

ing on the size of the furnace, the time may be varied by a minute or two, in order to produce proper adhe-

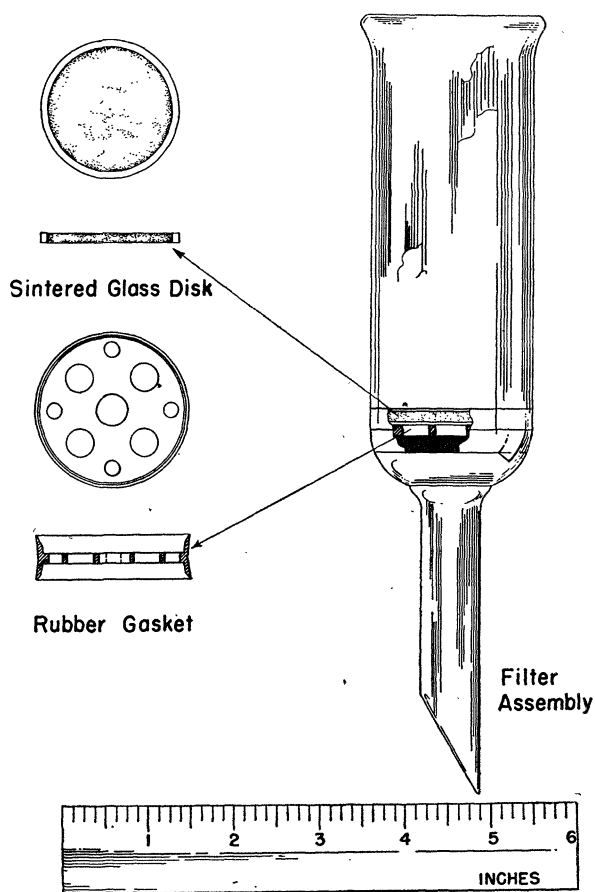


FIG. 1

sion of the pyrex granules to themselves and to the ring. The disk may be polished by rubbing against a flat glass plate with powdered glass as an abrasive.

### Attachment of Electroencephalographic Electrodes

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A perpetual problem in electroencephalography has been to secure an expeditiously applied, electrically stable, comfortable, and readily removable attachment of electrodes to the scalp. After trying various methods, most workers return to the use of flattened solder pellets with electrode paste, attached to the scalp by collodion (F. A. and E. L. Gibbs. *Atlas of electroencephalography*. Cambridge, Mass.: L. A. Cummings, 1941). This method requires an air blast for drying the collodion. If electrode paste is rubbed into

the scalp area to reduce skin resistance, the collodion does not adhere readily, and, once satisfactorily applied, is difficult to remove from the scalp and hair without the use of objectionable solvents.

The possibility that a more satisfactory material than collodion might retain the general advantages of the technic while eliminating its disadvantages led us to experiment with other adhesive materials. Having found a paraffin wax of low melting point ( $47^{\circ}$  to  $49^{\circ}$  C.) very satisfactory and having used it ourselves for the past year, we wish to call the attention of others to its advantages.

After massaging a point on the scalp with a finger tip moistened with a commercial electrocardiograph paste, an electrode with a bit of paste is placed on the area, and it is painted over with melted paraffin by means of a small stiff brush. At  $50^{\circ}$  to  $55^{\circ}$  C. this causes no discomfort. Excessive hardening of the wax and elevation of melting point is avoided by using fresh paraffin. Electrodes so applied have been found to be as stable as those attached with collodion, and both electrodes and paraffin are readily removed by gently scraping away the paraffin with a coarse comb.

### A Potometer for Rapid Measurements of Ingestion by Haustellate Insects

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In an investigation of the nutrition of the blowfly, *Cynomyopsis cadaverina*, it was necessary to measure accurately amounts of food ingested by individual flies. Gravimetric methods for this are exact, but they are time consuming. To facilitate these measurements, therefore, a potometer was developed to make these determinations volumetrically. This potometer, beside its utility in studies on nutrition of flies, should be valuable as a tool for the rapid measurement of ingestion in testing the toxicity of insecticides. With appropriate modifications, it could easily be adapted for use with haustellate insects other than flies.

The construction of this instrument is illustrated in Fig. 1. It consists of a piece of capillary tubing, bent as shown, with a scale graduated in millimeters fastened to it by means of small pieces of wire. The bore of tubing used would be determined by the amounts of ingestion expected. One end of the tubing is slightly expanded and a small wick of filter paper (not shown in the figure) is inserted.

The potometer is filled at the plain end by means of a pipette, and the meniscus brought onto the scale by absorbing the excess fluid with a piece of filter paper applied to the wick. The insects are allowed to