miles by C.P.R., and is 13 miles south of the town of Yale. Both Hope and Yale were centres of placer mining activity in the time of the great gold excitement of

the Fraser 50 years ago.

No official information is yet available relative to the new field, for it has not yet been visited by either Federal or provincial officials of the respective departments of mines. It has been stated, though, in published accounts of the district, that the formation is andesite, with intrusive sheets of quartz porphyry, with visible free gold sometimes occurring in the latter. Generally speaking the ore is, so it is stated, of a milling character; assay returns from specimens have given value

ranging from \$15 to \$200.

Of course, it is yet early to offer an opinion as to the merits of the new field, for little prospecting has been done, and no development of importance. It is not unlikely, though, that some payable mines will be opened, but this may not now be taken for granted. From the notice the field has already attracted, it is probable some of those who have acquired claims will develop them next season. Meanwhile this is only a preliminary intimation of the fact that this new district is receiving the attention of prospectors, and a suggestion of the possibility of its eventually being developed into a camp of some importance.

## A MINING MACHINERY EXHIBIT AT WESTERN PENNSYLVANIA MINING EXPOSITION.

Thousands of daily visitors, including a large number of coal operators and mine superintendents, were afforded in their visit to the Jeffrey exhibit, a view of modern mining machinery, the feature exhibit at the Western Pennsylvania Mining Exposition.

in underground workings. Every operation is explained by the demonstrators.

This mine room had a coal face 45 feet long and 6 feet high, constructed of large lumps of bituminous coal, which were brought from the Hazel mine of the Pittsburg-Buffalo Company. Practical demonstrations were daily conducted by the operators actually undercutting and drilling the coal and hauling it out of the room.

Photograph No. 1 shows a 28-A Short Wall Machine undercutting the coal across the face. At the left of this machine is a self-propelling steel truck, equipped with an automatic cable reel, which winds up the electric cable, as the truck moves out of the room. This machine unloads itself from the truck, makes the sumping cut at the right hand rib, from which point it cuts across the face until the left hand rib is reached. A steel feed cable wound on a power-driven drum at the front end of the machine pulls it across the face of the coal at a speed regulated by the hardness of the cutting and upon the nature of the coal or rock in which the cutting is done. Another cable which has no connection with the power, serves as a guide, holding the machine to its work and at a proper angle for its greatest cutting efficiency.

When the machine is finished in the room, it can be loaded on to the truck with its own power. Its narrow cutter-head and short length of machine from the coal face when cutting, make it especially valuable for cutting ribs and pillars of coal which have a tendency to come down when undercut.

Photograph No. 2 shows a Jeffrey A-5 Electric Augur Drill in operation, drilling a hole in the coal face. This drill is operated by an electric motor and will drill any material in which an augur drill will stand up. The



No. 1

This exhibit, occupying a space of over 3,000 square feet, reaching over 100 feet in length by 30 feet wide, was placed in the northwestern corner of Machinery Hall. It was designed and built entirely by the Jeffrey Manufacturing Company, Columbus, Ohio, being in the form of a model mine room, showing their latest and most improved types of mining machines, electric drills, as well as electric mine locomotives, in actual operation; and for all practical purposes as they would be operated

photograph also shows another corner of the mine room with a 21-A mining machine equipped with a flame and gas-proof motor and starting box. In other respects, it is similar to the well-known Jeffrey 17-A electric coal cutting machine, being especially adapted for the hardest cutting encountered in any coal mine.

Another distinctive feature about the exhibit was the fact that it was the first public exhibition of any Jeffrey "Armorplate" Electric Mine Locomotive; designed and