

together. The existence of such a *Cœnobium*, a number of equal and only loosely-connected cells, as a separate stage in the ancestral history of animals, is made highly probable by the fact that the eggs of all animals undergo after fertilization such a process of repeated self-division, or 'cleavage,' until the single egg cell is transformed into a heap of cells closely packed together, not unlike a mulberry (*morula*)—hence *morula* stage in ontogeny.

4. The morula of most animals further changes into a *Blastula*, a hollow ball filled with fluid, the wall being formed by a single layer of cells, the blastoderm or germinal layer. This modification is brought about by the action of the cells—they conveying nourishing fluid into the interior of the whole cell colony and thereby being themselves forced towards the surface. The Blastula of most Invertebrata, and even that of *Amphioxus*, is possessed of fine ciliæ, or hair-like processes, the vibrating motion of which causes the whole organism to rotate and advance in