

The bottom of the hole drilled in the tube should not be pointed but must be rounded so as to prevent flies being caught. Very small holes are drilled into the side of the tube (B) to allow ether vapor to enter from the glass jar. Cotton should be packed in the bottom of the glass jar (E) and held in place by plaster of paris (P) which should be perforated. If the tube is polished, it is possible to see the flies from the side and to tell when they are anaesthetized. Ether may be added either by pouring it into the tube or by dropping it onto the plaster after removing the top (A).

It is necessary to add ether only about once a day, or even at longer intervals if the stopper remains in place when not in use. Not only is the saving in ether remarkably economical but also valuable in regard to the comfort and well-being of the investigator. Indeed, this latter consideration was the chief reason for developing our new design.

Muller, H. J.    Etherizing bottle.

The type which I have found most practical all

round (and at the same time the easiest to construct, repair and clean) consists of a glass containing-vessel (whose shape may be chosen according to the convenience of the operator), into the neck of which is firmly fitted, preferably through the mediation of a hollowed-out cork, a funnel, preferably of metal, with an upper end wide enough to fit against the mouth of the widest-mouthed culture vessel used. To the narrow end of the funnel, below, a large gelatine capsule of the same diameter, and containing numerous fine

needle-holes, is glued on. In the space between the bottom of the suspended capsule and the bottom of the containing vessel is packed a mass of dense cotton, (which must not touch the capsule). Flies go in and out through the same opening, without manipulation or any stoppers being necessary and are quickly etherized by the diffusing ether. The ether used need usually be added to the bottle but one a day, as a minimum is lost (an advantage both economically and physiologically). If desired, glass can of course be substituted for the gelatine, but the latter has considerable durability and the ether can be poured in directly through the gelatine sieve. The latter is later wiped quite dry with a paint brush. (copied from DIS-2:62)

