

*Kaitangata No. 1 Mine.*—Early in the year the new return airway was connected from the surface to the main-seam workings, and the ventilating-fan was removed in March from the old air-shaft to its new site. The fan-foundation and the air-lock are of concrete, and the motor and fan-house is built of brick. The cross-measures level, driven from the 6 ft. seam to intersect the main seam a little east of the bottom level of old Mundy's dip workings, was stopped early in May owing to a large inflow of water through a fissure from the old workings above. Pumping was much delayed through a large fall in the cross-measures drive, and it was not until the end of August that driving could be recommenced. The headings are now in good clean coal. This is the old main seam worked prior to 1921 in Mundy's dip area, and it is easily the best coal which has been produced from the Kaitangata Mines for some time. It is to be hoped that a fair-sized area of such coal will be proven in this section, now called the No. 2 section, No. 1 seam. The main headings have been deflected to the east, and are now being driven to the full dip, 1 in 9. Endless rope or "main-and-tail" rope haulage should be made into the No. 2 section, No. 1 seam, as early as possible, as the present costly haulage, by means of two horses and three winches, to the main haulage-rope, a distance of about 40 chains, also limits the output. The size of pillars and of the intended panels should now be decided upon, and instructions given to see that the pillars are made to the required dimensions and that working-places do not encroach upon the barrier pillars. The method of breasting-back the pillars, in vogue a few years ago, has largely been displaced by the safer one of working lifts to the rise. To the south-east, and immediately ahead of the main haulage-road, the main seam is also being worked in No. 1 section, No. 1 seam. The seam is thinner there, being only 6 ft. thick at the face of a crosscut being driven almost due east. In the No. 4 seam a down-throw fault running east and west, and of 27 ft. displacement, cut off all the places. A small section of pillars have since been worked back from the south end of these workings. Farther down the main dip in this seam two large levels driven to the south met very troubled ground, so they had to be stopped. Turbine furnaces have been fitted recently to the five boilers—one Cornish, one Galloway, and three ordinary Lancashire boilers.

*Kaitangata No. 2 Mine.*—Development work in this mine during the past year was very disappointing. At the inbye end of a stone-drive over 700 ft. in length (the extension of the main dip) a dip was driven at a grade of 1 in 3 in the conglomerate to cross the measures. After going 160 ft. a 12 ft. seam of coal was met, which was called the No. 6 seam. Two large faults, a downthrow one on the east side and an upthrow of 100 ft. on the west side, were met. These were only 4 chains apart and converging to the south. Between these two main faults were two minor ones. Two of the working-places met one of these smaller faults, but a third place only half a chain away did not meet it and was continued and a place broken away to the south, where the seam dipped 1 in 2. The coal won from the few rise places was very stony, so, as the workable area proved such a small one, work ceased in the No. 6 seam area in October. The 700 ft. stone-drive was then extended for another chain and a crosscut commenced to the east. This was driven level for 130 ft., then to the dip at a grade of 1 in 9 to intersect the No. 2 seam and east of the former workings in that seam. As the pillars in the inbye sections are almost exhausted, this attempt to again work the No. 2 seam is the sole hope for the No. 2 Mine, so, if it is unsuccessful, production will soon cease from the Kaitangata No. 2 Mine.

*Castle Hill Mine.*—Pillar-working has been continued in the Nos. 5 and 7 sections. In the former two pairs of miners have been employed, and four pairs in the No. 7 section. An area called the "Top Seam" workings, sealed off five years ago, has been reopened. From a level at the head of the stone jig a crosscut, going to the rise at a grade of 1 in 3, was driven until it reached the higher seam, over 20 ft. thick, and only 35 ft. above the No. 7 section. For a few chains the seam proved fairly hard, in the main heading going east, but at the face it is now soft and friable. This seam is very steeply inclined, being in some places 1 in 2. A pair of levels going north are in harder coal. No work is now being done in the south levels in the lower seam. Both of the Lancashire boilers have been equipped with turbine furnaces, and are now being fired with fine slack, called "coom," instead of run-of-mine coal.

