suborder, and differing from them in its flat discoidal form. The diameter of the compressed shell often reaches one half millimetre or more; its perimeter is elliptical or nearly circular, smooth, constantly with a characteristic deep sternal incision or a basal sinus on the basal pole of the main axis. The central sagittal ring is comparatively small. The margin is often inflated, like a delicate reticular girdle, and contains a large number of peculiar spherical or roundish nucleated cells (Pl. 90, figs. 6–10). According to the observations of Dr. John Murray, made on living Nephrospyris, they are Vorticellina, perhaps constant Symbiontes.

Subgenus 1. Nephrodictyum, Haeckel, 1881, Prodromus, p. 444.

Definition.—Network of the shell simple, with bars of nearly equal breadth.

1. Nephrospyris renilla, n. sp. (Pl. 90, figs. 9, 10).

Shell kidney-shaped, one and a half times as broad as long, and three times as long as the deep kidney-shaped sternal incision. Ring with six pairs of branched apophyses, the bars of the apical pair vertical, of the basal pair divergent. The corresponding bars of the two middle pairs (on the frontal and the occipital face) form together on each side a large pentagonal or hexagonal naso-orbital area, which is surrounded by four or five large polygonal meshes; the other meshes become smaller towards the inflated margin. All meshes simple, without arachnoidal framework.

Dimensions.—Shell 0.3 to 0.4 long, 0.4 to 0.5 broad; ring 0.08 to 0.1 long. Habitat.—Central Pacific, Station 272, depth 2600 fathoms.

2. Nephrospyris nephridium, n. sp.

Shell kidney-shaped, one and two-third times as broad as long, very similar to the preceding species (or only a variety of it?). Ring with seven pairs of branched apophyses. The large naso-orbital area is on the dorsal or occipital side simple, on the ventral or facial side divided by an equatorial pair of transverse horizontal branches into two superior orbital, and two inferior nasal holes. Sternal incision ovate. All meshes simple.

Dimensions—Shell 0.25 to 0.35 long, 0.4 to 0.5 broad; ring 0.07 to 0.08 long. Habitat.—Central Pacific, Station 274, depth 2750 fathoms.

3. Nephrospyris phaseolus, n. sp.

Shell kidney-shaped, twice as broad as long, very similar to the two preceding species (or only a variety of them?). Ring with eight pairs of branched apophyses. The large naso-orbital area (between the mitral and collar ring) is on the dorsal and on the ventral side divided by two equatorial pairs of horizontal branches into two superior (orbital and occipital), and two inferior (nasal and suboccipital) holes. Sternal incision cordate. All meshes simple.

Dimensions.—Shell 0.25 long, 0.5 broad; ring 0.06 to 0.07 long. Habitat.—Central Pacific, Station 266, depth 2750 fathoms.