

each ray in the following order—2, 1; 1, 2; or 2, 1, 1; 1, 1, 2, the axillaries being limited to the outer arm of each successive pair. Primary arms of one to three (usually two) distichal joints, which are united by syzygy. Secondary arms of two to seven palmar joints, usually three. There may be one, or more rarely two, further divisions, which are usually of three joints each, but may have five or six.

The first two joints after each axillary are united by syzygy, the epizygal, when not itself an axillary, bearing the first pinnule. No other syzygies on the arms, which consist of about one hundred smooth, oblong joints, the lowest of which have flattened sides, and are sometimes more or less tubercular, while the outer ones overlap slightly. The first pinnules are somewhat longer and stouter than the following ones, after which the size again increases. The pinnules have a smooth, sharp dorsal edge, and are generally composed of flattened joints, the lowest of which are slightly wider than their successors, and are sometimes markedly prismatic.

The disk bears numerous scattered calcareous granules, but no regular pavement of plates, and there is no plated perisome between the rays. Arm-groove moderately wide, and closely covered by numerous, small, irregular plates. Pinnule-ambulacra have covering plates and ill defined side plates.

Colour in spirit, white or brownish-white, somewhat darker on the pinnules.

*Localities.*—Guadeloupe, St. Croix, St. Thomas, Barbados; between Saba and Eustatius Islands, 531 fathoms (Captain Cole).

The dredgings of the U. S. Coast Survey steamer "Blake," cruise of 1877-78, off Havana; 175 fathoms.

Cruise of 1878-79. No. 100, off Morro Light; 250 to 400 fathoms. No. 101, off Morro Light; 175 to 200 fathoms. No. 157, off Montserrat; 120 fathoms. No. 171, off Guadeloupe; 183 fathoms; bottom temperature,  $55\frac{1}{2}^{\circ}$  F. No. 193, off Martinique; 169 fathoms; fine sand, dark mud, and shells; bottom temperature,  $51^{\circ}$  F. No. 218, off St. Lucia; 164 fathoms; bottom temperature,  $56^{\circ}$  F. No. 269, off St. Vincent; 124 fathoms; bottom temperature,  $57\frac{1}{2}^{\circ}$  F. No. 274, off Barbados; 209 fathoms; fine sand and ooze; bottom temperature,  $53\frac{1}{2}^{\circ}$  F. No. 280, off St. Charles Lighthouse, Barbados; 221 fathoms; Globigerina sand; bottom temperature,  $50\frac{1}{2}^{\circ}$  F. No. 283, off Barbados; 237 fathoms; hard bottom; bottom temperature,  $49^{\circ}$  F. No. 291, off Barbados; 200 fathoms; flat calcareous stones; bottom temperature,  $49\frac{3}{4}^{\circ}$  F. No. 295, off Barbados; 180 fathoms; hard bottom; bottom temperature,  $50\frac{3}{4}^{\circ}$  F. No. 296, off Barbados; hard bottom; 84 fathoms; bottom temperature,  $61\frac{1}{2}^{\circ}$  F. No. V. (Bartlett), Santiago de Cuba; 288 fathoms.

*Remarks.*—This species was discovered by the Danish naturalist Oersted, who brought an example to Europe from the Danish possessions in the West Indies. It was exhibited in the year 1856 at the meeting of Scandinavian naturalists in Christiania,<sup>1</sup> and a brief

<sup>1</sup> *Forhandl. Skand. Naturf.*, 7<sup>de</sup> Möde i Christiania, 1856, p. 202.