found attached, and, finally, there are true unisexual species, in which small males live attached to very large females.

"Six genera of sessile Cirripedia have representatives in the collection made during the cruise of the Challenger. Acasta and Coronula are represented by one species each, Tetraclita and Chthamalus by two each, and one of the species of the latter genus has been described as new; far more interesting, however, are the species of Verruca and Balanus brought home by the Challenger.

"Verruca was collected at six different Stations, and, though not without hesitation, the specimens from each Station have been considered as representing a different species, although perhaps it will hereafter be possible to show that two or more of them belong

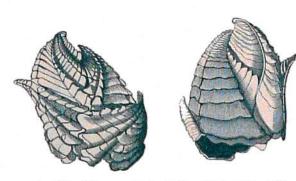


Fig. 319.—Verruca sulcata, Hook. Station 170, off the Kermadecs, 520 and 630 fathoms.

to one and the same species. These species are especially interesting, because they form together a very distinct and characteristic division of the genus, showing affinity to Verruca nexa as far as regards the perpendicularity of the walls and the presence of a distinct third articular ridge on the outer surface of the scutum, a peculiarity which is also observed in the fossil Verruca prisca, Bosquet. At the same time these new forms have shown that the genus has a truly world-

wide range, and that in the case of *Verruca*, as in that of *Scalpellum*, there is coincidence of great antiquity with the occurrence at a considerable depth. For, whereas the greatest depth from which Darwin got specimens of *Verruca* was only 90 fathoms, the range in depth of the Challenger species is from 500 to 1900 fathoms.

"The genus Balanus has twelve representatives among the Challenger species. Of these five are new; three of them, however, are probably nearly related to species described by Darwin; the remaining two, Balanus corolliformis and Balanus hirsutus, on the other hand, representing two closely allied species, scarcely admit of comparison with any species Darwin knew. They belong to the deep-sea fauna, one being found at a depth of 180 fathoms, the other of even 516 fathoms, and some of the peculiarities of their structure must be regarded as standing in near relation to their living at so considerable a depth. These peculiarities are the absence of radii and the solidity of the parietes; the former causes the compartments to adhere so feebly as almost to separate on being manipulated. For an animal living near the surface the violent beating of the waves would soon prove fatal, if its walls showed the structure of the present species. As, moreover, the compartments are solid (not permeated by pores), they have by no means the strength of those of other species of the genus. "So we see that though the genus Scalpellum is by far the most remarkable of the