

the liver and the lower portion of the intestine. They were enveloped in a dense membrane with polished, pearly surface. The contents consisted of more or less confluent cysts filled with a cheesy matter, probably the remains of perished parasitic worms.

*Acanthonus armatus* (Pl. XXIV. fig. A).

*Acanthonus armatus*, Günth., Ann. and Mag. Nat. Hist., 1878, vol. ii. p. 22.

B. 9. D. + C. + A. 100 + 3 + 88. C. 8. P. 18. V. 2.

The head of this remarkable fish appears of an extraordinary thickness, compared with the thin and compressed trunk and tail; it is very broad across the frontal regions and not much longer than high; the small eye being much nearer to the end of the snout than to the gill-opening. The snout would be truncated in front, but for its upper projecting portion which terminates in two short acute spines. The large mouth is slightly oblique, the maxillary extending backwards beyond the middle of the length of the head. The jaws are equal in front. Two sharp ridges run along each ramus of the mandible, to receive between them a wide muciferous channel.

The angle of the præoperculum is armed with four spines, three of which are placed on the outer edge of the bone; the upper is the longest and dagger-shaped, pointing backwards, the middle is shorter, broader, and points, like the third and smallest, downwards. The fourth is placed anteriorly to the first, arising from the anterior lamella of the bone, short and directed outwards. The longest spine of the head is part of the operculum, which otherwise is a very thin and narrow bone; this spine is nearly two-fifths the length of the head, styliform, deeply grooved above and below, and points backwards.

The nostrils are rather close together, and on the side of the snout; a large mucous aperture in front of them, below the rostral spines.

The entire head and body were covered with minute scales, thin and deciduous, and mostly lost in the specimens. The lateral line is represented by a series of small, distant black pores, running along the proximal ends of the interneural spines.

The length of the body and tail is not quite thrice that of the head; the vent placed immediately behind the root of the pectoral; its distance from the root of the ventrals is less than the length of the head.

The dorsal fin begins nearly above the root of the pectoral, but some rudimentary rays are more advanced and hidden under the skin. The rays are moderately long, longer than those of the anal fin, and gradually decrease in length as they approach the end of the tail; in one of the specimens the small caudal is distinctly free from the other fins. Pectoral fin with broad base, rounded edge and eighteen thin rays, the longest