

Anderson's Mine, Gibbston.—Early in the year a small shaft was sunk 12 ft. down from near the face of the main level. The coal met in this shaft was soft, and mixed with clay. The inflow of water becoming too heavy, the proprietors ceased operations and took up all the mine-rails. No work has been done there since.

Freeman's Mine.—Three miners are still employed at pillar-extraction. A pillar place showed signs of heating during August, but was successfully sealed off a few days later.

Jubilee Mine.—The No. 4 section was exhausted in August. In the No. 6 section the grade of the dip lessened until it eventually became level. A stone band came in 3 ft. from the floor. This band thickened, and the bottom coal thinned, so work was confined to the 5 ft. of coal above the band, which thickened to 6 ft. There appear to be a few acres of profitable work ahead in this section. In the No. 5 section solid work is still being done. When down about 3 chains the main dip holed into old workings. The dip was then deflected to the south, and is now approaching the Brighton traffic road.

Willowbank Mine.—Pillar-extraction is proceeding down the old dip section. The new east level, which is over 6 chains in from the surface, has only recently met the coal-seam. This level will be driven another 4 chains before a dip is commenced to the south-east to work the area east of the downthrow fault met in the old workings. A few acres of rise coal can also be worked from the new level, as it is many chains from the East Taieri mine-workings.

Brighton Mine.—A severe thrust was showing on the pillars, and most of the travelling-roads were closing, so the two miners ceased operations during May. Very little more can be done unless a pump is procured and the dip extended.

Waronui Mine.—Development in the lower seam proved very disappointing, and only three miners are now employed there. Most of the places in the south-west side of the dip proved low coal. In most of them the lower 3 ft. were soft and mushy and contained many floating boulders. In the No. 2 extension heading (going north-east) one huge boulder reduced the height of the coal on the west side to only 12 in. Owing to the liability of heating occurring in the upper seam pillar workings the management was instructed to procure a ventilating-fan for that district, and one was installed in June. Heating occurred in July, or within a month of the fan commencing duty. Another place (the farthest inbye one to the south) also caused anxiety owing to heating during November. There is about a year's output in this area of pillars, provided none are lost through heating.

Crichton Mine.—The owner and his son are still working places off a pair of levels going to the north-west. The main level is now in 5 chains, but, being in rather soft lignite, it is temporarily stopped. The back level is also in soft and dirty coal, but is still being driven. A dip was commenced, to go ahead of the old workings. Soft coal was met when only 9 yards down, so the dip was stopped.

Taratu Mine.—Barclay's section: This was the only section worked during the year, and most of the output is now produced from pillar-extraction. The dip on the east side was stopped when only 4 chains down. The south places off this dip met stony coal, and the north places had only $2\frac{1}{2}$ chains to go to reach the dyke. The two lowest rows of pillars have been worked back, and the dip is now used as a sump, leaving the other two rows of pillars to be worked in the future. The south-side workings reached outcrop coal early in the year, and the pillars were then worked back. A few solid places are still being driven on the west side, but these are nearing the fault, and will soon be stopped. Two places were driven on the east side through a barrier pillar. Throughout the year heating has been very pronounced near the mine-entrance. Over many of the timber sets boiler-plates were laid, and bags of sand then placed over these plates. Two short bores were later drilled into the heated mass, and water from the dip was pumped into these boreholes. This was successful in reducing the temperature. It is imperative that new development work—such as the proposed dip drive to the lower seams in the area between the old shaft section and Barclay's section—be soon commenced, otherwise the Taratu Mine will be short of supply within three years.

Tinaketo Mine.—A 20 ft. roll was crossed early in the year in the development east of the main dip haulage-road. Two miners are now working there in good clean coal with about 40 ft. of coal overhead. A new multibular boiler has been purchased, and will soon be in use, to generate steam for pumping and haulage.

Kaituna Mine.—Early in the year a small quantity of coal was extracted from pillars in the dip area. The main dip has since fallen, and the mine is closed. The only work now being done is the splitting of a few pillars in the top-seam area.

