

perhaps referable to a variety of this species, were dredged in Torres' Straits, and are figured in Plate XXXII. fig. 2, *a-c*; their chief characteristic being a large tubercle on the dorsal portion of the valve.

[Pl. VI. fig. 6, *a-d*. *a* Right valve seen from side, *b* from above, *c* from below, *d* from front; magnified 60 diameters. Pl. XXXII. fig. 2, *a-c*. *a* Right valve seen from side, *b* from above, *c* from front; magnified 50 diameters.]

2. *Bythocythere arenacea*, n. sp. (Pl. XXXIII. fig. 3, *a-g*).

Carapace of the female, seen from the side, oblong, somewhat helmet-shaped, truncated in front, acutely pointed behind, height equal to about half the length; anterior extremity nearly straight, looking obliquely upwards, rounded off at the upper and lower angles, posterior extremity much produced, and ending in an acute median point; dorsal and ventral margins straight, and almost parallel; seen from above the lateral margins are strongly convex, converging with a gradual curve towards the front, and almost at a right angle behind the middle, then running backwards to form a broad, triangular, acutely pointed posterior projection; end-view quadrangular, broadest at the base, ventral line strongly convex, dorsal about one-third as long, and deeply concave, lateral margins moderately convex. The surface of the shell is covered with small tubercular elevations of a coarsely granular or arenaceous appearance; the lateral alæ are only moderately prominent, and end behind in a rounded angle. The shell of the male differs from that of the female chiefly in being more elongated and less tumid. Length, 1-37th of an inch (.7 mm.).

The characters of *Bythocythere arenacea*, both as to shape and surface markings, suffice to distinguish it very obviously from any other species. Several examples occurred in a dredging from Torres' Straits, lat. 11° 35' S., long. 144° 3' E., 155 fathoms (Station 185).

[Pl. XXXIII. fig. 3, *a-g*. *a* Carapace of female seen from left side, *b* from above, *c* from below, *d* from front; *e* male right valve seen laterally, *f* from below, *g* from front. All magnified 50 diameters.]

3. *Bythocythere pumilio*, n. sp. (Pl. XXXIII. fig. 4, *a-d*).

Carapace elongated, tumid, depressed; seen from the side, oblong, quadrangular, nearly equal in height throughout; height equal to less than half the length, anterior extremity subtruncate, scarcely rounded, posterior rather narrower, imperfectly rounded, obscurely dentated below the middle; dorsal margin nearly straight through its whole length, ventral slightly convex, dentate in front, ending behind in an alæform projection, which is mucronate at the angle; seen from above the contour is hexagonal, with parallel sides, the width equal to somewhat less than two-thirds of the length; sides converging equally and rather abruptly, and ending in a subacuminate process both in front and behind; the posterior