

ing of these in the burner is not difficult when the size does not exceed about 25 mm in diameter, much valuable small material can thus be preserved. Larger specimens are not so apt to be allowed to dry up in jars.

The specimen with all necessary labels is placed in the bottom of the tube, and a pointed flame is applied sufficiently far above the paper that it will not scorch. As soon as the glass softens all around, it is slowly drawn down to a narrow neck (*b*, Fig. 1). After

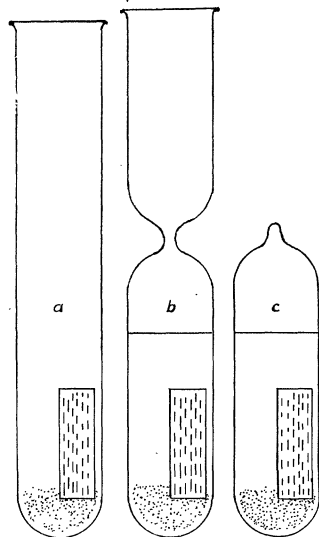


FIG. 1. Steps in the process of hermetically sealing zoological specimens: *a*. Specimens and label in tube. *b*. Tube reduced to a narrow neck and fluid added. *c*. The seal completed.

cooling for a few minutes, the preservative should be added. Just a touch of the flame will then seal off the constriction (*c*, Fig. 1).

There is no difficulty in flattening the bottom of the test-tube, if this be desired. Merely heat the bottom to the softening point, and press down on a piece of warm asbestos board.

There may be an objection that specimens so preserved are not accessible, but in practice it is found that the seals are so quickly and easily made, there is no hesitation in breaking a container when need arises.

G. D. HANNA

CALIFORNIA ACADEMY OF SCIENCES  
SAN FRANCISCO

#### LABELING MUSEUM SPECIMENS AND LABORATORY EQUIPMENT

AN article by E. E. Jacobs and Mary Auten published under the above title in No. 2174 of *SCIENCE* inspires me to tell the readers of *SCIENCE* about another method of labeling museum specimens, one used successfully by me for a great many years. In my opinion our method is, in some respects, more convenient than that devised at Ashland College.

We label with enamel paints, using white enamel for the labels and black for the numbers. The surface, whether a fossil or a glass bottle, does not need any preparation. However, it is necessary to observe that the labeled surface be neither dusty nor greasy—precautions always observed in painting. With a small camel's hair brush we first make white labels in dimensions corresponding to the size of the labeled specimen. The enamel should be applied rather sparingly, just enough to cover and level the original surface and to give a uniform, shiny, smooth surface. The labels are dry enough in a few hours, but we prefer to let them stand over night, numbering them the next day. The numbering is done also with a camel's hair brush of the smallest available size, carefully selected as to its point. A skilful operator can write a legible and good-looking number of four figures on a label a quarter of an inch long. In the same way as numbered labels we put on specimens all other kinds of marks, for example, small round disks of green to mark the types. Varied color combinations combined with different shapes of labels permit the expression of a wide range of meanings. When, for any reason, it becomes necessary to remove the labels or to change a number, they may be scratched off with a knife from a smooth surface such as glass, or in other cases it can be done with paint remover and turpentine. The amount of enamel used for such work is very small and a half pint can will last for months, provided that the enamel be protected against drying out. We never use enamel directly from the can but pour a small amount of it, say a teaspoonful, into a small, wide-necked bottle with a ground glass cap. Another bottle of the same kind but a little larger is used for turpentine. Two bottles and a brush make the complete equipment for every color used in labeling, numbering and marking.

I. P. TOLMACHOFF

CARNEGIE MUSEUM  
PITTSBURGH, PA.

#### BOOKS RECEIVED

- APPEL, KENNETH E. and EDWARD A. STRECKER. *Practical Examination of Personality and Behavior Disorders—Adults and Children*. Pp. xiv + 219. Macmillan. \$2.00.  
DAVIS, HAROLD T. *The Theory of Linear Operators*. Pp. xiv + 628. 15 figures. Principia Press. \$8.00.  
HAHN, OTTO. *Applied Radiochemistry*. Pp. xi + 278. 69 figures. Cornell University Press. \$2.50.  
HOBBS, WILLIAM H. *Peary*. Pp. xv + 502. Illustrated. Macmillan. \$5.00.  
MACELWANE, J. B. and F. W. SOHON. *Introduction to Theoretical Seismology. Part I, Geodynamics*. Pp. x + 366. 67 figures. Wiley. \$6.00.  
PARKINS, A. E. and J. R. WHITAKER, Editors. *Our Natural Resources and Their Conservation*. Pp. xii + 650. Illustrated. Wiley. \$5.00.  
Smithsonian Institution. *Annual Report, 1935*. Pp. xiv + 580. Illustrated. U. S. Government Printing Office. \$1.00.