

without water, and by the aid of a lens of moderate power, selects and picks up, with fine forceps, or the point of a needle, the roundish grains, and transfers them to another piece of glass, having on one spot a thin coat of Canada balsam. This should be gently heated over a spirit lamp, and the balsam will penetrate the grains, and render them transparent; by this process the minute Polythalamia, &c. may be detected. For a hasty exploration, the dust may be rendered transparent by a drop or two of oil of turpentine.

In sandy calcareous marls, as some of the infusorial earths of Virginia, the same accurate observer directs that a few grains should be diffused in water in a watch-glass, the lighter portion will be thus suspended in the fluid, which should be dropped on glass, and when dry prepared with Canada balsam, as above.

Flint, and other siliceous stones, require no preparation, but may be examined in the manner already pointed out in the description of the fossil *Xanthidia*, by chipping off very thin fragments, and immersing them in oil of turpentine. A clear, translucent flint should be selected, from which the slices should be chipped by smart blows of a hammer, over a sheet of white paper: the most transparent flakes are to be preferred, and these should be put in oil of turpentine, in a wide-mouth glass bottle. Take out the pieces for examination with forceps, and inspect them as transparent objects,