

*Stichopathes echinulata*, n. sp. (Pl. XII. fig. 9).

Corallum slender, elongate, distinctly tapering; spines much compressed, arranged in very steep spirals.

The type of this species is in the British Museum (Reg. No. 82.2.21.5), and is from Mauritius. The stem is 1 m. long, and 2.5 mm. in diameter at the base. Amongst the more slender forms it is more distinctly tapering than any with which I am acquainted. The specimen is dry, and the polyps are preserved on a portion of the axis, where they are distributed in a single row. This species comes nearest to *Stichopathes occidentalis* (Gray) in the form of the spines. They are short, triangular, much compressed, and directed upwards. They are arranged in subregular spirals, which are steeper than those of *Stichopathes occidentalis*, and apparently are sinistrorse instead of dextrorse. The spines also form regular longitudinal rows, nine or ten of which may be counted from one aspect. The members of a row are about three lengths apart.

*Habitat*.—Mauritius (Brit. Mus.).

*Stichopathes? desbonni* (D. & M.).

*Cirrhopathes Desbonnii*, Duchassaing and Michelotti, Mem. Acad. Torino, ser. 2, t. xxiii. p. 142; Pourtalès, Bull. Mus. Comp. Zool., 1880, p. 114, pl. iii. figs. 6, 7.

“Species lenta, nec flexuose spiralis, simplex, filiformis, caudata, nigra, spinis minutis, confluentibus” (D. & M., *loc. cit.*, p. 142). To this scanty description I am able to add the later and more definite observations of Pourtalès who identified it amongst the collections made by Agassiz during the “Blake” Expedition to the Caribbean Sea. This form was obtained growing in clusters, a dozen or more stems from an expanded base. Each stem is undivided, slender, straight, or slightly bent, but never in a spiral, and hollow near the apex. The spines are small and rather blunt, arranged in regular verticils, of which there are about thirty to a centimetre, each verticil being composed of about twenty spines. Vertically the spines are disposed in straight rows, not winding spirally round the stem as in other forms. On the older parts of the stem the verticils lose their regularity, but can always be recognised. The tips of the stems are membranous, and collapsed when dry, being thin and hollow, with the spines already quite distinct (*cf.* Pourt., *loc. cit.*, pl. iii. figs. 6, 7). Longest stem 70 cm., diameter at base 1.5 mm. Polyps not observed.

*Habitat*.—Guadeloupe (Duch. & Mich.); off Montserrat, 88 fathoms (Pourtalès).

*Stichopathes? occidentalis* (Gray) (Pl. XII. figs. 7, 8).

*Cirrhopathes setacea*, var. *occidentalis*, Gray, Ann. and Mag. Nat. Hist., ser. 3, vol. vi. p. 311.

Gray's type of this form is 2.74 m. long, very slender and tapering; the base is 2 mm. in diameter, and the apex 0.2 mm. The whole stem is like a slender whip lash, and