Habitat. —Station 163A, off Twofold Bay, 150 fathoms, green mud. [Australia, J. T. Woods.]

It appears to me very doubtful whether this is really the form so named by Mr. Woods, who may probably not have distinguished it from the next species, which in its general habit seems to resemble the figure of his Amathia tortuosa more than the present. However, I am led to suppose that he had this one in view from his remark respecting the great length of the cells, which in my Amathia connexa are rather short. What Mr. Woods intends by "a crescentic mouth, without setæ or spines," I do not clearly understand; and it should moreover be remarked, that in his figure of Amathia tortuosa the cells are not represented by any means as unusually long.

(6) Amathia connexa, n. sp. (Pl. VI. fig. 3).

Character.—Zoarium 3 to 4 inches high, very irregularly branched, straggling, forming dense tufts. Stem and branches from 0.5 to 0.6 mm. in diameter, transparent as glass, each internode encircled with a spiral series of zoœcia not extending its entire length, but leaving a space at each end clear. Branches here and there connected by transverse barren tubes. Zoœcia oblong, 0.5 × 0.13 mm., abruptly rounded (the neck projecting about 0.2 mm.), connivent, very delicate walls, so that the outlines towards the summits are very indistinct.

Habitat.—Station 186, off Cape York, 8 fathoms, coral mud.

The main characteristics of this form consist in-

1. The comparatively large diameter of the segmented stems and the beautiful glassy transparency of their walls, upon which the encircling series of zoœcia appear to stand

out in strong relief, so as at first sight to seem as if they were disposed on one side only of the segment; but examination shows that in reality they form nearly or wholly complete circles round the stem.

2. A second very striking feature, that I have not noticed in any other species of *Amathia*, is the occasional connection of the branches by transverse, barren, segmented tubes, resembling a similar arrangement in some of the Cheilostomata. As observed in the description of the preceding species, the general habit of *Amathia connexa*

Fig. 1. Fig 2.

Fig. 1.—Amathia connexa.
Fig. 2.—Amathia tortuosa, Woods.

closely resembles that of Mr. Woods' Amathia tortuosa, as shown in his figure, which is copied in the accompanying woodcut. But that Amathia connexa should be the species intended by him under the name tortuosa is contradicted, as has been remarked, by the comparative shortness of the zoœcia.