

pear-shaped (Pls. 126-128). The thin siliceous wall of the galea has the same irregular and delicate network as the valve from which it arises, and sometimes the small irregular pores are also here reduced, so that the wall becomes partly solid. In some cases the thin, solid, siliceous plate of the galea and of the valve is covered by an irregular delicate network of crests; the dimples between these crests may be easily confounded with true pores.

The cavity of the galea is filled with phæodella and does not communicate with the cavity of the shell-valves, nor with the cavity of the radial tubes filled by jelly; it is closed towards the latter and the former by a thin solid plate of silex. Bütschli (1882, *loc. cit.*, p. 488) describes in *Cælothamnus* a large circular opening (Taf. xxxi. figs. 2a, 4a), and states that this is a direct communication between the cavities of the valves and of their galeas which are called by him "der dreiseitige kastenförmige Aufsatz" (ϵ). This error was caused by the fact that he observed the valves from the apical face only. The apparent opening of communication does not exist, and is the optical section of the rhinocanna, the shortened walls of which he describes as "trapezförmige Kiesellamelle" (γ); the two lateral edges of the latter ("die seitlichen Zipfel," δ) are the paired frenula, which connect the open mouth of the rhinocanna with the base of the two frontal tubes.

The "rhinocanna or nasal tube" (Pl. 126, figs. 1, 4; Pl. 127, figs. 4-9t) is a very remarkable organ which is common to all Cœlographida (without any exception), and distinguishes them markedly from all the other Radiolaria, and particularly from the closely allied Cœlodendrida, in which we find no trace of it. The rhinocanna is a cylindrical or three-sided prismatic hollow tube, which lies in the sagittal plane, on the outer surface of each valve, arises from the base of the galea, and is directed towards the proboscis of the central capsule. The two opposite rhinocannæ open on each side of the latter (Pl. 127, figs. 4-9m), and usually this "nasal mouth" or the anterior opening of the nose is somewhat dilated or even funnel-shaped. The posterior opening of the nose passes directly over into the base of the cavity of the galea.

Usually the rhinocanna is densely filled up by dark phæodella, which enter by this channel into the cavity of the galea (Pl. 127, figs. 4, 5, 9). Sometimes the entire phæodium is enclosed in the two galeæ and their rhinocannæ (figs. 5, 9), whilst at other times a great part of the phæodium lies outside of their cavities, and surrounds the proboscis of the mouth, or even the anterior half of the central capsule (fig. 4). The length of the cylindrical rhinocanna is usually about equal to that of the galea, whilst the diameter of the latter is from three to five times as great as that of the former. The structure of the thin wall is the same in both. The fine reticulation (fig. 8) is produced either by true, very small and irregular pores, or by a fine network placed on the solid thin wall. We may distinguish on each rhinocanna an outer or distal convex face, which is opposite to the proximal concave face of the galea, and an inner concave or proximal face, which rests immediately upon the convex outer face of the shell-valve; a thin solid lamella of