

stantial framework for the body, which has been variously designated in the several classes of animals, as the *test*, *shell*, *carapace*, *skeleton*, &c. The study of these parts is one of the most important branches of comparative anatomy. Their characters are the most constant and enduring of all others. Indeed, these solid parts are nearly all that remains of the numerous extinct races of animals of past geological eras; and from these alone are we to determine the structure and character of the ancient fauna.

154. Most of the Radiata have a calcareous test or crusty shell. In the Polypi, this structure, when it exists, is usually very solid, sometimes assuming the form of a simple internal skeleton, or forming extensively branched stems, as in the sea-fans; or giving rise to solid masses, furnished with numerous cavities opening at the surface, from which the movable parts of the animals are protruded, with the power, however, of retracting themselves at pleasure, as in the corals. In the Echinoderms, the test is intimately connected with the structure of the soft parts. It is composed of numerous little plates, sometimes consolidated and immovable, as in the sea-urchins, (Fig. 26,) and sometimes so combined, as to allow of various motions, as in the star-fishes, (Fig. 17,) which use their projecting rays; both for crawling and swimming.

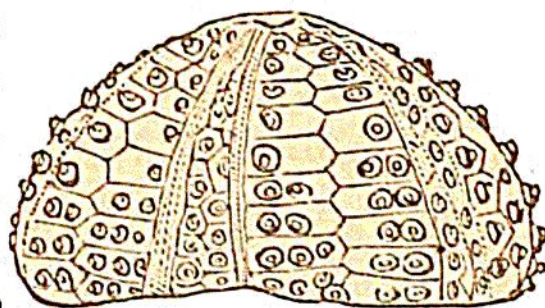


Fig. 26.

155. In the Mollusks, the solid parts are secreted by the skin, most frequently in the form of a calcareous shell of one, two, or many pieces, serving for the protection of the soft parts which they cover. These shells are generally so constructed as to afford complete protection to the animal within their cavities. In a few, the shell is too small for this purpose; and in some it exists only at a very early period,