4. Nephrospyris cordata, n. sp.

Shell heart-shaped, about as long as broad. Ring with six pairs of branched apophyses (as in Nephrospyris renilla, Pl. 90, fig. 9). No equatorial transverse branches. Sternal incision cordate, deeper than in all other species of the genus, nearly half as long as the shell. All meshes of the network simple.

Dimensions.—Shell 0.32 long, 0.36 broad; ring 0.05 to 0.06 long. Habitat.—Central Pacific, Station 263, depth 2650 fathoms.

Subgenus 2. Paradictyum, Haeckel, 1881, Prodromus, p. 444.

Definition.—Network of the shell double; the larger meshes separated by strong bars, and filled up by a very delicate secondary arachnoidal network.

5. Nephrospyris paradictyum, n. sp. (Pl. 90, figs. 1-8).

Paradictyum paradoxum, Haeckel, 1881, Prodromus et Atlas, loc. cit.

Shell nearly circular, ten times as broad as the inflated marginal girdle, and three times as long as the sternal incision. Ring with six pairs of branched apophyses; the bars of the apical pair nearly vertical, of the basal pair divergent; the corresponding and opposite bars of the two middle pairs (on the occipital and on the frontal face) form together a large middle naso-orbital area; above and below this lie six pairs of larger meshes. All larger meshes of the network are filled up by very delicate arachnoidal framework. The inflated and delicately reticulated marginal girdle of this and of the following closely allied species is usually filled up by nucleated roundish cells (fig. 7), which are Vorticellinæ, according to the observations of Dr. John Murray on living specimens.

Dimensions.—Diameter of the shell 0.5 to 0.6, of the marginal girdle 0.05 to 0.07; ring 0.07 to 0.09 long.

Habitat.—Central Pacific, Station 271, depth 2425 fathoms.

6. Nephrospyris paradoxa, n. sp.

Shell kidney-shaped, one and one-third times as broad as long, six times as broad as the inflated marginal girdle, and half as long as the sternal incision. Ring with six pairs of apophyses. Above and below the large naso-orbital holes lie ten pairs of larger meshes. All the meshes are filled up by very delicate arachnoidal network.

Dimensions.—Length of the shell 0.4 to 0.5, breadth 0.5 to 0.7; ring 0.06 to 0.08 long. Habitat.—Central Pacific, Station 270, depth 2925 fathoms.