

and essential part of the skeleton, but secondary and of little morphological value, absent in the majority of the Semantida and of the other NASSELLARIA.

We divide our family Semantida into two different subfamilies, which possibly possess a direct phylogenetic relation to the two subfamilies of Stephanida:—The Semantiscida have no typical feet, and have arisen directly from the Lithocircida; the Cortiniscida, however, possess the three typical basal feet of *Cortina*, and may therefore be derived directly from the Cortinida. Since these three cortinar feet are probably identical with the three primary radial rods of the Plectoidea, an immediate affinity also to these NASSELLARIA is indicated.

The Semantiscida, which do not possess these three basal cortinar feet, are the simpler forms of the family. The simplest of all, and perhaps the common ancestral form of the whole family, is *Semantis* (Pl. 92, figs. 1, 2). It may be derived from *Archicircus* or *Zygocircus* by development of two pairs of horizontal apophyses on its base, around the porochora of the central capsule. The two rods of each side (right and left), becoming curved one towards the other, and meeting laterally, form a simple horizontal gate, and the two paired basal gates together, a horizontal ring or basal ring, to which the primary sagittal ring is perpendicular. In the next allied genus, *Semantrum* (Pl. 92, figs. 3–5), three pairs of horizontal apophyses are developed, and therefore two pairs of basal gates produced, an anterior and a posterior. In the third genus, *Semantidium* (Pl. 92, figs. 6, 7), three pairs of basal pores or gates are visible, surrounded and separated by four pairs of horizontal apophyses, which arise from the base of the sagittal ring. Finally, in *Clathrocircus* (Pl. 92, figs. 8–10) the number of apophyses is much increased, and two parallel rows of pores are developed along the two sides of the sagittal ring.

The basal plate or the “seal,” developed from the base of the primary sagittal ring or “signet-ring,” is therefore a horizontal ring, which becomes bisected by the latter, and exhibits either one pair of primary “basal gates” or two or three pairs of these important basal pores, rarely more. Since these pores possess the greatest morphological value, and are probably everywhere homologous, we give to them and to the separating apophyses certain names, and call the anterior pair of gates, “jugular pores” (*i* in our figures, the pair I of Bütschli); the middle (usually the largest) pair, “cardinal pores” (*k* in our figures, the pair II of Bütschli), and the posterior, smaller pair, “cervical pores,” *l*. The typical pairs of rods, by the union of which these basal pores arise, are the following:—(1) the clavicular or furcular rods, *f*, the first pair (rods *e1* of Bütschli), (2) the coracal rods, *e*, between the jugular and cardinal pores (rods *e* of Bütschli), (3) the scapular rods, *g*, between the cardinal and cervical pores (rods *e2* of Bütschli), (4) the cervical rods, the fourth pair of apophyses, the most posterior, *h*. Bütschli supposes that the topographical succession of the three typical pairs of basal pores is also the chronological succession, the jugular being formed first, the