

Early in the year No. 2 North Section was stopped because of excessive water. Small inrushes were occurring in all the working-places, and it was considered wiser to stop the section rather than risk another large inrush similar to that in No. 1 North. Since being stopped great difficulty has been experienced in keeping the main road open for a waterway. A concrete-block tunnel is at present being built through one particularly bad portion. It is essential that this water has a free passage, as if a blockage occurred it would flood the dip workings below.

It is worth noting the large amount of shift-work required simply to deal with water in this mine. For instance, outlets for water alone have to be maintained from No. 1 and No. 2 North Sections and also the old Blackball Mine. Without considering ordinary face pumping, six pumping sumps have to be kept in repair and regularly cleared of silt. Altogether, thirteen pumps are in actual use underground.

Installations: During the year a large concrete substation has been built and transformers, &c., installed. Power was connected in August, and a marked improvement has been achieved in face voltage. The high-tension power is fed through a borehole cable at 10,000 volts and transformed underground to 400 volts. The building has two compartments, high-tension end and low-tension end.

A new 50 h.p. endless haulage has been installed in the main south headings, and is so situated that it can also be used down No. 1 Dip when the latter is dewatered. The haulage is operated by automatic bell-stop and thruster brake, and this has eliminated two winchmen. A considerable saving in skip repairs and rope has been made with this installation. Under the old main and tail system a $\frac{5}{8}$ in. rope lasted six weeks; the present $\frac{7}{8}$ in. rope should last one year.

A new 30 h.p. direct-haulage winch has been installed at the top of the Sump Dip to replace a small 15 h.p. slow-speed winch. A new 20 h.p. main and tail winch has been installed to handle the coal from the top of the Sump Dip to the endless-rope road. This haulage works exceptionally well on an undulating and winding roadway, replacing two small winches and winchmen.

A new 20 h.p. direct-haulage winch has been installed at the top of Dunn's Dip to replace an old 10 h.p. slow-speed winch.

All these sections are now equipped with haulage facilities which would handle more coal if the undulations and thinnings in the seam would allow us to concentrate our miners to a greater extent.

Surface: A stone chute has been erected at the delivery end of the underground conveyer belt and disposes of stone, &c., straight into the creek below. Instead of being compelled to stow all stone underground, it can now be sent to the surface during the ordinary coal-producing shift and dumped without requiring additional labour. This is a big advantage in a mine which has so many thinnings to contend with.

A new welding-shed has been erected as an extension to the main fitting-shop. This is a big improvement, as the arc does not now inconvenience the other workmen.

Summary: The difficult mining conditions due to excessive water and the changing nature of the seam make the maintaining of a steady output most difficult and it is impossible to forecast the future of any section from day to day. An example of this was the Main and Tail Section, which had four perfect places producing the highest outputs in the mine. Within one week every place struck thin coal with water pouring in, making the section unworkable from an output point of view. This happens continually, so that it is a struggle to have sufficient places on hand so that these low output places can be kept at a workable minimum. The two headings showing the most promise and working the best-quality coal are driving towards No. 2 Bore, which, as stated above, shows no coal.