Genital openings extending from mouth shield about two-thirds the distance to the margin. Nine to eleven short, stout, somewhat flattened peg-like arm spines, all about half as long as the side arm plate, except the lowest, which equals it. Two small rounded tentacle scales on the side arm plate, whereof that on the interbrachial side overlaps the base of the lowest arm spines. Colour in alcohol, disk pale yellowish-brown, above; arms darker, with irregular belts of black and yellowish-brown.

Station 162.—April 2, 1874; off East Moncur Island, Bass Strait; 38 fathoms; sand. This species stands between *Pectinura spinosa* and *Pectinura infernalis*.

Pectinura heros, Lym. (Pl. XXIII. figs. 7-9).

Pectinura heros, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 48, pl. xiv. figs. 389-391, 1879.

Three very short arm spines, low down on the side arm plate. No pores between lower arm plates. One round tentacle scale.

(Type specimen from Station 191.) Diameter of disk 22 mm. Length of arm about 100 mm. Width of arm close to disk without spines 4 mm. Fifteen small, close-set mouth papillæ to each angle, whereof the two or three outer ones on each side are flat, rounded, and larger than the rest, which are pointed; there are two just under the teeth, and sometimes two supplementary below and outside these. Mouth shields long, heartshaped, with a rounded angle within; length to breadth 3:2.2. Sometimes a rudimentary supplementary piece may be seen, just outside. Side mouth shields three-cornered and small, occupying only the outer corners of the mouth shield. Under arm plates about as wide as long, bounded without by a curve, within by a truncated angle, and laterally by reentering curves. Side arm plates short, with rounded edges, meeting neither above nor below. Upper arm plates broad, highly arched, closely overlapping, with outer and inner edges nearly straight. Disk flat and angular, closely and evenly covered with very fine granules, 7 or 8 in the length of 1 mm., except the radial shields and one or more plates along the margin. Radial shields egg-shaped, longer than broad, with outer and inner ends much rounded; length to breadth 3.7:2. Lower interbrachial space covered by same granulation as above, extending even to the mouth angle, but not on mouth shields. Genital opening long, extending from mouth shield to margin of disk. Three short, small, blunt arm spines standing low on the side arm plate, and about half as long as a joint. One round tentacle scale. Colour in alcohol white.

Station 191.—September 23, 1874; lat. 5° 41′ S., long. 134° 4′ E.; 800 fathoms; mud. This species stands as near to *Pectinura stellata* as to any; there are, however, no pores between the under arm plates, and but three short arm spines. The only occasional presence of rudimentary supplementary mouth shields points once more to the very close connection between *Ophiopeza* and *Pectinura*.