*Summerhill Mine.*—Owing to slackness of trade, very little work has been done at this mine. The back level met stony coal, so places were driven to the rise, but the stony coal cut off two higher levels. The top place is now completely filled with the gravel overburden. This freehold property has recently changed ownership, and unless the certificated man who is working the mine can make better terms with the new owner he will shortly cease working there.

*Benhar Mine.*—The main dip of the new mine is now down 500 ft. from the surface, and has been driven in the 28 ft. seam through a 7 ft. upthrow fault. Beyond the fault the seam is only 16 ft. thick. The bottom north level is in about 4 chains, but the south level is in only 60 ft. The pillars are being made 36 ft. square. No coal is now being won from the old mine, but a connection to the air-shaft has been made from the new mine which is being ventilated by the old-mine ventilating-fan. Except for this place, the manager was instructed not to make any other connection between the two mines, and to form a barrier pillar at least 1 chain wide.

*Brighton Mine.*—Two levels were driven to the north for 25 yards. The coal is only 4½ ft. thick there and becoming very poor in quality. The main dip drive was then continued, and, after crossing fallen workings, a level is now being driven to the south to connect with the prospect-shaft by a return airway.

*Whiterig Mine.*—A fire broke out in March in a place west of the sump and connected to old workings. Wooden stoppings were put in around the fire area, but, proving ineffective, the pump was withdrawn and the mine-water allowed to rise in the workings. The mine was reopened in June, but after the water was pumped out heating again took place and the mine was again sealed. Another attempt to work the mine was made in August, without success, so the water was again allowed to rise, this time to within 40 ft. of the surface. On breaking through the stopping in October it was found that heavy falls had occurred in the main dip haulage-road extending through the overlying gravel to the surface. The top of the return air-shaft had also caved in, and it was retimbered. The expense involved in driving through the large falls was too large, so the mine was abandoned near the end of the year. There remains about 2½ acres of unworked land to the north-west, but it is almost impossible, and certainly would be unprofitable, to make another drive near the eastern boundary to work this small portion of virgin ground. The pillars in the mine were made much too small and the places driven too wide, so that when the fire came through from the old workings it could not be effectively sealed off.

*Green's Mine, Gore.*—The main dip has been extended about 25 yards during the year, and the face is now nearly 13 chains from the surface. An overcast has been made, in the thick seam, across the main haulage-road and within 2 chains of the face. One level has been driven to the north from near the bottom of the dip, and four places are being worked in the upper south levels. The pillars are more uniform in shape than formerly, but an increase in the size of future pillars would be very advantageous when their extraction has to be done. The main haulage-road since it has been reduced in width and height is certainly much safer than the large cavernous portion of the road near the mine-entrance. The levels are still being driven of large dimensions, but they are now broken away narrow to reduce the size of the concrete stoppings which will be built between the intake and the return airways.

*Glenlee Mine.*—The back level reached dirty coal, and, being near old workings, it was stopped, but the level below is still being driven. About a chain in from the surface a place has been broken away to the south-east, and it is now in about 15 yards and in fairly good lignite. As the main drive is in a small syncline, the owner expects to be able to work a fair area of water-free lignite to the east of the main drive.

*Ramsay's Mine.*—The owner was injured early in the year by a fall of "tops." His injuries proved more serious than was at first anticipated. He obtained the services of another miner, who for a couple of months continued stripping the 3 ft. of clay overburden from some old standing pillars. The owner intends to divert the surface haulage, which will then be direct from the traffic-road to this opencast work.

*Argyle Pit.*—Stripping has been continued towards the Waikaia River, and only 10 yards separates the top of the pit from the work done by a former lessee in cutting a race with a hydraulic nozzle from the river. Enough lignite has been stripped for the coming winter's supply.

*McIver's Pit.*—Stripping has been continued to the north, but the seam is thinning in that direction, and the lower portion is stony and unprofitable to work. I do not anticipate much more will be won from this pit.