

Pentacrinus alternicirrus, P. H. C. ; whereas the pinnules of *Antedon basicurva* and *Antedon inæqualis*, P. H. C., become swollen and spirally coiled owing to the presence of *Myzostoma willemoesii* (fig. 127D), forming thus a central cavity in which the parasites are found. The pear-shaped swellings of the pinnules of *Pentacrinus alternicirrus*, P. H. C. (fig. 127B), caused by the presence of *Myzostoma deformator*, are no less remarkable.

“Many Crinoids are liable to the attacks of several distinct species of *Myzostoma* ; *Pentacrinus alternicirrus*, P. H. C., for example, harbours an ectoparasitic species besides the three endoparasitic *Myzostomida* just mentioned ; similarly, *Antedon triquetra*, Semper MS., is infested by no less than six ectoparasitic forms. On the other hand a given species of *Myzostoma* is by no means always confined to the same host ; many

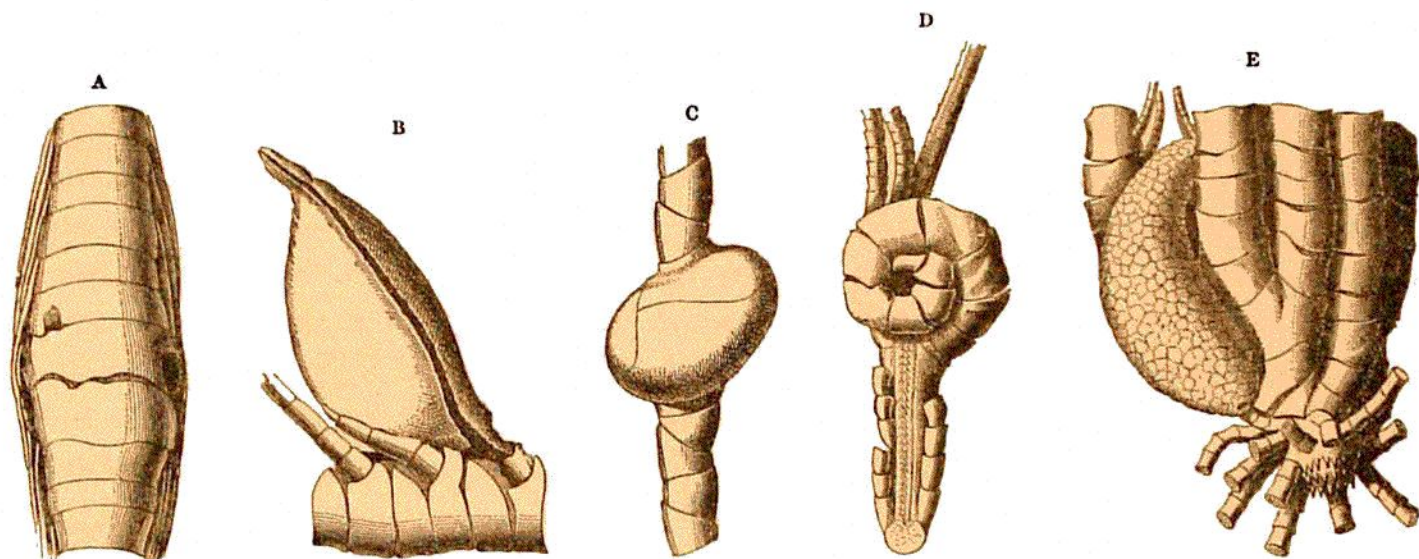


FIG. 127.—Malformations upon Crinoids caused by *Myzostomida* ; all magnified about 5 diameters.

A, Arm swelling of *Pentacrinus alternicirrus*, P. H. C., inhabited by *Myzostoma pentacrinii*. B, swollen pinnule of the same, inhabited by *Myzostoma deformator* ; C, arm swelling of *Antedon inæqualis*, P. H. C., inhabited by *Myzostoma tenuispinum* ; D, malformed pinnule of the same, inhabited by *Myzostoma willemoesii* ; E, cyst on the disk of *Antedon radiospina*, P. H. C., inhabited by *Myzostoma murrayi*.

indeed are found upon two, three, or even four distinct species of Crinoids. The only genera of Crinoids upon which *Myzostomida* have been found are *Antedon*, *Actinometra*, *Pentacrinus*, *Bathycrinus*, *Metacrinus*, and *Hyocrinus*.

“The presence of malformations upon many fossil Crinoids¹ indicates that in the earlier periods of the earth’s history as well as now these parasites existed.”

THE CROZET ISLANDS.

On the 31st December, at 1.30 A.M., the vessel tacked and stood off Hog Island under easy sail until daylight. At 3.30 A.M. she tacked again and stood towards the land, but the weather becoming thick, at 6 A.M. again stood off under topsails and jib. Shortly after noon the fog lifted a little and sail was made, and the island was sighted again at 3 P.M., but

¹ See Zool. Chall. Exp., part xxvii. p. 2, 1884.