

*Cirripathes anguina*, Dana.

*Cirripathes anguina*, Dana, Zooph., p. 577, pl. lvi. fig. 1.

? *Palmijuncus anguinus*, Rumphius.

? *Cirripathes Sieboldi*, Blainville, Manuel d'Actinol., p. 512.

*Antipathes* sp., Gray, Proc. Zool. Soc. Lond., 1857, p. 114, pl. vi. (Radiata).

"Stem quite simple, somewhat spirally flexuose, polyyps greenish, scarcely beaked; tentacles fuscous at base, axis with faint articulations at long distances, spines rather remote, compressed, subacute" (Dana, *op. cit.*). Dana remarks that this species resembles *Antipathes spiralis*, Pallas, but the polyyps are not properly beaked, and the spines are more distant, stouter, and hardly acute. The axis has distinct nodes every three or four inches. Stem, six feet long in five feet of water, twisted so as not to reach the surface. Polyyps one-sixth of an inch apart. His figures show the polyyps to be more distant than in *Cirripathes propinqua* and to lack the prominent oral prominence of other types. The spines, as figured, are short, stiff, and slightly hooked upwards. They appear closely packed in irregular transverse series, and all are of the same size.

This species, or at any rate the *Palmijuncus anguinus*, Rumph., which Dana regarded as probably identical, was included by Pallas as a form of *Cirripathes spiralis*. I have made a careful comparison of a number of specimens in various museums, in order, if possible, to throw some light on the subject. Between the truly spiral type (which, so far as my observations go, appears to be rare) and the non-spiral, with a straight stem, there appear to be a number of flexuose and contorted forms which may be so many individual variations. Unfortunately, the size and arrangement of the spines vary considerably in different individuals, and it appears as if satisfactory specific characters can only be obtained from an examination of well-preserved polyyps. The distinctly spiral form differs in several points from the straight or flexuose specimens and is here regarded as typical *Cirripathes spiralis*. The others, which do not agree with the characters of *Cirripathes propinqua*, are to be provisionally regarded as *Cirripathes anguina*, Dana. The stem may or may not present alternate dilations and contractions; it is apparently never twisted into regular spirals and the spines are not distinctly shorter on one aspect than on that opposite to it.

In the specimen from Seychelles described and figured by Gray in 1857 (38) the polyyps, though dried, are distinctly seen on some parts of the stem, where about four are arranged to each centimetre in the length of the stem. There are three very fine specimens of this species in the British Museum from Billiton. The longest measures over 3.6 m. in length. In nearly all the specimens which have come under my notice the stem is relatively thick (5 to 10 mm.). The Ceylon specimen, which I doubtfully refer to this species (B. M., Reg. No. 82. 7. 21. 3.), is more distinctly tapering than the majority of specimens, and, in its upper portion, the spines are stronger and less numerous. It measures 1.8 m. in length and has a diameter of 8 mm. at the base and 2 mm. at the apex.