

boundary, and the coal is then worked by longwall retreating. No explosive is used, the coal being worked by maul and wedge.

C. B. COAL FIELD,

Dominion Coal Co., Ltd.

The Company has, under lease from the Province of Nova Scotia, areas of coal lands aggregating about 125 square miles. Of these about 75 square miles were leased to the Company, by a special act, for a term of ninety-nine years, the terms of the lease exacting a royalty of 12 1-2 cents per ton, on all the coal raised, excepting coal used for colliery purposes, or by the Company's employees. The remaining areas of about 50 square miles are held under 20 year leases, the royalty being 10 cents per ton. The mines at present being worked by the Dominion Coal Co., lie within a radius of three or four miles of the town of Glace Bay. Glace Bay, situated on the Sydney and Louisburg railway, is about 15 miles east of International pier at Sydney; and about 25 miles from Louisburg pier at Louisburg.

The Sydney and Louisburg railway is exceptionally well constructed, the main line from Sydney to Louisburg being 39.3 miles in length. Branches to each mine, and sidings, add 42 miles, making a total of over 81 miles of road maintained. The gauge is standard 56 1 2 inches—and the maximum grade is 70 feet per mile, in favor of the loaded trains. The rails used weigh 80 pounds to the yard. Twenty-five locomotives, a number of which are of the 120 ton class, 1,200 fifteen ton cars, and 200 thirty-five ton steel cars are used in moving the twelve to fifteen thousand tons of coal, constituting the daily output of the Company.

Four seams are worked as follows:—

1—The Phalen seam. The coal from this seam is notable for its excellent qualities, containing by comparison with most of the other Nova Scotia coals, less ash and sulphur. A fair analysis of Phalen seam coal would show approximately as follows:—

Fixed carbon.....	58.5 per cent
Volatile matter.....	32.2 "
Ash.....	7.1 "
Sulphur.....	2.2 "
100.00	

The average thickness of coal, mined from this seam is about 7 1 2 ft., and the bulk of the coal mined at present comes from the Phalen seam, worked through collieries No. 1 to 6 and No. 8.

2—The Harbour Seam. Situated about 450 feet vertically above the Phalen; the coal is found to contain a somewhat greater percentage of volatile matter, so that Harbour seam coal is extensively used in the manufacture of gas for heating and lighting purposes. The thickness of coal mined is about 5 1 2 feet and is worked through colliery No. 9.

3—The Hub Seam.—The coal in this seam is very similar to Harbour coal, the thickness of coal mined being about 8 feet. Colliery Dominion No. 7 is situated on this seam.

4 The Emery or Ross Seam.—In this is found a coal of a character similar to the Phalen, about 4 1 2 ft. of which is mined. Dominion No 10 extracts coal from this seam.

All of these seams pitch towards the sea, their outcrops indicating their well defined basin like character. The average dip amounts to about seven feet vertically

per hundred horizontally, and an extensive series of soundings shows that there is a great thickness of cover over the sea areas, permitting future mining operations to be carried on in the sea areas, of which the holdings of the company are extensive, without any difficulty. Free from any considerable disturbances, such as faults, etc., and the uniformity of dip and thickness, aids materially in the economical extraction of the coal contained in these seams, of which only a fraction has been developed.

Nova Scotia Steel and Coal Co.

In the year 1900, the Nova Scotia Steel Co., purchased the business and property of the General Mining Association.

The General Mining Association was formed by deed of settlement in 1899, and (inter alia) took over the lease of the Duke of York's extensive coal areas in Nova Scotia. In or about 1859, by arrangement with the Provincial Government of Nova Scotia, the Association released some of its rights and secured the exclusive right to all coal seams in certain areas. The leases have been renewed, and now held under the general law of Nova Scotia. The Association had, however, disposed of some of these areas before the property was purchased by the Nova Scotia Steel Co., but had retained the Sydney mines and the Point Aconi areas, which contain a large quantity of coal and good facilities for shipments.

The Nova Scotia Steel and Coal Co., Ltd., acquired all the business, property, and assets of the Nova Scotia Steel Co., Ltd.

Property.—The properties taken over and owned by the Nova Scotia Steel & Coal Co. are as follows:—1—All the lands, shafts, buildings, plant, and railway used in connection with the coal mines, together with the leases of coal areas which were acquired by the Nova Scotia Steel Co. from the General Mining Association. 2—All the lands, plant, buildings, iron mines, and railway used in connection with the iron mines of Bell island, Newfoundland, and elsewhere, which were acquired by the Nova Scotia Steel Co. 3—All the lands, plant, and machinery used for the manufacture of steel at New Glasgow, in Pictou county, acquired and erected by Nova Scotia Steel Co. 4—A standard gauge railway from Bridgeville, in Pictou county, to connect with the Intercolonial Railway at Ferrona junction, 12 1 2 miles, with 3.87 miles of siding, with rolling stock. 5—All the land in fee simple and leases from the Crown, for iron, coal, flux purposes, acquired by the Nova Scotia Steel Co. for the purpose of carrying on the different industries.

The above are as follows: At the mines in Nova Scotia; 72 square miles in Cape Breton and Victoria counties. Eight square miles in Pictou and Guysboro counties. At the quarries; 250 acres in Cape Breton and Richmond counties. At the works; 800 acres at collieries and at the iron steel works. At the mines in Newfoundland; 18 square miles, 8 square miles of which are submarine, under lease from the Government of Newfoundland.

Things are going on nicely at the Joggins. The output is now over 200 tons per day. The management has accepted Tom Brown's rule, "Each day a little better than the preceding" and therefore the output is increasing satisfactorily.