

trated, it will slide before the knife, and in that case the two bodies will not adhere with requisite firmness. If the layer of balsam applied to the two surfaces be not too thick, its due concentration will be accomplished in four or five minutes, provided the application of the heat be properly regulated. The slice must now be ground down to that degree of thinness which will permit its structure to be seen by the help of a microscope. This will be accomplished by rubbing the slice, by a rapid circular motion with the hand, on a piece of sheet lead, supplied with a little emery (*size No. 1.*) moistened with water; when the emery ceases to act, the muddy matter remaining should be removed, and a fresh portion of emery applied; this must be repeated until the surface of the slice is perfectly flat; a sheet of copper must then be substituted for the lead, and the fossil ground as smooth as possible by flower of emery, freed from its coarser parts. The surface may then be polished by friction, with *crocus* or rotten stone, on a transverse section of any soft wood.”*

* Mr. Witham, Obs. Foss. Veg.