

length double that of the principals. Each terminal bears at its extremity a small, convex, transverse disc, with recurved marginal teeth (Pl. LXIV. fig. 7). In these discohexasters the central node is occasionally much thickened, and provided in the angle between each two principal rays with radial, tubercle-like rounded processes, which may also be drawn out into simple spines. In other cases, one or two of the principals are especially thick, and split up externally into several terminals; and this modification appears to me to indicate the way in which the numerous rosettes have arisen, which bear eight principal rays arising at approximately equal angles from the central node. The variations in the rays of these rosettes are so numerous that it is impossible to attempt to describe all the modifications. I shall only note that not unfrequently the central node becomes swollen into a conspicuous sphere, from the surface of which, besides several broad principals, numerous terminals also arise, evidently by the basal splitting of the principals. The splitting of a particular portion may thus increase till the whole principal is divided.

Under the skin these peculiar discohexasters occur in abundance, but in other regions, and especially in the subgastral trabecular space, peculiarly modified oxyhexasters, oxyhexacts, and remarkable diacts, derived by reduction from the latter, occur abundantly. In numerous oxyhexasters and oxyhexacts, the curved basal portion of the otherwise quite straight, gradually pointed rays, bears a coating of fine spines or barbs, directed obliquely inwards. These barbs are very numerous, and sometimes so long that those of adjacent rays almost unite (Pl. LXIV. figs. 8, 9). On these spinous oxyhexacts the rays are sometimes curved, and this not unfrequently takes the form of a spiral twisting of the two rays on the same axis (Pl. LXIV. fig. 10). If it happen, as is by no means unfrequent in these spinous spicules, that the number of rays is reduced, forms result like those represented in Pl. LXIV. fig. 11, in which a spherical, spinous, central body bears at its two opposite poles two spinous rays, which are twisted half round in a spiral and then continued in a straight course to end in a simple point, or to be divided into several pointed terminals. But the multiplicity of structure in these apparently reduced forms is so extremely great, that I will not begin to give a detailed account of the multitudinous modifications.

The dermal skeleton is supported by medium-sized hypodermal oxypentacts, in which the long smooth rays sometimes exhibit a simple curvature, but are, as a rule, quite straight. In the dermal membrane itself, numerous autodermal diacts occur, in which the rough rays, lying in one axis, end conically or are somewhat rounded off. The centre usually exhibits two or four projecting tubercles (Pl. LXIV. fig. 5), but these are in other cases entirely absent (Pl. LXIV. fig. 6). There is an isolated occurrence of well-developed tetracts with rays crossed at right angles, and even pentacts with a ray penetrating the parenchyma and resembling that of the diacts. Monacts occur less frequently than in *Bathydorus baculifer*, but still in tolerable abundance. They may