

long. 15° 16' W., small Pleuronectidæ were obtained in the towing-net, the relation of which to adult forms is at present likewise perfectly obscure.

They (Pl. I. fig. B) have a length of 6 and 7 mm. The notochord is distinct in its whole course, with its diphyrceral termination. The eyes are symmetrical; no pigment is to be seen on any part of the body except in three spots placed in a triangle opposite to the end of the notochord. The fin-rays are perfectly developed, no part of the embryonic fin-membrane remaining. The dorsal and anal portion pass uninterruptedly into the rayed fringe surrounding the termination of the tail. Very peculiar is an exceedingly long filamentous ray placed in front of the dorsal fin somewhat in advance of the eye. Neither pectoral nor ventral fins can be distinguished, but this may be owing to the condition of the specimens, which were mounted for microscopical examination immediately after their capture. Also the configuration of the bones of the side of the head is indistinct, but the mouth appears to have been of moderate width, and is armed with a few tooth-like apophyses.

Another larval Pleuronectoid, figured on Pl. IV. fig. E, is possibly the young of a *Solea*. It is only 5½ mm. long, and was obtained at the surface, off the mouth of the Plate River on February 26, 1876. It was stained and mounted for the microscope, scarcely more than the outlines being visible; the posterior outlines of the head are very indistinct. The specimen is not far advanced beyond the embryonic condition, and its abdomen protrudes as a rounded sac. The tail tapers and is diphyrceral; eyes and the small mouth symmetrical. Snout very short, with a parabolic outline; eye small, nearer to the angle of the mouth than to the upper profile. Fin-rays are developed and differentiated only anteriorly on the back, the remainder of the fin showing a finely striated appearance throughout its length, in its continuation round the end of the tail to the vent. The two first fin-rays stand above the eye, are much elongate, nearly 3 mm. long, and are followed by about eight developed rays. Pectoral and ventral fins apparently absent.

In a young Pleuronectoid (Pl. IV. fig. D), 13½ mm. long, obtained in the surface-net on the passage from the Admiralty Islands to Japan, March 1875, the fins and rays are much more developed. The body is whitish, semitransparent, like that of a *Leptocephalus*, the eyes and mouth are symmetrical. The anterior profile of the snout is parabolic; the small eye is close to the anterior profile, above the angle of the narrow mouth. Abdomen pendent and protruding. Pectoral well developed, on both sides, with broad base; a rayed fold of the integument, attached to the abdominal sac, represents the ventral fin. The vertical fins are continuous, but the caudal projects as a distinct portion and is composed of twelve rays. Dorsal rays about one hundred, anal seventy-four.

This large number of fin-rays would seem to indicate that this fish is the young of some species of *Synaptura*.