immersed in it within 3 to 5 minutes. The largest specimens required the greatest length of time.

However, because of the acidity of the formalin resulting from the presence of formic acid, sulfur dioxide gas, SO_2, was liberated from the $NaHSO_3$ solution in such quantities as to nullify its usefulness in a classroom procedure. It appeared that this source of SO_2 could be eliminated simply by reducing the H ion concentration of the reactant solution. This was accomplished by buffering the solution with Na_2SO_3.

We may now detail the essential points in the preparation and use of the sulfite-bisulfite solution:

(1) The deformalinizing solution contains 5.7 per cent. (by weight) of $NaHSO_3$ and 3.8 per cent. (by weight) of Na_2SO_3 dissolved in tap water. A deviation of 1 to 5 per cent. from the above figures would probably introduce no serious failure of the solution to function properly. It is our experience that 20–30 liters of the solution will last a full semester in the daily removal of formalin from any specimens in use in a zoology class of 35 students. To prepare 20 liters of solution dissolve 1260 grams of $NaHSO_3$ and 840 grams of Na_2SO_3 in tap water.

(2) Specimens removed from their formalin bath are given a brief preliminary rinsing under the tap, and then immersed in the sulfite-bisulfite solution from 3 to 5 minutes. As many specimens as can be conveniently handled may be deformalinized simultaneously. Following a final quick rinse, the specimens are free of formalin odor and ready for dissection. Large specimens or those which may have been injected with various formalin mixtures may require subsequent short immersions as dissection proceeds.

(3) Failure of the solution after repeated usage to remove the formalin promptly may require the addition of more $NaHSO_3$ just short of the point where SO_2 gas is evolved. Evidence of SO_2 arising during the routine employment of the solution calls for the addition of small amounts of the Na_2SO_3. There is a considerable variation in the actual amounts of $NaHSO_3$ and of Na_2SO_3 in the technical grade of these chemicals. This should be kept in mind and the amount of one or the other reagent increased as may be necessary to give a satisfactory solution. A pH determination of the solution gives a reasonably easy method of ascertaining if it has been properly prepared. The solution of the concentration specified has a pH of about 6.4. One containing insufficient Na_2SO_3 and which may therefore evolve sulfur dioxide, will have a lower pH. One containing an excess of Na_2SO_3 will have a higher pH.

(4) Although certain specimens, frogs for example, may be stored for several weeks in the reactant solution without impairing their dissecting qualities, others such as the dogfish become soft after 5 to 6 days and unsuitable for dissection. In other words, the solution is not a substitute for formalin. After the removal of the formalin, the specimen may be kept in any other satisfactory preservative, or returned to formalin.

(5) The solution should be kept in common glazed earthenware laboratory crocks, as it will slowly attack metal containers.

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A SIMPLE METHOD FOR REMOVING THE PLUNGERS OF "FROZEN" GLASS SYRINGES

THE method of removing the plungers of "frozen" glass syringes suggested by Goff in SCIENCE, Vol. 93, page 602, was of much interest to us. While we make no claim whatever to originality, we feel justified in calling attention to the method of removing the plungers of "frozen" glass syringes used in our laboratory, because of its simplicity and usefulness, and because many persons are unfamiliar with it.

All that is required is a syringe with a plunger of lesser diameter than the plunger of the "frozen" syringe, and equipped with a short hypodermic needle. We often use a 1 cc Yale tuberculin syringe. The needle passes through a small bit of rubber, such as a piece of a wide rubber band which acts as a gasket. The tuberculin syringe is filled with water, and the needle inserted into the outlet of the "frozen" syringe, the piece of rubber making an airtight seal. Water is then forced from the tuberculin syringe into the "frozen" syringe, until the plunger of the latter is free. It may be necessary to fill the tuberculin syringe with water a number of times, but the method almost never fails.

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