

feet, 4.6 feet, 5 feet, 6 feet, and 6 feet. The coal is mined by pillar and stall method and hauled to the tippie by endless rope; the steel tippie is equipped with Marcus screens, built at Newcastle-on-Tyne, and is capable of handling 120 tons per hour.

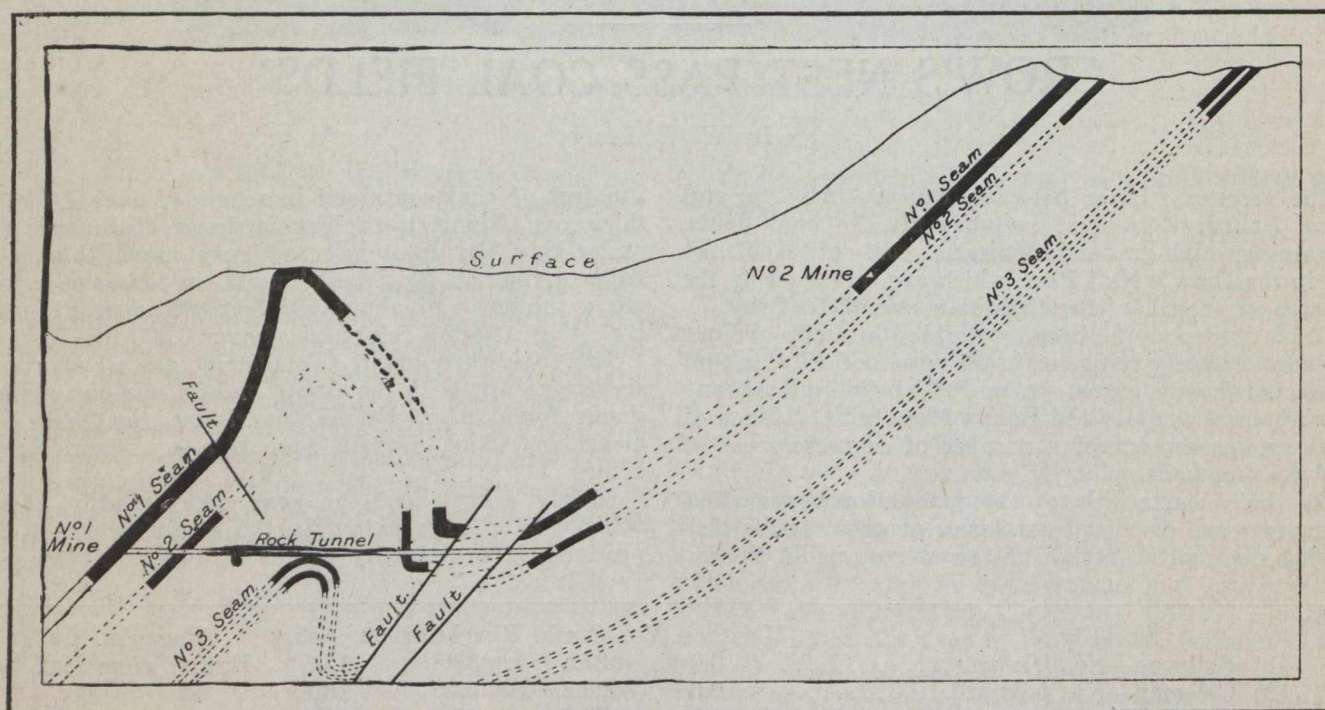
Police Flat Siding.—At Police Flat is situated one of the Leitch Collieries' plants. This point is on the axis of a sharp anticline and is underlaid by Dakota rocks, but about half a mile to the north, where the mine is situated, erosion has uncovered the underlying Kootenay beds. Here five seams of coal have been proven, 2 feet, 6 feet, 5 feet, 4 feet, and 10 feet, respectively, in thickness. The mine is worked by pillar and stall system, and on account of the steep dip (60°) the rooms are driven diagonally up the pitch. The coal is hauled in the main gangway and to the tippie by gasoline motor. The tippie is of the Phillips cross-over type and is equipped with shaking screens and

seam to intersect the lower seams from a point some two miles from the entry, a notable double fold was met with, No. 2 seam having been cut in three places while No. 1 and 3 seams were entirely missed; the accompanying sketch will make this clear.

About one-half mile to the east of Bellevue, the Maple Leaf mine is situated. The folding mentioned above is well seen here, the coal seams being repeated four times in a distance of about one-half mile.

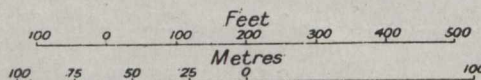
Hillcrest.—At this station a short spur turns off to the south to Hillcrest town and mine. The mine is located on the western limb of a broad undulating syncline, on the eastern limb of which the Bellevue mine is situated. Three seams, 14 feet, 8 feet, and 9 feet in thickness, have been developed at this point.

The Canadian Coal Consolidated is operating two mines at Frank; the first is opened by a drift parallel to the face of Turtle Mountain and driven in a souther-



Geological Survey, Canada.

Section in *Bellevue Mine* showing folding of coal seams



picking tables, and has a capacity of 1,000 tons in two shifts. From the tippie the slack coal is elevated to the washing plant, of Luhrig jig type, with a capacity of 500 tons washed coal in ten hours. After washing, the coal passes to bins holding 1,000 tons and thence by electric lorries to the coke ovens, 101 in number; these ovens are a modified bee-hive, rectangular in shape and are mechanically levelled and pushed. They take a charge of 10 tons of coal.

Bellevue Siding.—At Bellevue, the West Canadian Collieries, Ltd., are operating an important mine. Four seams intersected by a cross-cut tunnel are 9 feet, 17 feet, $4\frac{3}{4}$ feet, and 15 feet, respectively, in width, in a total thickness of 450 feet of measures. Two other seams, one 4 feet, the other $3\frac{1}{2}$ feet in thickness, are known to occur below these. The coal is worked by pillar and stall system, the rooms being driven directly up the pitch. In driving a crosseut from No. 1

ly direction. Three seams have been proved but one only, the highest, is being worked; this seam is from 12 to 15 feet thick. The coal is hauled along the main level and to the tippie by means of gasoline locomotives.

No. 2 mine is situated about one-half mile north of No. 1, and is being operated by means of a shaft 330 feet in depth. The main level, driven from the bottom of the shaft, runs in a northerly direction towards Bluff Mountain. From this mine the daily output is about 450 tons.

Lille Coal Mine.—From Frank, the Frank and Grassy Mountain Railway branches off to the north and follows the valley of Gold Creek for about 7 miles. About 5 miles up this line the town of Lille is situated, where the West Canadian Collieries are operating their Lille mine. A coal seam 4 to 5 feet in thickness has been worked here quite extensively. The mine is