PLATE I. — Fig. 1, Restoration of upper side of the elongated spesies of *Pterichthys*, (*P. oblongus*,) referred to in page 47. Fig. 2, *Pterichthys Milleri*. Fig. 3, Part of tail of elongated species, showing portions of the original covering of rhomboidal scales. Fig. 4, Tubercles of *Pterichthys* magnified.

PLATE II. — Fig. 2, Restoration of under side of *Pterichthys* oblongus. Fig. 1, A second specimen of *Pterichthys Milleri*. Fig. 3, Fortion of wing, natural size.

PLATE III. — Fig. 1, Coccosteus cuspidatus. Fig. 2, Impression of inner surface of large dorsal plate. Fig. 3, Abdominal lozenge-shaped plate. Fig. 4, Portion of jaw, with teeth.

PLATE IV. — Fig. 1, Restoration of Osteolepis major. Fig. 2, Scales from the upper part of the body magnified. Fig. 3, Large defensive scale which runs laterally along all the single fins. Fig. 4, Under side of scale, showing the attaching bar. Fig. 5, Enamelled and punctulated jaw of the creature. Fig. 6, Magnified portion of fin, showing the enamelled and punctulated rays.

PLATE V. — Fig. 1, Dipterus macrolepidotus. This figure serves merely to show the place of the fins and the general outline of the ichthyolite. All the specimens the writer has hitherto examined fail to show the minuter details. Fig. 2, Glyptolepis leptopterus. Fig. 3, Single scale of the creature, showing its rustic style of ornament. Fig. 4, Scale with a nail-like attachment. Fig. 5, Under side of scale. Fig. 6, Magnified portion of fin. Fig. 7, Shells of the Old Red Sandstone.

PLATE VI. — Fig. 1, Cheirolepis Cummingia. Fig. 2, Magnified scales. Fig. 3, Magnified portion of fin