

The family *Androsphyrida* differs from the three preceding families of *Spyroidea* in the three-jointed shell, in which the galea of the *Tholosphyrida* and the thorax of the *Phormosphyrida* are combined; it may therefore be derived from the latter by development of a galea, or from the former by formation of a thorax. The common ancestral group of these three families is probably the *Zygosphyrida*. But it may be that a part of the *Androsphyrida* has originated directly from the *Stephoida*.

Two species only of this family were hitherto known, *Amphispyris reticulata* (figured, in 1872, by Ehrenberg, as *Dictyospyris*) and *Sphaerospyris sphaera* (described, in 1882, by Bütschli, as *Dictyospyris*). Thirty new species were found in the collection of the Challenger, and are here disposed in seven genera. But perhaps these may represent three different families, which we here enumerate as subfamilies; the *Lamprospyrida*, *Perispyrida*, and *Nephrosphyrida*.

The *Lamprospyrida*, the first subfamily, are tripodal *Spyroidea* with galea and thorax; they may therefore be regarded as a combination of *Tholospyris* and *Acrosphyris*. In the simpler form, *Androsphyris* (Pl. 83, fig. 8), the network of the shell is simple, and allows a very clear recognition of the internal structure. In the splendid *Lamprospyris*, derived from it (Pl. 89, figs. 13, 14) the delicate network is more or less spongy. The large apical horn is branched and fenestrated in the latter and simple in the former.

The *Perispyrida*, the second subfamily, possess no free apophyses, but a three-jointed shell with two distinct transverse strictures, an upper mitral and a lower collar stricture. The network of this shell is incomplete in *Amphispyris* (Pl. 88, figs. 2-7), being developed only in the frontal or lateral perimeter, thus making it probable that this subfamily may have arisen directly from the *Tympanida* (*Toxarium*, Pl. 88, fig. 1; Pl. 93, figs. 18-20). The network of *Tricolospyris* (Pl. 88, figs. 8-11) is complete, of another shape in the cephalis than in the galea and thorax; it is doubled or spongy in *Perispyris* (Pl. 88, figs. 12, 13).

The *Nephrosphyrida*, the third subfamily, contains two very different genera only, each of which may represent a separate family. *Sphaerospyris* (Pl. 83, fig. 4) possesses a spherical or subspherical lattice-shell, the central part of which includes a sagittal ring, connected with the inner face of the sphere by a number of paired apophyses, corresponding to those of *Lithocircus*; it may be easily confounded with some *Sphaeroidea* (*Carposphaera*), but the enclosed ring leaves no doubt as to its true origin. *Nephrosphyris* (Pl. 90) has a flat discoidal shell of considerable size, usually kidney-shaped or cordate, with a deep sagittal incision at the base, indicating the region where the pseudopodia are protruded from the porochora. The violin-shaped central capsule has two large lateral lobes on each side of the including sagittal ring, and the transverse nucleus is perpendicular to its sagittal plane (Pl. 90, figs. 7, 10). *Sphaerocircus* as well as *Nephrosphyris* have probably arisen independently from the *Stephanida*.