

*Holothuria cumulus*<sup>1</sup> sp. nov.

(Plate 38, Figures 14 to 19a.)

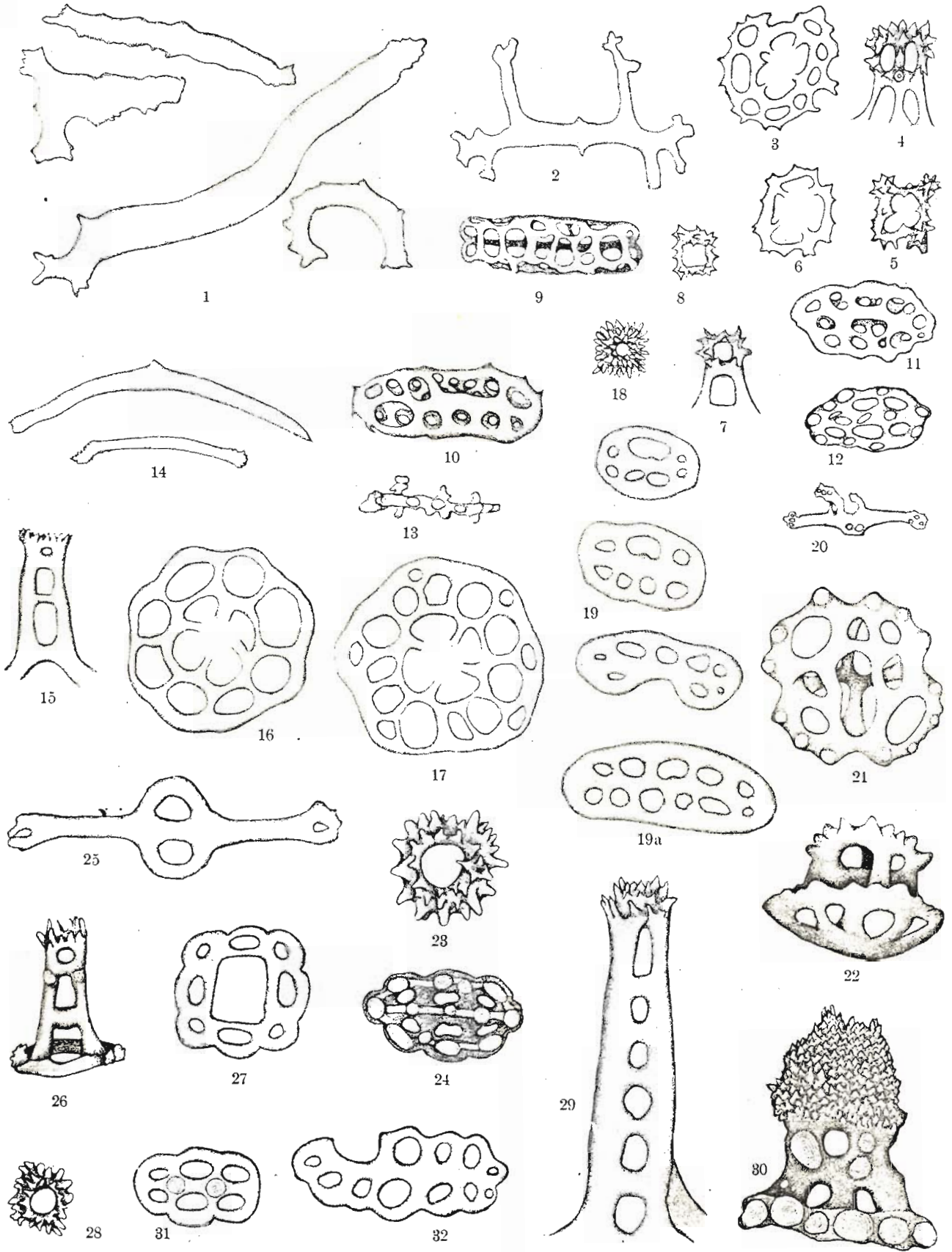
Length in life about 50 mm.; diameter about 10. Body more or less cylindrical, with a thin but rather firm body-wall. Tentacles 20. Pedicels relatively few, scattered all over both dorsal and ventral surfaces, with no indication of serial arrangement. Calcareous ring rather low; interradial pieces more than twice as wide as high, with a sharp median anterior projection; radial pieces very much stouter with a conspicuous, wide, rounded anterior projection. No polian vessel was found. Madreporic canal single, small, free. No indication of anal teeth or calcified papillæ. No Cuvier's organs.

Calcareous particles, tables, and buttons. Tables (pl. 38, figs. 15-18) form a single close layer all over body-surface; disk about 0.080 mm. in diameter, with a quadripartite central hole and a peripheral circle of 8 to 11 large holes and often half a dozen smaller perforations outside of them; but there are not two well-defined circles even on the largest disks; spire not quite equal to disk-diameter, rather stout, of 4 rods and 2 (or rarely 3) cross-bars; top, about 0.020 mm. square, covered with numerous teeth. Buttons (pl. 38, figs. 19, 19a) 0.040 to 0.090 mm. long, the width one-third to one-half length, variable in form, number of perforations, and completeness of development; not scattered, but collected in very distinct heaps or rings, which are well distributed over the body but are not abundant; few buttons have the typical three pairs of perforations symmetrically developed, and many, if not most, buttons have 4 to 6 pairs of holes; holes relatively small as compared with calcareous part of button. Pedicels with terminal plates, and not very numerous supporting rods; latter are curved, enlarged, and perforated at the ends. Tentacle-rods (pl. 38, fig. 14) straight or curved, pointed at ends, without perforations, and not thorny. Color in life whitish, with pedicels yellow; alcohol has made little change, save that the general tint is more gray and indistinct brown spots and blotches can be seen on the dorsal side.

Holotype: M. C. Z. No. 1019; from under surface of a rock-fragment, on southeastern reef-flat, Mer, Murray Islands, Torres Strait.

This is probably a young individual, but the diversity and arrangement of the buttons are quite distinctive and I can not refer it to any species hitherto described. It is not impossible that it is a young *pardalis*, but the character of the tables makes that quite unlikely. It does not seem probable that the accumulation of the buttons in heaps is a youthful character, and it is therefore not likely that we are dealing with the young of some previously known species with scattered buttons. Certainly *cumulus* does not resemble at all any other holothurian taken at Mer. But there is in the Museum of Comparative Zoölogy collection a still smaller specimen, supposed to be from Hilo, Hawaii, in which the calcareous particles are suggestive of *cumulus*. This individual is not in very good condition and its identification is uncertain, but it indicates the possibility of *cumulus* being a widely distributed Pacific species.

<sup>1</sup> *Cumulus* = a little heap, in reference to the distribution of the buttons.



ECHINODERMS FROM TORRES STRAITS.