

Sandstone" of Herefordshire, which enables geologists to correlate the strata with a marked degree of proximity to certainty:

"The Old Red Sandstone" of Herefordshire was long thought to be non-fossiliferous, a few fragmentary specimens only having been found when in the railway cuttings near Ledbury, the Rev. W. B. Symonds (see Quart. Journ. Geol. Soc., vol. 16, p. 193, and vol. 17, p. 152) discovered in the lowest beds (the Ledbury shales) of that formation remains of *Pterygatus*, *Ouelms Pteraspis*, and *Cephalaspis*, together with large numbers of the head shields of *Anchenaspis*."

It is impossible to read over the association of forms in the strata near Ledbury, in Herefordshire, without recognizing in them a fauna and horizon similar to that met with at McArras brook, in Antigonish county, Nova Scotia.

In 1843 Doctor Abraham Gesner described* an "Old Red Sandstone" or Devonian group, which he recognized above Silurian beds In several parts of the province, . . . consisting of . . . "a bright red micaceous sandstone or conglomerate, accompanied by thin beds of red shale and marly clay, and in some places containing seams of fibrous gypsum." He adds: "Hitherto no organic remains have been found in it." He recognizes it at Advocate harbor and on the Moose river, where it is "seen lying unconformably beneath the Coal Measures."

Mr Fletcher classes the rocks of Advocate harbor as Devonian, so that the "Old Red Sandstone or Devonian group" of Gesner must therefore be classed with the rocks of Union and Riversdale, which, from the fauna and flora found in them, are referable to the Carboniferous system, and from their position in the stratigraphic succession may be referable to the Meso-Carboniferous. The gypsum-bearing strata of Gesner are likewise also Carboniferous and not Devonian.

In November, 1899, in a communication on a number of fossil fishes sent him by the writer from various localities in Nova Scotia, in which the geological horizon and precise affinities of the species sent were doubtful, Mr Smith-Woodward, the eminent authority on Paleozoic fishes, gives the following notes on the specimens from McArras brook, adding that they had been submitted by him to Doctor R. Traquair, of Edinburgh:

"The specimens from McArras brook are extremely interesting, and represent the base of the Lower Old Red Sandstone of Britain. The pteraspidian remains are sufficient to prove that they belong to the genus *Pteraspis*. Both dorsal and ventral shields are so much like those of *P. crouchii* that if these Nova Scotian fossils had been found in western England we should have referred them to the latter species. Perhaps the rostral plate may prove to distinguish your form when it

* Proc. Geol. Soc. London, 1843, vol. 4, part 1, no. 65, p. 187.