This species is very near to Caryophyllia clavus, but differs from it in having fewer costæ, and these more delicate and not all equally prominent, and also in the abundant epitheca developed around the base.

All the specimens obtained were fused together into masses, composed of eight or ten coralla, united by the abundant encrusting epitheca which in places spreads over and partly conceals old dead calicles forming parts of the masses.

The corals were obtained in the living condition, and observed expanded in sea water. They varied much in colour. In the largest specimen obtained, which is that on the extreme right in fig. 6, Plate I., and the calicle of which is shown in fig. 6,  $\alpha$ , the disc was of a transparent bluish colour, so transparent that the pali were visible through it. Near the margin of the calicle the disc was of a sulphur-yellow colour. The margin of the mouth was white, and was thrown into a number of folds or plaits, of which twenty-two were counted on one side. Other specimens adhering to the same mass had their transparent discs marked with burnt-sienna coloured streaks in place of the yellow, and one of these had the margin of the mouth vermilion coloured, instead of white, as had also another which was streaked with yellow, like the largest specimen. The tentacles were all short and conical, each with a red knob at the tip. Each septum had a single tentacle placed at its inner margin. The tentacles were thus disposed at successively further distances from the axis of the coral, and decreased correspondingly in dimensions, being of four sizes.

Extreme height of the longest specimen 47 mm. Long diameter of the calicle 27 mm. Shorter diameter 23 mm.

Station 135, off Nightingale Island, of the Tristan da Cunha group, 100 to 150 fathoms; abundance of specimens.

A fragment possibly referable to this species was dredged with Corallium rubrum, off St Jago Island, Cape Verde group, in 100 to 120 fathoms.

Caryophyllia maculata, Pourt. (Pl. IV. figs. 8, a, 9, a).

Bathycyathus maculatus, Pourtalès, Ill. Cat. Mus., Harvard, No. 8, p. 34, pl. vi. figs. 5, 6.

Parasmilia variegata, Pourtalès, Ill. Cat. Mus., Harvard, No. 4, p. 21, pl. i. fig. 13.

Bathycyathus elegans, Stüder, Monatsbericht der K. P. Akad. der Wiss., Nov. 1877, s. 628, pl. i. figs. 1, a-d.

Professor Studer described his Bathycyathus elegans in ignorance of Pourtalès' Bathycyathus maculatus, which appears to be identical with it, and takes precedence. I see no reason to separate Bathycyathus from Caryophyllia, because of the smallness of the pali, or the superior exsertness of the quinary septa. The whole aspect of the present coral when grown under favourable conditions is that of a Caryophyllia. I have therefore placed the species in that genus. Pourtalès' Parasmilia variegata seems certainly to be inseparable from Bathycyathus, and, most probably, both from the