

ably larger. All the bases of the cones had been beveled off toward their outer aspect, and they had evidently been used for vigorous locomotion over firm ground. The large areolæ and spine-muscles were again present, and the object of their excessive development was now obvious.

In *Phormosoma uranus* there is but little difference in character between the upper and the lower surfaces of the test, and the species thus holds a place intermediate between the genera *Phormosoma* and *Calveria*.

*January 31st.*—The trawl was put over in 2125 fathoms, about midway between Cape St. Vincent and Madeira. Since our first essay with the trawl we had been employing it at gradually increasing depths, and our experience was that on perfectly smooth ground without rocks it worked with even greater certainty than the dredge, always falling in the right position, and scarcely ever fouling in any way. The operation took a little longer than dredging, for the trawl, being of lighter material and exposing a much larger surface to the water, takes somewhat longer to go down, and offers greater resistance in coming up. The strain, measured by the accumulator, is, however, probably not greater; for as the trawl is not constructed to bring up the material of the bottom in any quantity, the weight of its contents is usually much less.

The number of living animals certainly diminishes, after we reach a certain point, with increasing depth; and even the wide-mouthed trawl rarely brings up a heavy freight from depths beyond 2000 fathoms. Such captures, however, frequently countervail their scantiness by their interest and value. This haul, for example, gave us, with a few star-fishes and holothurids, a fine specimen of the "clustered sea-polyp," *Umbellularia Grænlandica* (Fig. 36), an animal of great interest, historical as well as scientific. Twelve gigantic alcyonarian polyps, each with eight long fringed arms, terminate in a close cluster a calcareous stem 90 centimetres high.