Although the language is a little ambiguous there is no doubt that sigmata are here referred to.

Mr. Carter's genus "Echinonema" must be suppressed, as the species which it includes are not generically separable from the older genus "Rhaphidophlus," which Mr. Carter appears never to have recognised.\(^1\) The genus "Rhaphidophlus" has a further claim to take precedence of "Echinonema" in that its founder gave a generic diagnosis thereof.

Rhaphidophlus gracilis, Ridley, sp.

1884. Echinonema gracilis, Ridley, Zool. Coll. H.M.S. "Alert," Brit. Mus., p. 617, pl. liv. figs. l, l', l".

One specimen of this species was obtained by the Challenger off Bahia. It agrees very minutely in external form and in spiculation with the type, but instead of being of a "very dark purplish-brown colour" (in spirit), it is greyish-yellow. It is very interesting to find this well-marked species occurring at two so widely separated localities as the Mascarene Islands and Bahia.

Locality.—Off Bahia; depth, 7 to 20 fathoms. One specimen.

Habitat.—Providence Reef, Mascarene Islands (Ridley, "Alert"); off Bahia (Challenger).

Rhaphidophlus filifer, Ridley and Dendy (Pl. XXVIII. fig. 2; Pl. XLVI. fig. 9).

1886. Rhaphidophlus filifer, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii.

Sponge (Pl. XXVIII. fig. 2) irregularly ramose; branches approximately cylindrical, but very uneven and with a gnarled appearance; the habit of the sponge appears to have been subcrect or creeping. Colour in spirit greyish-yellow. Length of specimen

94 mm., average diameter of branches about 6 mm. Texture hard and almost incompressible. Surface very rugose and uneven, but with a slightly glabrous appearance.

Skeleton (Pl. XLVI. fig. 9).—(a) Dermal; consisting of a compact crust, about 0.14

mm. in thickness of densely packed, projecting brushes of stylote spicules with outwardly directed points. When viewed in surface section these tufts are seen to be arranged in a reticulate manner, so as to form approximately circular meshes about 0.1 mm. in diameter.

(b) Main; a well-developed, but rather irregularly disposed reticulation of spiculo-fibre; one can in places roughly distinguish primary fibres, running towards the surface, from secondary fibres which cross them more or less at right angles and thus give rise to approximately rectangular meshes. The fibre itself is stout and well defined and is ¹ Cf. also Ridley, Zool. Coll. H.M.S. "Alert," Brit. Mus., 1884, p. 615.