1. Zygocircus sagittalis, n. sp.

Gate ovate. Ring half ovate or nearly triangular, with three curved edges and three prominent corners, one apical and two basal protuberances. Dorsal rod vertical, twice as long as the horizontal basal rod. Ventral rod convexly curved.

Dimensions.—Diameter of the gate 0.05 to 0.07; height of the tubercles 0.01 to 0.015. Habitat.—Central Pacific, Stations 265 to 268, depth 2900 fathoms.

2. Zygocircus trigonus, n. sp.

Gate triangular. Ring triangular, with three curved edges and three prominent corners, which are prolonged into nine divergent conical spines; three spines arising from the three edges of each corner. Dorsal rod vertical; ventral and basal rods curved and convergent.

Dimensions.—Diameter of the gate 0.11 to 0.13; length of the spines 0.01 to 0.015. Habitat.—Indian Ocean, Sunda Archipelago (Rabbe), surface.

3. Zygocircus tetragonus, n. sp.

Gate ovate. Ring quadrangular, without edges, with four simple conical spines of different sizes; one smaller apical, one larger basal, and two equatorial spines of middle size (one dorsal and one ventral). Dorsal and ventral rod curved.

Dimensions.—Diameter of the gate 0.04 to 0.06; length of the spines 0.018 to 0.026. Habitat.—Tropical Atlantic, Station 338, depth 1990 fathoms.

4. Zygocircus rhombicus, n. sp.

Gate rhombic. Ring rhombic, with three prominent edges, and eight short conical curved spines arising from the lateral edges at the four corners of the rhombus. The basal and ventral spine are larger than the apical and dorsal spine; the ventral rod is more curved (with smaller angle) than the shorter dorsal rod. The medial edge of the ring is smooth, without spines.

Dimensions.—Diameter of the gate 0.08; length of spines 0.02 to 0.04. Habitat.—South Atlantic, Station 335, depth 1425 fathoms.

5. Zygocircus pentagonus, n. sp. (Pl. 81, fig. 8).

Gate roundish pentagonal. Ring very thick (about as thick as the radius of the gate), irregularly pentagonal, with prominent sagittal edge. On both sides of the latter arise at the five corners five pairs of short simple irregularly curved spines. The four ventral spines are larger than the four dorsal, and the two basal spines larger than the eight former, forked. (In fig. 8 the basal spines are turned upwards.)

Dimensions.—Diameter of the gate 0.07; length of the spines 0.04 to 0.06. Habitat.—Central Pacific, Station 268, depth 2900 fathoms.