

light for the little crustaceans that went frisking about inquisitively among the deep-sea vegetation, and incautiously frolicked themselves into the grasp of the expectant tentacles. Or, tired of repose in one spot, what a curious sight it must be to see these shelled things pumping the water through their siphons, and jerking themselves at each squirt backward? Although the naturalist has found out many of their secrets, the whole story of the nautilus' life has never been told, since living specimens have been very few and far between. The shells are common enough, for when the crabs or lobsters have eaten the tenants, their residences, no longer anchored, float up to the surface, and the tide washes them on to rock and beach. Associated with them in fiction and fancy, though separated from them by many species of nature, is the huge tridacna, the shell in which the Greeks tell us Venus, the foam born, was found floating, and known to collectors as "the gigantic clam." It holds a sea-snail that weighs often twenty pounds, itself weighing five hundred weight, and has hinges of such strength that without battering it to pieces the man who once got his hand gripped within it would have no chance of extricating himself. The tritons, too, a superb family of shell-fish, are familiar in old world myth as the trumpets which the courtiers who surrounded King Neptune in his voyages used to blow to let the sea-folk know that his Majesty was coming, and to summon the mermen and the mermaids to pay their homage to the monarch of the waves. They are still used, these large conches, as the war horns of savage tribes; and weird and wild are the sounds that come wailing over the water as the battle canoes shoot out from the bank in pursuit of enemy or victim.

The fountain shell, again, with its rosy lining, what a beautiful object it is, and how it conjures up to the mind the possible loveliness of those sandy plains and valleys, down, deep-down, at the bottom of the sea, where these and other ocean jewels lie scattered doubtless in endless multitude. As the material upon which most cameos are cut, this fountain shell is, in its fragments, familiar enough in Europe, while in other countries the savages delight in it, cutting bracelets out of it and grinding pieces down into beads, or shaping others into arrow and harpoon heads. Then there are the lovely cone shells, the graceful spires, the exquisite,

elegant "olives," with their artistic blending of tints, the *Janthania*, with its violet hues, and the apple shells that have as strange tenacity of life as the "rose of Jericho;" the whipping top shells with their wondrous front door lids, the chiton that rolls itself up like an armadillo and looks as indigestible as possible when anything threatens to eat it; the sea hare that stains the water purple to hide itself from pursuers, and the univalves that take their popular names from the objects they seem to resemble, "bubble," and "umbrella," and "watering pot." Then again, the cowries, admired all the world over for their bold coloring as the handsomest of shells, spotted or blotched, and barred like leopards and tiger cats; and the pecten and scallop family painted as beautifully as any flowers, and as brilliant when laid out in numbers together as a parterre of pansies. Or for pure beauty what is there to excel some of the cockles, or mussels, the surpassing isocardia, or the lantern shells? For delicateness of marking and intricate ingenuity of design, the wings of butterflies and moths will hardly compare with some of these works of the sea snails, while for fragile delicacy what can excel the paper nautilus? Then there exist some thin fairy bubble textures that on the water seem to be only water and light themselves, and taken up in the hand fill the mind with astonishment that fabrics so frail would ever have borne the washing of the waves or sufficed for the home of a living animal. Yet they are not all so innocently fragile, so helpless in their loveliness. The mugilus, for instance, started like its relatives the "angora" in being a respectable snail, living properly in a curly shell, but by and by it developed an appetite for coral insects, and set to work to bore through the block, always taking care, the fastidious wretch, to keep so near the surface that it was sure of its tiny victims being "all alive." The pholas, too, that manages with a tongue of velvet to drill through solid rock, and the dactylus, apparently as unfitted for such a life as can be imagined, that perforates stone, and the teredo navalis, which makes lace of woodwork and reduces a plank to the appearance of a piece of wasp's nest.

Many others, again, are remarkable, apart from their beauty, for their products; for instance, the colossal byssus, that throws out ruses of silk so fine and strong in fiber that it can be worked up into

articles of clothing, and the mussels, which if left undisturbed, will weave crumbling masonry together by filling all the crevices with the curious bunches of sea thread. Above all, however, ought probably to be ranked those shell fish that give man food, and, though these are legion, they are but few, the periwinkle and cockle, scallop, whelk, mussel and oyster, that are obtainable in any quantity to make the consumption of commercial importance and of all these the oyster deserves the prominence it has obtained. Nature has given it but a poor shell to look at. It is very wonderful, no doubt, the life of the oyster, as interpreted for us by such expert decipherers of natural secrets as a Sowerby or a Woodward, or as pleasantly translated by a Buckland or a Gosse; but when all its labors are ended, and the mature bivalve lies awaiting its destiny the shell in which the dainty morsel is ensconced is not much to look at. It has, therefore, been somehow the fashion to poke fun at the oyster. Yet no one should forget how splendidly it triumphs even in such a contest of rival beauties as the shell world offers, when the rough ribbed rind is forced open and that wonder of the sea is disclosed to view, the pearl. By itself it suffices to fill the ocean with an exquisite mystery, and through all ages has delighted the fancy of man. Such, most imperfectly suggested, is the world of marvels, of dainty color, and of fascinating elegance in which the conchologist carries on his studies.

*London Telegraph.*

### "PALMING" COINS.

"That is a 20 cent piece," said a conductor on a street car, this morning, to an old gentleman who had just handed him a piece of money for his fare. As he spoke the conductor returned the coin. To the passenger's astonishment it was a 20-cent piece.

"Why," said he, "I am sure I gave you a quarter."

"Look at it," said the conductor.

The old gentleman put on his eyeglasses and examined it critically.

"You're right," said he. "Then take out a nickel and you will owe me 15 cents instead of 20."

The conductor returned 15 cents, and the old gentleman said: "Well! Well! I don't know how that happened. I could have sworn I gave him a quarter."

A man with a full brown beard and a