at various times and temporary stoppings erected as a precautionary measure. A small amount of preparatory work was done in No. 5 section with a view to the early development of this area. The new No. 6 level was driven almost to its limit with a view to making this the main haulage-road for the total output from the south-west section above this point. In the No. 4 panel the coal-seam is very thick, from 40 ft. to 60 ft., and is lying on the hade of a steeply inclined fault-line, and the operation of extracting this coal presents somewhat unusual difficulties. The process at present is one of working the coal in two series, or what is now termed "gallery working." Owing to the steep gradient, the coal won from the initial operations in the higher workings is run into chutes and the mine trucks loaded in the lower workings. The process of pillar-extraction under the above circumstances is accompanied by more than the usual element of danger, and requires extreme care on the part of all concerned.

Linton No. 2 Mine.—The whole of the operations at this mine are now confined to pillar-extraction; a proportion of the coal at the lower end of the dip heading had to be left owing to its being inferior and somewhat stony. Work in Nos. 6 and 7 panels has retreated to close proximity to the haulage road and it was found necessary to seal off No. 8 panel as a result of heating observed towards the end of the year. A cross-measures stone drive, below the haulage heading, is in course of construction to enable the pumping-plant to be removed outby and to facilitate the extraction of the dip pillars. One of the fire stoppings in No. 1 south, which seals off fire in the old workings, showed signs of heating. Any extension of this trouble would become a serious matter so far as the life of this mine is concerned.

Mossbank No. 1 Mine.—All operations have been confined to pillar-extraction, there being no further development work in view at this mine. The pillars from the east have now been withdrawn to a point 2 chains from the site of the No. 3 Mine haulage plant.

Mossbank No. 3 Mine.—Development work has proceeded to the south and west; the majority of the development headings going west have reached the vicinity of the Wairaki Mine workings and have been stopped on the barrier. It is not intended to proceed much further with development work from the present site, there being an area to the south-west yet to be developed. Pillar-extraction is being carried out in the western corner adjacent to the old No. 1 workings and also in close proximity to the roadway and railway. A considerable number of stone intrusions, small rolls, and dykes, have been encountered as in the past.

FATAL ACCIDENTS.

It is gratifying to report that no fatal accidents have occurred during the year. The safety factor in mining operations depends entirely upon a complete co-ordination of effort on the part of—(a) the management; (b) the underground staff—i.e., mine-manager, underventurer, deputy, and shotfirer; (c) the employees themselves. No matter what amount of zeal and care may be displayed by any one or two of the above-mentioned classes, every effort in the interests of safety will be rendered useless unless the whole of the parties strive to attain the same desirable end. For the period under review all are to be commended for the satisfactory result obtained.

SERIOUS ACCIDENTS.

On the 26th September, William Adecock, miner, Linton No. 2 Mine, sustained a fractured femur of the right leg. The working-place was one of pillar-extraction and the accident was caused by a fall of coal roof; a more strict compliance with the timbering rules would probably have prevented this accident.

On the 5th October, Thomas Hunt, trucker, Taratu Mine, sustained a compound fracture of the left leg below the knee. Hunt was trimming the side coal, preparatory to erecting a bar in a jig haulage-road, when a piece of coal fell and inflicted the injury.

DANGEROUS OCCURRENCES (REGULATION 82 OF THE COAL-MINES ACT, 1925).

Black Diamond Mine.—On the 31st January heating was discovered in the goaf in the north-west section, and was effectively sealed off. On the 28th June heating was discovered in the goaf in the top level of the north-east section, and was effectively sealed off. On the 4th July an inrush of water took place as a result of water accumulating in a large subsidence hole on the surface following pillar-extraction.

Riverside Mine.—On the 5th July an outbreak of fire occurred underground; this was sealed off, but broke through again on the 12th August and resulted in the mine being abandoned.

Star Mine.—On the 10th July smoke was discovered issuing from the return airway. The airway and adjacent places were effectively sealed off.

Shag Point Coal-mining Co.'s Mine.—On the 11th September heating was discovered in the pillar area on the west side of winch heading in the lower seam; same was effectively sealed off.

Birchwood Mine.—On the 12th October it was found necessary to seal off the rise pillar section owing to definite signs of heating.

Linton Mine.—On the 30th October heating was discovered in the No. 3 section No. 1 Mine; same was effectively sealed off.

Willowbank Mine.—On the 9th November spontaneous combustion was discovered in a blind bord in the dip workings; same was sealed off.

PROSECUTIONS.

During the year the following prosecutions took place:—

(a) In April a mine-manager was fined £2 and costs for a breach of Regulation 224 (5) (a) of the Coal-mines Act, 1925.

(b) In April an acting shotfirer was fined £1 and costs for a breach of Regulation 224 (5) (b) of the Coal-mines Act, 1925.

(c) In May a person was fined £1 and costs for acting as mine-manager without the necessary qualifications.

(d) In May a mine-owner was fined £3 and costs for a breach of section 59 (1) of the Coal-mines Act, 1925.

(e) In May a workman was convicted with costs for a breach of section 127 of the Coal-mines Act, 1925.

(f) In May a mine-manager was fined £2 and costs for breach of Regulation 223 (1) of the Coal-mines Act, 1925.

(g) In October a mine-manager was fined £5 and costs and £1 and costs for breaches of section 117 and section 115 of the Coal-mines Act respectively.

(h) In October a mine-manager was fined £5 and costs and £1 and costs for breaches of Regulation 92 and section 115 of the Coal-mines Act respectively.

(i) In October a miner was fined £1 and costs for a breach of section 117 of the Coal-mines Act, 1925.