## THE IRON ORES OF PICTOU COUNTY, NOVA SCOTIA.

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On the west side of the east branch of the East River the Carboniferous rests on strata, composed largely of black and gray slates and quartzites, older than any met on the east side of the river, except possibly the hills of indurated breccia. At several points patches of strata, perhaps representing the lower beds exposed on the east side of the river, intervene between the Carboniferous and the older strata. These slates and quartzites are considered to be the eastward extension of the axial measures of the Cobequid Mountains, which they strongly resemble, and have been termed Siluro-Cambrian. As yet, however, the work of mapping out these horizons has been incidental to the exploratory work on the various iron-ore deposits, and much remains to be done.

Although the presence of a few of the iron-ore beds about to be described had been known for many years, no attempts were made to prove their value until 1873. In this year Dr. Dawson, assisted by his son Mr. George Dawson, determined the position and extent of some of the more important deposits, and their work was continued by the writer for several seasons over a district embracing three hundred square miles.

Taking the ores in ascending geological order, they occur as follows:

Cambro-Silurian.		Specular magnetite.
Upper Silarian.		Red hematite.
sno.	Marine limestone.	Spathic ore. Red hematite.
Carboniferous	Millstone grit.	Nodular elay ironstone.
	Coal measures	Clay-ironstone. Blackband.
	Upper coal measures.	Clay-ironstone.
Recent.		Bog-ore.

The iron-ore district of the Cambro-Silurian series begins about six miles to the northwest of Glengarry station, where there are several veins of specular ore in Gairlock. These veins, as exposed naturally near the farm of James McKay, of Mill Brook, vary in thickness up to 2 feet, but no work has been done to test their extent. About two miles west of Glengarry a large vein crosses the railway, and is composed chiefly of ankerite with sideroplesite, and a little calcspar, and carries several veins of specular ore. One of these has been opened by a short drift and shows 3 feet of excellent ore.

From this point eastward to Drug Brook on the west branch of the East River traces of specular ore are frequently met, but no veins have been observed. Here a natural exposure shows three beds of limonite, the thickest being about 30 inches in width. It is not known with certainty that these ores represent the specular