

only 5 ft. thick, but is 7 ft. thick in two levels above. The solid work in the dip section will be completed in about six months' time. The main south-east level met a downthrow fault when 9 chains in, and, as it is within a chain of the Morley Stream, no attempt was made to cross the fault. Six levels to the rise have also reached that fault. Inclines are proceeding to the north-east, one being 9 chains in length and rising in rather dirty coal at a grade of 1 in 3. About 5 chains above the main level a place to the north-west connected to old workings west of the 30 ft. downthrow fault and is used as a return airway from the rise section. Early in the year Oldham electric cap-lamps were installed and are in use by all underground workmen. Total production to the 31st December, 1931, was 68,026 tons.

Star Mine.—A small party of miners put down three shallow boreholes west of the old Birchwood No. 1 Mine workings. A seam of coal $5\frac{1}{2}$ ft. thick was proved about 20 ft. below the one worked about four years ago on the flat near the Morley Stream. A dip is being driven to the south-west at a grade of 1 in 4 and is down 3 chains.

PROSECUTIONS.

Five informations were laid during the year, and convictions were obtained in four cases, the fifth being withdrawn.

On 21st April a labourer was fined £3 and costs for acting as a manager of an opencast coalpit without being a certificated person or a person to whom a permit had been issued.

On 5th May a mine-manager was fined £6 and costs for failing to take road-dust samples within the prescribed period of three months; and for not providing trailers on jigs he was fined £1 and costs.

On 25th June a fireman-deputy was fined £3 and costs for firing a shot which was not properly prepared.

On 10th November an owner was charged with failing to pay an amount due to the Coal-miners' Relief Fund. The case was withdrawn on his paying the statutory fine for non-payment.

FATAL ACCIDENT.

Wairaki No. 1 Mine.—On 1st June Thomas Dixon, miner, was killed by a fall of top coal about ten feet thick and 30 tons in weight. He and his mate, J. Craig, were bringing back pillar-and-top coal and had bored a hole into "tops" at the end of the level. While waiting for the shotfirer they commenced to fill a tub with the small quantity of coal lying just beyond the shot. The coal, in which the hole had been bored, fell without any warning, killing Dixon instantly and just grazing Craig who was behind Dixon. The fall disclosed an almost vertical "back" and had displaced a centre prop within a foot of the "back."

SERIOUS NON-FATAL ACCIDENTS.

Mossbank Mine.—On 30th April Niven Redhead, a labourer, sustained a fractured right tibia and fibula by a very simple accident near the loading-bank. He and another labourer were carrying a box of ashes. The wooden box had a pole nailed to each side which projected beyond both ends. Redhead was ahead of the box and the other man behind it. Redhead slipped when crossing a small depression, pulling the box of ashes down with him and thus breaking his leg.

Homebush Mine.—On 21st May Fred. Hinks, horse-driver, sustained a broken right arm when spragging a rake of full tubs on the surface haulage-road. Rain had set in that day and Hinks slipped on the clayey road and, in falling, his arm went under the wheel of the last tub.

DANGEROUS OCCURRENCES NOTIFIED UNDER REGULATION 82.

Linton No. 1 Mine.—On 16th January an ignition of firedamp, following the firing of a shot, occurred in the stone face of Grant's working-place. No one was injured nor any damage done by the ignition. The place is $7\frac{1}{2}$ ft. high and 11 ft. wide, and when rising at a grade of 1 in 3 met an upthrow fault having about 40°. The incline was being extended into the fine-grained sandstone and the top of the face was about 8 ft. beyond the fault and the floor was about 18 ft. ahead of it. Eleven days previously 6 cubic feet of a 2-per-cent. mixture was reported there and the same quantity and percentage eight days prior to the ignition and 8 cubic feet the following day. Three shots were fired, one of 10 oz. of Samsonite No. 3, near the centre and about a foot from the floor; another of 10 oz., near the right rib and 3 ft. from the floor; and the third was a small shot near the roof and towards the left rib. The shots were totally independent of one another and the shotfirer stated that he had examined for firedamp with a Bifold safety-lamp after firing each of the first two shots and he had found the place clear. The third hole, 2 ft. long, was only 18 in. inbye the fault, and it was charged with 6 oz. of Samsonite No. 3. Cloth brattice was close to the third shot. Immediately after firing the shot from a spot 90 ft. back they saw flame running along the right rib and near the fault-line and it took a few minutes to put out the flame. The end of the shot had not pierced into the fault, but there must have been a small break leading to it, thus the explosive had ignited the small quantity of firedamp being given off at the fault. This occurrence emphasizes the need of very careful examination of all shot-holes for breaks and the examination for firedamp after as well as before the firing of each shot.

Kaidale Mine.—On 9th March a Kartangata resident reported a fire in the waste dump just outside the Kaidale Mine. Slack which had been dumped there some years ago had commenced to burn. Some of it was shovelled away and fine gravel put in its place. After a few months the fire died out.

Coal Creek Flat Opencast Pit.—An underground fire in an old adjoining mine, and which has been active for years, broke through into the opencast pit in March. The hydraulic nozzle was turned on it and its progress towards the pit was again checked.

Jubilee Mine.—On 23rd May, when making his morning inspection, the deputy found a stream of water 6 ft. wide and a few inches deep flowing through recently formed goaf in the lower south workings. It seemed to have come from the old No. 4 section which was pillared five years ago, but those workings are 5 chains away. The water rose steadily, and the pump did not commence to gain on the inflow for a fortnight. Eventually most of the water was pumped out and the inflow decreased to about 4,000 gallons per hour, but it had played havoc in the soft clay floor and in the stratum of sand above the seam. Consequently the main dip has not been extended any farther down.

Linton No. 2 Mine.—Owing to heating in the goaf, the Nos. 4 and 5 south sections were sealed off in June.