

cap of a small vial, and the specimen attached to a slide is inverted over it. This slide is supported by a block or bunch of slides at one end, and a weight placed upon it to hold it in position. After making the proper adjustments the slide is removed, specimen and cover glass treated as before, and the specimen then returned to its inverted position. Gum may now be added from time to time until the gummed area is sufficiently large.

Porous specimens, such as colonies of bryozoa, are best treated by slowly lowering them into a very small volume of the thinner gum solution, thus driving out most of the air.

If it is desired subsequently to shift the position or angle of the cover glass, it is only necessary to add a little fresh gum at the edges and slowly push the cover to the new position. Deep Petrie or covered cylindrical glass dishes will be found useful in housing the mounted specimens and keeping them from dust.

To clean: place in benzol until the gum is dissolved. Rinse with a little clear benzol and let dry. The benzol used for dissolving and rinsing may be saved for subsequent operations.

The plate accompanying this article is introduced to show the value of the process where penetration of recent organic material is desired. The remains of muscle fibers here shown are, in appearance, practically as they appear in many fossil forms, when revealed by the gum process. Note that the first (upper) ambulacral (jaw piece) is supported by a process arising from the second. The oral end of each ambulacral is firmly attached to the adambulacral in advance of it. Between the lowest adambulacral in the figure and the ambulacral at the left of it, there is a dark spot revealing a bit of the buried ambulacro-adambulacral muscle. A contraction of this muscle served to draw the following ambulacral orad. The aboral wings on the oral ends of the ambulacra are so shaped as to allow this motion. While the ambulacra themselves are not truly imbricated, the pairs (adambulacral and following ambulacral) are distinctly so placed. The numbers on the lower edge of stereogram are those of the original negatives.

REFERENCES.

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