coenenchyma as longitudinally disposed spicules, the one end is usually blunt and the projecting end sharp; they measure 1 to 0.9 mm. in length by 0.1 mm. in thickness.

The collar below the origin of the tentacles consists of delicate, purplish-red, curved spindles, covered with fine, sharp spines, seldom further toothed. They measure from point to point 0.7 by 0.045; 0.67 by 0.08 mm.

In the tentacles the purple, rarely yellow, spicules are straight or very slightly bent; they are sharp at one end, blunt at the other, and covered with fine spines. Size, 0.54 by 0.03; 0.5 by 0.05 mm.

The colour of the stem, branches, and twigs is yellowish-white; the tentacular portion of the polyps is purple.

In the structure of the polyps the species shows a great similarity to the preceding, but is distinguished, apart from the ramification, especially by the stouter and differently arranged spicules in the stem.

Habitat.—Station 232, Hyalonema-ground, Japan; depth, 345 fathoms.

Chironephthya crassa, n. sp. (Pl. XXXVIII. fig. 3, from an imperfect specimen).

The stout main stem, which is attached by a membranous base, gradually diminishes in size and gives off, after only a short course, a few thick, simple branches arising at various angles. The main stem, like the branches, is covered, from the point of origin of the first twig upwards, with spirally arranged polyps placed at wide intervals from one another and more closely packed at its end. The polyps have large, obliquely projecting calyces, above which there rises a conical tentacular operculum. The polyps are considerably larger than in the two preceding species.

Height of a colony in which the apex is wanting,				•	•		69	mm.
Height of the barren portion of the stem, .			_	•	•	•	20 "	
Diameter of the stem above the base, .						15	,,	
Diameter in the middle,			•		•		10	,,
Length of the branches,		1.00%	•			•	20	,,
Diameter of the same,		•			•	•	4-6	"

The colony does not present quite the same rigid consistence as in the two preceding species. The stem and branches are hence somewhat shrivelled and collapsed in the specimens preserved in spirit, and the branches also show a slight flexibility. The barren portion of the stem is very thick, and after extending for only a slight distance it gives off at an acute angle a cylindrical branch. In its further course only a few (viz., five), more branches follow; these are all stout, unramified, and nearly cylindrical, diminishing only slightly in size towards the apex. The polyps commence to appear on the stem immediately after the giving off of its first branch; they are placed at distances of 4 to 2 mm. On the branches they form irregular spirals, which become closer towards the