

terminal umbel, from the lateral margin of which about sixteen pointed teeth project. It is remarkable that these hemispherical or globular terminal umbels are not of equal size, the central having but about half the diameter of the four surrounding it (Pl. XII. fig. 11).

In a fragment of this species which Professor Oscar Schmidt had kindly placed at my disposal, I found a few other rosette forms, namely, first, oxyhexasters with two diverging thin terminal rays on a very short principal (Pl. XII. fig. 9), just like those so frequent in different species of *Euplectella*, and secondly, small discohexacts in which upon the outer extremities of every simple cylindrical principal ray, a hemispherical hollow terminal disc with marginal prongs was so adjusted that the cavity seemed to be directed not inwards but outwards.

The stars which Oscar Schmidt observed in *Rhabdoplectella tintinnus*, and which he compared to the *Tethya*-stars, I have likewise seen, and have figured them in Pl. XII. fig. 12. I regard them as oxyhexasters in which the strong terminal rays have at their base grown together laterally on the very short principal rays.

Finally the rough bow-shaped spicules (Pl. XII. fig. 10) deserve to be mentioned. The great resemblance between these forms and those of *Euplectella jovis* has already been noted by Oscar Schmidt.

#### Genus 6. *Hertwigia*, O. Schmidt.

This genus includes only the single species mentioned below.

##### *Hertwigia falcifera*, O. Schmidt.

From a knotted and branched basis, according to Oscar Schmidt's representation, there arises an irregular labyrinth of tubes with thin leaf-like walls, supported by a lattice-like framework of obliquely crossed rods and fibres. Owing to the defective preservation of the upper much damaged portion it was not possible to frame any satisfactory conception of the whole form. Among the looser siliceous spicules, Oscar Schmidt mentions—(1) hexradiate spicules and derivative five- and three-rayed forms, which are for the most part rough towards the point, while others exhibit a fir-tree-like ray with at most very short prickles; (2) rosettes with four intersecting umbel teeth; (3) rosettes with larger teeth on the backwardly bent margin of the terminal umbel; (4) the "specific *Euplectella* rosettes," that is to say, floricoles; and (5) two kinds of sickle-rosettes, one of which carries on the hemispherical terminal disc of each principal ray several whorls of sickle-like terminal rays, while in the other four large sickle-like teeth are inserted on every principal ray. Rods with numerous oblique lateral prickles at one end are scattered here and there. Oscar Schmidt also mentions delicate