Gonosome.—Gonangia carried by each branch of the hydrocladia near to the bifurcation, pyriform, supported on a short peduncle, and with a basal segment which carries a pair of laterally placed nematophores.

This fine species forms wide flabelliform tufts with rather rigid stems, and with the hydrocladia nearly an inch in length. The hydrocladia are each supported on a short process of the stem; to this is articulated the first segment of the hydrocladium; this segment is very short, is destitute of hydrotheca, and is immediately followed by a long segment in which the bifurcation takes place, and which carries in the angle of bifurcation a hydrotheca without nematophores. One branch of the bifurcation always commences by a short internode destitute of hydrotheca; every other internode of the branches carries a hydrotheca.

Besides the form here described, there occurs also a variety (see fig. 3), in which the hydrothecal ramuli scarcely exceed half the length attained by these ramuli in the typical form.

The typical form was dredged in Christmas Harbour, Kerguelen, from a depth of 100 fathoms. The variety with short hydrocladia was dredged also off Kerguelen Island, from a depth of 10 to 60 fathoms.

Schizotricha multifurcata, n. sp. (Pl. VII. figs. 4, 5).

Trophosome.—Colony attaining a height of about nine inches; stem sparingly branched, fascicled, rooted by a mass of entangled filaments; hydrocladia alternate, attaining about four-tenths of an inch in length, bifurcating three, four, or a greater number of times. Hydrothecæ with even margin adnate to the internode by their entire height, flanked by a pair of lateral nematophores, and also subtended by a similar pair of nematophores on the same internode, a hydrotheca without nematophores carried in the angle of every bifurcation.

Gonosome.—Gonangia carried by the internodes of the hydrocladia, each springing from a point situated laterally, and just below a hydrotheca, pyriform, supported on a very short peduncle, and having a wide basal segment which carries a pair of nematophores.

This is a very graceful species, with flexile stems much longer and less profusely branched, and with shorter hydrocladia than in *Schizotricha unifurcata*. A remarkable feature in the specimen examined consisted in the hydrothecal internodes, carrying at the proximal side of the hydrotheca a pair of laterally situated nematophores, instead of the azygous mesial nematophore usual in the Eleutheroplean Plumularidæ. The gonangia also, besides the two nematophores which were always present on its basal segment, often carried here a third one. This fact, however, scarcely seems to be constant.

In every bifurcation one of the branches is connected with the internode from which it springs, by a short internode destitute of hydrotheca, but carrying a pair of nematophores.