

crinoids, however, are not predatory animals. Their nutrition is effected in a very gentle manner. The grooves of the pinnules and arms are richly ciliated. The crinoid expands its arms like the petals of a full-blown flower, and a current of sea-water bearing organic matter in solution and suspension is carried by the cilia along the brachial and radial grooves to the mouth. In the stomach and intestine the water is exhausted of assimilable matter, and the length and direction of the excretory proboscis prevent the exhausted water from returning at once into the ciliated passages.

The other West Indian *Pentacrinus*—*P. Mülleri*—seems to be more common off the Danish Islands than *P. asteria*. The animal is more delicate in form. The stem attains nearly the same height, but is more slender. The rings of cirri occur about every twelfth joint, and at each whorl two stem-joints are modified. The upper joint bears the facet for the insertion of the cirrus, and the second is grooved to receive its thick basal portion, which bends downwards for a little way closely adpressed to the stem, before becoming free. The syzygy is between the two modified joints, and in all the complete specimens which I have seen the stem is broken through at one of these stem syzygies, and the terminal stem-joint is worn and absorbed, showing that the animal must have been for long free from any attachment to the ground.

On the 21st of July, 1870, Mr. Gwyn Jeffreys, dredging from the 'Porcupine' at a depth of 1,095 fathoms, lat. 39° 42' N., long. 9° 43' W., with a bottom temperature of 4°·3 C. and a bottom of soft