

On new Tubicolous Annelids, in the Collection of the British Museum. Part 2. By W. BAIRD, M.D., F.L.S.

[Read December 1, 1864.]

[PLATE V.]

GENUS TEREBELLA, *Linn.* (*Montagu*).

1. TEREBELLA FLABELLUM, *Baird*. Pl. V. figs. 1 & 2.

The animal is as yet unknown, but the tubes are sufficiently remarkable to merit a description. The specimens, which have been deposited in the collection of the British Museum, vary in size, the largest being about 6 inches in length, and about the circumference of an ordinary goose-quill. They are cylindrical in form, tapering gradually from the summit to the base; the upper portion being the narrower. They are composed of a thin membranous substance internally, covered externally with numerous fragments of shells, corals, and pieces of horny zoophytes. The most characteristic feature, however, in the structure of this tube is the fan-shaped expansion of filaments at its upper orifice. This orifice is circular, and has on its dorsal surface a projecting lip or kind of hood (fig. 2), which extends beyond the mouth for a short distance, whilst from its ventral side springs another lip or hood (fig. 1), which quickly expands into a fan-shaped tuft of horny-looking filaments. This tuft is composed of several branches, each of which divides dichotomously into stiff but somewhat flexible filaments, spreading out horizontally to the length of an inch or more. These filaments are nodulous, and seem to possess a glutinous secretion, by means of which they are able to attach small shells, &c. to their surface.

*Hab.* These tubes, to the number of six, were collected during Sir J. Clarke Ross's Antarctic Expedition—two of them being registered in our collection as from *Narcon* Island. (Mus. Brit.)

2. TEREBELLA BILINEATA, *Baird*. Pl. V. figs. 3 & 4.

Animal with three pairs of branchiæ, composed of simple cirri-form filaments (fig. 3). They are not arborescent, having no trunk or main branch from which the others spring, but are inserted in tufts of single filaments on the three first segments of the body, on each side. The tentacula are composed of numerous, rather long filaments, hollowed in the centre, and waved or undulated along the edge. In the specimens we have preserved in the collection, most of these have unfortunately fallen off. The bristle tufts are continued to the end of the body, and are about 36 in number. The segments of the body are rather deeply

striated across, and the surface is somewhat granular in appearance. The body is thickest about the centre, and tapers suddenly from that to the inferior extremity. When alive, the animal is marked with two fine stripes or lines running longitudinally down along the dorsal surface beautifully tinged with purple.

The case or tube which this animal constructs (fig. 4), and which it inhabits, is of an irregular form, and consists of a thin transparent membrane, densely coated externally with numerous rough fragments of stones and shells, with some beautiful foraminifera mixed, coarsely cemented together and exhibiting a very rude appearance.

The total length of the animal is about 3 inches, and that of the longest tube is about 4 or  $4\frac{1}{2}$  inches.

*Hab.* Falkland Islands. Collected by Mr. W. Wright. (Mus. Brit.)

GENUS *SABELLA*, *Linn.* (*Savigny*).

1. *SABELLA BIPUNCTATA*, *Baird*.

Worm rather slender, somewhat flattened, slightly tapered towards the posterior extremity.

Branchial fans large, about one-third the length of the body; of a dark purple colour towards the base, where the filaments are all united by a web for a short distance. Each filament is marked on the smooth rachis at regular distances with two small round purple spots. There are five pairs of these spots on each filament, the first being near the base and the last a short distance from the apex. The filaments are all rather densely and closely ciliated on one side. The two tentacula are smooth and setaceous, short, stout, and sharp pointed at the apex. The collar is slightly lobed; and the upper part of the body, on the ventral surface, a little below the head, is stained with a rather broad dark purple mark, and along each side of the body, at the base of each foot, is a small spot of the same colour. The thorax has ten pairs of setigerous feet, and the purple spots at their bases are much larger than those at the base of the feet belonging to the abdominal segments. In one specimen (which I cannot see differs specifically from the others in other respects) the setigerous feet are twelve pairs in number and the body is somewhat broader.

The tube which the animal constructs, and in which it lives, is narrow, about the circumference of a swan-quill, long, round, and consists of a toughish membrane covered with a rather thick, smooth coat of mud.

The length of the animal is about 3 inches; that of the tube about  $4\frac{1}{2}$  inches.

