1. Plectaniscus cortiniscus, n. sp. (Pl. 91, fig. 9).

Spines straight, three-sided prismatic, with three to four verticils of short perpendicular branches; the branches of the distal verticils are simple and free, those of the proximal verticils again ramified and connected by an arachnoidal network of delicate threads. The vertical apical spine (or horn) is scarcely one-third or half as long as the three divergent basal spines (or feet), and the angle between it and the latter is smaller.

Dimensions.—Length of the apical spine 0.05 to 0.1, of the three basal spines 0.18 to 0.2. Habitat.—North Pacific, Station 244, surface.

2. Plectaniscus tripodiscus, n. sp.

Spines curved, cylindrical, with a variable number of irregular branches, which in the distal half of the spines are free, in the basal half again ramified and connected by a loose spongy framework. The apical spine is shorter and simpler, nearly straight, less ramified.

Dimensions.—Length of the apical spine 0.1, of the three basal spines 0.15 to 0.18. Habitat.—North Pacific, Station 238, surface.

3. Plectaniscus archiscenium, n. sp.

Spines slightly curved, three-sided prismatic, with two to three verticils of short curved branches. The vertical apical spine is about twice as long as the three basal spines, and connected with them by an irregular loose framework. The three basal spines are connected together only by a simple ring, so that between them remain three large collar holes, like those of the similar and closely allied *Archiscenium quadrispinum* (Pl. **53**, fig. 11).

Dimensions.—Length of the apical spine 0.32, of the three basal spines 0.18. Habitat.—South Pacific, Station 295, depth 1500 fathoms.

4. Plectaniscus cladoscenium, n. sp.

Spines curved, three-sided prismatic. The three basal spines pinnate, with four to five pairs of opposite curved pinnulæ; the distal pairs are simple and free, the basal pairs branched and connected by an irregular delicate framework, which together with the apical spine forms a spongy cap-shaped shell, similar to *Cladoscenium*. Apical spine about half as long, simple.

Dimensions.—Length of the apical spine 0·1, of the three basal spines 0·18. Habitat.—Central Pacific, Station 274, surface.

5. Plectaniscus clathrocorys, n. sp.

Spines straight, three-sided prismatic, with seven or eight verticils of ramified branches, which in the basal half are connected by an irregular loose framework. In the distal half each of the three divergent basal spines (or feet) is connected with the longer apical spine (or horn) by a