In Nova Scotia the gypsum and associated strata were long considered of Permian age from their resemblance to these rocks in other countries and their somewhat obscure relations to the succeeding measures; and it was only by a careful study of sections, and a comparison of fossils that the labours of Sir Charles Lyell, Dr. Dawson, and Mr. R. Brown, relegated them to their true position as forming part of the Carboniferous marine formation. Their stratigraphical position is now undoubted, and Davidson affirmed the fossils, especially the brachiopods, to be in many cases identical with those of the Mountain Limestone of England. De Koninck stated "that the fauna completely recalled that of the Carboniferous limestone of Visé in Belgium."

Yet, as Dr. Dawson remarks, it is true that the rocks themselves, the limestones, the red sandstones, the marls, and the gypsums, have much the aspect of Permian strata, and the fossils, although Carboniferous, have, especially in the upper beds, many forms common to the Carboniferous and Permian, suggesting that there may have been here what M. Barrande would have styled a "colony" of Permian forms in the Carboniferous age.

This formation in the Lower Provinces is made up of red and grey sandstones, arenaceous and argillaceous shales, conglomerates, limestones, gypsums, and marls; the various members predominating in different districts.

The formation extends in an irregular form from the Tobique river, in New Brunswick, through the northern and eastern parts of Nova Scotia to the Sydney coal-field of Cape Breton. The gypsiferous deposits of Newfoundland and the Magdalen Islands also belong to the same series of rocks, and are isolated patches of the northern and eastern edges of the great mass of Lower Carboniferous sediment which stretches under Prince Edward's Island and great part of the gulf of St. Lawrence, over an area of not less than 100,000 square miles.

ASSOCIATED STRATA.

The following section, measured by the writer, in Pictou county, shows in a general manner the succession of these strata:—

	Ft.	In.
Red fissile shales	15	0
Compact bluish limestone	4	6
Gray marl, with nodules of limestone	21	4
Gray laminated sandstone	6	0
Gypsum, with a few layers of arenaceous matter	17	3
Brown marl, with veinlets and crystals of gypsum	30	6
Arenaceous limestone, fossiliferous	3	10
Gypsum	8	0
Calcareous, fissile sandstones	11	5