

size about 0·6 by 0·0126 mm. (2) Smaller, entirely spined styli (usually subtylostylote), commonly a little bent towards the base and gradually sharp pointed; length commonly about 0·1 mm. but may reach up to 0·25 mm., thickness about 0·0066 mm.

This is probably a common shallow-water species in the Cape Verde Islands. It is remarkable on account of the high development of the Axinellid fibre and of the numerous foreign bodies which the sponge contains. The latter character is probably due to the nature of the bottom on which it lives. It is further distinguished by the presence of the entirely spined styli.

*Localities.*—St. Vincent, Cape Verde Islands; shallow water. Three specimens.

Harbour, St. Vincent, July 1873; depth, 7 to 20 fathoms. One specimen.

*Axinella* (?) *lunæcharta*,<sup>1</sup> Ridley and Dendy (Pl. XXXVII. figs. 1, 1a, 2).

1886. *Axinella* (?) *lunæcharta*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 481.

Sponge (Pl. XXXVII. figs. 1, 2) massive, sessile, subglobular. Size of largest specimen about 38 by 31 by 25 mm., with a deep concavity on the lower surface. A second specimen is about 21 mm. in diameter and attached to a small pebble. *Colour* in spirit very pale yellow. *Texture* fairly firm, but compressible and rather spongy. *Surface* uneven but glabrous, with numerous small, monticular eminences, amongst which occur fewer but much larger eminences, volcano-like, each with a distinct crateriform depression at the top, which is about 2·5 mm. in diameter. (The degree of development of these crateriform eminences differs in different specimens.) *Pores* (?). *Oscula* minute, in the crateriform depressions (Pl. XXXVII. fig. 1a).

*Skeleton.*—There is no special dermal skeleton; the main skeleton is loosely reticulate, consisting of primary lines of loose spiculo-fibre running vertically to the surface and crossed by still looser and vaguer secondaries composed for the most part of single spicules. The spicules in the main fibres are all, or nearly all, directed towards the surface of the sponge, but the Axinellid character of the fibre is barely recognisable.

*Spicules.*—*Megasclera*; (1) smooth styli, more or less bent towards the base and very gradually and sharply pointed; size about 0·4 by 0·014 mm. (2) Smooth oxea, usually gradually sharp pointed at both ends, but very commonly with one end larger and less sharply pointed than the other; size about 0·35 by 0·0126 mm. It is very common in Axinellid sponges to find a few oxea along with the styli, but in this species the oxea are abundant, though not so much so as the styli. The not uncommon tendency which they exhibit towards blunting at one end seems to indicate that one form may be derived from the other.

<sup>1</sup> So called from the resemblance which the surface of the sponge bears to a map of the moon, owing to the numerous crateriform eminences.