margin is broken also by the projecting mucronate processes of the lateral alæ; end view irregularly quadrilateral, widest near the base, height equal to about two-thirds of the width only ; dorsal line nearly flat, ventral deeply excavated in the middle, and ending in broad, well-rounded angles; lateral margins sinuated in the middle. The surface of the shell is onamented in a manner very similar to that of Bythocythere arenacea, but the ventral area is depressed, and marked with longitudinal furrows. Length, 1-66th of an inch ( 39 mm .).

Found only at Balfour Bay, Kerguelen Island, in a depth of 20 to 50 fathoms (Station 149).
[Pl. XXXIII. fig. 4, a-d. a Shell seen from left side, $b$ from above, $c$ from below, $d$ from front. Magnified 80 diameters.]
4. Bythocythere velifera, n. sp. (Pl. XXXIII. fig. 5, $a-c$ ).

Valves, seen from the side, subrhomboidal, height equal to more than half the length, anterior extremity oblique, subtruncate, only slightly rounded, posterior looking obliquely downwards, almost straight, and ending above in an acute angle, dorsal margin straight, slightly surved downwards at the hinder end, ventral margin formed for the most part by a huge lateral ala which occupies the larger part of the inferior half of the valve, its lower border being nearly straight, the anterior joining the surface of the valve with a forwards curve, the posterior almost at a right angle; seen from below the lateral alm form the entire central part of the shell, the extremities constituting two broad mucronate projections, the margins of the lateral alæ sweep forwards in a full curve from the posterior angle which is slightly produced, while behind they converge in a sinuated line, but almost at a right angle; the width of the complete shell would seem to be greater than the length, but single valves only have been seen. Surface smooth, and slightly undulated. Length, $1-48$ th of an inch ( 52 mm .).

A few detached valves only found in Torres' Straits, lat. $11^{\circ} 35^{\prime}$ S., long. $144^{\circ} 3^{\prime}$ E., 155 fathoms.
[Pl. XXXIII. fig. 5, $a-c$. $a$ Left valve seen from side, $b$ from above, $c$ from front. Magnified 50 diameters.]
5. Bythocythere (?) exigua, n. sp. (Pl. VI. fig. 7, a-ld).

Carapace, seen from the side, subovate, smaller in front than behind, highest in the middle, the height being equal to more than half the length ; anterior margin narrow, and imperfectly rounded, posterior broader, and more distinctly rounded; dorsal margin arched, slightly gibbous in the middle, ventral nearly straight behind the middle, then rather suddenly bent upwards towards the front ; seen from above, the outline is broadly oval, widest in the middle, margins fully curved, anterior extremity obtuse, scarcely pointed, posterior narrow, subtruncate and emarginate in the middle, width equal to the height; end view almost circular, slightly keeled in the middle of the ventral margin.

