

*Kearns' Coal-mine, Merrijigs* (R. L. Kearns, owner, permit).—(18/11/10) : From this mine, which was formerly owned by Loughnan, the present owner has been able to win upwards of 300 tons of coal from pillar-extraction. These pillars were considered as lost until the mine was taken up by Mr. Kearns. In their extraction timber was freely used, and every precaution taken for the safety of the workmen.

*Golden Point Coal-mine, Merrijigs* (R. L. Kearns, owner, permit).—(18/11/10) : Work in this mine has been intermittent. The only period during which work was any way constant was when the Town Belt Mine was closed down to allow repairs to the timbering along the main level. Two men were usually employed.

*Blackball Colliery* (W. Leitch, mining engineer; J. Hamilton, mine-manager).—(14/12/10) : Operations for the year have been carried out by two shifts of workmen, and a material increase in the output is shown. The quantity of coal won during the year was 166,505 tons, being an increase of 46,440 tons above the previous year's output. This large increase can in a measure be attributed to the completion of the Government railway from Ngahere to Blackball. The company's coal is now brought direct in Government railway-wagons from the bins at Blackball to Greymouth. The aerial tramway, which did good service in the past, is now disused.

No. 17 bank : A large amount of development has been done in this section of the mine, the heading-face now standing 23 chains from the main level. From this bank six intermediate levels (three east and three west) have been driven forward for 200 yards, the levels going west extending as far as No. 20 bank. A holing has lately been made in No. 3 east level, at the escarpment in Coal Creek, and therefore the ventilation of the inby sections of the mine is satisfactory. The coal throughout this large section is of excellent quality. As the present appliances for dealing with the increased output from this section have proved inadequate, all winning operations have been temporarily suspended here, and preparations are being made for the extension of the main endless-rope system of haulage into this section, the preparatory work for which is being speedily advanced.

Dip : To win the coal lying to the west, and beyond the Government railway-sidings, a dip heading was started some months ago, which in the early stages of driving made considerable progress; but as the heading extended, the volume of water increased, so that the small pump for sinking was working almost to its full capacity. Upon completion of 3 more chains of driving it is intended to replace this small pump by a three-throw Evans pump, capable of dealing with 250 gallons of water per minute. The usual trouble with spontaneous heating of the coal, more so where pillar-extraction is being carried out, has been successfully dealt with.

Fault : Towards the end of the year it was decided to cut the line of fault met with in the main levels last year. From geological examination, immediately in front of these levels, it is estimated that an area of at least 200 acres of coal will be available to the rise of the main levels. Some of the outcrops show 20 ft. of hard bright coal.

Drainage-adit : Owing to the *débris* from the railway-works and Blackball sidings filling up the bed of the creek above the mouth of the water-level, it was necessary to extend the drainage-adit some 400 ft. down the creek. The Public Works Department contributed to the cost in ratio to the amount of *débris* put into the creek.

Surface : No new surface works of any magnitude have been undertaken during the year.

Volume of air entering the mine, 62,780 cubic feet per minute. Rules posted, and reports to date.

*Paparoa Colliery* (J. Hayes, mining engineer; D. S. A. Patterson, mine-manager).—(13/12/10) : This colliery has now been in operation for eighteen months, and has produced a total output of 43,795 tons. The output for the year ending 31st December, 1910, was 36,596 tons, an increase of 29,397 tons over the previous year. The whole production has been from Nos. 1 and 2 seams, where a large amount of development has been carried out, as well as in the No. 3 seam. From the main level in No. 1 seam two headings have been set out to the eastward to the full rise of the seam, and it is anticipated these headings will open up a large area of coal in this direction. Some six months ago the old method of lowering the coal from Nos. 1 and 2 seams was replaced by the endless-rope system of haulage. The load on this length of haulage-road is controlled by an hydraulic brake stationed at the Soldier's Creek or upper end of tunnel. The main ventilating-tunnel, gradient 1 to 1 for a distance of 200 ft., and which connects Nos. 2 and 3 seams, was completed on the above date, and should prove a decided advantage to the general ventilation of the mine. The workings are adequately ventilated in three splits, as under: Entry No. 1 seam, 23,850 cubic feet per minute; entry No. 2 seam, 32,400 cubic feet per minute; entry No. 3 seam (one pair of miners), 4,000 cubic feet per minute. Total volume of air entering the mine, 63,250 cubic feet per minute; total volume of air in main return, 60,250 cubic feet per minute. The difference may be attributed to leakage through the use of single separation doors between the intake and return airways. With the object of testing the suitability of the coal for coking, a few tons were sent to Australia for practical test. The coke is of very good quality, specially suited for use in blast furnaces, and compares favourably upon analysis with the best cokes of the world. The timbering of the mine is good, and all requirements of the Coal-mines Act are complied with.

*North Brunner Colliery* (George Smith, mine-manager).—(10/12/10) : Early in February development-work at this colliery had so far advanced as to permit of coal being carried from what is locally known as the 16 ft. area to the bins at Stillwater. After opening up this seam, and after a considerable amount of driving, the coal continued soft and friable. Operations on this section were then discontinued. The construction of the incline to the upper seams, situated at a height of 1,385 ft. above sea-level, and a distance of 76 chains from Stillwater, is now being carried out. At this point an opening was made in the top seam, which at the outcrop showed coal of excellent quality and hardness, but on being driven on gradually became softer, and has remained so. Two main levels have been driven to the south of the main heading for a distance of 14 and 13 chains respectively. In both levels a