

six pairs of miners were employed therein during the year, there are sufficient places for eighteen pairs of miners.

At the present time the Morgan seam is stopped, and all the miners are now employed in the upper seam. This was done in order to centralize operations for the profitable handling of the reduced output owing to shortage of miners; also to exhaust the upper seam as early as possible, so that when the new haulage tunnel which is now in course of construction connects with the present workings of the Morgan seam the upper portion of the present endless-rope haulage-road may be dispensed with.

No. 3 section: Operations in this section have been carried out much on similar lines to those of the previous year. The winning headings continue to be driven in a northerly course, but as the headings advance it is found that the seam is gradually reducing in height; the same applies to the levels driven in an easterly course from these headings. The winning headings are within 8 chains of Garvey Creek, and as this creek forms the boundary for this section it will be readily seen that the time is not far distant when development work will be completed.

In the No. 3A section there has been practically no development work done, the output having been maintained from pillar-extraction. Arrangements are, however, being made to work a small area of coal between two faults on the eastern side of the dip haulage-road.

Accidents.

There have been a few minor accidents during the year, but it is pleasing to report that these have not been of a serious nature.

Development Work.

Work under this head is confined to the construction of a low-level haulage-road into the Morgan seam. This new haulage-road commences from near the upper terminus of the first endless-rope haulage, better known as the "middle brake," and consists of an outside tramway 21 chains in length, and also a tunnel 56 chains long. The object of this new haulage-road is to connect with the Morgan seam, and also the upper seam at its lowest points. The upper seam, which is 21 ft. thick, should be struck at 46 chains from the tunnel-entrance, and the Morgan seam, which is 25 ft. thick, at the full distance of the tunnel.

The area which this new haulage-road will command is approximately 260 acres, and contains about five and a half million tons of coal. To win this coal under the present haulage system would necessitate the installation of a powerful haulage and pumping plant, and, assuming an average daily output of 500 tons, it would take over thirty years to work the coal out of this area. This would mean a heavy annual expense for pumping, and also a costly and lengthy system of haulage; whereas under this new scheme all the coal will be won free of pumping, and instead of hauling the coal up an inclined plane by means of powerful haulage engines it will be lowered by means of self-acting inclines to the tunnel terminus, from which point the coal will be conveyed by means of an endless-rope haulage to the middle brake.

Once a connection is made with the present workings in the Morgan seam the question of dispensing with the upper section of the present haulage-road will be considered. This, of course, will depend upon whether the rise workings in the upper seam will be exhausted to such an extent to enable this to be done.

In addition to the advantages derived as herein enumerated by the construction of this new haulage-road it will to a large extent overcome another serious difficulty, and that is the housing problem. It is well known that, owing to the hilly nature of the country in the vicinity of the colliery, it is no easy matter to find suitable sites for building cottages, and it is also a difficult matter to construct suitable roads. This new haulage-road will overcome the difficulty to a large extent, in that it will enable employees to reside at Runanga and Dunollie and travel to and from their work daily.

To complete the work will probably take two years and a half from date. The route of the new haulage-road is shown on the litho accompanying this report.

Surface Works.

The plant and machinery in and about this colliery has been maintained in good condition and efficient repair.

The electric plant, which is centrally situated and provides power for all ventilating-fans at this colliery, also for the driving of an endless-rope haulage, has been continuously worked during the year without interruption.

The generating-machine is driven by a high-speed Bellis-Morcomb engine, which derives its power from two Babcock boilers; the latter also supply steam for two hauling-engines in the No. 3A mine, and for a self-contained air-compressing plant, which is situated in the boiler-house and supplies compressed air for driving the rock-drilling machines in the new tunnel. As these boilers and the electrical plant are worked continuously throughout the twenty-four hours, with only a stoppage of sixteen hours on Sundays, it will readily be seen that the annual consumption of fuel at this power-house, together with the attendants' wages, is a costly item.

In the near future it will be necessary to duplicate this plant, as a stoppage to this plant means a stoppage for the whole colliery. To duplicate it by means of additional boilers and other machinery required would be a costly undertaking; therefore, before doing anything in this respect, it is the management's intention to ascertain the water-power available from either the Seven-mile or Davy