This species is considerably swollen, almost exactly equilateral, scarcely gaping at either end, elongate, nearly twice as long as high, sharply rounded at the anterior end, broader behind and shortly rostrate above, with a distinct but not very deep sinus just beneath, which marks the termination of a slight depression extending from the umbones. It is ornamented at intervals with very strong raised ridges, marking periods of growth, so that the surface might be described as ridged and sulcated. The epidermis is thickish, of a dark olive tint upon the liræ, paler and yellower between them. The dorsal margin is only very little sloping on both sides, quite rectilinear behind, and very slightly excurved in front. The umbones are small, central, and but very little raised above The hinge-plate is not remarkably strong, and in the largest specimen the dorsal line. bears seventeen sharp close-set teeth on each side the ligament-pit, which is deep and a little prominent within the valves. The interior is glossy, somewhat iridescent, whitish, zoned with a bluish tint, and stained at times with a pale reddish or yellowish colour. The pallial sinus is short, narrow, and rather acute.

Length 24 mm., height 13, diameter 12.

Habitat.—Balfour Bay, in 20 to 60 fathoms; Betsy Cove, in 15 to 25 fathoms; Howe's Foreland, in 95 fathoms; and Station 149G, in 110 fathoms; all off Kerguelen Island.

This species cannot be conveniently compared with any at present known. The specimens described by Professor Martens were rather smaller than the largest obtained by the Challenger.

Yoldia subæquilateralis, Smith.

Yoldia subaquilateralis, Smith, Ann. and Mag. Nat. Hist., 1875, vol. xvi. p. 73. Yoldia subaquilateralis, Smith, Phil. Trans. Roy. Soc., 1879, vol. clxviii. p. 187.

Habitat.—Station 149D, Royal Sound, Kerguelen Island, in 28 fathoms; volcanic mud.

Besides the internal cartilage, the valves are connected above by a slight external ligament or thickening of the epidermis on each side of the umbones, which are generally eroded. The species is characterised by its compressed form, its gaping ends, and few teeth. The interior is bluish-white, zoned with a darker tint.

## Sarepta, A. Adams.

Sarepta abyssicola, n. sp. (Pl. XX. figs. 6-6b).

Testa tenuis, parva, inæquilateralis, antice angusta, acute rotundata, postice latior, nitens, alba, aliquanto iridescens, incrementi lineis tenuissimis sculpta. Margo dorsi anticus brevis, paulo excurvatus et declivis, posticus parum arcuatus, minus obliquus. Ventris margo late curvatus, antice oblique ascendens, postice subito sursum arcuatus,