I have another spider, a member of the family *Attoidæ*, found in the bay in the same locality, and having the same habit, except that it constructs for itself a protective tube; but, owing to the difficulty of assigning an example to its genus in a family containing so many ill-defined genera, I have been unable to determine in which to place it. This is the fourth marine spider discovered in New Zealand, which is, I believe, the only country in which such spiders have been found.

Art. XXX. — *On a New Genus of Fishes of the Family* Percidæ, *from New Zealand.*

By H. O. Forbes, F.R.G.S., F.Z.S., A.L.S., Director of the Canterbury Museum, Christchurch, New Zealand.

[*Read before the Philosophical Institute of Canterbury, 5th Sept., 1889.*]

Professor Hutton described in 1875 a new species of *Percidæ*, which he founded on a stuffed specimen in the Otago Museum, Dunedin, under the name of *Therapon rubiginosus*. In his account of this fish in "Trans. N.Z. Inst.," viii., pp. 209–10, he says, "It differs from *Therapon* in the oblique cleft of the mouth, the forked caudal, and the greater development of the scales on the vertical fins; but I hesitate to draw up generic characters for it until I can get a fresh specimen." The opportunity of examining a second and particularly fine example of this rare fish has fallen to me, by the acquisition by this Museum of a specimen thrown on the beach, in July 1889, near the mouth of the river Avon, in the Province of Canterbury.

The specific description given by Professor Hutton in the volume I have cited leaves little to be desired in the matter of accuracy; a few points only, and those not easily to be made out in a dried skin, require addition or emendation. I am able also to confirm his opinion that a new genus would probably have to be established for its reception, of which I therefore append the diagnostic characters under the name of *Plagiogeneion*, and a completed description of the species.

Plagiogeneion,* gen. nov.

Body oblong, compressed, covered with ctenoid scales; eye equal in diameter to length of maxillary bone; mouth small, vertical; teeth small, villiform in both jaws; palate

* πλάγιος = perpendicular; γένειον = jawed.

toothless; patch on vomer. Operculum spiniferous, smooth; præoperculum finely serrated. Branchiostegals, 6. Dorsal received into a sheath, notched, with 12 spiny unequal, and 11 soft, rays; anal with 3 spiny and 9 soft rays. Scales quadrilateral, $\frac{6}{10}$in. Caudal deeply forked. Air-bladder simple. Cæca pylorica (9) few.

Plagiogeneion is thus separated by its vertical mouth from the following genera: *Therapon, Macquaria, Pristipoma, Hæmulon, Hapalogenys, Diagramma, Scolopsis, Dentex, Synagris, Pentapus;* and by its simple air-bladder from *Helotes, Conodon, Mæna,* and *Smaris;* by its dorsal-fin formula from *Hyperoglyphe, Gerres, Pristipomoides, Chætopterus, Aphareus, Cæsio, Erythrichthys, Pentaprion,* and *Polycentrus;* and by the form of its body from *Lobotes* (differentiated also by its pseudo-branchiæ) and *Datnioides* (also distinguished by the shape of its caudal fin).

Plagiogeneion rubiginosus, Hutton.

D., $\frac{11}{12}$; A., $\frac{3}{10}$; L. lat. 81, L. trans. 13/25.

General colour pink-red; above the dorsal line, and for 2 to $3\frac{1}{2}$ scales below it, the colour is grey washed with pink-red, in consequence of a wide band on each scale of grey, margined with pink-red. The whole surface below the grey belt is deep salmon-pink. Each scale has a metallic purple spot, which falls into longitudinal lines of purple along the sides. The purple is replaced by deeper pink on the ventral surface between the ventral and anal fins. On the margins of the opercula the colour is nacreous purple; in front of the eye, and the whole of the maxillary bone and lower mandibles, are of a rich purplish-pink nacreous colour. The length is three times the height of the body, or four times the length of the head. The diameter of the eye goes three and a half times into the length of the head. Scales ctenoid, $\frac{6}{10}$ of an inch across, and quadrilateral in shape, with semicircular anterior margin.

Body compressed, the greatest height under the third dorsal spine. Mouth small, vertical, protrusive. Series of very minute teeth in each jaw; palate toothless. Vomer with a patch of teeth. Præoperculum slightly denticulated on its lower margin, smooth below; operculum smooth, armed with two small flat spines. Dorsal single, deeply notched; the fourth spine, which is the longest, goes nearly $2\frac{1}{2}$ times into the length of the head. Spines of the dorsal and anal fin very strong. Anal and soft dorsal not covered with scales; the fins are received into a sheath, which is covered with fine scales; the spiny parts scaleless. Caudals and exteriors of pectorals and ventrals partly covered with scales. Caudal forked, each lobe about equal to the length of the head. The dorsal commences at the

base of the ventrals, and ends at a distance from the caudal equal to about two-thirds the length of the head. Pectorals pointed, the upper border the longest, but not so long as the head, and extending slightly further back than the points of the ventrals. Ventrals inserted behind the pectorals, and extending to a little more than half the distance to the vent, the lateral line extending on to the tail. Total length of the specimen, $15\frac{9}{10}$in.

Canterbury, mouth of River Avon.

Art. XXXI.—*List of the New Zealand Fishes.*

By Professor F. W. Hutton.

[*Read before the Philosophical Institute of Canterbury, 5rd October, 1889.*]

During the eighteen years that have passed since the publication by the Geological Department of the Catalogue of the Fishes of New Zealand, several active workers have been in the field, who have added a number of additional species to our fauna; also many errors in nomenclature have been corrected, principally by Dr. A. Gunther, of the British Museum; and, in order to facilitate further progress, it seems to me to be desirable to collect together the information we now possess. With this object in view I have drawn up the following list, the arrangement followed being that of Dr. Gunther's "Study of Fishes." I have not thought it necessary to give complete references to all descriptions, but only those which show the evidence for the species being included in the list. In the references, Cat. means the "Catalogue of the Fishes of New Zealand, 1872;" and vol. means the volume of the "Transactions of the New Zealand Institute." An asterisk prefixed to a reference indicates that a figure will be found there. A note of interrogation prefixed to a species means that it is doubtful whether it really occurs in the New Zealand seas.

ELASMOBRANCHII.

Carcharidæ.

1. Carcharias brachyurus, Gunther; Catalogue, p. 75.
2. Galeus australis, Macleay, Cat. Australian Fishes, p. 290; *G. canis*, Cat., p. 81.
3. Zygæna malleus, Risso; Cat., p. 76; vol. 5, p. 271.
4. Mustelus antarcticus, Gunth.; *Cat., p. 76; fig. 123; vol. 15, p. 219.