

degrees. In this distance four small shafts have been sunk and two drifts.

In shaft No. 1, which is nearest the camp, there is a large body of coal and shale, the width of which, at surface, is from 20 to 24 feet. The lower edge of the coal is vertical, resting against a grey sandstone by a fault plane. Of this entire thickness of coal and shale the portion opened up by the shaft is about as follows:—

	Feet
Coal at bottom .....	4
Sandstone parting .....	1
Coal .....	2
Coal with small partings of shale mixed .....	2

This probably represents the lower portion of two seams which appear to exist in this area, the exact relations of which are not easy to determine at one point merely. To ascertain as clearly as possible the actual conditions of the coals at this place, as to which some discrepancy of opinion exists in the several reports on the property by mining engineers, a careful examination was made.

A measured line was run from No. 1 shaft to the entrance of the tunnel on a course of  $127^{\circ}$  for 295 feet. Another shaft, to the south of the camp about 175 feet west of shaft No. 1, found no coal, probably being to the south of the line of fault which can be traced from the first shaft into the tunnel on a course S.  $65^{\circ}$  E.

The tunnel at the east end of the outcrop was driven on a course of  $76^{\circ}$  degrees for 82 feet, or at an oblique angle to the run of the coal, and later, was continued on a course of  $5^{\circ}$  for about 60 feet. In the latter course, at 10 feet, the lower seam was struck, the angle of dip at bottom being 75 degrees, indicating a fault; the dip speedily declined and in a distance of 14 feet was only 37 degrees, the coal and shales being much crushed. The thickness of this seam of coal and shale is about 12 feet 6 inches of which the amount of coal will total about 8 feet. A large part of the seam near the outcrop is badly broken up, the coal and shale being crushed together. In general character this lower seam corresponds quite closely with the lower portion of the seam disclosed in shaft No. 1.

The second or upper seam as seen in the tunnel is separated from the lower by about eight feet of shale. The dip of 37 degrees in the upper part of the lower seam decreases to  $16^{\circ}$  at the bottom of the upper seam, the measures flattening out rapidly. The inner end of the tunnel could not be reached owing to water, but the seam as measured gave

	Feet	Inches
Coal .....	1	3
Shale parting .....		1
Coal .....	5	0