

by the Dobson fault, having been worked out. The area is to be allowed to fill with water giving three month's storage as a reserve in case of emergency or failure of the main pump. During the year the old head frame on the auxiliary shaft was replaced by a 12 in. by 12 in. birch structure, well braced, and set on concrete foundations.

Dobson Colliery, Dobson (Grey Valley Collieries, Ltd.).—The mine worked 110½ days for an output of 57,999 tons. The main dip was extended a further 2½ chains preparatory to the installation of an endless-rope haulage to replace the direct hauler at present in use. No. 3 east level: The level has been advanced 2½ chains, the total distance driven being 15 chains. No. 3 west level: The main level has been advanced 2½ chains, the total distance driven being 16½ chains. The companion level has been driven a further 4 chains, making a total of 17½ chains. A developing dip from this level has been driven for a distance of 3½ chains, this being for the purpose of opening out a panel of workings on the low side of No. 3 level west, a total distance of 7½ chains. No. 2 west section: The main level in this section has been advanced to within 5½ chains of the lease boundary, making a total distance driven of 23 chains. A developing dip from this level is in course of being driven for panel formation. No. 1 west level: This level has been advanced for a distance of 4 chains, making a total driving of 21½ chains. Pillar-extraction has been carried out during the year in the main east side section and Ruane's section.

Tynside Collieries, Ltd.—The mine remained closed throughout the year.

Paparoa Colliery, Roa.—Coal-winning operations were carried out in both the aerial and west sections until the end of July, when the aerial section was closed due to slackness of trade. The section is being kept in repair so that it may be restarted should occasion demand. West level section, No. 2 seam: A pair of parallel levels have been continued westerly for a distance of 19 chains. Parallel inclines have been driven north-easterly towards the outcrop to where the seam increases to 30 ft. The coal is of good quality and much harder than is usually met with in the Paparoa series. A Keith-Blackman fan, capable of producing 40,000 cubic feet of air per minute, has been installed in the west section. Explosion: On the 27th November an explosion of gas occurred in the back level of the west section, Paparoa Mine. A body of gas had evidently been given off in the main level and was actually passing in the main return, when a miner struck a match to light a cigarette, resulting in the death of the miner and injuries to two others. The explosion was almost entirely a firedamp one; although a great deal of coal dust was heated to incandescence, it did not materially assist in propagation of the explosive force. One branch of the explosion wave died out shortly after passing the spot on the main level where the gas was given off. The other branch of the wave which was of lesser force, died out a couple of chains up the No. 2 jig, within 2 chains of that jig and along the back level.

United Brunner Mine, Brunner.—Work throughout the year was a continuation of the cleaning-up and recovering of small pillars left behind in the old Transvaal section of the Brunner Mine. No development work was carried on. The work of coal-winning has been done under difficult conditions. The roof, as was to be expected in pillared ground, was much broken.

Co-operative Mines.

Spark's Mine, Rewanui.—During the year the coal in the main level going easterly became thin and intersected by dirt bands. Pillar-extraction was commenced. From the main dip the parallel headings on the strike of the seam were continued. The extraction of pillars has caused a break in the overlying strata from which small quantities of oil have been given off.

Duggan's Mine, Rewanui.—Coal-production from this mine was confined to the extraction of pillars left behind in the old No. 3 Liverpool State Mine. Only a small number of pillars remain to be extracted. The natural conditions in this mine are extremely favourable for coal-winning and complete extraction was obtained.

Old Runanga Mine, Rewanui (O'Brien and Party).—Coal in the main level going north-west gradually thinned as it approached the fault known to exist in this direction. In the rise jig going north-east the coal gradually increased in thickness so that a second level parallel with the main level has again been developed. On the eastern boundary the pillars are irregular in shape, due to the presence of a synclinal fold. Below the present workings a new section known as the "Bluff section" is being developed in coal 4 ft. in thickness. From the main levels a pair of parallel levels have been broken off and are being driven north-westerly.

Goldlight Colliery, Rewanui (Williams and Party).—The bulk of the coal produced was won from pillar-extraction on the eastern boundary of the lease. Work to the dip was suspended due to an influx of water. Prospecting operations to the south of the present workings have been commenced.

Moody Creek Mine, Dunollie (Simpson and Party).—In the old mine, pillar-extraction was continued in coal 5 ft. in thickness. Suitable barriers were left behind to support the railway. In the offset headings proceeding south-easterly a fault was encountered completely cutting off work in that direction. Only a limited amount of coal remains to be won in the old mine. Two new seams have been opened up in faulted ground east of the present workings. The seams pitch steeply at a grade of approximately 1 in 1½. A prospecting level, running parallel with the fault in a southerly direction, has been commenced.

New Point Elizabeth Mine, Dunollie (Guy and Party).—The whole of the solid work in this mine has been completed and pillar-extraction commenced in a narrow strip of coal 4 chains wide lying between two faults.

Fiery Cross Mine, Dunollie (Currie and Party).—The main level going north, after being driven a total distance of 14 chains, encountered a fault, and pillar-extraction was commenced. The main inclines, which are being driven north-westerly, are approaching the boundary, where the coal has thinned.

Baddeley and Party, Dunollie.—Two mines have been opened up on the new lease. The seam is steeply inclined, lying apparently on a fault running north and south. In the north level the coal is 9 ft. in thickness between the hanging and the foot walls. A pair of parallel levels 90 ft. apart connected by rises are being driven. In the south mine a similar method of development has been carried forward.

Castlepoint Mine, Dunollie.—The bulk of coal won from this mine was from pillar-extraction in the northerly portion of the lease. Very little development work was undertaken throughout the year.

Hilltop Mine, Ten Mile (Armstrong and Party).—The main dip going north-east has been stopped on a fault-line. Development work was carried out in Nos. 1 and 2 panels to the east of the main dip. From the bottom of the main dip a level has been driven easterly in 5 ft. of coal. The coal is split by a stone band 4 in. in thickness. Plant: Screening-plant has been erected at the foot of the main incline.

Brady's Mine, Ten Mile.—The main dip has been extended a total distance of 3 chains easterly in coal 6 ft. in thickness. Development on the strike of the seam to the north and south was then undertaken. The coal in the south level averages 7 ft. in thickness and is of good quality.

Hunter's Mine, Dunollie.—The main level was stopped on a fault 14 chains due north of the main mine-entrance, the coal gradually decreasing in thickness to 2 ft. 3 in. The main inclines are being driven easterly. Pillar-extraction has commenced on a line parallel with the outcrop and beneath the "Bridal Falls."

Cox Creek Mine (Coates' Lease worked by Kaye and Party).—The work of pillar-extraction was continued. Only a small amount of coal remains to be won. Coal is of good quality, averaging 3 ft. 6 in. in thickness.

Schulz Creek Mine, Ten Mile (Marshall and Party).—The main incline, after having been driven 6 chains north-easterly, was stopped in coal 1 ft. 3 in. in thickness. Development work was also continued in No. 2 incline on a bearing north 17° east, the seam being 2 ft. 4 in. in height. All levels being driven easterly have been stopped on the fault-line. Prospecting operations have been carried out without any material result being obtained.

Dennehy's Mine, Twelve Mile (Chamley and Party).—All development work was completed and coal-winning is now confined to the extraction of pillars between the goaf and the old workings of the Schulz Creek Mine, the coal being 3 ft. 6 in. in thickness.