

*i.e.*, at the interbasal sutures, immediately beneath the middle points of the first radials. The latter have exceedingly high muscle-plates projecting inwards; but their dorsal surface is barely half as long as that of the second radials. These are nearly square, but deeply incised to receive the strong backward projections of the axillaries, which are roughly rhombic and slightly wider than long.

First brachials well separated laterally, with the inner sides much shorter than the outer ones, and the distal edge much incised to receive the strong backward projections of the quadrate second brachials. The following joints have markedly unequal sides, with a syzygy in the third or fourth, and again in the fifth, sixth, or seventh brachial.

Disk almost naked, 4 mm. in diameter. Mouth somewhat excentric and surrounded by a large peristome, immediately behind which is the anal tube. Brachial ambulacra close down upon and between the muscular bundles. Skeleton light brownish-white.

*Locality*.—Station 174c, August 3, 1874; lat. 19° 7' 50" S., long. 178° 19' 35" E.; 610 fathoms; coral mud; bottom temperature, 39° F. One mutilated specimen.

*Remarks*.—This type differs from the other two species of the genus in the greater squareness of the second radials, and in the curious relation of the basals to the centro-dorsal. They are of uniform height, as in *Atelecrinus cubensis*, but are not in contact with the centro-dorsal at the interradial angles of the calyx, being separated from it on the exterior by a gap which is filled up by perisome (Pl. VI. fig. 5). Apart from its purely morphological importance, this Pacific species is also interesting as showing the wide distribution of the genus; and it is the only one of the three which is known as yet to extend below the limit of the continental line (500 fathoms), though each of the others has been dredged below 400 fathoms.

### Genus 3. *Eudiocrinus*, P. H. Carpenter, 1882.

1868. *Ophiocrinus*, C. Semper, Archiv f. Naturgesch., 1868, Jahrg. xxxiv. Bd. i. p. 68.

1869. *Comatula* (*Ophiocrinus*), P. de Loriol, Denkschr. d. allg. Schweiz. Gesellsch. f. d. ges. Naturw., 1869, Bd. xxiii. p. 57.

1879. *Ophiocrinus*, P. H. Carpenter, Proc. Roy. Soc., No. 194, 1879, p. 385.

1879. *Ophiocrinus*, P. de Loriol, Monographie des Crinoïdes fossiles de la Suisse, Geneva, 1877-79, p. 277.

1882. *Eudiocrinus*, P. H. Carpenter, Journ. Linn. Soc. Lond. (Zool.), 1882, vol. xvi. p. 493.

1883. *Eudiocrinus*, E. Perrier, Comptes rendus, 1883, t. xcvi. No. 11, p. 725.

1886. *Eudiocrinus*, E. Perrier, Les Explorations sous-marines, Paris, 1886, p. 275.

*Definition*.—Centro-dorsal and calyx like those of *Antedon*; but the radials bear the brachials directly without the intervention of axillaries, so that there are only five undivided arms. Mouth central. Sacculi abundant, scanty, or absent altogether.

*Remarks*.—The genus *Ophiocrinus* was established by Semper in 1868 for an elegant little *Comatula* with five undivided rays, which he had discovered in the Philippine Islands; and in the following year a fossil species was described by de Loriol from the