

VIII., fig. 3.) It seems a piece of exquisite snell-work, such as we sometimes see on the walls of a grotto. There are two dorsals—the posterior, immediately over the tail, and directly opposite the anal fin; the anterior, somewhat higher up than the ventrals; and all the fins are of great size. The anterior edge of each is formed of a strong spine, round as the handle of a halbert, and diminishing gradually and symmetrically to a sharp point. Though formed externally of solid bone, it seems to have been composed internally of cartilage, like the bones of some of the osseous fishes—those of the halibut, for instance; and the place of the cartilage is generally occupied in the stone by carbonate of lime. The membrane which formed the body of the fin was covered, like that of the *Cheiracanthus*, with minute scales, of the same scallop-like pattern with the rest, but of not more than one sixth the size of those which cover the creature's sides and back. Imagine two lug-sails stiffly extended between the deck of a brigantine and her two masts, the latter raking as far aft as to form an angle of sixty degrees with the horizon, and some idea may be formed of the dorsals of this singular fish. They were lug-sails, formed not to be acted upon by the air, but to act upon the water. None of my specimens show the head; but, judging from analogies furnished by the other families of the group, I entertain little doubt that it will be found to be covered, not by bony plates, but by minute scales, diminishing, as they approach the snout, into mere points. If none of the specimens does any part of the internal skeleton survive.

My collection contains the remains of yet another fish of this group, which was unfurnished with a name only a few months ago, but which I first discovered about five years since. (See Plate VIII., fig. 2.) It is now designated the