(6) Cellepora honolulensis, n. sp. (Pl. XXIX. fig. 5, and Pl. XXXV. fig. 15).

Character.—Zoarium massive, irregular. Zoœcia very confusedly crowded, deeply immersed, surface finely granular, imperforate. Orifice (primary) semiorbicular, or subtriangular, lower border straight, with a minute three-toothed pectinate process within it. A short pointed pre-oral rostrum, supporting on one side a small avicularium, with a semicircular mandible. In the older parts, very numerous large interspersed prominent avicularia, with a lanceolate mandible pointing upwards, and simply channelled beak.

· Habitat.—Off Honoruru, Sandwich Islands, 20 to 40 fathoms.

Differs from Cellepora tridenticulata in the much smaller size of the internal denticles, which rather resemble a minute three-toothed comb, and in the almost universal presence on the front of the older zoœcia of a prominent avicularium with a lanceolate mandible and simply channelled not serrated beak.

(7) Cellepora imbellis, n. sp. ? (Pl. XXIX. fig. 7, and Pl. XXXV. fig. 20).

Character.—Zoarium lamellar, flexuose, thin. Zoœcia distinct, erect, free above, ventricose and immersed below; surface finely pitted. Orifice arcuate or subtriangular or suborbicular, about 0".006 wide, peristome slightly thickened; a small avicularium in front just within the border. A few interspersed, immersed avicularia, with duck-bill mandible.

Habitat.—Off Bahia, 10 to 20 fathoms.

Only a single specimen apparently old and dead.

(8) Cellepora jacksoniensis, n. sp. (Pl. XXX. fig. 10, and Pl. XXXV. fig. 9).

Character.—Zoarium branched; branches compressed. Zoœcia barrel-shaped, very distinct at the growing edge (fig. 10a), elsewhere confused; surface granular; a row of small perforations round the border. Pre-oral process short, pointed, trifid, having an avicularium, with a rounded mandible, on one side towards its base, which forms one border of the labial fissure. Orifice orbicular, widely notched below. Some of the lateral zoœcia have in front a strong projecting avicularian process, with a lanceolate mandible, and the beak cupped and toothed (fig. 10b).

Habitat.—Station 163B, off Port Jackson, 35 fathoms, hard ground.

(9) Cellepora polymorpha, n. sp. (Pl. XXX. fig. 11).

Zoarium irregularly branched, branches tapering, short. Zoœcia very confusedly disposed; surface coarsely granular. Orifice (primary), (fig. 11a), circular, widely emargin-