asterias, or star-fish. As this animal is common on our shores, I shall offer a few remarks on its structure, to illustrate my subsequent observations. We have seen that the actinia (p. 542) is destitute of a skeleton, its tough skin and elastic gelatinous mass have no support. In the fungia, the polypus has an immoveable calcareous frame; while in the alcyonium, the rudiments of a skeleton are seen in the numerous separate spines, dispersed throughout the body; but the star-fish has an articulated or jointed frame-work to give stability to the soft parts. The body of the animal is covered by a tough integument, and each ray or arm is composed of a series of little bones, or *ossicula*, which are united together like the vertebræ of the spine, and form a flexible but powerful support. These bones are often found in a fossil state, and my museum contains some interesting examples of the skeletons of asteriæ, from the chalk. There are some kinds of star-fish which, instead of the five flat rays of the common species, have jointed arms, which surround the body and mouth, like the tentacula of the polype. These arms are composed of thousands of little bones, and the whole are inclosed in the common integument or skin. The asterias is a free animal; it floats at liberty in the water. Now, if we imagine a star-fish, like that which I have described, to possess a long flexible column, the base of which is attached to the rock, we shall have a correct idea of the general character of the