from 0·2 to 0·3 mm., whilst their thickness is only 0·002 to 0·004 mm., often it is less than 0·001, rarely more than 0·005 mm. The nodal points of the network, in which six threads are usually united, are more or less thickened, often stellate (Pl. **108**, figs. 9, 12, &c.). Sometimes they are pierced by a central pore. The thin threads are constantly cylindrical, never edged or prismatic, very elastic and flexible; usually they are perfectly smooth, rarely spiny or thorny, sometimes provided with scattered cruciate verticils of lateral branches, as in *Sagena crucifera* and in the first described form of this family, *Sagmarium trigonizon* (compare my Monograph, 1862, Taf. xxvi. fig. 5).

The surface of the spherical shell is smooth only in two genera of Sagosphærida, in *Sagena* and *Sagmarium* (Pl. **108**, figs. 2, 8). In the five other genera it is covered either with radial spines, arising from the nodal points of the network, or with peculiar cortical pyramids or tent-shaped elevations (Pl. **108**, figs. 1, 3–6, &c.). These pyramids are of the same characteristic shape as in the similar *Auloscena* among the Aulosphærida (Pl. **110**, fig. 1); usually, however, they are less regular than in the latter. The pyramids or tents are usually six-sided, often, however, they are also four-sided or three-sided, more rarely five, seven or more sided. The edges of the pyramids are formed by filiform bars similar to those which compose the original lattice-work of the Sagosphærida. The cavity of the pyramids is quite simple in *Sagoscena* (figs. 1, 5, 6), whilst in *Sagenoscena* and *Sagoplegma* a radial column arises in its axis, the thickened axial rod (figs. 3, 4, 10).

The radial spines, which arise either from the tops of the pyramids or from the nodal points of the network, exhibit in the Sagosphærida a variety and elegance similar to the closely allied Aulosphærida. Sometimes a single radial spine arises in each nodal point or at the top of each pyramid (figs. 3, 4, 10); at other times two, three, or four (rarely more) divergent spines (figs. 6–9, 12, 13). These are rarely quite simple, usually provided with lateral and terminal branches. The lateral branches are either scattered irregularly, or regularly disposed in elegant verticils, each of which is usually composed of three or four short branches (Pl. **108**, figs. 9, 13). The terminal branches form either a similar verticil, or a bunch or corona, composed of numerous radial secondary spines. The distal ends of the terminal as well as of the lateral branches are rarely simple, usually they are provided with a spinulate knob or with an elegant spathilla (Pl. **108**, figs. 3, 9, 13).

The *central capsule* of the Sagosphærida is comparatively small, as it also is in the Aulosphærida and Orosphærida. Its diameter is usually about one-third or one-fourth that of the enveloping shell, between 0·2 and 0·3, often only 0·12 to 0·18, rarely more than 0·3 mm. It is surrounded on the oral half by a red or dark phæodium and separated from the inner surface of the shell by the voluminous calymma. The subspherical nucleus is usually about half as broad as the capsule. The three openings of the latter, the large tubular astropyle and the two opposite lateral parapylæ, exhibit the same shape