

That it is selective power, and does not depend upon the absence of the angular sand-grains, which are the ordinary constituent of the composite shells of the *Lituolæ*, is demonstrated by the fact that other species occur in the same soundings in their normal sandy condition; and that the orderly arrangement of the spicula side by side, and the neat and compact masonry of the walls cannot be entirely accidental, becomes additionally evident when it is contrasted with the indiscriminate use of sponge-spicula amongst sand-grains and various other extraneous bodies, seen in the tests of many of the larger Arenacea, or even in specimens of the closely allied *Reophax difflugiformis* or *Reophax scorpiurus* obtained from localities where such objects abound.

The best specimens of *Reophax spiculifera* hitherto obtained are from two Stations off Kandavu, Fiji Islands, 255 fathoms and 610 fathoms respectively, and from a sounding off Tahiti, Society Islands, 620 fathoms.

Reophax distans, H. B. Brady (Pl. XXXI. figs. 18–22).

Reophax distans, Brady, 1881, Quart. Journ. Micr. Sci., vol. xxi., N. S., p. 50.

Test elongate, straight or curved; composed of numerous segments connected end to end by slender stoloniferous tubes. Segments large, distinct, fusiform; tapering nearly equally at the two ends. Never found entire; length of specimens with three chambers, nearly $\frac{1}{8}$ th inch (5 mm.).

Reophax distans may be regarded as the arenaceous isomorph of *Nodosaria pyrula*, but it is even more fragile than the latter species, owing to the tenuity of the stoloniferous tubes in proportion to the bulk of the chambers they connect. Hence individuals with as many as three segments are seldom met with, and even these have not the appearance of complete specimens.

The species is very rare except in the Pacific, and its distribution is almost exclusively confined to deep water. It occurs in the Farøe Channel, 355 fathoms; and at one other Station in the North Atlantic, off the African coast, 1750 fathoms; at one Station in the South Atlantic, east of Buenos Ayres, 1900 fathoms; at two in the Southern Ocean—between the Cape of Good Hope and the Kerguelen Islands, 1570 fathoms, and south of Australia, 2600 fathoms; at four Stations in the South Pacific, from 1070 to 2160 fathoms; and at four in the North Pacific, 2050 to 2775 fathoms.

Reophax adunca, H. B. Brady (Pl. XXXI. figs. 23–26).

Reophax adunca, Brady, 1882, Proc. Roy. Soc. Edin., vol. xi. p. 715.

Test moniliform; consisting of a crooked line of inflated segments of somewhat irregular size but of nearly equal diameter. External constrictions between the segments