tough, muscular fibre. The body of the actinia is highly contractile, and full of cells; the tentacula are hollow tubes, which the animal has the power of filling with sea-water, and thus causing them to protrude; a mechanism similar to that of the spiral appendages of the spirifera, described in the former lecture (page 474). The cells also contain water, with which the whole or any part of the body can be filled; and I have observed, that when the animal was desirous of shifting its situation, it distended one half of the body with water, then withdrew the base from the stone, and sunk to the bottom of the vessel in which it was contained. This plan (Tab. 103) of the internal structure of the actinia will serve to illustrate these remarks. The surface of the stomach, and even the internal lining of the tentacula, are abundantly furnished with cilia; the actinia has no durable skeleton.

23. CARYOPHYLLIA, TURBINOLIA, &c. (Pl. V. fig. 9; Tab. 50.)—In this small coral (*caryophyllia cyathus*) from the Mediterranean, and in this fossil from the chalk (Tab. 50, fig. 3), we have examples of an isolated calcareous cell, divided by vertical lamellæ or partitions, arranged in a radiated manner. This cell is the skeleton of a single polype, having a double row of tubular tentacula, and bearing a great analogy to the actinia; indeed, the recent animal may be described as an actinia with a calcareous skeleton, fixed by its base. The *turbinolia* (Tab. 50, figs. 1, 2) possesses a similar structure.