faces of rock. On the coast of the river St. Lawrence, at Cape Rozier and its vicinity, the Lower Silurian rocks of the Quebec group are well exposed, and are overlaid unconformably by the massive Upper Silurian limestones of Cape Gaspé, which rise into cliffs six hundred feet in height, and can be seen filled with their characteristic fossils on both sides of the cape. Resting upon these, and dipping at high angles toward Gaspé Bay, are the Devonian sandstones, which are exposed in rugged cliffs slightly oblique to their line of strike, along a coast-line of ten miles in length, to the head of the bay. On the opposite side of the bay they reappear; and, thrown into slight undulations by three anticlinal curves, occupy a line of coast fifteen miles in length. The perfect manner in which the plant-bearing beds are exposed in these fine natural sections may serve to account for the completeness with which the forms and habits of growth of the more abundant species can be described.

In the Bay des Chaleurs, similar rocks exist with some local variations. In the vicinity of Campbellton are calcareous and magnesian breccia or agglomerate, hard shales, conglomerates and sandstones of Lower Devonian age. The agglomerate and lower shales contain abundant remains of fishes of the genera *Cephalaspis*, *Coccosteus*, *Ctenacanthus*, and *Homacanthus*, and also fragments of *Pterygotus*. The shales and sandstones abound in remains of *Psilophyton*, with which are *Nematophyton*, *Arthrostigma*, and *Leptophleum* of the same species found in the Lower Devonian of Gaspé Bay. These beds near Campbellton dip to the northward, and the Restigouche River here occupies a synclinal, for on the opposite side, at Bordeaux Quarry, there are thick beds of grey sandstone dipping to the southward, and containing large silicified trunks of *Prototaxites*, in addition to *Psilophyton*. These beds are all undoubtedly Lower Erian, but farther to the eastward, on the north side of the river, there are newer and overlying strata. These are best seen at Scaumenac Bay, opposite Dalhousie, between Cape Florissant and Maguacha Point, where they consist of laminated and fine-grained sandstone, with shales of grey colours, but holding some reddish beds at top, and overlaid unconformably by a great thickness of Lower Carboniferous red conglomerate and sandstone. In these beds numerous fossil fishes have been found, among which Mr. Whiteaves recognises species of *Pterichthys*, *Glyptolepis*, *Cheirolepis*, &c. With these are found somewhat plentifully four species of fossil ferns, all of Upper Erian types, of which one is peculiar to this locality; but the others are found in the Upper Erian of Perry, in Maine, or in the Catskill group of New York.