and a few thin seams of coal, and abundance of leaves of cordaites, and a few calamites and stigmaria."

He further remarks: "We can trace this coal measure back from Advocate Harbour, near Cape Chignecto, to the upper part of the Salmon River of Truro, where it adjoins the carboniferous district of Pictou. It is (generally speaking) much broken and disturbed; and although it widens considerably towards its eastern extremity, it nowhere attains a great development, either in horizontal extent, or in the magnitude of its coal seams." From Advocate Harbour to Partridge Island the belt contains contorted shales and sandstones yielding a few fossil plants, scales of fishes, and shells of Naiadites. Mr. Matthew Jones, a member of this Institute, some years ago found in these strata footprints of a large reptilian animal, referable to the genus sauropus. Similar shales and sandstones outcrop on the banks of the various rivers falling into the Basin of Minas, and show beds of bituminous limestone, with cyprids and fish scales, fireclays, clay ironstones, etc., and yield characteristic fossil plants of several of the species found in the Joggins section.

Ι

In the same work Dr. Dawson has discussed the physical conditions which governed the deposition of the coal and associated carboniferous measures of the district. The evidence of the foldings of the carboniferous of the north side of the Basin of Minas, plainly given by the various river sections, leads to the anticipation that the coal measure band may prove disturbed. The longitudinal foldings are useful to the prospector, as they bring the various coal crops to the surface, and define the limits within which his researches can be carried on with profit. The transverse folding and faults caused by unequal strains, and by the irregularity of the great mountain chain, the determining element, may prove a source of expense to the miner engaged in economic development.

The upper DeBert bridge, on the Londonderry road, appears to be a little to the south of the centre of the Basin in this locality. Following the stream downwards from the bridge the coal beds appear about in the relative order of the section, which is descending geologically speaking :—

94