peristome, which is not grooved, or very obscurely so on the exterior, and not expanded at the orifice; surface reticulato-scrobiculate, the pits with a perforated diaphragm; interstitial ridges thin or even acute, finely beaded. On one or both sides of the front, on a level with the base of the peristome, a long, jointed chitino-calcareous spine articulated by a flexible joint over a circular opening; median pore rather large and often projecting. Operculum not cupped (?) semicircular 0":007 ×:004-5.

Habitat.—Station 163A, off Twofold Bay, 150 fathoms, green mud. [New Zealand, Darwin; Colenso; Queenscliff, Portland, Maplestone.]

Incineration shows that the lateral spines in *Tubucellaria hirsuta* are in reality of the nature of ordinary articulated oral spines, though at first sight they resemble radical tubes such as those which project from the front of the zoœcia in *Salicornaria hirsuta*.

2. Siphonicytara, n. gen.

Character.—Zoarium continuous, radicate, branched, branches alternate, subcylindrical quadriserial, subsecund. Zoœcia completely immersed below, flattened in front. Peristome tubular, extended. A circular median pore below the middle of the front. A large circular orifice (avicularian?) near the top of most of the lateral zoœcia behind.

Siphonicytara serrulata, n. sp. (Pl. XV. fig. 2).

The only species.

Habitat.—Station 196, lat. 0° 48' S., long., 126° 58' E., 825 fathoms, hard ground.

As the only specimen of this very peculiar form is a small fragment, about 1 inch long, which had been placed by itself in a tube, I have been unwilling to injure it by too minute an examination, so that the internal structure has not been made out quite satisfactorily. I have, however, been able to ascertain one or two interesting particulars.

From the way in which the figures are shaded in the plate, it might be supposed that the lower part of each zooccium in which the median pore is situated were convex and distinct from the upper part; but this is not really the case. The general surface of the branch, both before and behind, is in reality nearly even, though divided by fine raised lines or vibices, marking the outlines of the zooccia, and also circumscribing a small area in which the median pore is placed.

The calcareous wall, beneath a strong brownish epitheca, is very thick and solid, and in the oral tube longitudinally fluted, as it is in *Tubucellaria cereoides*.

I have been unable to obtain a distinct view of the operculum, which, however, doubtless exists at the lower part of the tubular peristome.