Kaliapsis cidaris, Bowerbank.

Kaliapsis cidaris, Bowerbank, Phil. Trans., pl. xxiv. figs. 32-38, 1858, and p. 759, pl. xxviii. fig. 12, 1862; Mon. Brit. Spong., vol. i. p. 80, pl. iv. figs. 102, 103, pl. v. figs. 104-108, 1864; Proc. Zool. Soc. Lond., pp. 76, 337, pl. xxv. figs. 2-5, 1869.

- " Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. xii. p. 441, 1873.
- " Zittel, Abhandl. d. k. baier. Akad. d. Wiss., Bd. i. pp. 103, 152, pl. i. figs. 12, 12a, 1878.

Sponge.—Incrusting, very thin. Oscules and pores (?).

Spicules.—I. Megascleres. 1. Desma, actines smooth, cylindrical, syzygial ends finely branched, terminating in numerous somewhat elongated tubercles. The desmas of the lowermost layer of the skeleton are orientated so that one epactine projects at right angles to the underlying surface, the other three are curved backwards or upwards. The single basal epactine is not branched, and has the form of a conical spine, surrounded over its proximal half by a zone of longitudinal rounded ridges or elongated tubercles. Hence the specific designation "cidaris."

- 2. Discotriæne, rhabdome short, cladome disciform, circular, or elaborately branched, bearing boss-like tubercles on the outer surface. Rhabdus (?).
 - II. Microsclere. 3. Microstrongyle, fusiform, 0.028 by 0.0042 mm.

Colour.—(?). Size, 6 mm. in diameter, by 0.62 mm. in thickness.

Habitat.—South Seas; growing over Oculina rosacea.

Remarks.—Although the specimen from which Bowerbank's description is taken is a dried one, it retains portions of the tissue, and in this microstrongyles were found in great numbers. As Bowerbank examined these under a power magnifying 666 diameters, he would have seen spirasters had they been present; as he does not mention them, we may conclude their absence.

Neosiphonia schmidtii, n. sp.

Jereopsis sp., O. Schmidt, Spong. Meerb. Mexico, p. 20, pl. ii. fig. 10, 1879.

Sponge.—Pyriform, supported on a short pedicle, summit flattened, oscules confined to the summit, the openings of longitudinal excurrent canals.

Spicules.—I. Megascleres. 1. Desma, epactines cylindrical, smooth, about 0.127 by 0.039 mm. to 0.16 by 0.05 mm.; seldom bifurcating more than once, cladi short, breaking up into numerous syzygial tubercles; zygosis generally terminal. 2. Triæne (?), said by Schmidt to be absent.

II. Microscleres (?).

Habitat.—Gulf of Mexico; depth, 80 to 92 fathoms (O. Schmidt). Near Havanna; depth, 80 and 175 fathoms. Lat. 22° 9′ 30″ N., long. 52° 21′ 20″ W.; depth, 292 fathoms. Off Morro Light; depth, 805 fathoms.