

plane, at right and left; their maximum number is three pairs, viz.:—(F) the paired pectoral tubes (as the foremost), directed forwards; (G) the paired frontal or lateral tubes, placed either in the frontal axis of the valve, or in a neighbouring axis, directed towards the right and left pole (Pl. 127, figs. 4–8, *g* 4 and *g* 5); (H) the paired tergal tubes, directed backwards (constant in all Cœloplegmida). The origin of these tubes is rather variable, since they arise in nearly allied species, sometimes independently of one another, at other times united at the base. But a closer comparison of them in the different species will demonstrate their homology, caused by constant heredity.

The terminal ramules of the brushes, which form the subspherical “fork-thicket” in the Cœlotholida, the outer “lattice-mantle” in the Cœloplegmida, are constantly armed at the distal ends either with spathillæ or with anchor-pencils, bunches of those most elegant spinulate threads, which bear at the free end an anchor, or a whorl of two, three, or four recurved teeth (Pl. 122, fig. 8; Pl. 127, fig. 10; Pl. 128, figs. 1, 6). The pencils are usually dichotomously branched, their threads zig-zag or delicately serrate, often armed with very small recurved denticles, and the anchor teeth (commonly three or four) are usually smooth on the convex outer, serrate on the concave inner edge. The entire surface of the subspherical thicket in the Cœlotholida, and of the polyhedral lattice-mantle in the Cœloplegmida, is armed with thousands of those most elegant spathillæ, or anchor-pencils.

The “fork-thicket” of the Cœlotholida is identical with that of the Cœlodendrida, and is composed only of the innumerable dichotomous branches of the hollow tubes. It envelops the two central valves and the enclosed central capsule in the same way as in the Cœlodendrida. But the Cœlotholida differ from these latter in constantly possessing a rhinocanna and two frenulæ. The entire form of this thicket, which in the few species observed was never complete, but always more or less destroyed, is usually probably subspherical or polyhedral, sometimes cordate or kidney-shaped. Its surface is densely studded with thousands of spathillæ. Its diameter is about four to eight times as great as that of the enclosed bivalve shell.

The “lattice-mantle” of the Cœloplegmida, which replaces in this subfamily the fork-thicket of the Cœlotholida, is always produced by the anastomoses of the distal ramules of the brushes, and of those branches of the styles which do not proceed over the surface of the mantle. Its network is always very irregular, and composed of polygonal meshes of very different sizes. Usually it is quite simple, and may be compared with the cortical shell of the Disphærida. More rarely it is more or less spongy. Its surface is densely studded with thousands of spathillæ or anchor-pencils. The entire form of the lattice-mantle is always symmetrically polyhedral, since its dorsal and ventral halves are symmetrically developed on both sides of the equatorial plane, and therefore correspond perfectly to the enclosed smaller halves of the central bivalve shell. The two valves of the lattice-mantle (dorsal and ventral valves) are never really united and grown together,