Kaidale Mine.—No work has been done at this mine during the year.

Kaibrook Mine.—A small output was produced during the winter months, but nothing has been done since.

Kaitangata No. 1 Mine.—Development was continued in the Nos. 3 and 4 seams. In a heading going east from the No. 3 south workings a downthrow fault of 6 ft. was met. Beyond this fault a 6 ft. seam of hard coal (the No. 4 seam) was met. A place has been driven over 4 chains to the east in this seam. Headings have been broken away to the north, and are now in about 5 chains. The dip off the extension of the main haulage-road into this seam is now stopped. A level has been driven to the south and will connect with the headings mentioned. When this connection is made the dip will then be extended farther to the east. From a place off this level an upcast was recently started at a grade of 1 in 1. It is expected to pierce the main seam within 130 ft. A prospect drive going almost due north was put in from the main haulage-road to prove the unworked ground towards the Castle Hill area. This drive was expected to rise and reach the surface in about 1,100 ft. if workable coal was proven *en route*. It was intended then to use this drive for a main return airway and thus do away with the need of the present air-shaft. The drive went level for 200 ft. then rose at a grade of 1 in 3 for another 220 ft., without proving any coal. A rise was then put up 38 ft. but only proved a 2 ft. seam, so the drive was abandoned and sealed off. The connection between the Nos. 1 and 2 Kaitangata Mines was completed early in the year, and the ventilation of portions of the No. 2 mine was considerably improved thereby. A few men have been employed at pillar work during the year in the No. 1 seam workings.

Kaitangata No. 2 Mine.—The pillar section in the No. 1 seam workings near the main haulage-road became exhausted near the end of the year. In the north end of No. 1 seam workings four solid places are being worked. This is the only solid work being done in this mine. The pillars in No. 5 (McMillan's dip) section were extracted during the year, and pillaring is proceeding in the seam to the west of McMillan's dip area and in the No. 4A seam workings to the north. A prospect drive was put in to the south from the main haulage-road and between Nos. 3 and 4 seam workings. Two small seams, each about 2 ft. thick, with 1 ft. of clay between, were followed for some time. Then a stratum of conglomerate was driven through and another small seam, 1 ft. thick, was met. The drive was stopped when 7 chains in.

Castle Hill Mine.—A circuitous connection has been made through many large rolls from the 6 ft. seam to the main return airway. This new return will now permit the extraction of all the standing pillars in the main seam north of the main haulage-road. These pillars were formed many years ago, and should soon be extracted, as the coal is of good quality and there are thousands of tons available. A dip was recently driven a chain or so in the 6 ft. seam. It is now in fairly good coal, and a small workable area has been proved there.

Benhar Mine.—The south side workings having been effectively sealed off, and the main dip stopped in very faulted ground, development has been confined to work on the north side. A small section has been worked off a short dip a few chains north of the main haulage-road. The workings off the lowest north level are stopped. Means for air-reversal have been made, and the ventilating-fan is now driven by a three-phase electric motor; the haulage plant and pumps are also motor-driven. Two pumps are used, the lower one driven by a 3 horse-power motor and the upper one by 1 horse-power. The cables are taken to the pumps in proper conduit. A new dip drive has been commenced from the surface and about 15 chains from the present main haulage-drive. This new drive is down about 60 ft. at a grade of 1 in 4, and has passed through the No. 1 seam, which there is of poor quality.

Whiterig Mine.—A crosscut has been driven through some of the pillars on the west side of the main dip. This will be used as a continuation of the main haulage-road. Stone stoppings have been built in the old bord ends.

Green's Mine, Gore.—Work in the main dip was recommenced during the year. It was extended another 2 chains, but at first not reduced in size to the dimensions I required. Later, I was notified by the new mine-manager that the place would be driven lower and narrower than formerly. Development was continued in the levels and inclines south of the main dip. Samples of the mine-dust were collected and forwarded to the Otago School of Mines for analysis. All contained sufficient moisture and ash, so the roadways do not require treatment with incombustible dust.