

need revision other than that caused by progress in knowledge. The investigations of Professor H. Douvillé on the morphology of the tests of the larger foraminifera are almost certainly the best that have yet been made—his work is classic—but this will not prevent the necessity of having to revise his nomenclatorial treatment of the organisms he has studied so profoundly.

Strict adherence to the rules of the International Code of Zoological Nomenclature in paleontologic publications is a fundamental necessity, for unless this is done there will be perpetual instability in paleontologic nomenclature.

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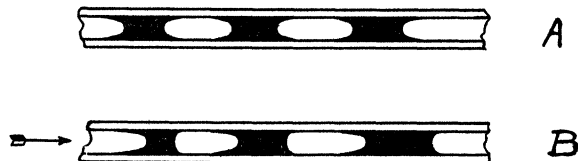
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A NEGLECTED CAPILLARITY EFFECT

THE principle of the phenomenon of the "chaplet of drops," due to Jamin, is simple. The annexed figure shows glass tubes containing series of water drops separated by air bubbles. With both ends open to the atmosphere as at A the drops and the bubbles are symmetrical, but at B, the air in the left-hand end of the tube being under pressure, the symmetry is disturbed and in consequence of the different curvatures of the left and right ends of each drop there is a resultant force from right to left. With a sufficient number of drops in a tube of fine bore Jamin found that the force was great enough to resist a pressure of several atmospheres.

Thinking that possibly the Jamin effect might be responsible for some of the numerous cases of engine failure which have caused airplane disasters the author has made experiments with chaplets of water drops in gasoline.

Many methods were tried for introducing the chaplet of drops into a glass tube, the simplest proving to be a suction method. The capillary tube, one end of which is drawn out to a fine jet and crooked at right angles, is laid flat upon a table. A bracket fixed to the left-hand end of the table supports a beaker which is thus held just below the level of the table. The crooked end of the capillary tube reaches



nearly to the bottom of the beaker, which is filled, the lower half with water and the upper half with gasoline. A rubber pipe is fitted tightly over the open end of the capillary tube so as to form a straight extension to that tube. In order to draw up liquid

from the beaker into the capillary tube a wooden roller is laid across the rubber pipe and rolled along from left to right. Water is drawn up when the jet is at the bottom of the beaker, gasoline when the jet is raised.

It is important to draw out the end of the tube into a fine jet, since otherwise a water-spout is apt to form between the water below and the gasoline above.

The following is a brief summary of results obtained:

(1) The head of water supported by a water-gasoline chaplet in a glass tube of given bore is about constant for a given number of drops no matter what are the lengths of the drops.

(2) Between the limits of ten and thirty drops the head supported by a chaplet is roughly proportional to the number of drops.

(3) The head supported by a given number of drops is inversely proportional to the diameter of bore of the tube.

(4) The head supported per ten drops of ordinary gasoline (Texaco brand) in a glass tube of 1.5 millimeter bore is about five centimeters of water. Thus a chaplet consisting of thirty drops of gasoline alternating with twenty-nine drops of water supports a head of about fifteen centimeters of water.

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THE AMERICAN SOCIETY FOR EXPERIMENTAL PATHOLOGY

THE thirteenth annual meeting was held at Cleveland, from December 28 to 30, 1925, in conjunction with the Federation of American Societies for Experimental Biology. Dr. George H. Whipple, of Rochester, New York, presided.

Among the interesting papers was a communication by Dr. George H. Whipple, on "The Hemoglobin of Striated Muscle," in which he showed that there was a considerable variation in the hemoglobin content of muscle which, however, can not be robbed by anemia's demands. It is obvious that muscle hemoglobin is of importance whether one studies the end products of hemoglobin disintegration or the parent substances suitable for construction into mature hemoglobin; also that muscle hemoglobin must be considered in any study of body pigment metabolism.

Drs. H. Cushing and S. J. Maddock produced an experimental obstruction of secretion from the Pars Nervosa of the Pituitary by means of small metal clips. Marked changes in the posterior lobe, with the production of diabetes insipidus, indicated that the pituitary was intimately involved in this condition.