

H.M.S. Beagle

Technique #040605-03

“Slide Mounting with Canada Balsam”

Canada Balsam is a yellow, oily, resinous exudation obtained from the balsam fir. It is an oleoresin with a pleasant odor but a biting taste. It is a turpentine rather than a true balsam. On standing, the essential oil in Canada Balsam evaporates, leaving behind the resin as a hard, transparent varnish. Canada Balsam is valued as an optical mounting cement, e.g., for lenses and microscope slides, since it yields, when dissolved in an equal volume of xylene, a non-crystallizing cement with a refractive index nearly equal to that of ordinary glass. It is used also in paints and polishes.

The proper use of the Canada Balsam sold by H.M.S. Beagle will require the addition of Xylenes to thin, or dilute, the resin in its dropper bottle. The material in the unopened dropper bottle is too thick to use without thinning. To thin, simply remove the dropper from the bottle and pour in enough Xylenes to fill the air pocket in the Canada Balsam about half full. Return the dropper assembly to its bottle and shake for about 30 seconds and allow to sit for an hour before using. Always add a bit more Xylenes to the dropper bottle after each use to insure that the Canada Balsam is ready to use.

Before mounting a slide using Canada Balsam be sure that the specimen on the slide has been properly fixed and stained and is dry. Next, place one, two or three drops of the Canada Balsam on the specimen and place a properly sized cover slip over it. Gently press the cover slip so that the excess Canada Balsam moves towards the edges. A gentle tapping pressure is usually enough to insure an even distribution of the Canada Balsam under the cover slip. Be careful that air bubbles are not sucked back, under the cover slip when the pressure is released. It takes a little practice to master the art of mounting a specimen on a slide. Allow the slide mount to dry for at least 24 hours before storing it on its side. Excess or spilled Canada Balsam can be removed with a little bit of Xylenes on a lint-free paper towel.

When done properly the result will be a slide that will retain its usefulness, and beauty, for many years.