those of Pterichthys, were distinctly seen. The tail is very long, covered with scales, and supports a fin; see fig. 2.\*

The plates of the body are tuberculated, as in Pterichthys. The mouth is supposed by Mr. Miller to have been placed vertically; but the evidence as to this anomalous character is not conclusive. The dental organs are stated, by the same sagacious observer, to have been vertical plates with serrated margins; appearing like the teeth of a saw.†

These fishes are from a few inches to two feet in length; four or five species have been discovered; and their remains are the most abundant of the Ichthyolites of the Old Red. Patches of detached scales, and insulated osseous plates, are very frequent in the sandy cornstones, and the subcrystalline masses of limestone. These fragments are usually of a brilliant blue or purple colour; and strongly contrasting with the dull red tint of the surrounding rock, are easily recognised. The colour is supposed

<sup>\*</sup> The above restorations are upon the authority of Mr. Dinkel; and were made after he had inspected all the best collections of these Ichthyolites. I have only imperfect specimens in my own cabinet; but the late Lady Gordon Cumming gave me the opportunity of examining some choice examples in London. The great length of the tail in *Coccosteus*, is based on a specimen seen by Mr. Dinkel since his return to Neufchatel. For the accuracy of all the other original figures in this work, the author is accountable.

<sup>†</sup> Miller's New Walks in an Old Field; plate 3, fig. 4, p. 52.