

*Shell*.—Very long and narrow, very slightly bent, and that almost entirely above; a very little flattened on the concave curve, so as to be slightly trigonal; white, opaquely porcellanous, a little glossy, not thick but strong. *Sculpture*: Closely and regularly girt round elliptically with scratch-like puckerings in the lines of growth, of which there are about 55 in the  $\frac{1}{16}$ th of an inch. Longitudinally striped with fine ribs, of which there are from 17 to 20, sharp and well defined by still broader furrows toward the apex, but down the shell these increase in number and steadily decrease in definiteness till they only show as a feeble system of lines on the rounded surface. At the apex there is on the convex curve a ragged irregular fissure about 0.1 in. long. L. 1.93 in. B. at mouth 0.13, at apex 0.02.

As compared with *Dentalium semipolatum*, Sow., this is a longer, straighter, more attenuated shell, with striæ stronger, blunter, and more persistent. It is not unlike *Dentalium antillarum*, D'Orb., in texture and in size, but is much straighter and narrower, and the early ribs are much finer and fewer. It is intermediate in form between *Dentalium erectum*, G. B. Sow., and *Dentalium splendidum*, Desh., a little stumpier and more curved than the first, and less so than the second; it is much more longitudinally ribbed and less polished than either. Than *Dentalium lessoni*, Desh., it is much more attenuated, and never so strongly ribbed longitudinally. Than *Dentalium inversum*, Desh., it is more strongly and persistently striate longitudinally.

The young shell is perplexingly like that of *Dentalium entalis*, var. *orthrum*, Wats., but is a little straighter, broadens more slowly, and the ribs project more sharply. In maturer specimens this species is obviously much more attenuated than the former.

9. *Dentalium acutissimum*, Watson (Pl. I. fig. 8).

*Dentalium acutissimum*, Watson, Prelim. Report, pt. 2, Journ. Linn. Soc. Lond., vol. xiv. p. 514.

Station 218. March 1, 1875. Lat. 2° 33' S., long. 144° 4' E. N. of Papua. 1070 fathoms: Blue mud. Bottom temperature, 36°.4.

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.

*Shell*.—Long and much attenuated, rather straight, and very regularly curved, very thin, brilliant, and glassy. *Sculpture*: The surface is crossed by fine sharpish irregular striæ, which run very elliptically round. In the young shell the surface is regularly and finely scratched by a great number of close-set, regular, sharp, and extremely minute lines, which very gradually become more and more faint, but are still traceable even in the full-grown shell. The *colour* is pure white, transparent, and almost hyaline in the fresh shell, but in the dead shell the interior (not, as usual, the exterior) layers of the shell become opaque and chalky. The *edge* is very thin and irregularly broken. At the *apex* the end is abruptly broken off in one specimen, in the other there is an irregular fissure with an internal lining process. In the specimen from Station 246, which is full-grown, but very short, a large, thin, irregularly shaped process projects, which being obliquely