

ART. XXVIII.—*A Practical Treatise on the Art of making and Preserving Microscopical and other Preparations.* By HENRY GOADBY, M.D., F.L.S.

In the preserving fluids that I use, and which are known by my name, the following ingredients occur, viz.: rock salt, alum, corrosive sublimate, and the white oxyd of arsenic, or arsenious acid.

These materials are never all employed at one time, and they should be used judiciously, to prevent the contingency of destroying rather than preserving specimens of Natural History.

To this end, I think it desirable to describe the *properties* of the materials respectively, before giving the necessary formulæ for the fluids.

Rock (or bay) salt is very preservative, and will maintain the characteristics of all tissues unimpaired, better than any other agent with which I am acquainted, provided the *strength* be well regulated; and I make much greater use of the purely saline, or B fluid, than of any other.

Alum possesses very important conservative properties; it is astringent, coagulates albumen to some extent, rendering transparent tissues opaque in proportion to the volume of alum brought in contact with them; but it *destroys the carbonate of lime*, converting it into the insoluble sulphate. The aluminous, or A, 2, fluid, however, is a very valuable composition; and to it I owe many important preparations, which may be found both in my own possession, and in the Hunterian Museum of the Royal College of Surgeons, of England, and which never could have been made without its assistance.

Alum *combines* with animal tissues so perfectly, that it cannot be dissolved out of them by long continued maceration in water. Whenever it is considered necessary to use the aluminous fluids either to give form, and support, to an animal, or any part of an animal, or a delicate tissue, by reason of its astringent property, or to render diaphanous animals or tissues opaque enough to be visible, the *excess of alum* should be washed away with water, and the animal, or whatever it might be, with few exceptions, removed