

Now to use the device the wire ring is simply dipped into water momentarily and a film of liquid imprisoned across the ring. The animal is then placed in this film and is automatically retained therein by the action of the surface tension on the two sides. The lead weight serves to hold the ring on the stage of the compound or dissecting microscope in any position desired.

The device has the advantage of confining the animal to a small area and, essentially, to a single plane so as to eliminate the necessity of continual change of focus. The animals so far studied by this method show surprisingly little tendency to struggle, but, to the contrary, go about their feeding and regular body movements within the fluid layer in what appears to be a normal manner. Furthermore, the large area for gaseous diffusion eliminates any respiratory difficulties.

The method has proved of exceptional value in studying mosquito larvae and their relations to the surface, but, presumably, is to be recommended for vital preparations of other aquatic invertebrates. The films last for considerable lengths of time, depending, of course, upon the relative humidity of the laboratory air. A number of them were timed at over an hour. Loss of thickness due to evaporation, however, may be readily remedied from time to time by addition of a drop of water to the film without disturbing the preparation.

The film may be varied in thickness to accommodate animals of different sizes by adding more or less water with an eye-dropper or by using various sizes of wire in the loop.

A further advantage is the ability thus offered to study the ventral side of the animal by simply turning the lead block over on its other end.

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A PRACTICAL OPERATING STAND

THE operating stand described herewith was especially constructed for use in experimental surgery. The advantages of this type of stand are: (1) Low cost and ease of construction. (2) Interchangeable operating table tops for various sizes of animals. (3) The operating table top may be tilted through 180 degrees. (4) The operating table top may be rotated through 360 degrees. (5) The operating table top may be elevated from 29 inches to 45 inches allowing a sitting or standing operating position. (6) The single column allows maximum leg room and the entire stand occupies little laboratory space.

The entire column (1) is constructed of pipe and pipe rail fittings. A is a 2-inch pipe rail base, B is a piece of 2-inch pipe 20 inches long drilled and tapped at C for the locking bolt, D is a piece of 1½-inch pipe 20 inches long and E is a 1½-inch pipe rail adjustable base. The brace F and H is of strap iron and is at-

tached to the operating table top by means of an awning bracket G.

The operating table top is of the size that will accommodate the animal being studied and is made mainly of wood, held together by strap iron. The cross sec-

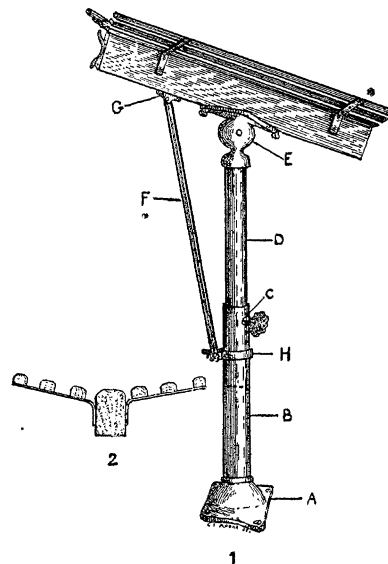


FIG. 1

tion (2) shows the manner of construction. A ready means of interchangeable table tops is provided by threaded lead sockets in the wood base of the top; thumb screws in these hold the top securely to the column. In use the stand is securely bolted to the floor.

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