

tissues of the body. The amounts of oxygen consumed and carbon dioxide produced determine the volume of the circulation needed to transport these gases between the tissues and the lungs, as well as the volume of respiration needed to exchange them with the atmosphere.

We can now see that muscle tonus, itself controlled from the central nervous system and considerably influenced by the respiratory center, is the basic factor determining both the amount of metabolism and the correlated volumes of the circulation and respiration.

In particular, we conclude that muscle tonus is a factor of prime importance in the venopressor mechanism.

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A SPECIES AND GENUS OF FRESH-WATER BRYOZOON NEW TO NORTH AMERICA

FOUR years ago while collecting fresh-water bryozoa for class purposes in the Delaware and Raritan Canal at Princeton, New Jersey, the writer found on the leaves of water plants small colonies, of from four to thirty polyps each, which were at first taken for very young colonies of *Pectinatella* or possibly colonies of this form which remain flat without forming the prominent globular mass of jelly that usually characterizes this species. It was noticed, however, that the colonies were not round but roughly triangular in shape, with the polyps mostly on one side and the opposite angle well drawn out. It was then seen that

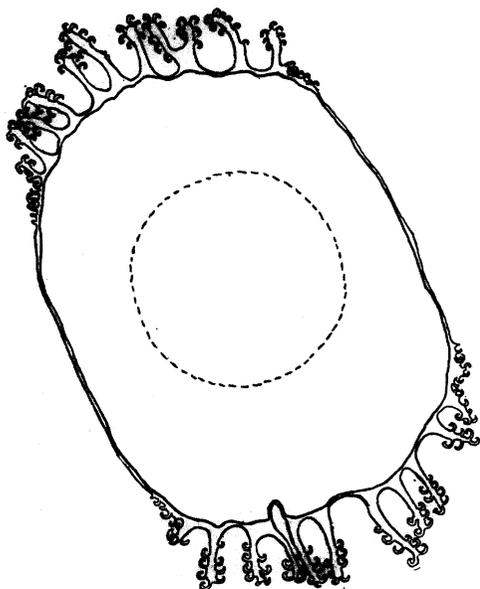


FIG. 1

the colonies were freely motile, moving up to as much as three or four inches per day. They were then surmised to be the genus *Lophopus* until an examination of the statoblast showed the swim-ring (Fig. 1) to be an elongate oval over a millimeter in length with a group of rod-like projections at each end, each rod bearing from two to eight strongly curved hooks. This was so remarkably different from any of the other hook-bearing statoblasts of the Phylactolaemata that it was realized that the species was new to America at least.

The phylactolaematous bryozoa of eastern North America had been so faithfully collected and studied by Leidy, Hyatt, Potts, Davenport and a host of others that it seemed impossible that this very abundant form could have been overlooked.

It was found that the genus had been recorded by H. J. Carter in Bombay, India, from a single statoblast in 1859. He called it a species of *Lophopus*. In 1881 Hyatt recognized that it was not a *Lophopus* and made it a new genus *Lophodella carterii*, naming it after its first discoverer. Annandale has found it abundantly and widespread in India in 1911. Kraepelin in 1906 and Vorstman in 1927 describe it from the East Indies and Siam, etc. Oka in 1906 describes it from Japan and Ulman in 1907 from equatorial Africa. Wherever it grows, it is very abundant, literally covering the leaves of plants as well as sticks and stones in favorable seasons. How then did it escape Leidy and his followers only forty miles from Philadelphia?

The writer concludes that it is a recent introduction, from India probably. He has collected extensively in the fresh waters around Princeton since 1890 and had never seen it until four years ago when it was abundant in the canal, but not in the lake or other Princeton streams or ponds. Last season, 1933, it appeared in the lake and Millstone River in abundance. It will be interesting to trace its further spread. The statoblasts are very resistant and could have been easily transported from India and introduced into the canal on many kinds of cargo. It resists the winter, although it comes from a warm source. It is a beautiful form, splendid for class work, easily kept in aquaria and easily expanded for study. The body is clean, not dirty, like *Plumatella*.

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BOOKS RECEIVED

- CRILE, GEORGE. *Diseases Peculiar to Civilized Man*. Pp. xi + 427. Illustrated. Macmillan. \$5.00.
LUCK, JAMES M., Editor. *Annual Review of Biochemistry*. Vol. III. Pp. viii + 558. Stanford University Press. \$5.00.
TRETNIEN, AUGUSTUS W. *Arthur Trent: Choosing a Career*. Pp. 312. Stratford. \$2.00.

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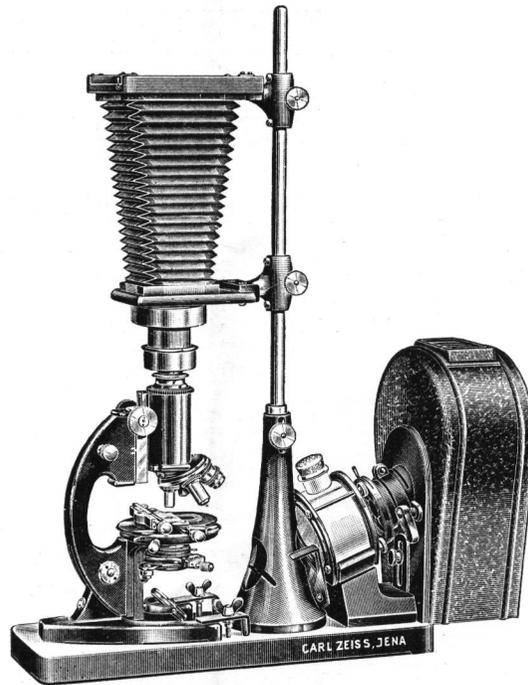
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