

NOTES ON PEDIASTRUM. W. L. BRAY.

[ABSTRACT.]

Specimens of *Pediastrum* were kept under cover glass, in moist chamber, for 12 days. In this preparation was observed, in a number of cases, the breaking up and swarming of the contents of a single cell to form new colonies. From a sixteen celled specimen three cells "swarmed," each giving rise to colonies of 32 cells. Inner lamella of mother cell escapes as the enclosing membrane of swarming spores. This membrane increases in size, as did also the spores, while swarming. Spores swarmed with jerky movement about thirty minutes, gradually assuming the symmetrical and permanent position characteristic of the colony, when motion ceased. Protuberances (spines) began to appear on outer circle of cells of new colony in 12 to 20 hours. In one or two cases the enclosing membrane remained 24 hours.

Individual cells of mother colony remained undivided for twelve days, becoming several times the size of their fellows which had swarmed, very turgid and rounded as if growing independently. From another collection one case was observed where contents of a cell broke up into male swarm spores. Not able to be sufficiently observed for more definite statements.

NOTES ON THE GENUS *LYTTA*. By W. P. SHANNON.

THE GENUS *CORALLORHIZA*. By M. B. THOMAS.

NOTES ON THE FLORA OF THE CHILHOWEE AND GREAT SMOKY MOUNTAINS. By STANLEY COULTER.

THE NEED OF A LARGE LIBRARY OF REFERENCE IN CRYPTOGAMIC BOTANY IN INDIANA; WHAT THE COLLEGES ARE DOING TO SUPPLY THE DEFICIENCY. By L. M. UNDERWOOD.
