Pachastrella monilifer, O. Schmidt.

Pachastrella monilifer, O. Schmidt, Spong. Algiers, p. 15, pl. iii. fig. 7, 1868.

Sponge.—An irregular nodular fragment with a rough surface; oscules several, from 0.5 to 1.0 mm. in diameter.

Spicules.—I. Megascleres. 1. Oxea, fusiform, almost cylindrical, slender; broken specimens measure 0.03 mm. in diameter and up to 1.75 mm. in length, but when perfect they may have been as much as twice as long. 2. Calthrops; the young forms, up to a stage in which the actines measure 0.2 mm. in length, are regular and isoactinate, but when fully grown they resemble a triæne in the fact that three of the actines are regularly curved forwards like the cladi of a large protriæne, while the fourth is straight and longer than the others, resembling the rhabdome of a triæne; the spicule then presents a remarkable similarity to the protriæne of Stryphnus rudis (vide postea). The curved actines attain a length of 0.835 mm., the straight actine measures 1.03 by 0.095 mm. In an example in which the curved actines are 0.8 mm. long the chord measures 0.825 mm.

II. Microscleres. 3. Microxea, fusiform, curved, 0.35 mm. in length. 4. Microstrongyle, centrotylote, 0.02 by 0.004 mm. 5. Amphiaster, the axis continued into a spine beyond the whorls at each end, spines and axis remarkably slender, total length 0.0118 mm.

Habitat.—Coast of Algiers.

Remarks.—This species is the type of the genus Pachastrella as instituted by Schmidt. I at first provisionally separated Pachastrella abyssi from it as the type of a new genus, Picraster, on the assumption that Schmidt's description could be depended upon. Subsequently I received through the kindness of Professor Perrier a fragment taken from Schmidt's type, and to my surprise I find that it is scarcely specifically different from Pachastrella abyssi. Neither in this specimen nor in a type slide of spicules presented by Schmidt to the British Museum are any of the concentrically striated umbilicated discs described and figured by Schmidt as occurring in Pachastrella monilifer to be found, while the amphiaster, which Schmidt may be supposed to have regarded as absent, for he does not mention it, is abundant enough in the specimen I received from Professor Perrier, though not in Schmidt's preparation in the British Museum collection, The microxeas are sometimes not only bent in the middle but slightly reflexed at each end, in a manner which suggests the idea that the toxa of Dercitus may have been derived from similar spicules.