

most beautifully preserved, and the integuments of the petiole *b*, longitudinal vessels *e*, and gum vessels *f*, correspond with those in Fig. 1. See V. I. p. 499, Note. (Original.)\*

- Fig. 3. Transverse section of a portion of the lowest Petioles, in Pl. 61. Fig. 3, *b*, *c*, magnified four times. The disposition of the bundles of vessels is nearly parallel to the integument of the Petiole.†
- d*. Magnified portion of the double woody circle, within the Embryo bud, Pl. 61. Fig. 3, '*d*.'
- d'*. More highly magnified portion of the embryo double woody circle *d*.
- c'*. More highly magnified section of one of the bundles of vessels, adjacent to *c*.

These bundles of vessels exhibit, in their transverse Section, a series of minute tubes, arranged in rows, and between these rows, opaque plates of compressed cellular tissue, resembling portions of medullary rays.

The fibrous structure of the integument is preserved in several parts of *b*. See V. I. p. 501, Note. (Original.)

\* Mr. Robert Brown has noticed in the cellular tissue of a silicified trunk of *Cycadites*, portions of Chalcedony bearing the form of extravasated gum within the trunks of recent *Cycadeæ*. He has also recognised spiral vessels, in the laminated woody circle of a mature trunk of fossil *Cycadites*, and also in the laminated circle within a silicified bud of the same, near its origin.

† A familiar example of a nearly similar disposition of bundles of vessels, passing into the Petiole or leaf-stalk, may be seen in the base of the fresh fallen leaves from a horse-chestnut tree, or in the scars on a cabbage-stalk, from which leaves have fallen off.