The genus *Polyplagia* alone represents the small subfamily of Polyplagida, distinguished from the other Plagonida by the multiplication of the radial spines, the number of which amounts to seven to nine or more. This increased number is commonly the result of an intercalation of new spines between the three or four primary spines; it is sometimes also effected by stronger development of branches of the latter, which become independent. The following five species of this genus are very different, require further investigation, and perhaps represent different genera:—

1. *Polyplagia septenaria*, n. sp.

Seven radial spines, straight, three-sided prismatic, verticillate, of different sizes; four larger spines correspond to the four axes of a tetrahedron (running from the centre to the four corners), each with five to six verticils of three simple slender branches; one of these four main spines seems to be the apical, the three others the basal spines of *Plagiocarpa;* in the three meridian planes between the latter and the former lie the three smaller spines, diverging upwards, each with two to three verticils. (Similar to *Polyplecta heptacantha*, Pl. **91,** fig. 12, but without connection between the branches.)

Dimensions.—Length of the four major spines 0·26, of the three minor 0·11.

Habitat.—Central Pacific, Station 274, surface.

2. *Polyplagia octonaria*, n. sp.

Eight radial spines, straight, three-sided prismatic, of equal size, arising in two opposite groups from the two poles of a short common middle rod (as in *Sphærozoum arborescens*, Pl. **4,** fig. 8, and in other Beloidea). The four spines of each group are divergent, six to eight times as long as the middle rod, each spine armed with three to four verticils of thorny branches.

Dimensions.—Length of the spines 0·15, of the middle rod 0·022.

Habitat.—Indian Ocean, Cocos Islands (Rabbe), surface.

3. *Polyplagia novenaria*, n. sp.

Nine radial spines of equal size, straight, cylindrical, lying nearly in a horizontal plane, or forming a very flat pyramid. Near the common central point every three spines arise from a short common rod, so that the centre of the skeleton is triradial. Each spine bears towards the apex two divergent straight lateral branches. This species may have been derived from *Plagiacantha arachnoides* by shortening and reduction of the basal parts of the three original branched primary spines.

Dimensions.—Length of the nine spines 0·24, of the three basal rods 0·02.

Habitat.—North Atlantic, Færöe Channel (Gulf Stream), John Murray, surface.

4. *Polyplagia duodenaria*, n. sp.

Twelve radial spines of equal size, arising from a common central point, and diverging in different directions. The twelve spines are very large, opposite in six pairs, cylindrical, longitudinally