superior sub divisions of Lower Silurian age have yet been recognized in any part of the island.

UPPER SILURIAN AND DEVONIAN.

Rocks of upper Silurian age are indicated at Sop's Arm in White Bay by the presence of *Favosites gothlandica* and other characteristic fossils; and they are succeeded to the eastward about Spear Point by a mass of sandstones, supposed to be Devonian. Further north on the two little peninsulas of Fox Cape and Cape Rouge, some carbonized and comminuted plants were found in a set of sandstones and arenaceous slates, which were referred to Dr. Dawson of Montreal for identification, and who considered them "to bear a stronger resemblance to Upper Devonian than to any other period." These rocks were seen in unconformable junction with the slates and quartrites of the main land, which at the time of my visit were supposed to belong to the middle division of the Quebec group.

THE CARBONIFEROUS SERIES

occupies a large area in the neighbourhood of the Grand Pond, and at St. George's Bay. In an appendix to my report for 1868, a section of the carboniferous strata between Cape Anguille and the Little Codroy River is given of about 3,000 feet in thickness. This mass of strata appears chiefly to belong to the lower and middle part of the series, and contains no workable seams; but higher measures with one or perhaps two workable seams, are known between the south coast of St. George's Bay and the Long Range of Laurentian hills. The strata of Cape Anguille is not included in the section, and was supposed to represent the millstone grit. The calcareous strata associated with the gypsiferous portion of the formation contains *Terebratula succula*, *Conularia planicostata*, and other fossils characteristic of the Lower Carboniferous. These are succeeded by a set of sandstones, shales and marls, which in many cases are filled with carbonized and comminuted remains of plants; sometimes forming nests and thin seams of coal. In the Grand Pond trough, the gypsiferous part of the formation, and inferior strata, appear to be wanting, and the sandstones and associated rocks are deposited upon a floor of Laurentian gneiss. In the St. George's Bay trough the measures on the north side are spread unconformably over the upturned edges of the Lower Silurian strata, while on the south they are brought abruptly in juxtaposition with Laurentian gneiss by a great dislocation which runs in nearly a straight line from near Cape Ray to White Bay. A considerable segment of the workable seams is probably cut off by this fault. The measures are affected by an anticlinal running from Cape Anguille in a north-easterly direction, and nearly parallel with the south shore of the bay, causing the rocks on the south-east side to be repeated on the north-west, which there plunge below the sea, under the surface of which, perhaps, lies the greater part of the coal field of Newfoundland.

From what has been stated above, it would appear that while the ancient Laurentian continent was long submerged on the eastern side of the island, on which the intermediate system was deposited, it was