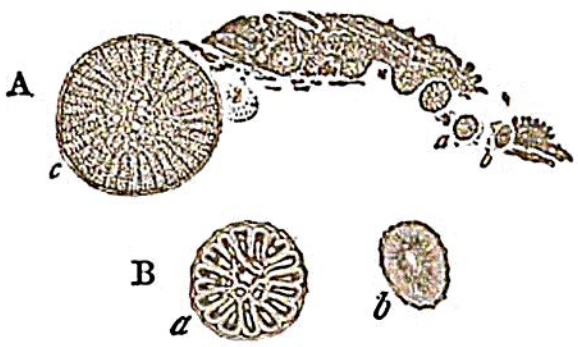
than a fourth part of the section, the appearance presented is that of a well-trained wall tree. And hence the generic name *Dendrodus*, given by Professor Owen to teeth found detached in the deposits of Moray, when the creatures to which they had belonged were still unknown, — a name, however, which will, I suspect, be found synonymous rather with that of a family than of a genus; for so far as I have yet examined, I find that the dendrodic or tree-like tooth, was, in at least the Old Red Sandstone, a characteristic of all the Cœlacanth family. I may mention, however, as a curious subject of inquiry, that the Cœlacanths of the Coal Measures seem to have had their reptile teeth formed of pure ivory, — a substance which I have not yet detected among the reptile-fish of the Old Red. Towards the base of the reptile teeth of *Asterolepis*, the interstices between the branches greatly widen, as in the branches of a tree in winter divested of its foliage, (fig. 33, *c*;) the texture also opens towards the base in the *fish*-teeth outside, in which, however, the pattern in the transverse section is greatly less complex and ornate than that which the reptile teeth exhibits. When cut across near the point, they appear each as a thick ring, (*b*,) traversed by lines that radiate towards the centre; when cut across about half way down, they somewhat resemble, seen under a high magnifying power,

Fig. 33.



A. *Section of Jaw of Asterolepis.*
c. *Reptile tooth as shown in section.*
a, b, & c. *Row of ichthyic teeth in dermal plate of jaw.*
B. *Magnified representatives of ichthyic teeth, a and b, in* A.