

This strange Pterichthyan genus first appears at the base of the Old Red Sandstone, and disappears with its upper beds. It is peculiarly and characteristically the distinctive organism of the system, for in no other system does it occur ; and it has a yet further claim on our notice here, from the extreme singularity of its construction. 'It is impossible,' says Agassiz, in his great work on fossil fishes,—'it is impossible to find anything more eccentric in the whole creation than this genus. The same astonishment which Cuvier felt on examining for the first time the Plesiosauri, I myself experienced when Mr. Hugh Miller, the original discoverer of these fossils, showed me the specimens which he had collected from the Old Red Sandstone of Cromarty.' And we find Humboldt referring, in his *Cosmos*, to this strange Pterichthyan genus in nearly the same terms. This, I suspect, is no place for strict anatomical demonstration ; and so, instead of elaborately describing the Pterichthys, I shall merely attempt sketching its general outlines by the aid of a few simple illustrations. When, in laying open the rock in which it lies, the under part is presented, as usually happens, we are struck with its resemblance to a human figure, with the arms expanded, as in the act of swimming, and the legs transformed, as in the ordinary figures of the mermaid, into a tapering tail. On further examination, we ascertain that the creature was cased in a complete armature of solid bone, but that the armour was of different construction over the different parts. The head was covered by a strong helmet, perforated in front by two circular holes, through which the eyes looked out. The chest and back were protected by a curiously constructed cuirass, formed of plates ; and the tail sheathed in a flexible mail of osseous scales. The arms, which were also covered with plates, were articu-

for examination. It is probable that they will have been lawfully named and surnamed by the *savants* ere the next edition of this work is ready for the press.—L. M.