3. Dentalium amphialum, Watson (Pl. I. fig. 3).

Dentalium amphialum, Watson, Prelim. Report, pt. 2, Journ. Linn. Soc. Lond., vol. xiv. p. 510.

Station 323. February 28, 1876. Lat. 35° 39' S., long. 50° 47' W. Off the mouth of the river Plate. 1900 fathoms. Blue mud. Bottom temperature 33°·1.

Animal.—Small for the shell, of a pale ruddy colour, which is deeper and browner on the foot and liver, the latter very large: two large masses of long, fine, equal captacula fill the mantle-cavity; they spring from the front of the pedestal out of which the buccal mass and the foot rise; and of these, two large bunches project through the mantle-orifice; buccal palps very small.

Shell.—Long, conical, nearly straight, what curve there is very equal throughout, of a dirty brownish-yellow, chalky on the surface, porcellanous beneath. Both specimens are very much eroded, especially on the convex curve, and show a prodigious number of layers of shell, which is, however, thin and slight. There is a short, irregular anal fissure on the convex curve. Sculpture: There are about 50 very slightly raised, rounded, longitudinal ridges, the furrows between which are very much like the ridges reversed, being very shallow and open. These vary a good deal at different parts of the shell, and tend to disappear towards the mouth; they are crossed by fine, close-set, sharp, but very superficial, irregular scratches, which run elliptically round the shell, advancing on the concave and retreating on the convex curve. As the shell grows, these lines of growth become harsh and broken. L. 2, nearly. B. 0.3, nearly; least B. 0.05.

This species is somewhat like *Dentalium zelandicum*, Sow., "from New Zealand," British Museum, but in form is much stumpier, the ridges are closer and the shell thinner. Than *Dentalium grande*, Desh., "Japan," British Museum, it likewise is stumpier in form; the ridges are less strong, the furrows less marked, the circular striæ less sharp: in *Dentalium amphialum* the longitudinal ridges die out, while in *Dentalium grande* they continue equally strong.

4. Dentalium keras, Watson (Pl. I. fig. 4).

Dentalium ceras, Watson, Prelim. Report, pt. 2, Journ. Linn. Soc. Lond., vol. xiv. p. 510.

" Dall, "Blake" Exped. Bull. Mus. Comp. Zool. Camb. Mass., vol. ix., p. 37. Station
33, 1568 fathoms.

Station 246. July 2, 1875. Lat. 36° 10′ N., long. 178° 0′ E. Mid-Pacific, E. of Japan. 2050 fathoms. Globigerina ooze. Bottom temperature 35°·1.

Station 299. Dec. 14, 1875. Lat. 33° 31' S., long. 74° 43' W. W. of Valparaiso. 2160 fathoms. Blue mud. Bottom temperature 35°.2.

Animal.—Mantle is white, very thin, and transparent; the adductor muscles are short and weak. The liver is small, of a light greyish-brown. The mouth of the mantle is very strong, of a yellowish colour, and the animal is rather fawn-coloured.

¹ ἀμφίαλος, sea-girt.

² xigas, a horn.