Dimensions.—Diameter of the central capsule 0.4 to 0.8, of the nucleus 0.02 to 0.05, of the calymma 1 to 5 mm.

Habitat.—Cosmopolitan; common in all warmer seas; Mediterranean, Atlantic, Indian Ocean, Pacific, mainly between lat. 40° N. and lat. 40° S.; surface.

6. Thalassicolla maculata, n. sp. (Pl. 1, fig. 4).

Spherical body in the central part opaque, black or dark coloured, in the periphery semi-transparent, spotted. Central capsule compact, yellowish, opaque, with a thick and firm, very elastic membrane, areolated by polygonal, punctated figures resembling cells. Diameter of the central capsule about twice that of the nucleus, one-third to one-fifth that of the jelly-cover. Nucleus thinwalled, with one large spherical nucleolus. Protoplasm of the central capsule contains innumerable very small, hyaline, spherical vesicles of equal size (or vacuoles?), two to four times as broad as the separating bridges of protoplasm. Extracapsular body with dark pigment-powder of black or brown colour, densely accumulated around the central capsule (in the matrix), loosely scattered between the alveoles of the outer jelly-cover. The latter appears spotted by numerous large, roundish lumps of protoplasm, scattered between the alveoles. No xanthellæ.

Dimensions.—Diameter of the central capsule 0.3 to 0.6, of the nucleus 0.2 to 0.3, of the hyaline globules in the protoplasm of the capsule 0.02 to 0.03; calymma, 2 to 3 mm.

Habitat.—South Pacific, Challenger Station 289.

7. Thalassicolla melacapsa, n. sp. (Pl. 1, fig. 5).

Spherical body in the central part opaque, black or dark coloured, in the periphery semi-transparent, spotted. Central capsule compact, black, with a thick and firm, very elastic membrane, areolated by polygonal, punctated figures resembling cells. Diameter of the central capsule about twice that of the nucleus, one-third or half that of the jelly-cover. Nucleus thin-walled, transparent, containing very numerous and small nucleoli. Protoplasm of the central capsule filled with small black pigment-granules, quite intransparent, contains densely packed hyaline (albuminous?) globules of equal size; every pellucid globule includes a smaller globule (one-third or one-fourth its diameter), which appears to be composed of aggregated oil-bubbles. Extracapsular body without pigment, contains between its alveoles in the inner half numerous, dark refractive oil-globules, in the outer half numerous amœboid lumps of protoplasm, irregularly scattered. No xanthellæ.

Dimensions.—Diameter of the central capsule 2 to 2.5, of the nucleus 1 to 1.5, of the hyaline globules in the protoplasm of the capsule 0.03 to 0.04; calymma, 3 to 5 mm.

Habitat.—South-east Pacific (near Valparaiso), Challenger Station 300, surface.

Genus 5. Thalassophysa, Haeckel, 1881, Prodromus, p. 470.

Definition.—Thalassicollida without intracapsular alveoles, but with large roundish or globular alveoles within the extracapsular calymma. Nucleus in the centre of the capsule papillate or branched.

¹ Thalassophysa=Sea-bladder; θάλασσα, Φῦσα.