Streptocaulus, nov. gen.

Name from στρεπτὸs, twisted, and καυλὸs, a stem, in allusion to the torsion of the stem round its axis.

Generic Character. *Trophosome*.—Hydrocladia disposed in a continuous spiral round the stem. Hydrothecæ with entire margin. Mesial nematophore not adnate to the walls of the hydrotheca.

Gonosome not known.

The species on which the genus Streptocaulus has been founded is rendered very striking by the spiral instead of pinnate disposition of its hydrocladia. Even here, however, we may regard the hydrocladia as having primarily a semi-pinnate arrangement, or as being confined to one side of the stem, while a torsion of the stem round its axis—the proximal end remaining fixed—causes the hydrocladia to fall into a continuous spiral. So remarkable a form of ramification may well be assumed as affording a character of generic value. The absence of serration in the margin of the hydrotheca, and still more the detachment of the mesial nematophore from the hydrotheca, are also characters very unusual among the Statoplean Plumularidæ.

Streptocaulus pulcherrimus, n. sp. (Pl. XVI. figs. 1-3).

Trophosome.—Colony attaining a height of about nine inches; stem simple, fascicled, wavy; hydrocladia nearly an inch in length, occupying about the distal half of the stem. Hydrothecæ deep, thimble-shaped, margin with a single tooth-like extension in front; mesial nematophore in the form of a free conical spine, with a terminal and a lateral aperture, springing from a point of the hydrothecal internode immediately below the hydrotheca; lateral nematophores pyriform, overtopping the hydrotheca.

The habit of this beautiful Hydroid is very different from that of every other known species. Among Statoplean forms it is the only species as yet discovered in which the disposition of the hydrocladia is not strictly pinnate.

Dredged in Porto Praya, St Jago, from a depth of 100 fathoms.

Diplocheilus, nov. gen.

Name from διπλόοs, double, and χείλοs, a lip, in allusion to the duplicature of the hydrotheca margin.

Generic Character. Trophosome.—Hydrotheca with a duplicature of its walls forming an external calycine envelope, which surrounds the hydrotheca for some distance behind the orifice. Mesial nematophore in the form of a shield-like process not adnate to the hydrotheca; lateral nematophores absent.