The first few pinnules have wide basal joints, the fourth and fifth of which are sometimes expanded towards the dorsal side. This is most marked in the larger specimen. The later pinnule-joints are elongated, but very much more slender in the small specimen than in the larger one. The lower pinnules appear to be the longer, containing more numerous, though shorter joints. That on the fourth brachial in the larger specimen is almost 12 mm. long, and consists of twenty-five joints.

Disk 5 mm. wide. It bears numerous calcareous nodules, but the brachial ambulacra only have delicate rods and networks of limestone at their sides. Sacculi are present, though small, inconspicuous, and few in number Skeleton white.

The smaller specimen is 3.2 mm., and the larger 4.5 mm. across the centro-dorsal.

Locality.—Station 205, November 13, 1874; lat. 16° 42′ N., long. 119° 22′ E.; 1050 fathoms; grey ooze; bottom temperature, 37° F. Two mutilated specimens.

Remarks.—This is a very singular species. The two mutilated individuals described above resemble one another very closely in the characters of the calyx and arms, while the cirri and pinnules vary considerably. In the smaller one I can find no certain trace of any but the long-jointed cirri like those of Eudiocrinus semperi and Eudiocrinus japonicus (Pl. VI. fig. 1; Pl. VII. figs. 2, 7).

But in the larger form, which retains the bases of two, if not more of these, the majority of the remaining cirrus-stumps consist of numerous short joints but little longer than wide (Pl. VII. figs. 3, 5).

In the smaller form again, most of the pinnules are quite slender and delicate, with somewhat glassy joints, which are twice, or more than twice, as long as wide (Pl. VII. fig. 4). But in the larger one they are usually considerably stouter and more massive, though one or two of the lowest pinnules are much more slender than their fellows, and somewhat resemble those of the smaller individual (Pl. VII. fig. 3). This species is at once distinguished from *Eudiocrinus semperi* and *Eudiocrinus japonicus*, which resemble it in having an articulation between the first two brachials, by the presence of a pinnule on the second one.

Eudiocrinus semperi, n. sp. (Pl. III. fig. 7; Pl. VI. figs. 1-3).

1882. Eudiocrinus semperi, P. H. Carpenter, Journ. Linn. Soc. Lond. (Zool.), 1882, vol. xvi. p. 497.

Centro-dorsal small, nearly hemispherical, or somewhat flattened, thickly covered with cirrus-sockets, except at the dorsal pole. These have strongly marked articular rims around the opening of the central canal, and are from twenty to thirty in number. Cirri probably 30 mm. long, and tapering, of twenty-six joints; the first three or four quite short, the next more than twice as long as wide, and the four following ones the longest, sometimes exceeding 2 mm. The remainder diminish slowly in size, but exhibit no traces of any dorsal spines.