

REPORT

OF THE

FIFTY-FIFTH MEETING

OF THE

BRITISH ASSOCIATION

FOR THE

ADVANCEMENT OF SCIENCE;

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tip of a young example attached to the former, or stretch from the extremity of a parasitic sertularian.

These filamentous processes are usually at some distance from the nests or tubes of the crustaceans which climb actively on them. Whether they give them a larger area for the capture of prey in comparative security, or afford a more extensive surface for the temporary arrest of minute larval or other forms on which they feed, is unknown. It is probable, however, that processes so elaborate subserve some useful purpose to the species, and are not the result of mere purposeless formation.

16. *On a new British Staurocephalus.*
By Professor McINTOSH, M.D., F.R.S.

This form was first noticed in a small aquarium belonging to Mr. Sibert Saunders, at Whitstable, in 1884, and he kindly forwarded living specimens to the St. Andrews Marine Laboratory for examination. It is about 8 or 9 mm. in length by 1 mm. in breadth, including the bristles. The number of segments varies on each side of 30, exclusive of those without bristles. It is characterised by a horseshoe-shaped head furnished with a pair of short dorsal tentacles of two segments, and a similar pair on the ventral surface. Four eyes occur dorsally, one on each side behind the dorsal tentacle, and a smaller pair just in front of the nuchal fold. Each foot has dorsally a short cirrus, and ventrally a somewhat larger one, besides a long process of the setigerous region. Dorsally are long simple bristles, inferiorly bristles with an articulated terminal piece. The jaws consist superiorly of a pair of curved maxillæ and about six small dental plates on each side. The anterior edge of these in ordinary views from above is minutely denticulated. The mandibles present a crown and anterior projection. This form comes nearest the *Staurocephalus minimus* of Langerhans¹ from Madeira.

17. *On certain remarkable Structures resembling Ova from Deep Water.*
By Professor McINTOSH, M.D., LL.D., F.R.S.

When carrying out the work for Her Majesty's Trawling Commission, an old willow-basket came up in the net on August 15, 1884, fifteen miles S.E. of the island of May. This, besides other interesting marine forms, had attached to it certain peculiar dull, yellowish structures resembling ova, about an eighth of an inch in diameter. They adhered to each other in the form of a single layer along the bark of one of the willows. They were nearly circular, with a short, slightly curved distal appendage. The capsule was yielding, but tolerably tough, and the contents consisted of a soft and cohesive gelatinous substance of a pale colour. The minute structure was explained. No change occurred, though kept for a considerable time in the marine laboratory, until decomposition set in. Their relationships are at present unknown.

18. *On the Ova of Callionymus lyra, L. (the Skulpin).*
By Professor McINTOSH, M.D., LL.D., F.R.S.

So little was known about the breeding of this fish that the most recent work on British fishes, viz., that of Dr. Day, gives nothing worthy of note. At St. Andrews it was found that the ovaries were not sufficiently advanced for reliable observation in regard to the condition of the eggs till the middle of June, but that from this date till about the middle of August several favourable examples occurred. The ovaries in a well-developed female form a somewhat cordate mass, bifid in front but connate posteriorly, and, like the spermaries, covered with a silvery coating of the peritoneal lining. The ova are very minute ($\cdot 028$ to $\cdot 03$ of an inch in diameter) and translucent, and are truly pelagic. In appearance they are characteristic. Each has a very fine hyaline *zona radiata*, furnished externally

¹ *Zeitsch. f. wiss. Zool.*, Bd. XL. p. 257.