Family HETEROPHROSYNIDÆ, Clark, 1855.

Genera. 1. Jeffreysia, Alder. 2. Barleeia, Clark.

1. Jeffreysia, Alder, 1850.

Jeffreysia edwardiensis, Watson (Pl. XLIII. fig. 5).

Jeffreysia edwardiensis, Watson, Prelim. Report, pt. 5, Journ. Linn. Soc. Lond., vol. xv. p. 99.

Station 145A. December 27, 1873. Lat. 46° 41' S., long. 38° 10' E. Prince Edward Island, between Cape of Good Hope and Kerguelen. 310 fathoms. Volcanic sand.

Shell.—Tumidly conical, flattish on the base, thin, glossy. Sculpture: the whole glossy surface is covered with extremely fine lines of growth, and with still fainter and more minute spirals, which are only vaguely discernible under the microscope and in very favourable light. Colour whitish, hyaline. Spire conical. Apex bluntish, and a little obliquely rounded. Whorls 41, turnidly convex or rounded, of regular increase until the last, which is somewhat disproportionately swollen. Suture rather shallow and open. Mouth perpendicular, oval, rather large. Outer lip sharp and thin, with a slight sinus at its junction with the body; incurved above, slightly flattened in the middle, advancing below, patulous and prominent on the base, but slightly sinuated towards the point of the pillar. Inner lip just connected with the outer by a film across the body, closely and shortly bent back on the umbilicus, and sharp on the edge of the pillar. Pillar straight. angulately springing from the body-whorl, bending a little to the left. Umbilicus a minute chink, almost covered by the inner lip. H. 0.075 in. B. 0.048, least 0.04. Penultimate whorl, height 0.017. Mouth, height 0.037, breadth 0.028.

The general aspect of this shell resembles that of Jeffreysia, but the inner lip by no means presents so continuous a peristome as any of our British species of the genus, and the junction of the pillar to the body is quite distinctly angulated, which is not the case in any Jeffreysia known to me. If assigned to this genus, therefore, it is rather because none else lies nearer, and in the absence of the animal and of the operculum, a new genus would be absurd here.

2. Barleeia, Clark, 1853.

Barleeia imbricata, n. sp. (Pl. XLIII. fig. 2).

July 29, 1874. Levuka, Fiji. 12 fathoms.

September 7, 1874. Torres Strait, North-east Australia. 3 to 11 fathoms.

September 8, 1874. Flinders Passage, Torres Strait. 7 fathoms.

Station 186. September 8, 1874. Lat. 10° 30′ S., long. 142° 18′ E. Wednesday Island, Cape York, North-east Australia. 8 fathoms. Coral mud.

July 1875. Honolulu. 40 fathoms.