

most is a medullary shell. In this case the size of the capsule remains intermediate between the inner and the middle shell.

The *Tetrasphærida*, or the *Sphæroidea* with four concentric shells, are in general not frequent, and not rich in different forms. In most of the observed species two inner shells are medullary, two outer cortical shells, the former within, the latter without, the central capsule; and the wall of the capsule, pierced by the connecting radial beams, lies between the two middle shells. But there are some *Tetrasphærida* in which all four shells seem to be external or cortical shells.

The *Polysphærida*, or the *Sphæroidea* with five or more concentric shells, seem of course to offer the greatest possibility for the development of very different forms; but in reality this group is the poorest and smallest of all; and only one part of it, the *Arachnosphærida*, is rather common. In this peculiar division the shell is composed of five to ten or more, very delicate, cobweb-like concentric shells, which are connected by radial beams; all are cortical shells, and lie outside the central capsule. Much more rare are those *Polysphærida*, in which both innermost shells, as true medullary shells, lie within the central capsule, all others being outside it. The total number of concentric shells in this group is commonly between five and ten, rarely more.

The *Spongosphærida* are distinguished from all other *Sphæroidea* by the spongy structure of the spherical shell, which is composed wholly or partially of an irregular spongy framework. The relation of this group to the other groups of *Sphæroidea* is probably rather complicated, for in some *Spongosphærida* the whole shell is composed of massive spongy reticulation, whilst in others it contains a spherical central cavity, and in a third group this cavity is filled up by one or two concentric lattice-shells, connected by radial beams. Many of these *Spongosphærida* are very common, and of considerable size.

The *Collosphærida* form a peculiar separate group of *Sphæroidea*, distinguished from all others by their social life or aggregation in colonies (*cœnobia*). They represent the only group of *Sphærellaria* in which this association of numerous individual capsules or cells is realised. The shell is almost constantly simple, without regularly disposed radial spines; therefore they may be called "social *Monosphærida*," or better "polyzoic *Ethmosphærida*." Only in one small group (*Clathrosphærida*) the shell, enveloping every central capsule, is double or surrounded by an external mantle; these may be compared to the *Diplosphærida* (or better to a part of the *Carposphærida*, *Liosphæra*, p. 76). In most of the *Collosphærida* the lattice-shell is more or less irregular in form and structure.

*The Lattice Work* of the fenestrated shells is in the *Sphæroidea* of the greatest variability, and its innumerable modifications serve mainly for the distinction of species. In general we can distinguish as the most important modifications a *regular* network (with equal size, form, and distance of the pores or meshes) and an *irregular* network (with