

substratum by means of the narrow inferior surface. There is also a fragment of similar structure preserved in spirit, and this has been especially serviceable for microscopic examination. Although the macroscopic and microscopic structure of this fragment essentially agree with those of *Chonelasma hamatum*, there are several points of difference, especially in regard to the form of the isolated spicules, and these differences appear to me to be sufficient for the erection of a distinct species. I have named this species in honour of Dr. Döderlein who gave it over to me for examination.

In the dictyonal framework the two funnel-shaped systems of canals, which open alternately on the two lateral surfaces, are narrower than in *Chonelasma hamatum*, but this might be associated with the slight thickness of the entire plate. The beams of the network exhibit the more or less tubercled surfaces noted in the above species. There is further great regularity in the square or rectangular meshes of the middle layer, while the meshes near the two surfaces appear more irregular and rounded.

The strands of beams which run parallel to both sides, and cross each other approximately at right angles, are for the most part perpendicular and parallel to the upper boundary. When this therefore is somewhat curved, as in the specimen represented in Pl. XC. fig. 1, a more circular and radial disposition of the beam-strands results.

The hexacts of the dermal and gastral skeleton are provided with a short, broad, almost oval, brush or fir-tree-like freely projecting ray, while the four moderately long transverse rays and the strong conical proximal radial (which varies in length and penetrates into the parenchyma), are smooth at their base and rough towards the extremities (Pl. XC. figs. 2, 3). The scopulæ which occur both in the dermal and gastral skeleton all have a shaft which runs out to a fine point, but vary greatly in the form of the teeth and of that expanded portion of the shaft which bears them. The latter sometimes exhibits a simple thickening, or in some cases an annular swelling or four cruciately disposed knobs, and into these the short transverse rudiment of the axial canal extends.

The teeth are almost always in fours and appear either as rods thickly beset with barbs provided with slender terminal knobs, and running almost parallel to one another; or while remaining similar in form they may diverge slightly outwards (Pl. XC. fig. 6); or they are slender and show a tendency to become somewhat curved in an S-like manner (Pl. XC. fig. 5).

In addition to the uncinates of variable strength which I have found only in the middle and dermal portions of the parenchyma, the latter contains discohexasters of variable strength, and these bear on the extremity of every short basal ray three or four long, thin, diverging, somewhat curved terminal rays with pronged terminal discs (Pl. XC. fig. 7). Sometimes the number of terminal rays on one or other principal ray is reduced, and I even observed some discohexasters with irregular undulating rays.

The structure of the soft parts does not exhibit any essential deviation from that already described in *Chonelasma lamella* and *Chonelasma hamatum* (Pl. XC. fig. 2).