

thorax, the abdomen, and the post-abdomen. Large colonies were formed, and the Ascidiozooids (produced by gemmation from the post-abdomen) composing the colony were so closely placed that their tests became united to form a continuous investing mass. On account of several young Ascidiozooids being usually produced from a single older Ascidiozoid in the colony, a more or less regular grouping into systems naturally took place, and then the atrial apertures of the various Ascidiozooids in a system coalesced to

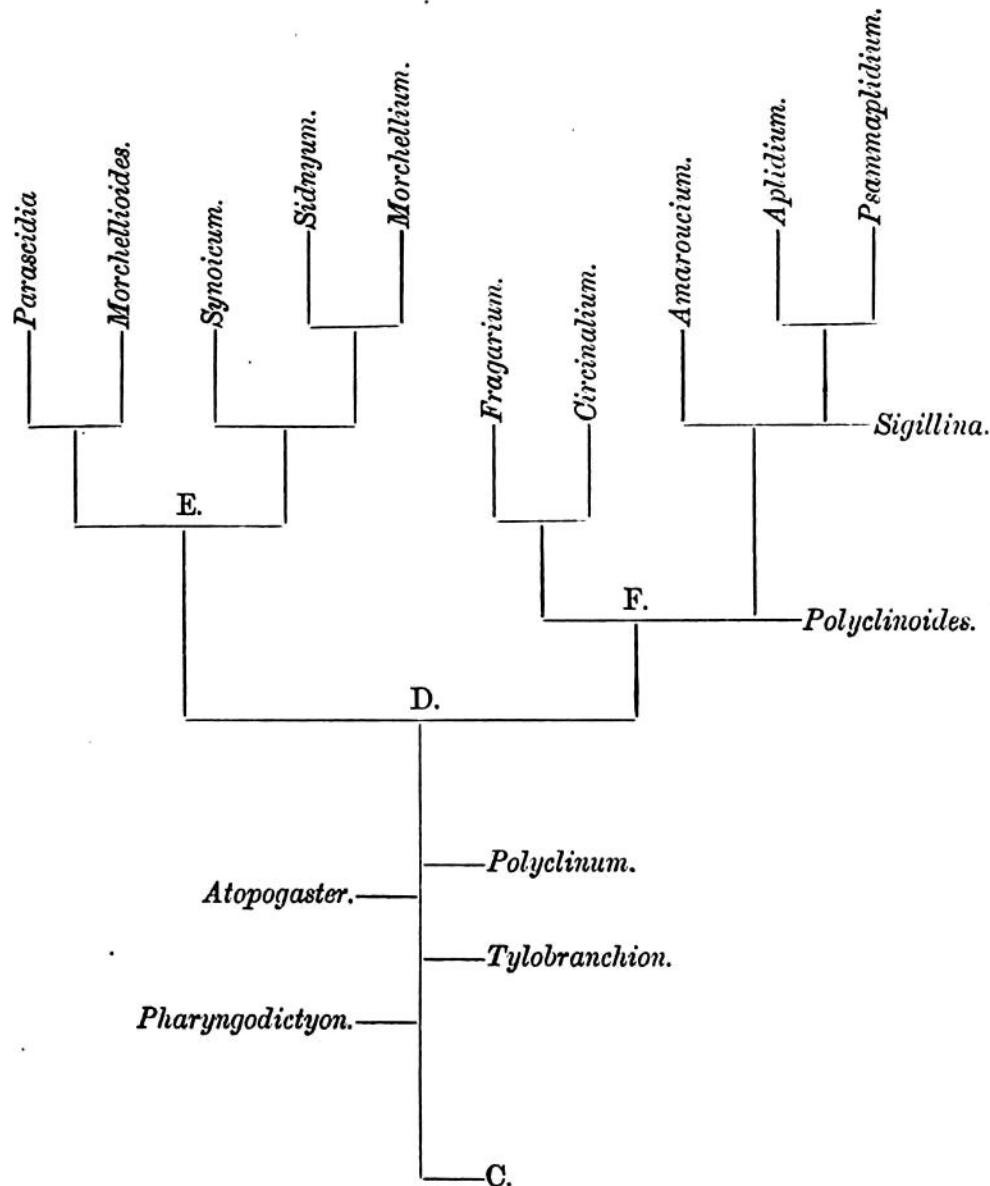


FIG. 12.—Diagram illustrating the phylogeny of the Polyclinidæ. C. indicates the point where the ancestral Polyclinidæ and Distomidæ diverged.

form a centrally placed common cloacal aperture. The branchial sac also underwent a gradual degeneration, resulting in the complete disappearance of the system of internal longitudinal bars inherited from the ancestral forms at B. (see fig. 11).

The central axis of the Polyclinidæ, extending from C. to D. (see fig. 12), was composed of a series of ancestral forms in which these and some other less important changes were gradually being effected, but from this axis a few short side branches were given off at