

down to 5 ft. x 4 in. are used. The mine is freed of water by duplex Jeanesville pumps, one in No. 2 and one in No. 5. The air current passing through the mine is in volume 95000 feet per minute. The ventilation is sweet, and the condition of the mine in general, all that can be desired. The rooms are driven ten feet wide and the cross head eight feet. Timbers—a boom and two props or three if coal is fresh,—are placed from 3 to 4 ft apart. It is claimed for No. 2 slope coal that it is not excelled by any in the province.

—THE NO 3, OR NORTH SLOPE.—

THIS slope is a very short distance north from No. 2. Here 148 'places' supply work for some 240 miners. The coal is all filled from chutes, with the exception of what comes from two small inclines. A number of new places are ready, it being the policy of the management to keep development work well ahead. There are sufficient places for a daily output of 1600 boxes, though the daily average is a hundred or two boxes short of that number. This average can be easily maintained under existing conditions indefinitely, and largely added to by a little effort. On the west side of the slope the coal is ten feet and on the east four feet two inches, but it is gradually increasing in height. The same system of haulage is employed as in No. 2. In this slope also large quantities of timber are used, and iron booms are being much used in the slope and for mainways. The roof is fairly good. The air courses are in excellent condition. The air circulates at the rate of 98,000 cubic feet per minute, the fan making 110 revolutions per minute with 4 inch water gauge. The general condition of the mine throughout is satisfactory. The coal is worked back from the boundary to the bottom by bord and pillar method. The coal is taken by chutes to level. The pillars are fifty feet. The bords are 10 feet wide and crossheads 8 feet as in No. 2. Large sized duplex pumps are employed in unwatering, one stationed at 1300 feet and the other at 3200 feet from surface. There is also a medium sized 'Cameron' set at bottom of slope which forces the water to the 3200 foot lodgement. The vertical height from the bottom to the surface is 2,050 feet. Below are given the distances of the several leading places.

Length of slope	4100 feet.
Level west 3200 ft. lift	9504 "
" " 2600 "	" 9528 "
" " 3800 "	" 1800 "
" " East 3200 "	" 2000 "
" " 2600 "	" 900 " U. Seam.
" " 2600 "	" 1000 " L. Seam.
" " 3890 "	" 700 " E. Tunnel.
" " 3800 "	" 150 " W. Tunnel.

Aberdeen or No. 5 Slope.

The history of Aberdeen slope is interwoven with that of No. 2. The coal is hoisted by an engine, placed on the surface, to the 2400 feet level, from the two lower lifts, distant 600 feet and 1200 feet respectively. The coal is then hauled by horses some 400 feet to No 2 haulage and thence to bottom of No. 2. This applies to the east as well as to the west side.

AVAILABLE COAL

IT may now be asked what quantity of coal has the development work referred to exposed. That is rather a hard question, but an answer is attempted in the following tables:

In No. 3 slope:—

(1) 8000 feet x 600 x 8'	6'	8 per cent worked out.
(2) 8500 " x 500 x 8'	6	6 " " " "
(3) 2000 " x 600 x 4'		20 per cent worked out.
(4) 2000 " x 600 x 4'		unworked
(5) 1075 " x 600 x 4'		"
(6) 1075 " x 600 x 4'		"
(1.&2) West 2600 & 3200.	(3.&4) East 3200 & 3800	
bottom coal. (5.&6) East 3200 & 3800 top coal.		
No. 2 Slope and Aberdeen.		
(1) 4800 x 400 ft x 9 ft		50 per cent worked out.
(2) 4000 x 1000 " x 7 "	25	" " " "
(3) 3000 x 600 " x 9 "	4 8	" " " "
(4) 1100 x 90 " x 4 "		unworked.
(5) 700 x 400 " x 11 "		unworked.
(6) 1225 x 500 " x 9 " 4 "		"
(7) 1225 x 600 " x 9 " 4 "		"
(8) 4000 x 1200 " x 9 " 4 "		"
(9) 2000 x 600 " x 9 "		"

(1) east No. 2 2700 ft. level (2) east of Aberdeen (3) east No. 2 sinking. (4) Minto seam. (5) west No. 2 slope (6) west No. 5 sinking (7) do lower level. (8) east No. 5 sinking (9) west 3000 feet lift.

At an output of 500,000 tons yearly there is sufficient coal exposed at this moment to last for many years, just how many years I have not time nor inclination to figure out. The Springhill Mining Students Association may be well employed for a night in calculating the quantity. Excellent as the above showing is it gives no adequate idea of the vast resources of the company. As said in a former issue the Cumberland Ry. & Coal Co. is the largest owner of coal mining areas in the Dominion. In the immediate vicinity of Springhill it possesses 17 square miles, while in other points in Cumberland and Cape Breton it owns 173 square miles additional, or a total of 190 square miles. No one will undertake to say there is coal of commercial value in every one of the areas held under lease from the crown, but if it underlies a fourth of the total then the property may be said to be of incalculable value. Mr. J. R. Cowans never let any chances go by. If there was an area for sale, or a vacant area not taken up, it was bought or covered at once. And then besides the areas held under lease the company holds thousands upon thousands of acres of land in fee simple.

GENERAL REMARKS

The position of the collieries, from a geographical standpoint is excellent; shipments can be made all the year round by water as well as by rail. To the position in part, as well as to the excellent quality of the coal, is due the fact that the product demands a better price than at some other of the larger mainland collieries. Good prices for coal are necessary these days owing to the greatly increased cost of production. The public may not be aware how much more coal costs the company than it did four years ago, in the one item of wages alone. Take some instances. In 1901 no less a sum than \$106,882 represents the amount paid additional as increase in wages; in 1902 \$122,287, in 1903 \$139,963, and this year it will reach at least \$156,000, or a total for the four years of over half a million dollars. Let it be clearly understood that this half million has no reference to the more wages paid owing to there being more men, it represents the increased sum necessary to do the same amount of work in 1904 as was done in 1899 or 1900. In January, of 1901 the increased per centage in wages, cost the company over \$9000, the average for the year being a trifle less than that amount. In 1902 the average increased percentage was over \$10,000 a month,