*Hab.* Island of St. Thomas, West Indies. Collected by M. Sallé. (Mus. Brit.)

2. *SABELLA NIGRO-MACULATA*, Baird. Pl. V. figs. 5 & 6.

Worm rather short, broad and stout, tapering slightly near the posterior extremity (fig. 5).

The branchial fan consists of numerous short filaments united near the base by a web, and about the fourth part of the length of the body. They are of a dark brown colour spotted with white on the rachis, are densely ciliated on one side with long stout cilia, and on the rachis, which is smooth, there are at regular distances about twenty other very short filaments, set in pairs (fig. 6). Near the base of the filament spring a pair longer and broader, and near the middle of its length another pair of the same kind. The collar is deeply lobed and of a dark purple colour. The body throughout its whole length is spotted with numerous dark purple or nearly black dots of various sizes, but largest on the superior extremity. The thorax possesses seven pairs of setigerous feet. The two smooth filaments are short and flat, and sharp pointed at the apex. The tube in which the animal lives is rounded, and is composed of a toughish membrane covered outwardly with a smooth coat of mud.

The length of the animal is about  $2\frac{1}{2}$  inches; that of the tube nearly double the length.

*Hab.* Island of St. Vincent, West Indies. From the Rev. Lansdowne Guilding's Collection. (Mus. Brit.)

3. *SABELLA OCCIDENTALIS*, Baird. Pl. V. figs. 7 & 8.

Worm slender, of a cylindrical form, slightly tapering towards the posterior extremity (fig. 7).

Branchial fan composed of about sixteen filaments on each side. The filaments are densely ciliated on one side; the cilia of a yellow colour for most part, interspersed at short distances with black cilia, generally disposed in pairs, or in clusters of three, and rather stouter than the others. The rachis is smooth, but dotted along one side with numerous very small black spots (fig. 8). The filaments are all united near their base by a web, which is of a dark purple colour. The two smooth filaments are short, and sharp pointed at the apex. The collar is narrow and slightly bilobed. The thorax has seven pairs of setigerous feet. We possess no tubes belonging to the specimens.

*Hab.* Island of St. Vincent, West Indies. From the Collection of the Rev. Lansdowne Guilding. (Mus. Brit.)

4. *SABELLA GROSSA*, Baird.

Worm remarkably thick, short and solid-looking, of a uniform dark olive colour, and about the same dimensions anteriorly as posteriorly.

The branchial filaments of the only specimen we possess have unfortunately been destroyed, but the peduncle upon which they were placed remains, and exhibits a spiral twist like that represented in M. Milne-Edwards's figure of *Sabella unispira* in Cuvier's 'Animal Kingdom' (Crochard edition, t. 4. fig. 1a). The collar is everted, thick, and bilobed. The thorax possesses eight pairs of setigerous feet. The smooth (?) tentacles are wanting; the specimen, which has been for a good many years in the Museum Collection, being in only tolerable preservation. There is no tube belonging to the specimen. Length of animal (without branchiæ) about 4 inches, breadth about 7 or 8 lines. In general appearance it resembles *S. melania* of Schmarda from Jamaica.

*Hab.* Island of St. Helena. From the Collection made during the voyage of H.M.S. 'Chanticleer.' (Mus. Brit.)

5. *SABELLA GRANDIS*, Baird.

Worm of a rather square or quadrilateral shape, tapering slightly to the extremity, which terminates in a sharp point. Length (without branchiæ, which unfortunately have been lost) about  $6\frac{1}{2}$  inches.

Collar rather broad and deeply bilobed. Thoracic feet seven pairs. Segments belonging to them smooth, not grooved on the upper dorsal surface. Body of a dark brown colour on the back, rather yellow underneath or on the ventral surface. Feet numerous, about 100 in number. Peduncles large, well developed. Anterior and posterior divisions separated by a groove, in the centre of which are situated the feet. Along the dorsal surface, with the exception of the seven first or thoracic segments, there runs a deep groove dividing each segment into two halves. The setæ of the feet appear in many instances to be enveloped in a membranous little bag, which, falling off, allows the setæ to project. These are short, slender, smooth, setaceous, and very sharp pointed.

The case in which the worm lives is somewhat larger than the animal itself, and is a round and leathery-looking tube covered over externally with a thin coat of mud.

*Hab.* Coast of New Zealand. From the Collection of Sir A. Smith, M.D. (Mus. Brit.)

