However this may be, in the Museum of the Geological Survey at Ottawa there is a well preserved fish tooth from the Upper Arisaig series at McDonald's Brook, near Arisaig, N.S., collected by Mr. T. C. Weston in 1869. On the evidence of large numbers of other kinds of fossils, the upper portion of the "Arisaig series" is still held to be of about the same age as the Lower Helderberg group of the State of New York and the Ludlow group of England, but no Devonian rocks are known to exist at McDonald's Brook.

The tooth itself, which is not quite perfect at either end, is about eleven millimetres in height by about five in breadth at the base. It is conical, slightly curved and somewhat compressed, the outline of a transverse section a little below the mid-height being elliptical, and its surface is covered with a thin coat of a finely and longitudinally striated enamel. The figure is a line drawing of the tooth, as viewed laterally, with an outline of the transverse section, both of twice the natural size.

Judging by its external characters, this specimen seems to be what is usually called a dendrodont tooth, and therefore probably that of a crossoptery in, perhaps allied to *Holoptychius*, though its fore and aft edges are not trenchant. Only one specimen of it has been obtained, so that no thin sections of it have been made, to show its microscopical structure. As it does not seem referable to any known species, it may be convenient to call it provisionally *Dendrodus Arisaigensis*.

If the limestones from which this tooth was collectedare, as there is every reason to believe that they are, of Silurian age, a second species can be added to the vertebrate fauna of that system in Canada; but if not, the tooth is still of interest as indicating the possible existence of Devonian rocks at a locality where such rocks have not previously been recognized.