



FIG. 1. *Mesostoma ehrenbergii wardii*. Ventral view. A. Enlarged section of body wall. 1, eyes, on dorsal surface of brain; 2, brain with nerves running anteriorly and posteriorly; 3, flame cells, distributed over the entire body, but usually most easily seen in this region; 4, rod-shaped enteron; 5, rosulate pharynx; 6, mouth on ventral surface of the body; 7, protonephridial tubule; 8, brown, thick shelled, biconvex winter egg—the summer eggs are thin shelled and semi-transparent; 9, branches of the uterus, shown only on left side of the animal; 10, male copulatory organ, usually most easily recognized by the sperm in its proximal chamber; 11, bursa copulatrix, very small and difficult to see; 12, ovary, most easily distinguished by the oöcytes with large nuclei which it contains; 13, receptaculum seminis, very large or very small according to the condition of the animal; 14, yolk or vitellogenoducts; 15, yolk glands or vitellaria, shown only on right side of body; 16, testes, shown only on right side of body; 17, rod-shaped rhabdites in epidermis; 18, dermal rhabdite; 19, cilia; 20, muscular layer of body wall.

class as are the triclads. The legend to the figure has been purposely made as complete as possible in order to facilitate the location of the structures shown.

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A STABLE THROMBOPLASTIN FOR USE IN QUICK'S PROTHROMBIN TEST¹

QUICK's method for the determination of active prothrombin in the blood is now widely used in the control of hypoprothrombinemia resulting from avitaminosis K or hepatic disease. Unfortunately, the thromboplastin used in the test is unstable and the preparation of fresh thromboplastic extract from rabbit brain is a laborious procedure.

A stable preparation of thromboplastin has been made which requires the addition of only distilled water before use. This preparation permits the test to be performed with greater ease than formerly.

The saline extract of fresh rabbit brain was prepared according to the technique of Quick *et al.*² Brains were removed from freshly-killed rabbits, stripped of superficial blood vessels, washed, comminuted to a paste and dried. The dried residue was extracted with 0.85 per cent. sodium chloride solution and the extract incubated at 56° C. for 15 minutes. One ml amounts of incubated extract were introduced into suitable vials and dried by the lyophile method of Flosdorf and Mudd.³ Under such circumstances the dry material keeps at room temperature without loss of potency for at least ten weeks. When the contents of the vials are diluted to the original volume of 1 ml with distilled water, a thromboplastin solution equal in strength to one freshly prepared is obtained. This amount of thromboplastin solution is sufficient for nine determinations of "prothrombin time."

The convenience of having a stable source of thromboplastin on hand is apparent. Details of the application of this preparation and assays of its potency will be presented elsewhere.

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² A. J. Quick, M. Stanley-Brown and F. W. Bancroft, *Am. Jour. Med. Sci.*, 190: 501, 1935.

³ E. W. Flosdorf and S. Mudd, *Jour. Immunol.*, 29: 389, 1935.

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BOOKS RECEIVED

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