Black Diamond Mine.—The year's output has again been obtained from pillar-extraction carried out in the north and north-east areas. The operations have proceeded without any untoward incidents. The areas being worked have been methodically prepared beforehand for immediate isolation in the event of heating, and they have been worked so as to obviate, as much as possible, surface subsidence. These precautions have proved successful in mitigating the

so as to obviate, as much as possible, surface subsidence. These precautions have proved successful in integating the difficulties previously experienced.

\*\*Wairaki Mine.\*\*—The bulk of the year's output has again been obtained from pillar-extraction in the No. 2 east and No. 2 west sections. This work was carried out under normal conditions, and areas were sealed off as became necessary owing to the inevitable heating which follows pillar-extraction. A connection was made between the No. 2 and No. 3 east section for ventilation purposes, and development of the No. 3 east section is being continued. A dip heading has also been commenced from the No. 3 west level going towards the north boundary of Ohai Township. In the dip from No. 2 east a fire broke out in the solid workings. The area was sealed off, but has since been reopened and recon-

Black Lion Mine.—Operations at this mine have been practically confined to pillar-extraction. The prospecting drive, proceeding west and towards the Linton boundary, was abandoned after failing to prove any workable seam of coal. All mining operations are now confined to the main level section, under good conditions, as both top coal and the stone roof are very strong here. A slight heating was experienced in the pillar workings but was effectively sealed off. A system of main- and tail-rope haulage was installed to replace the surface steam locomotive.

Mossbank No. 1 Mine.—This mine has also produced its total output from pillar extraction, and almost all village.

Mossbank No. 1 Mine.—This mine has also produced its total output from pillar-extraction, and almost all pillars from the north side of the main level have been extracted, a few small stumps only remaining to be won. An area of pillars has also been won from the south-west district. Surface subsidence holes have been considerably extended and the mine narrowly escaped flooding during a flood period. In the event of excessive rain it is doubtful if the mine

and the mine narrowly escaped flooding during a flood period. In the event of excessive rain it is doubtful if the mine will again escape flooding.

\*\*Mossbank\* No. 3 Mine.\*\*—No development has taken place at this mine during the year. Pillar-extraction has been completed in the section to the east of the main dip, and the area was sealed off. In the west or main jig section, the pillars have been extracted to a point adjacent to the jig-head. To the south the area was proved to contain only small blocks of coal lying in between small dykes or faults, and the year's operations have consisted of winning whatever coal was possible from this area. Natural conditions at this mine are more favourable for total pillar-extraction than is generally the case in this coalfield.

## FATAL ACCIDENTS.

On 28th March W. S. O. Ballantyne, miner at the Linton No. 1 Mine, was fatally injured by a fall of coal. The deceased was walking along a roadway when a shot was fired, and the concussion of the shot probably simultaneously accompanied by a bump of the roof strata, dislodged a piece of coal which fell and struck him, inflicting a fractured spine.

## SERIOUS ACCIDENTS.

On 10th January J. G. Barclay, mine-manager, Willowbank Mine, sustained a fracture of the left leg just above the ankle. The accident occurred in the main dip haulage-road as a result of a rake of trucks which were being hauled becoming obstructed by a prop lying at the side of the road, this prop being dragged on to Barclay's leg.

On 13th August George Scurr, miner, Willowbank Mine, sustained a fracture of the left leg just above ankle. Scurr was removing some top coal overlying a set of timber when a small fall of coal took place the ankle.

and struck him.

## DANGEROUS OCCURRENCES.

Linton Mine.—On 11th January signs of heating occurred in the No. 1 panel, No. 4 section, of the No. 1 e. The area was scaled off.

Black Lion Mine.—On 16th January signs of heating occurred in the goaf of the main-level pillar section. mine.

The area was sealed off.

Linton Mine.—On 4th March signs of heating occurred in the goaf of Nos. 4 and 5 sections of No. 2 mine.

Linton Mine.—On 27th April signs of heating occurred adjacent to No. 1 south level stopping of the No. 2 mine. Water was laid on to the site of the fire, and an additional stopping was erected.

Kailangata Mine.—On 9th May heating was discovered in a sooty back running through a solid pillar between intake and return airways in the main south dip section of No. 2 mine. The heated coal was filled away and the site cemented.

Linton Mine.—On 8th June and 17th June signs of fire occurred adjacent to the stopping in the No. 1 south level of No. 2 mine. Heated material removed and an opening sealed.

Linton Mine.—On 13th August signs of fire occurred adjacent to the stopping in the old horse road of the

No. 1 mine. Heated material removed, and site cemented up.

Wairaki Mine.—On 14th September fire broke out in the dip heading from the No. 3 cast level.

area was effectively scaled off.

Willowbank Mine.—On 22nd September fire broke out in the old mine, and the mine was sealed off and abandoned.

Allbright Mine.—On 18th November fire broke out and the mine was sealed off and abandoned.

Green Island Mine (Shiel's).—On 18th and 27th November an inrush of water and sand took place, resulting in the abandonment of the mine.

resulting in the abandonment of the mine.

Two of the above-mentioned occurrences are worthy of mention.

The heating of the Kaitangata Mine took place in the intake airway of a development section. A band of sooty coal, approximately 2 ft. in thickness, ran through the pillar between intake and return airways. It would appear that just sufficient air was finding its way through the friable coal to set up the correct amount of oxidation to ultimately lead to spontaneous combustion. The outcome was that distinct fire was discovered on the intake side of the pillar.

The heating in the Wairaki Mine also occurred in the solid coal in a development heading. This heading had passed through a vertical band of sooty coal a few feet in thickness. The fretting of this friable coal had caused a cavity in the roof, the place was supported by sets and the cavity filled with manuka scrub, and oxidation took place until the temperature was sufficient to ignite the small timber.

It is obvious from the above instances that the presence of sooty bands of coal should be carefully watched for signs of heating. It is generally known that such care is necessary in pillar workings, but the instances quoted indicate that the same care is necessary in development places.

During the year the following prosecutions took place:—
On 9th April a mine-manager was convicted and fined £2 and costs for a breach of section 59 (5) of the

Coal-mines Act, 1925.

On 26th April a mine-manager was convicted and fined £2 and costs for a breach of section 91 (1) of the Coal-mines Act, 1925.

On 30th April a fireman-deputy was convicted and fined £2 and costs for a breach of section 128 (1) of the Coal-mines Act, 1925.

On 23rd September a mine-manager was convicted and fined £3 and costs for a breach of Regulation 224 (5) (b) of the Coal-mines Act, 1925, and was also convicted and fined £2 and costs for a breach of section 128 (1) of the Coal-mines Act, 1925.