

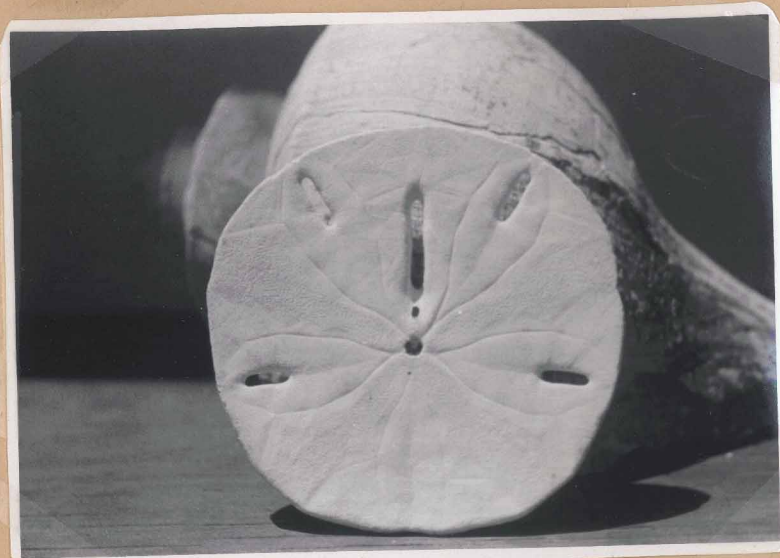
### Sea Urchins and Sand Dollars

SEA urchins and sand dollars belong to a family of marine invertebrates whose Greek name translated into English means "hedgehog skin." The name is especially appropriate for the sea urchin, common along these coasts, for this little animal is equipped with many moveable spines about an inch long, giving him the appearance of an underwater porcupine. The resemblance is furthered by his ball-like shape.

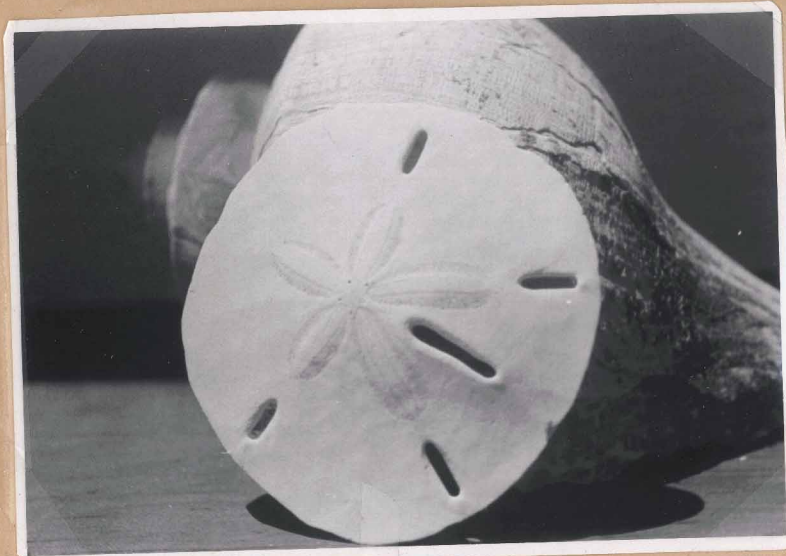
The spines on the sand dollar are shorter than those of the sea urchin so that the animal has a granular appearance, like the sand in which he burrows. To put it accurately, the sand dollar is a flattened urchin with shortened spines, and so also is the cake urchin.

Live sea urchins, globular or flattened, show colors of purple, green, grey, brown, or combinations of two or more of these colors. The lifeless cases of sand dollars and cake urchins are bleached, colorless, and are often spineless. These empty cases are familiar objects on the beach, but cases of the spinner urchins are not so often cast up on shore, because a stormy turnover of waters is needed to loosen the sea urchin from the rocky bottom where he swells beyond the breakers. The sand dollar burrows just below the surface of the sand near the low-tide mark, and can sometimes be spotted by the resulting shallow elevation of the sand.

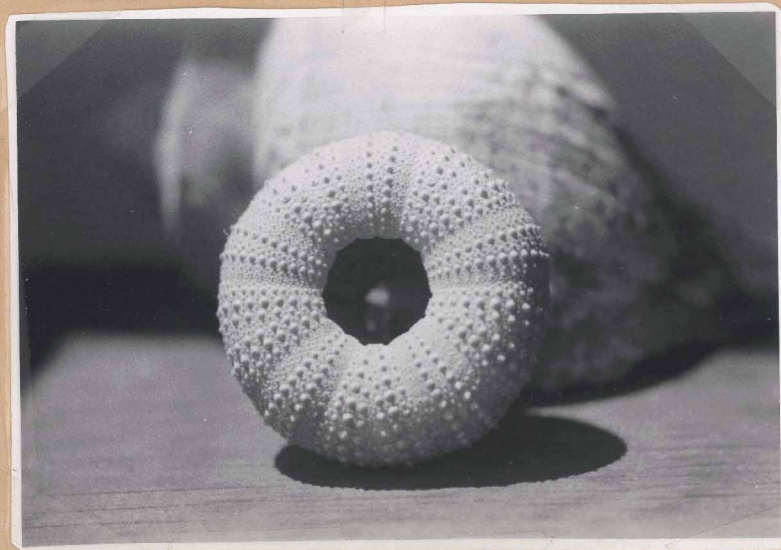
Sea urchins and sand dollars feed upon minute sea plants, and are fed upon by gulls. Broken cases of sea urchins may be found among the rocks where the gulls have dropped them in order to crack the spiny shell and get at the soft animal within.



Rear of the Sand Dollar



Front of the Sand Dollar



Front of the Sea Urchin

### Curious Facts

### About Barnacles

WE refer specially to "rock barnacles," which are but one kind of many. Rock barnacles live very close together, so that a thousand may occupy the space of an ordinary book page. A baby rock barnacle is a tiny thing—no bigger than the head of a pin, but it has six legs. It swims about in the sea when first born, but soon it develops two eyes and two feelers, and it is not very long before the baby comes into contact with a solid substance, a rock it may be, and there it fastens itself and spends the rest of its life there.

When a rock barnacle is under water, as at high tide, it opens its shell at the top, tiny, feathery legs come out of the opening, and these "kick" minute animals of the sea into its mouth. When the tide goes out and the barnacle is uncovered, it pulls in its legs and shuts up its shell.

You may have noticed barnacles on a ship's hull. Have you ever tried to remove one of them? They hold on so tightly that they have to be forced off. The barnacles that grow on ships are called goose-neck barnacles. So many—tons of them—may grow on a ship's hull as to impede her course seriously and force her to go into dry dock to have them scraped off. Sometimes barnacles fasten themselves to other animals that live in the sea. An old lobster, for instance, may be nearly covered with them. And a whale may be the home of millions of them, taking them with it everywhere it goes.