Basals triangular or rhomboidal, not meeting laterally on the exterior of the calyx. The two outer radials united by syzygy. The grouping of the ray-divisions and the number of their component joints are somewhat irregular. Primary arms of two to six (usually three or four) distichal joints; secondaries of two to eighteen (usually seven to nine) palmar joints; tertiaries of six to fourteen joints, and occasionally another division after eight or ten joints more. The tertiary arms which divide are often only the two outer ones in each group of four, so that the distichal axillary bears six arms, viz., 2, 1; 1, 2; but there are sometimes "more than a hundred arms." The first two joints beyond each axillary united by syzygy, with a pinnule on the epizygal. No other syzygies on the arms, which consist of about a hundred smooth, oblong joints, the outermost ones overlapping slightly. Distichal and palmar pinnules very large and stout, with thick lower joints, those of the later arm-divisions and of the free arms being much smaller. The joints of these large lower pinnules have the distal edge raised into a strongly marked keel which projects forward over the base of the next joint; and this feature recurs on all the pinnules of the arms, though it is less distinct in their middle and outer portions.

The perisome uniting the rays up to the level of the distichal axillaries is paved by large, closely set plates. Similar plates cover the ventral surface of the disk and armbases. Arm-groove moderately wide, and protected by numerous irregular plates. Pinnule-ambulacra have covering plates, but no definite side plates. Colour in spirit or dry, a light yellowish-brown.

Localities.—Various parts of the Caribbean Sea—Nevis, Martinique, Barbados, Guadeloupe (Dr. Schramm); off Saba Island, 320 fathoms (Captain Cole). This species was only once dredged by the U. S. Coast Survey steamer "Blake," cruise of 1878-79, No. 157, off Montserrat, 120 fathoms.

Remarks.—The specific name caput-Medusæ, which was originally bestowed by Lamarck on the West Indian Pentacrinus described by Guettard, was used by Miller, Goldfuss, Müller, and all later writers till the year 1864. In August of this year the late Sir Wyville Thomson published a popular article on Sea Lilies, in which he expressed the opinion that the fossil Pentacrinus briareus, a widely different species from the recent Pentacrinus caput-Medusæ, "seems, however, to have a just claim to be recognised as the type of the genus Pentacrinus;" and he therefore proposed to give the generic name Cenocrinus to the West Indian species, for which he retained the original title Caput-Medusæ. Lütken, however, reverted to the original specific designation employed by Linnæus, and called the type Pentacrinus asteria. In the following year Thomson referred to it as Pentacrinus (Neocrinus) asterias, Linn.; but he subsequently gave up

<sup>&</sup>lt;sup>1</sup> See Wyville Thomson, The Intellectual Observer, August 1864, p. 5.

<sup>&</sup>lt;sup>2</sup> The Intellectual Observer, August 1864, p. 3.

3 Om Vestindiens Pentacriner, loc. cit., p. 207.

Systema Naturæ, ed. xii., Holmiæ, 1766, t. i. p. 1288.
 Phil. Trans., 1865, p. 542.
 Proc. Roy. Soc. Edin., vol. vii., 1872, p. 765; and also The Depths of the Sea, p. 435.