

distance equal to the length of the thorax beyond it. Five pairs of setigerous processes are distinct on the thorax, but the presence of a rudimentary sixth is possible. The bristles consist of a longer and shorter series. The former (Pl. XXXIA. fig. 14) have a straight shaft with a peculiarly tapered tip, the axis of which is bent at a slight angle to the former, thus differing from the kind of bristle observed in *Protula* (which has a much longer tip), and more allied to the structure seen in *Serpula vermicularis*. The wing is well marked though narrow, and is slightly serrated at the margin. The shorter series show very slender shafts, less than a third the length of the former, and delicately tapered extremities. The posterior bristles are extremely slender, with a slightly curved tip, an indication of the winged region.

The anterior hooks (Pl. XXXIA. fig. 15) have a long straight edge, minutely serrated, and terminating inferiorly in a larger process—the great fang. The crown passes backward to join a nearly straight dorsal line, and there is no sinus behind the great fang.

The trace of mud in the alimentary canal showed Diatoms and sponge-spicules.

In all probability this is a *Serpula*. It is devoid of the thoracic membrane, and the remarkable collar may be found in others of the genus. No operculum is present.

*Serpula narconensis*, Baird (Pl. LIV. fig. 5 ; Pl. LV. fig. 1 ; Pl. XXXIA. fig. 23).

*Serpula narconensis*, Baird, Proc. Linn. Soc. Lond., vol. viii. p. 21 (1864).

*Serpula* (?), M'Intosh, Ann. and Mag. Nat. Hist., ser. 4, vol. xvii. p. 322 (1876).

*Serpula patagonica*, Grube, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, Aug. 1877, p. 550.

*Habitat*.—Dredged abundantly at various Stations, *e.g.*, at Station 144A (off Marion Island), December 26, 1873 ; lat. 46° 48' S., long. 37° 49' E.; depth, 69 fathoms ; surface temperature, 41°·0 ; sea-bottom, volcanic sand. Station 149c (in Balfour Bay), January 19, 1874 ; lat. 49° 32' S., long. 70° 0' E.; depth, 60 fathoms ; sea-bottom, volcanic mud. Station 151 (off Heard Island), February 7, 1874 ; lat. 52° 59' S., long. 73° 33' E.; depth, 75 fathoms ; surface temperature, 36°·2 ; sea-bottom, volcanic mud.

The total length is about 43 mm. from the tip of the operculum to the tail, and the diameter just behind the thoracic region is fully 5 mm.

The branchiæ are densely covered with pinnæ, and have been decorated with bars of white. The radioles possess a smooth filiform tip. A female Crustacean parasite like *Ergasilus* was seen on the branchiæ of one example, but could not be subsequently found for description.

The operculum is much firmer than in *Serpula vermicularis*, and the peduncle is separated by an evident articulation from the bell-shaped distal portion, the latter commencing at once with a diameter fully twice that of the former. The radii of the