

Fig. 9. Vertical section of the dome-shaped trunk of *Stigmaria*, shewing the relative position of the branches. (Lindley and Hutton.)

Fig. 10. Restored portion of a branch of *Stigmaria*, shewing the manner in which the long cylindrical leaves proceeded from the tubercles around its surface to the length of many feet. In front, extending from *a.* to *b.* is seen the depression adjacent to the internal eccentric woody axis *a.* From *b.* to *c.* this axis is laid bare by the removal of a portion of the sandstone. This part of the axis is drawn from a specimen in the Oxford Museum. Scale one-seventh. (Original.)

Fig. 11. Fragment of a branch of *Stigmaria*, shewing the character of the Tubercles, which formed articulations with the bases of the leaves. The enlargement of the leaf towards its base (*a*) seems to have been calculated to strengthen this part, and to afford space for the articulating socket. This socket formed, with the spherical tubercle, an universal ball and socket joint, admitting of motion in every direction to a long cylindrical leaf floating in water. Scale one-half. (Sternberg.)

PLATE 56<sup>a</sup>. V. I. p. 483 et seq.

Appearances presented by longitudinal and transverse sections of recent and fossil Coniferous woods, cut into thin slices, and magnified 400 times. (Nicol.)

Fig. 1. Longitudinal Section of *Pinus Strobus*, cut parallel to a medullary ray.

Fig. 2. Transverse Section of the same.

*a. a.* Portions of concentric annual layers.

Fig. 3. Longitudinal Section of *Araucaria Cunninghamsi*.

Fig. 4. Transverse Section of the same.