

Dobson Mine (Grey Valley Collieries, Ltd.).—Development work was continued throughout the year in both the dip and rise sections. In the east rise section adjacent to the fault-line the solid work is nearing completion. Work in the west rise section was suspended for six months during the year. During October development work was recommenced and two panels are in the course of formation, one to the dip and the other to the rise of the main west level. The size of pillars in this section has been increased to $1\frac{1}{2}$ chains square. Subsidiary air-driven haulages have been installed in both sections. To the dip, development has been concentrated chiefly in one main section known as No. 2 west and a subsidiary section known as No. 2 east. In the No. 2 west section three panels are in the course of formation, two being driven to the dip and one to the rise of No. 2 west level. The panels each cover an area of 5 acres. In the dip panels it has been considered advisable to alter the direction of the dip drives so as to secure a gradient of 1 in 5. In opening out the first dip panel a Sullivan Arkutter (air-driven) has been installed, and is working efficiently. The manager states that the output per miner shows a substantial increase, whilst there has been a decided improvement in the percentage of lump coal, due to the improved preparation of the coal for shot-firing. An endless-rope haulage (air-driven) has been installed in this section, and feeds the coal to the No. 2 dip (electric winch) road where a 40 h.p. motor has been installed to supplement the haulage arrangement on the No. 1 dip. Work in the No. 2 east section was suspended for three months during the year. Four pairs of miners are employed in the section. The solid work is nearing completion, and it is proposed to commence pillar-extraction during the coming year. Nos. 1 and 2 dips have been extended a distance of 9 chains and 10 chains respectively, whilst three developing levels have been driven from No. 2 dip to the west for a distance of 8 chains. Also at points coincident with these, from No. 1 dip, levels have been set away and advanced 9 chains. It is proposed to open up from these a series of panels to the dip. The quality of coal has been maintained. Stone-dusting has been carefully attended to, approximately 200 tons having been used during the year. The 50 h.p. motor driving the fan has been replaced by one of 100 h.p. A second air-compressor of 1,000 cubic feet capacity has been purchased to duplicate the one already in use.

Paparoa Mine.—The extraction of pillars from the old mine is almost completed. However, a level stone drive has been driven a total distance of 16 chains through barren stratas into a new area of coal, which it is anticipated contains 500,000 tons. The thickness of the seam in this area, as indicated at the outcrops, is 20 ft. In the aerial section development work was proceeded with vigorously during the year, and contributed the greater portion of the colliery output. The main levels were advanced a total distance of 11 chains towards the outcrop in Waterfall Creek. The aerial haulage system which was installed to operate this section has proved a most satisfactory and economical method of transportation. The general outlook at this colliery has improved materially during the year.

Blackball Mine.—The output during the year was obtained from the No. 9 dip sections. Pillar-extraction was responsible for the output from the No. 3 west level, and the heatings which invariably accompany pillar-extraction at this mine were promptly dealt with by means of stoppings. A slant dip heading has been driven a distance of 14 chains below the No. 3 west level, commencing at a point 11 chains along the level, the quality of coal in this area being very good. The No. 2 east level has been extended a total distance of 24 chains, this development having provided a large number of additional working-places. The whole of the development places in No. 9 dip below the No. 3 level were abandoned towards the end of the year, owing, it is understood, to the friable nature of the coal. No further work has been carried out in the No. 2 dip section, beyond that of drainage. Considerable trouble has been experienced in maintaining the efficiency of the pumping-plant owing to the corrosive action of the mineralized water on the interior parts of the pumps. Monel metal has been used up to the present for the manufacture of the pump impellers, &c., and it is now proposed to try Staverger steel for these parts. An ambulance-room has been erected adjacent to the mine-entrance, for use in connection with the more serious accidents. The fittings include surgeon's couch, water-heating (electrical), instrument sterilizer, portable three-tier table, and all the usual first-aid requisites. During the latter portion of the year the mine reverted to working double shift.

Wallsend Mine.—Development work at this mine has been carried out chiefly on the east side of the shafts. The dip headings in this section have been advanced a total distance of 13 chains. Levels are being pushed ahead in an easterly direction from these dips, preparatory to forming panels to the rise. The direction of the strike of the measures in this section is somewhat irregular. However, the prospects of an area of good-quality coal being obtained from this section are good. The No. 2 dip heading has been totally dewatered, and coal-production recommenced. However, this place will probably encounter the Taylorville fault in a short distance. The main dip heading from which it is proposed to win the area of coal underlying the Taylorville Township and to the west of the Taylorville fault is now in readiness for extension, having been heavily retimbered, and generally given a permanent appearance. The surface equipment has been materially extended during the year, and is now in a better state to deal with an increased output. Preparations for the installation of a 98 in. double-inlet sirocco fan are nearing completion. This installation, in conjunction with the proposed extended use of concrete stoppings, is a move in the right direction, and is to be commended. The mine is being developed on the panel system, and should soon be in a position to produce an increased output. The main return airways were thoroughly swept clean from coal-dust accumulations, and stone-dusted towards the end of the year, in addition to which a large quantity of stone-dust was applied to other roadways and working-places throughout the year.

Tyneside Collieries, Ltd.—During the early months of the year preparations were made to drain the Tyneside Mine, which had been flooded for some years. An electrically driven pump was installed of 1,000-gallons-per-minute capacity, and pumping-operations were commenced in March. The level of the water was gradually lowered, progress being decreased during periods of heavy rain, thus proving that percolation from the surface was the chief cause of water entering the underground workings. The water was lowered a sufficient distance by September to make the top portion of the old dip heading visible for a short distance, when it was evident that considerable robbing of the main dip pillars had taken place, with the result that the roof had fallen heavily. Following upon the cleaning-up of the old roadways, it was proposed to drive a dip heading from the main level in a south-westerly direction through the old pillars, the bords in which appeared to be standing well. However, an inrush of water caused the flooding of the mine on 8th October, when all the underground portion of the pumping-plant was lost. The indications were that had a duplicate pumping-plant been added to the original equipment unwatering operations would probably have been successful.

Briandale Colliery.—No. 1 section was reopened in June, closed in September, and reopened in November. A small ventilating-fan was installed and the main heading advanced 2 chains in a north-westerly direction. In No. 2 section mining operations were carried out during the year. In No. 3 section pillar-extraction was commenced in May and continued during the year. No. 4 section was commenced early in the year; the main levels were driven a distance of 4 chains in a north-westerly direction, when thinning of the seam took place. The main heading was driven a distance of 4 chains. A steam locomotive was installed to replace the internal-combustion tractor to transport the coal from the mine to the bins. The change has proved beneficial. It will be necessary to carry out further prospecting on this lease in the near future if the life of the mine is to be materially extended, and, in view of the faulted nature of this area, such work will require great care so as to secure reliable results.

Co-operative Party Mines, Grey District.

Spark and Party's Mine, Rewanui.—The coal to the rise of this lease became stony and unsaleable, as a result of which pillar-extraction was commenced, and continued to the end of the year. A screening-plant was installed towards the end of the year with beneficial results.

Duggan and Party's Mine.—The main dip heading encountered old workings, after being driven a few chains, and collapsed. A small amount of coal containing stone remains to be extracted.