

calcareous laminæ, clinging to small pieces of shell, grains of sand—anything which may improve the anchorage of the crinoid in the soft mud which is nearly universal at great depths.

In *Rhizocrinus* the basal series of plates of the cup are not distinguishable. They are masked in a closed ring at the top of the stem; and whether the ring be composed of the fused basals alone, or of an upper stem-joint with the basals within it forming a 'rosette,' as in the calyx of *Antedon*, is a question which can only be solved by a careful tracing of successive stages of development. The first radials are likewise fused, and form the upper wider portion of the funnel-shaped calyx. The first radials are deeply excavated above for the insertion of the muscles and ligaments which unite them to the second radials by a true (or moveable) joint. One of the most remarkable points in connection with this species is, that the first radials—the first joints of the arm—are variable in number, some examples having four rays, some five, some six, and a very small number seven, in the following proportions. Out of seventy-five specimens examined by Sars, there were—

15	with	4	arms.
43	„	5	„
15	„	6	„
2	„	7	„

This variability in so important a character, particularly when associated with so great a preponderance in bulk of the vegetative over the more specially animal parts of the organism, must undoubtedly be accepted as indicating a deterioration