

XXXVI THE FAUNA OF BRACKISH
PONDS AT PORT CANNING,
LOWER BENGAL

PART XII.—DESCRIPTION OF A NEW SPECIES OF POLYCHÆTE
WORM OF THE GENUS *Spio*.

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Spio bengalensis, sp. nov.

Amongst the invertebrate animals collected in 1907 by Dr. Nelson Annandale from brackish ponds at Port Canning in Lower Bengal, there were some small tubicolous Polychæte worms which he sent to me for description. Although clearly belonging to the family Spionidæ, there appeared, under ordinary inspection, to be no trace of the long occipital (peristomial) tentacles which are characteristic of this family, nor were they seen in the living worms. But after repeated examination under strong reflected sunlight I have found what I take to be the bases or scars of the lost tentacles. In its general characters the species otherwise resembles the *Spio filicornis* described and figured by Malmgren (*Annulata Polychæta*, 1867, p. 92, pl. i, fig. 1) except that the branchiæ or branchial cirri, instead of occurring on all setigerous segments, are confined to the anterior region of the body; this being the distinctive character of the species.

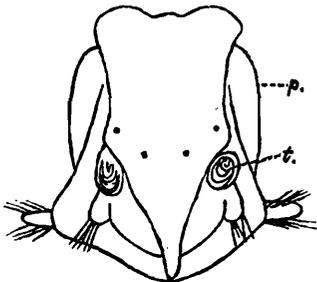


FIG. 1.

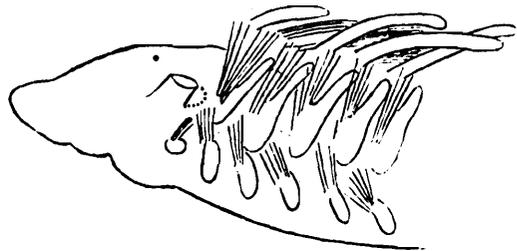


FIG. 2.

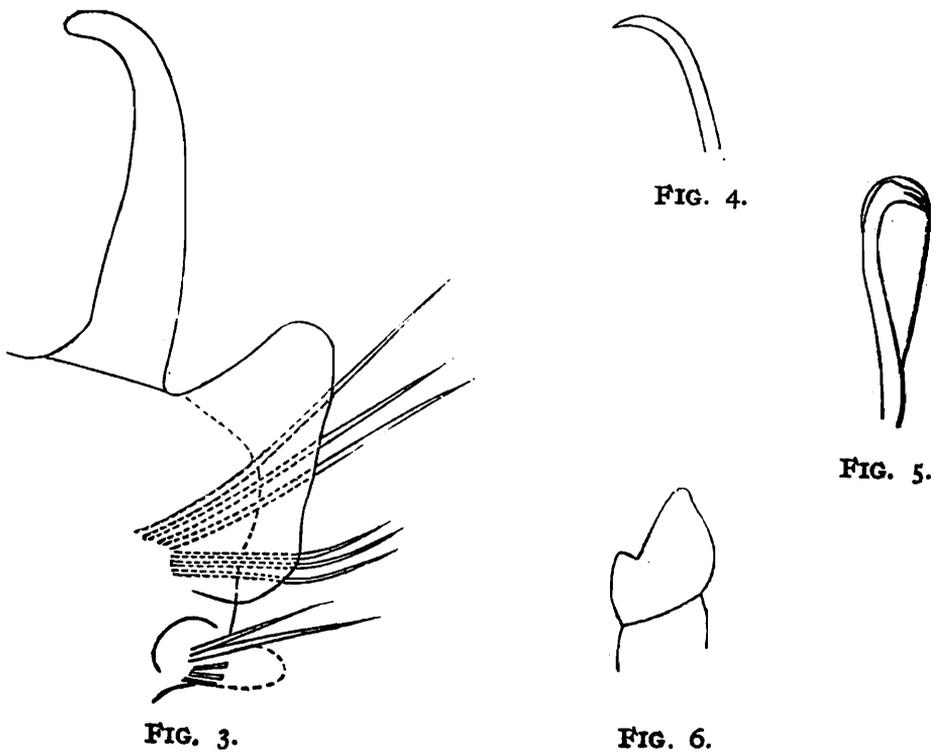
FIG. 1.—Head of *Spio bengalensis*: *p.* = proboscis; *t.* = tentacular basis.
,, 2.—Anterior end of *Spio bengalensis* in side view.

The material includes at least two mature females; the ovaries commence in the posterior branchial region and may be followed segmentally on each side of the gut to the hinder region of the body. The size is small, 12 to 13 millimetres in length, with about 70 segments.

The four small eyes are placed as shown in fig. 1 when the proboscis is protruded, but the ocular area becomes narrower when the proboscis is withdrawn. The prostomium is slightly emarginate in front; behind the eyes it narrows down to a pointed

extremity ending on the first setigerous segment. At the sides of the head close behind the ocular area occurs a pair of structures which I identify as the scars of the occipital tentacles; these are followed by the small setigerous notopodia of the first setigerous segment (figs. 1 and 2). The branchiæ commence on the second setigerous segment and occur on twelve to fourteen segments only, the last two or three smaller than the preceding; they are distinct to their bases, not joined to the notopodial lamellæ (fig. 3). Behind the branchial region the parapodial prominences become very inconspicuous.

In the anterior segments capillary setæ occur in both fascicles, and the dorsal setæ remain capillary throughout, becoming very slender towards the posterior region of the body. Simple hooked setæ (setæ infimæ ventrales) appear singly in each neuropodium from about the 12th somite (fig. 4); they appear to be rather



- FIG. 3.—Fourth gill-bearing parapodium from hinder aspect. The neuropodial ligule was concealed in the preparation; compare fig. 2.
 „ 4.—Ventral hooked seta from 12th foot.
 „ 5.—Guarded uncinata seta or crochet from the 28th foot; sketched from a preparation *in toto*.
 „ 6.—Pygidium in side view.

less curved in the hinder region. Guarded crochets (fig. 5) were observed from about the 28th segment; apart from the single inferior ventral seta mentioned above, they are the only setæ present in the neuropodia of the posterior segments, 6 or 7 appearing in each appendage.

The pygidium (fig. 6), as observed in one specimen, is simple with a ventral cone and a pair of low dorsal elevations.

The first small notopodium is hard to see in side view and is indicated by a dotted line in fig. 2.