Halecium fastigiatum, n. sp. (Pl. XV. figs. 2, 2a).

Trophosome.—Hydrocaulus with the main stem and principal branches fascicled, becoming monosiphonic and slender towards their distal extremities; ramification profuse and irregular, with the branches given off in different planes and at a high angle.

Gonosome.—Gonangia (male) springing from the side of the basal segment of the hydrophores, sessile, compressed goblet-shaped, deep.

Locality.—Station 135c, off Nightingale Island, Tristan da Cunha; depth, 110 fathoms.

This is a slender and flexile species. The specimens are but fragmentary and destitute of hydrorhizal extremity, and the largest has a height of upwards of two inches. The branches, which like the gonangia spring from the fixed basal segment of the hydrophore, are given off at an acute angle and become directed in various planes. The internodes are of moderate length.

The hydrophores usually present two or three superimposed segments, but are often formed alone by the fixed lateral process of the stem, which then carries the hydranth directly. The segments are of variable length and the limbus is well developed. The wreath of brilliant points just within the margin is distinct. The hydranths are large and were well preserved in the specimen, where they might be observed in various states of extension.

The gonangia are large, their height being nearly twice that of an internode. They spring, as is usual in the genus, from the basal segment of the hydrophore. When viewed in the plane of the hydrophores they present the outline of a deep wide-mouthed goblet, slightly everted towards the rim, and narrowed at their point of attachment without forming a distinct peduncle. When viewed in a plane at right angles to this they are seen to be much compressed.

The gonangia present in the specimen were those of a male colony. The blastostyle carried a single sporosac, which projected for some distance through the orifice of the gonangium.

Halecium dichotomum, n. sp. (Pl. VI. figs. 1-4).

Trophosome.—Hydrocaulus consisting of jointed stems which branch dichotomously and are continuous at their proximal ends with a plexus of branching and intercommunicating tubes; internodes of stem long and cylindrical, branches given off close to the distal ends of the internodes. Hydrophores either direct continuations of the internodes, or springing from the sides of the tubes which form the basal plexus, nearly cylindrical, with a few annular rugge at the base, and with very narrow, scarcely everted limbus.

Gonosome.—Gonangia (female) springing each by a short peduncle from the sides