

nian fish,—a connecting link between the fish and the tortoise. A gurnard,—insinuated so far through the shell of a small tortoise as to suffer its head to protrude from the anterior opening, furnished with oar-like paddles instead of pectoral fins, and with its caudal fin clipped to a point,—would, I found, form no inadequate representative of this strangest of fishes. And when, some years after, I had the pleasure of introducing 't to the notice of Agassiz, I found that, with all his world-wide experience of its class, it was as much an object of wonder to him as it had been to myself. “It is impossible,” we find him saying, in his great work, “to see aught more bizarre in all creation than the *Pterichthyan* genus: the same astonishment that Cuvier felt in examining the *Plesiosaurus*, I myself experienced, when Mr. H. Miller, the first discoverer of these fossils, showed me the specimens which he had detected in the Old Red Sandstone of Cromarty.” And there were peculiarities about the *Coccosteus* that scarce less excited my wonder than the general form of the *Pterichthys*, and which, when I first ventured to describe them, were regarded by the higher authorities in Palæontology as mere blunders on the part of the observer. I have, however, since succeeded in demonstrating that, if blunders at all,—which I greatly doubt, for Nature makes very few,—it was Nature herself that was in error, not the observer. In this strange *Coccostean* genus, Nature *did* place a group of opposing teeth in each ramus of the lower jaw, just in the line of the symphysis,—an arrangement unique, so far as it is yet known, in the vertebrate division of creation, and which must have rendered the mouth of these creatures an extraordinary combination of the horizontal mouth proper to the vertebrata, and of the vertical mouth proper to the crustaceans. It was favorable to the integrity of my work of restoration, that the press was not waiting for me, and that when portions of the creatures on which I wrought were wanting, or plates turned up whose places I was unable to determine, I could lay aside my self-imposed task for the time, and only resume it when some new-found specimen supplied me with the materials requisite for carrying it on. And