

DESCRIPTION OF PLATE V.

Illustrative of the Organization of Fossil Vegetables.

Fig. 1.—Polished transverse section of silicified Monocotyledonous Wood, from Antigua; p. 173.

1^a.—Magnified 20 times linear.

1^b.—Magnified 75 times linear.

2^a.—Transverse section of silicified Coniferous Wood (*Abies Benstedii*) from the Kentish Rag, Iguanodon quarry, near Maidstone; × 120 linear; p. 166.

2^b.—Vertical or longitudinal section of the same, × 250 linear.

3^a.—Transverse section of calcareous coniferous wood, from Willingdon, Sussex, × 80 linear; p. 166.

3^b.—Longitudinal section of the above, × 120 linear.

4.—Slice of a transverse section of a recent Dicotyledonous Stem; showing, 1st, Pith or medullary column, occupying the centre; 2d, Four bands of woody layers, separated by condensed lines of elongated tissue in series, and having large regular openings of vessels, with numerous medullary rays running continuously from the central pith to the bark; 3d, the bark. (*From Mr. Witham.*)

5.—Slice of a transverse section of a recent gymnospermous phanerogamic stem (of a *Cycas*), having a central pith, with woody layers separated by a condensed line, and consisting of elongated cellular tissue, arranged in a regular series; medullary rays, and bark. (*From Mr. Witham.*)

6.—Bundles of vascular tissue in *Stigmaria fcooides*, × 12 linear. See p. 143.

The two strands of vessels that appear as if on the surface (and are of a looser texture) are part of the vascular tissue of the stem, and become inflected (that is bent over), and give rise to a band of vessels (the darker band seen between the above), that passes towards the bark or cortical covering.