

ends of the tornote spicules may sometimes become flattened and slightly spined. The Challenger variety, again, has a firmer and more regular skeleton.

Neither Lieberkühn nor Schmidt (*loc. cit.*) mention the chelate spicules, but Vosmaer¹ records their presence, and we have ourselves found them in one of Schmidt's specimens now in the British Museum.

Lieberkühn and Schmidt obtained their specimens from the Mediterranean, and it is of considerable interest to find an only very slightly modified variety occurring at Japan.

Locality.—Kobé, Japan; depth, 8 to 50 fathoms. Three specimens and some fragments.

Habitat.—Mediterranean (Lieberkühn, Schmidt); Japan (Challenger).

Myxilla digitata, Ridley and Dendy (Pl. XXVI. fig. 2; Pl. XXVII. figs. 5, 5a, 5b).

1886. *Myxilla digitata*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 471.

Sponge (Pl. XXVI. fig. 2) represented in the collection by a single specimen, about 31 mm. long and 12 mm. broad, cleft at the upper end into five finger-like lobes, whence the specific name. *Colour* in spirit greyish-yellow. *Texture* soft and spongy. *Surface* smooth but uneven and corrugated. *Dermal membrane* distinct, thin, transparent. *Oscula* small, scattered, having their margins flush with the surface. *Pores* scattered.

Skeleton.—(a) *Dermal*; consisting of tylote spicules loosely scattered in the dermal membrane. (b) *Main*; a close but irregular and somewhat Halichondrioid reticulation of spined stylote spicules. Fibres very indefinite.

Spicules.—(a) *Megasclera*; (1) entirely spined styli (Pl. XXVII. fig. 5), usually slightly curved and tapering gradually to not very sharp points, with no tendency to the formation of heads and with the base no more spined than the remainder of the spicule; spination well marked; size about 0.4 by 0.014 mm.; (2) tylota (Pl. XXVII. fig. 5a), straight and with well-developed heads; size about 0.24 by 0.006 mm. (b) *Microsclera*; of one kind only, viz., tridentate isochelæ (Pl. XXVII. fig. 5b), with strongly curved shaft; length about 0.044 mm.

This species is readily distinguished from *Myxilla (Hymeniacidon) paupertas*, Bk., with which it agrees in several respects, by the absence of the echinating stylote spicules.

Locality.—Station 142, December 18, 1873; lat. 35° 4' S., long. 18° 37' E.; south of the Cape of Good Hope; depth, 150 fathoms; bottom, green sand; bottom temperature, 47°·0. One specimen.

¹ Notes Leyden Mus., vol. ii. p. 124, 1880.