## **Coal Resources of the Provinces.**

Nova Scotia.—The coal of Nova Scotia belongs to the Carboniferous formation, the largest workable seams forming a part of the middle portion of that system or belonging to what is styled the Productive Coal Measures. This formation is found in several portions of the province, chiefly at Sydney and in Richmond and Inverness counties in Cape Breton island, at Pictou in the eastern part of Nova Scotia proper and at Springhill and Joggins, which are in the northwest part of the province in Cumberland county. Seams of considerable size are found in the underlying portions of the Middle Carboniferous, otherwise known as the Millstone-Grit. The coals of Nova Scotia are bituminous, of good quality, well adapted to the production of coke and excellent for domestic use and for steam purposes.

Sydney.—The Sydney coalfield, one of the most important in Nova Scotia, extends for 32 miles along the seacoast of the north-eastern extremity of Cape Breton island, the measures having a width on land of about 6 miles. The aggregate thickness of coal in the several workable seams varies from  $13\frac{1}{2}$  feet in the Dauphin area to  $44\frac{1}{2}$  feet at Sydney harbour, the individual seams ranging from 3 to 9 feet in thickness. The strata are almost free from faults and have a gentle dip seaward, so that a large area of submarine coal is available.

Inverness.—The coal fields of Inverness county include a series of narrow areas extending for over 50 miles along the western shore of Cape Breton island. The areas of the productive measures form part of the eastern rim of a basin, the greater part of which has been removed by erosion. The Productive Measures, on their easterly side, are underlain by the Millstone-Grit and various formations of the Lower Carboniferous, which in turn rest on Cambrian rocks. In various localities seams from 2 to 12 feet in thickness occur, usually with rather low angles of dip.

*Pictou.*—The Pictou coal field, on the mainland ,has an area of about 25 square miles and has been producing coal for more than 90 years. Though the field is small, it comprises some of the largest seams in Eastern America, the main seam in the Stellarton area having a thickness of 40 feet while several others in the vicinity vary in thickness from 10 to 20 feet. The geological structure of the district is very intricate; faults often of considerable magnitude are numerous and the productive measures are almost completely girdled by them.

Cumberland.—In Cumberland county there are two productive areas of which one situated on the coast is called the Joggins area while the other is at Springhill, about 15 miles east of the first. In the Joggins area, the coal seams occur along one side of a very broad synclinal basin of Carboniferous measures, which toward the centre of the basin are overlapped by the Permian beds. In the western portion of the Joggins area the seams are comparatively thin, the principal one worked showing about 5 feet of coal and the lower seam somewhat less. In the remarkable section of strata exposed along the coast of Chignecto bay, over 70 coal seams outcrop. Several seams are 5 to 6 feet thick, one measuring  $9\frac{1}{2}$  feet but having  $2\frac{1}{2}$  feet of shale partings.

In the Springhill basin the geological structure is less simple and the strata dip more steeply than in the Joggins area, the seams being worked along slopes of  $30^{\circ}$ . There are a number of seams, some of which are over 10 feet thick. They have been worked for more than 40 years, while several others of workable size have been developed to some extent.

New Brunswick.—In New Brunswick the Carboniferous rocks have a wide distribution and comprise an area of more than 10,000 square miles; their coal seams outcrop at many points throughout this area. Near the upper portion of