

- (8) Reduce in 1 per cent. formalin.
- (9) Wash in distilled water.
- (10) Place in gold chloride 1-500. Heat very slowly up to 40° C. until the characteristic violet color develops. (About 10 minutes.)
- (11) Place in 1 per cent. sodium hyposulphite for a few minutes.
- (12) Run through the alcohols, up through absolute, place in xylol and mount in balsam.

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### A BATH FOR ORIENTING OBJECTS IN PARAFFIN

MUCH of the difficulty experienced in orienting objects in paraffin can be obviated if one has plenty of time before hardening takes place and if it is not necessary to move the tray to a cooler base. The writer customarily uses paper trays of sufficient size to accommodate as many as a dozen objects. In order to keep the paraffin melted until orientation is complete and to harden the paraffin rapidly without change of position, an embedding bath has been devised which is satisfactory. In Fig. 1, "R" is a ring

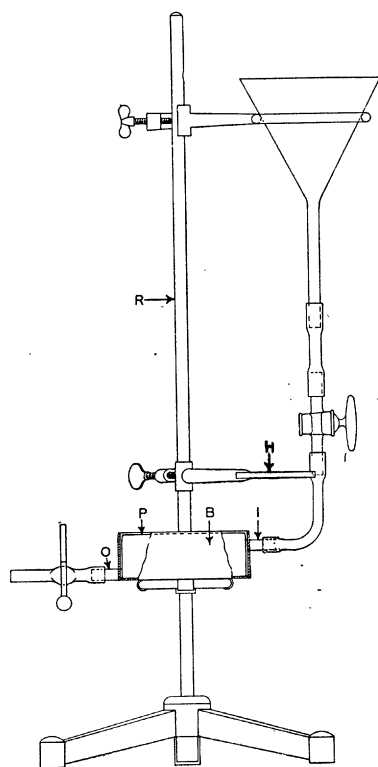


FIG. 1

stand on a tripod base; "B," a bath open at the top, made of 20-ounce copper and measuring 4½ inches × 3½ inches × 1½ inches on the inside, fastened firmly to a

3-inch ring by 3 flanges riveted to the bottom. "I" is a ¼-inch inlet pipe soldered into the bath near the top at the corner near the ring stand, and "O" an outlet of the same size at the bottom in the diagonal corner. Connection is made by rubber tubing and glass stop-cock to a funnel supported in a 4-inch ring on the ring stand, while the outlet is controlled by a pinchcock on a short piece of rubber tubing. Fitting into the bath not too loosely is a platform, "P," made of a sheet of 32-ounce copper bent so that it is supported at bottom of the bath at the ends, with the top flush with the top edge of the bath. In the legs of the platform holes are drilled at inlet and outlet to allow free movement of liquid. A 2½-inch ring, "H," from the ring stand serves as a hand rest while orienting.

In operation about 250 cc of hot water is introduced either at inlet through funnel or preferably from another funnel (not shown) through outlet. The paper tray containing melted paraffin and objects to be imbedded is placed on the warm stage where orientation is accomplished, under strong light and binoculars if necessary. The stage will remain warm for 5 to 10 minutes with little trouble, and longer if the bottom of the bath is heated with a flame. The warm water is then drawn off at the outlet and 250 cc of ice water run in from the funnel reservoir. Hardening of paraffin sufficient to hold objects in place occurs within 60 seconds, after which the block is placed in ice water to complete solidification. The operation can be expedited by attaching a hot-water reservoir to the outlet pipe through a 3-way stop cock. The bath is of a size accommodating the nickel silver tray for 30 slides, sold by Arthur H. Thomas and Company, and when the platform is removed, can be used for washing and rehydrating slides. The bath alone was made for \$3.50.

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### BOOKS RECEIVED

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- STERN, WILLIAM. *Allgemeine Psychologie.* Pp. xxviii + 831. Martinus Nijhoff, The Hague. Gld. 16.