but upon deflation of the cuff they lapsed into respiratory failure (Fig. 3, second arrow). Attempts made to revive such animals by reinflation of the constricting cuff (Fig. 3, third arrow) or by artificial respiration were futile. These findings seem to indicate that the torso pressure maintained a volley of vagal nerve impulses to the respiratory center and thus increased the latter's resistance to drug toxicity.

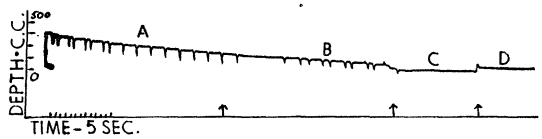

FIG. 3

As yet, sufficient data have not been accumulated for judgment of the efficacy of this maneuver in clinical cases of barbiturate overdosage. Preliminary observations made thus far seem to indicate that it is applicable in such cases.

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A Portable Light for a Dissecting Microscope[1]

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When large numbers of dissections or identifications of insects must be made where no electric current is available, the microscope lamp described below is quite useful. If a microscope must be carried from place to place, the light weight of this lamp is an added advantage.

The whole apparatus is shown in Fig. 1. The source of light (P) is a 'penlight' type lamp (Eveready No. 1152). This is held in a screw-base pilot light socket (H), mounted in the end of a piece of flexible tubing (S) (speedometer cable). The end of the flexible cable remote from the lamp is fastened to a piece of brass, flattened over most of its length to facilitate fastening to the microscope by the screw (A). Mounting in this manner allows the lamp to move up and down with the microscope, thus keeping the light continually on the material being examined. Connection is made with the source of power through a light-weight electric cord using a radio-type midget-tip plug and jack (M). One side of this jack is grounded, as is one side of the socket of the lamp. Thus, only one wire is necessary from the jack to the lamp socket. (The mounting shown is for a Bausch & Lomb microscope. Arrangements for attachment to other makes of microscope will suggest themselves.) Current is supplied by a battery of two standard flashlight cells housed in a plastic case on which is fitted a wire-wound midget voltage control with a resistance of 10 ohms (R). The use of this is necessary, since the lamp which is rated at 2.2 volts is not durable if subjected to the full 3 volts of the battery. The rheostat is mounted on a swinging piece of plastic to facilitate replacing the battery, the shaft of the rheostat making

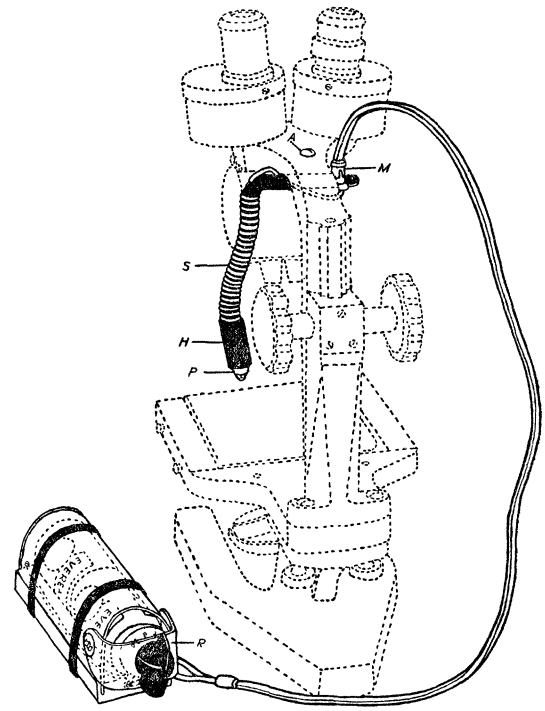

FIG. 1

contact with the tip of the battery when in place. A satisfactory light is provided at 2.2 volts, and if a more intense light is desired for short periods, the rheostat may be adjusted so as to provide the full current of the battery. Satisfactory operation has also been secured from the 6-volt terminals of a transformer, using the proper resistance to reduce the flow of current to the lamp. (Other lamps of higher voltage may be substituted if necessary.)

The chief virtue of the particular lamp used is that a small condensing lens is incorporated in the tip of the lamp itself. The flexible arm is made of such length that the field of the lowest power of the microscope is completely illuminated. The lamp gives off almost no heat.

There is no thought that this apparatus can replace any of the standard microscope lamps. The whole apparatus, including the battery, can be carried in the microscope case, and this complete portability makes it very useful under certain conditions. The total cost of materials is less than $2.00.

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