than the eighteen other spines. In my Monograph (1862, p. 389) I had united all these Acanthonida in a single genus Amphilonche (with ten species). of it are very common and widely distributed; but in general the number of different forms in this family is much smaller than in the two foregoing families.

The two principal spines, which in all Amphilonchida are much larger than the eighteen other spines, characterise the "hydrotomical axis" or the larger equatorial axis. The two other equatorial spines or the "geotomical spines" are much smaller, and commonly of the same size as the eight tropical and the eight polar spines. In the genera Amphilonche and Amphibelone these eighteen smaller spines are rather equally developed; sometimes they are very small or quite rudimentary, so that the skeleton seems to be represented only by the two very long principal spines (Pl. 132, fig. 4). The genus Acantholonche is distinguished by the unequal size of the eight tropical and the eight polar spines, the latter being more or less rudimentary. However, the central bases of all twenty spines, by which they are united in the centre, are constantly The genus Amphibelone is distinguished by the unequal size and form of the two principal spines, one of them, the "caudal spine," being larger (and often of another form) than the opposite "frontal spine."

The form of the radial spines is in the Amphilonchida far less varied and complicated than in the other Acanthonida (the Astrolonchida and Quadrilonchida). Apophyses or lateral transverse processes are never developed. The three main forms of spines are the same as in the other Acanthonida; they are (1) either cylindrical or conical (like Acanthometron), or (2) compressed or two-edged (like Zygacantha), or (3) quadrangular or four-edged (like Acanthonia). Often the spines are angular in the inner or proximal, roundish in the outer or distal part. The distal apex is commonly simple, conical or The central base is commonly also pyramidal, as in the majority of the pyramidal. Acanthonida; and the triangular faces of the neighbouring bases are simply propped one upon another. More rarely a basal leaf-cross is developed above the basal pyramid. Very rarely the central bases of the united spines grow together in the centre, so that the whole skeleton forms a single piece of acanthin.

The Central Capsule is rarely spherical, commonly prolonged in the direction of the hydrotomical axis; ellipsoidal or cylindrical, sometimes also four-sided prismatic; it commonly envelops the greater part of the two principal spines; its structure and contents are the same as in the other Acanthonida.

Synopsis of the Genera of Amphilonchida.

```
Eighteen smaller spines of nearly acqual size and similar form.
                                                          . 341. Amphilonche.
                   Caudal spine larger than the frontal spine, . 342. Amphibelone.
```

Eight tropical and eight polar spines of different sizes (the latter often rudimentary), . 343. Acantholonche.